Factors influencing a Farmer's Decision to select a Bank for availing an Agricultural Loan with the bank

Doctoral Thesis Submitted

In partial fulfillment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

In

MANAGEMENT

By

K GOVARDHAN SHETTY

UID No. 16JU11300009

Under the Guidance of

Dr. Sarika R Lohana
(Research Co-Supervisor)
Post Doctorate Research Fellow
State Bank of India, Hyderabad

Dr. Goutam Tanty
(Research Supervisor)
Associate Professor
ICFAI University Jharkhand
Ranchi

ICFAI UNIVERSITY JHARKHAND, RANCHI

September 2022

THESIS COMPLETION CERTIFICATE

This is to certify that the thesis entitled "**Factors influencing a farmer's decision to select a Bank for availing an agriculture Loan**", submitted by K. Govardhan Shetty in partial fulfilment of the requirements for the award of the Degree of Doctor of Philosophy is an original work carried out by her under our joint guidance. It is certified that the work has not been submitted anywhere else for the award of any other Degree or Diploma of this or any other University. We also certify that she complied with the plagiarism guidelines of the University.

Dr. Sarika R Lohana
(Research Co-Supervisor)
Post Doctorate research Fellow
State Bank of India
Hyderabad

Dr. Goutam Tanty
(Research Supervisor)
Associate Professor
ICFAI University Jharkhand
Ranchi

PLAGIARISM CERTIFICATE

Curiginal

Document Information

Analyzed document	Goverdhan Thesis for Plagarism.docx (D141067476)
Submitted	6/23/2022 12:30:00 PM
Submitted by	RUMNA BHATTACHARYYA
Submitter email	rumna.b@iujharkhand.edu.in
Similarity	0%
Analysis address	rumna.b.iujhar@analysis.urkund.com

DECLARATION OF AUTHORSHIP

I declare that this research thesis titled "**Factors influencing a farmer's decision to select a Bank for availing an agriculture Loan**", submitted by me in partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy in Management by the ICFAI University, Jharkhand, Ranchi is my own work. It contains no material previously published or written by another person, nor material which has been accepted for the award of any other degree or diploma of the University or other Institute of higher learning, except where due acknowledgement has been made in the text. I further state that I complied with the plagiarism guidelines of the University, while preparing the thesis.

(K. Govardhan Shetty)
UID No.16JUI1300009
No.6, Fourth Floor, Shree Sadan
7th Cross, Krishna Garden Layout
Rajarajeshwarinagar
Bangalore – 560098
Place: Bangalore
Date: 24th June 2022

ACKNOWLEDGEMENTS

The journey of my research which started with ICFAI University, Jharkhand has been exciting, challenging and novel experience for me, taking time out from hectic daily office work and family responsibilities. I am extremely grateful to ICFAI University Jharkhand for giving me an excellent platform and a conducive atmosphere that facilitates learning during the tenure of the study.

I am thankful to the honourable Vice-Chancellor, Prof. O R S Rao for his unstinted support during this journey and for the suggestions in the various progress reviews which has streamlined the research work. I am also thankful to former registrar Dr. B M Singh for his support during the start of my studies and his suggestions during many of the progress reviews.

I wish to express my sincere gratitude and appreciation to my research supervisor Dr. Goutam Tanty and Dr. Vishal Kumar, previous supervisor from Faculty of Management Studies, ICFAI University, Jharkhand, for thier constant encouragement and support during all the stages of my research. He has been acting as a catalyst throughout the activities related to my doctoral program.

I would like to express my gratitude to my research co-supervisor Dr. Sarika S Lohana, Post Doctorate Research Fellow, State Bank Institute of Innovation & Technology, Hyderabad who has mentored me during the research and provided valuable guidelines on research topics and analysis skills. I thank her for guiding and encouraging me in my research work.

I also wish to thank Dr. Hari Haran, Dr. Satyendra Kishore and Dr.Barik who have contributed in enabling a quality research by way of their guidance and suggestions in the various half- yearly progress reviews & regular reviews with their critical evaluations

I would like to thank Dr. Rumna Bhattacharyya who has been co-ordinating with me since beginning of the journey and has been a constant support in completing my research

I would also like to thank Dr. Susan Chirayath, Dr. Rajkumar, Dr. Pallavi Kumari, and the entire research support team for their encouragement and regular monitoring of progress in my research

I wish to thank my friend Mr. B R Anand who accompanied me and assisted me during the primary data collection process. I also wish to express my gratitude to my colleague and friend Miss Disha Luthra who has helped me in understanding usage of SPSS and Smart PLS and assisted me in completing my thesis. My gratitude remains to my family members who have been a continuous support to me during the journey.

I would also like to thank to all the academic as well as non-academic staff members of ICFAI University, Jharkhand, who have been always supporting and encouraging during the journey of my research work.

(K. Govardhan Shetty)
Date: 24th June 2022
Place: Bangalore

ABSTRACT

Lending towards agriculture is an important function of any bank in India. The farmers who are engaged in agricultural activities require financial assistance for growing crops during the cropping seasons and for other related uses like for setting up irrigation facilities, land development activities and purchase of agricultural implements etc. There are quite a few sources available to the farmers which provide financial assistance at the villages like local money lenders, cooperative societies, micro finance institutions, co-operative banks and scheduled commercial banks. The Banks are governed by the rules, guidelines and policies framed by the RBI and NABARD and hence, they are the most trusted source of finance to the farmers in terms of charging interest on the loans and repayment conditions, recovery processes and providing timely banking services.

Given the importance of providing credit to the agriculture sector, the Reserve Bank of India has mandated that 40% of the total loans outstanding of a bank should be towards the priority sector and out of which 18% should be towards agriculture activities. Hence every bank aiming to increase its overall business as a whole in India in and to increase its total loans portfolio, has to increase the loan portfolio in parallel to the priority sector at 40% and agriculture sector at 18% of the total loan portfolio. Since the year 1991 onwards with the invent of new generation private sectors banks, the number of banks has increased and resulted in a competition amongst banks. The public sector banks earlier had 18% of lending to agriculture earlier in their normal course of lending and hence they had no issues in this front. With the growth in the economy on other tertiary sectors is multi-fold maintaining the same proportion in agriculture sector lending has been challenged. Also the private sector banks coming in with high growth objectives had also to lend 18% of their loans to agriculture, which has brought in the competition in the agriculture lending amongst bank. At present since last 10 to 15 years approximately, all banks are providing agri-loans to farmers in a village, where the

bank has a presence, either through a branch in the same village or nearby village or through other network for providing loans. The farmer now has a choice to select a bank to take a fresh agri-loan, or to shift his existing agri-loan to some other bank, for some benefit he derives from the other bank.

There are various factors which can influence a farmer to take a loan with a bank. These factors include bank various induced factors like 'Advertisement by Bank' 'Meetings conducted by Banks' or some specific benefit of requirement of the customer like 'lower rate of interest' or higher loan amount per acre of land' or some other inducing factor to the farmer like 'influence from his friends or family' rapport with branch manager' etc. This study is focussed on identifying the significant factors which the farmer considers importance to select a particular bank to avail an agri-loan and to analyse how significant each of these factors are to a farmer to take such a decision. This study is based on primary data collected from the farmers belonging to two districts in Karnataka state, who bank with the various banks in these areas.

Extensive literature study was done on the related topics of agriculture finance, competition amongst bank, customer decision making models and the elements of the model which customer considers important to select a bank for himself for his banking transactions and loan requirements. There are many literature study on this aspect on the relevant factors which a customer considers important to select a bank for his transactions or for taking a loan for himself. This study goes in depth into this aspect. Here the customer of a bank is limited to a 'Farmer' who has special characteristics as a customer based on his demographic profile and the product/service is limited to 'agricultural loan'. Hence this is an indepth study in this field of literature. This study is aimed to benefit the banks as well and hence, the objectives of the study are as below:

1. To identify the factors which influence the decision making of a farmer to select a bank to avail an agriculture loan and to study these factors in details.

2. To help the banks in building suitable strategies in agriculture finance using the results and outcome of this research, which can be used as a reference.

3. To add to the existing literature this specific content which is specific work in the field of agriculture finance.

This study aims to identify the factors which are significant to a farmer in taking a decision to select a bank to avail an agriculture loan which is the primary objective. The study has also focussed examining the indirect impact of these factors on other factors and also the impact of the demographic variables like age, district etc on the factors which influence a farmer. Hence the Hypothesis adopted for the research study fall under 3 categories. The NULL hypothesis is stated below :

1. H1: There is no significant impact of the influencing factors on the decision making of a farmer (willingness) to avail an agri loan with a bank.

2. H2: The mediating variable does not mediate the relationship between the independent variable (Influencing factor) and the dependent variable (willingness of the farmer to avail an agri loan with the bank)

3. H3: A moderating variable (demographical factor) does not moderate the relationship between the Independent variables (influencing Factor) and Dependent variable (Willingness of the farmer to avail an agri loan with the bank)

The population identified for the study were two districts in Karnataka (Koppal and Chitradurga) Primary data collection was done from 7 banks in the given population, which included private banks, public sector banks, regional rural bank and co-operative banks. The data collection activity commenced post that since Feb 2019 and it went up to Nov 2019 when the entire data was collected as per the sampling requirement.

The primary data collected was process through excel sheet and then SPSS-20 software and Smart PLS- 3 were used for further analysis. As per the data analysis, out of the 8 main variables, 5 variables are considered significant and 3 variables are considered non- significant in impacting the decision of a farmer to avail an agri loan with the bank, as per details below:

Sl. No	Constructs - Influencing Factors	Significance
1	Advertisement by bank on agri Loans	Significant
2	Convenience to farmers	Non- Significant
3	Meeting of farmer with bankers	Non- Significant
4	Influence from others	Significant
5	Recovery & follow up of banks	Significant
6	Loan specific benefits of the bank	Significant
7	Cost of the loan	Significant
8	Rapport & service experience of farmer	Non- Significant

Mediation Impact: The impact of mediation was studied on all these factors keeping the other variables as mediators. Of these 14 mediations were found to be significant, where the indirect effect of the mediation was significant. The balance 42 mediations tests relieved in-significant effect of mediation & hence treated as No Mediation

Moderation Impact: The impact of moderation on the relationship between the influencing actors and willingness was studied under 7 categorical variables.. The variables were grouped under two categories each for this study. The moderation significance was 36.8% overall with the given factors as per details below.

Details of Impact of Categorical variables as Moderators

Sl No	Moderating Variable	Variables Significantly Impacted	Count	Significant % age
1	Age upto 45 yrs & above 45 yrs	Advertisement & Recovery	2	25.0%
2	Education upto 10th std & above	No factor	-	Nil
3	Type of Farmer (SFMF/ Others)	Convenience & Rapport	2	25.0%
4	Chitradurga / Koppal District	Convenience & Meeting	2	25.0%
5	Loan amount (Up to Rs. 3 lakhs and above Rs.3 lakhs	Convenience, Rapport, Cost of Loan & Meeting	4	50.0%
6	Public Sector banks and Private sector Banks	Convenience, Cost of Loan & Meeting	3	37.5%
7	RRB & Co-operative banks	Convenience & Advertisement	2	25.0%
	Total		**15**	**26.8%**

This research adds to existing research by contributing towards identification and analysis of the factors which influence the decision of a customer to choose a bank, wherein this is specific to a farmer as a customer who has to make a choice of a bank to avail a specific banking product which is an agriculture loan.

The research outcome provides a basis for creation of an appropriate strategy to the bankers when they decide upon the factors to be considered for promotion of agri business. Future research can be done with more specific in terms of type of banks, other geographies, other types of loan taken by farmers, impact of digitisation and other external influences in the farmer segment and these researches will go a long way in defining the strategy of Banks towards their marketing plan on agriculture lending.

TABLE OF CONTENTS

PART - I

PART – II

CHAPTER - I: INTRODUCTION

CHAPTER - II: REVIEW OF LITERATURE

CHAPTER - III: RESEARCH METHODOLOGY

CHAPTER -IV: DATA ANALYSIS AND INTERPRETATION:

CHAPTER -V: RESULT, DISCUSSIONS & CONCLUSIONS:

ANNEXURES / OTHERS:

PART - III

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVATIONS

Sl no	Acronym	Full Form
1	ANBC	Adjusted Net Banking Credit
2	ATM	Automated Teller Machine
3	CFA	Confirmatory Factor Analysis
4	DRT	Debt recovery Tribunal
5	DV	Dependent Variable
6	EFA	Exploratory Factor Analysis
7	FDI	Foreign Direct Investment
8	GDP	Gross Domestic Product
9	IMPS	Immediate Payment Service
10	IV	Independent Variable
11	KCC	Kisan Credit Card
12	MF	Marginal Farmer
13	MGA	Multi Group Analysis
14	MV	Mediating Variable
15	NABARD	National Bank for Agriculture & Rural Development
16	NPA	Non performing asset
17	PLS	Partial Least Squares
18	PSL	Priority Sector Lending
19	RBI	Reserve Bank of India
20	RTGS	Real Time Gross Settlement
21	SARFAESI	Securitisation & Reconstruction of Financial Assets & Enforcement of Security Interest Act
22	SD	Standard Deviation
23	SEM	Structural Equation Model
24	SF	Small Farmer
25	SMA	Special Mention Asset
26	SME	Small & Medium enterprises
27	UPI	Unified Payments Interface

CHAPTER - I

INTRODUCTION

CHAPTER - I

INTRODUCTION

1.1 Overview:

This chapter provides the introduction and the background to the research, discussing the important concepts related to the study. The concepts regarding the importance of agriculture finance in India, the details of competition amongst banks in the field of agriculture finance and the concept of choice of a farmer to select a bank and the factors influencing such decision is explained in this chapter.

1.1 (a): Overview of Agriculture in India:

Agriculture is a key sector of Indian economy in view of its contribution to employment and GDP. Agriculture activities are needed in the economy for producing food for consumption by people and for supplying raw materials to many industries. During the year 1950 to 1955 the contribution of agriculture to the GDP of India was 52 per to 55 % maximum. This percentage share of agriculture in the GDP has been reducing substantially with the growth in the Industry and Services sector income. The GDP share of agriculture reduced to 30 per cent during the 1990s and during 2018-19 it was 15.96 per cent. To represent in figures, the GDP of the country during FY 19 in INR is around Rs. 200 trillion, hence Agri GDP is around INR 32 trillion in (32 Lakh crores) (Ref: RBI Report of Agri Internal group- Sept 2019)

As per RBI Report of Agri Internal during Sept 2019 the total workforce in India was around 482 million which had around 262 million workers engaged in agriculture and allied activities which means around 55% of total work force was employed in agriculture. As per Agriculture Census 2015-16, the total agriculture land under cultivation was around 158 million hectares, with total number of operational holdings around Rs.146 million which results in an average holding of 1.08 hectares per person. Of this around 47% holding were of small and marginal farmers (up to 2 hectares of land)

1.1 (b): Overview of Agriculture Credit in India

Agricultural credit plays a vital role in the farm sector development. Government of India along with RBI and NABARD has designed and rolled out many agricultural credit policies to ensure credit flow from banks happen to the ground level to every needy farmer at the villages since independence. These policies include, RBI mandate to every bank to allocate atleast 18% of their total lending towards agriculture sector, interest subventions scheme by central government and state governments towards farm loans, various subsidy schemes towards agriculture and other farmer friendly policy interventions. The research report on 'A study on Institutional credit to Agri Sector in India - 2017' by Dr Ponnarasu states that the agriculture lending between 2001 to 2011 has shown an annual compounded annual growth rate (CAGR) of 24.9 % (from Rs.323.5 billion to Rs.2171.3 billion) which laid the foundation to take the growth in agriculture in India to a very high scale then onwards. The agriculture outstanding as on 28 Jan 2022 has increased to Rs.14327 billion as per the RBI report released on Feb 28 2022.

The farmers require money to keep the agricultural activity going, say for levelling the land, provide irrigation facilities, purchase of seeds, purchase of fertilizers and towards labour payments. Farmers get loans for agriculture purposes from many sources in the villages like local money lenders, cooperative societies, regional rural banks and other commercial banks. As the banks are governed

by the rules and policies framed by the Government, RBI and NABARD in agricultural lending, these are the most trusted source of finance to the farmers in the villages.

There are few typical features in lending to agriculture sector as compared to the loans given to other sectors by the banks. The farmers require loans as per the cultivation cycle for purchase of seeds, fertilizers etc. towards sowing, for labour expenses during harvesting and then for storage till he sells the products and towards land development and mechanization related activities. The loan amount is dependent on the proportion to the land holding and the type of crop cultivated. The bank needs to assess the loan based on this requirement of farmer and also considering his repayment capacity and credit worthiness, as the bank has the responsibility to recover the loan given to the farmer along with interest. To ensure this, the bank need to verify the credentials of the farmer in terms of his land holding, income levels, projected income etc. The farmers hardly file income tax returns or do they have financial documents to prove their incomes with them as compared to other constituents like a businessmen or salaried persons, where they get a balance sheet or a salary statement. The banker has to assess the farmer based on the land details of the farmer available as per government records, the crops grown by him and through the income generated therein. Getting proper land records maintained with government offices has remained a challenge to the farmers and bankers in terms of accuracy of information, time required to get the documents and the cost involved in getting these documents. To address these challenges, digitisation of agri land records was a big step initiated by the central government around twenty-five years ago across the country. This was aimed to stabilise the land record maintenance system, make land records transparent and easily accessible to the people. At present the digitisation of land records has improved substantially across most of the state governments. Digitisation has simplified the process of getting documents and creating mortgage in favour of lending banks to take an agri loan.

Agriculture flow to the Indian Farmers through the banking system was streamlined by the Central Government, RBI and various state governments through various reforms passed since independence. 14 banks were nationalised during year 1969 and 6 banks were nationalised during the year 1980 which gave additional focus on agriculture, which is called as the priority sector for the country. NABARD was established on 12th July 1982 to refinance the agricultural activities as an exclusive institution for agricultural finance. RBI drafted specific guidelines towards agricultural lending by banks since beginning. Every year this guideline gets revised on the first of July, as Priority Sector Lending (PSL) guidelines for the year. So agriculture has always remained a top priority sector of the government since independence.

Since the year 1991 onwards RBI has streamlined the policy of issuing licences to banks to open new branches. (Ref: RBI notification on Bank branch Licensing- 1991). The proportion of the number of bank branches in rural and semi urban areas to the total branches is fixed and need to be maintained. This resulted in increase in the number of bank branches and especially in the rural and semi urban locations, which were unbanked earlier. So at present this has resulted in every small village having few bank branches, or at least one bank branch and focus on agriculture lending in that village.

This position was different during the early eighties. One bank branch used to cater few villages in a Taluk. Hence, one of the approaches to fund the farmers which was stipulated during the early eighties was called the Service Area Approach. Under this approach one village was allocated to one branch of a bank and only that branch used to service the loan requirements of the villagers of that village. This approach was very helpful as the bank could focus on that particular village. The farmers were also happy as they know where to approach for their needs. The bank also had a target and obligation to fund the farmers in this village, even to the last farmer in the village. Along with that the downside was that the farmer was at the mercy of this bank branch. He had to accept all the terms and conditions

of this bank and had no choice to make in case he wants to take an agriculture loans. Hence many times the farmer used to prefer a money lender instead of the bank.

1.1(c): Overview of competition amongst banks in agri lending:

With the new economic policy which came up during the year 1991, many new reforms and changes were introduced. One of them was banking licenses provided to the new generation private sector banks. HDFC Bank, ICICI Bank, UTI Bank (now Axis Bank), Times Banks (now merged with HDFC Bank), Global Trust Bank, IndusInd bank, were some banks which opened during the mid of the 1990 -2000 decade. These new generation private sector banks adopted many best practices followed at different countries and the earlier banking practices have undergone many changes. In the field of agricultural lending also, these banks brought many improvements, used high end technology in loan processing, which saved time and cost to the farmers. The other nationalised banks also have made many improvements in their lending practices and customer service to farmers. With the above changes and increase in the number of bank branches, competition amongst banks increased. The service area approach was scrapped by RBI during the end of the nineties, and banks were given liberty to fund any village or any farmer as per their convenience. This ended monopoly of bank branches focussing on specific villages earlier and resulted in better facilities provided to the farmer in terms of customer service, rate of interest, door step services to farmer and higher funding amounts

At present, all Scheduled Commercial Banks are required to meet a target of 40 per cent of their Adjusted Net Bank Credit (ANBC) or credit equivalent of off- Balance Sheet Exposure, whichever is higher for Priority Sector Lending (Source: RBI Circular on PSL Norms April 2010 onwards) RRBs and SFBs are required to meet a target of 75 per cent towards PSL. Besides the overall PSL targets, banks are required to achieve agriculture target of 18 per cent and a sub-target of 8 per cent of ANBC for small and marginal farmers. Till the year 2008, agriculture lending and Priority sector lending had

a vast definition of the category of borrowers included under this bucket. It included not only the farmers, but also the companies, traders who were involved in agriculture directly or indirectly, either by direct production or subsequent value additions and marketing of agricultural products. Hence till the year 2008, many banks used to fund the corporate linked to agriculture and thereby achieve their stipulated targets on agriculture.(Ref: Annual RBI Circular of PSL Lending July 2008 onwards)

During the year 2008, RBI revised the PSL guidelines and made it strict to the banks that the loans given to the direct farmers only shall be allowed in this category and funding to corporate was disallowed. Banks who do not achieve these targets were imposed penalty in terms of depositing the shortage in target amount in a RBI bond earning very low interest rate. (Ref: RBI circular on Priority sector lending updated April 2020). Hence all the banks including private sector banks started focusing more on direct agri lending to the farmers since the year 2008. As a penetration strategy the banks have opened additional branches in rural village, rural unbanked villages and in semi urban areas wherever agriculture is in place. All these has resulted in a competitive environment amongst banks to the advantage of the farmers to take loan from banks

Table 1.1: RBI Priority Sector Norms

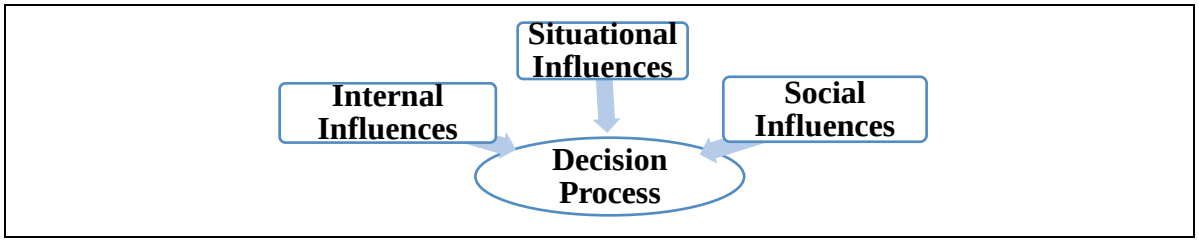
Categories	Commercial Banks	Regional Rural Banks	Small Finance Banks
Total PSL	40 per cent of ANBC	75 per cent of ANBC	75 per cent of ANBC
Agriculture	18 per cent of ANBC out of which a target of 10 percent towards SF & MF	18 per cent of ANBC out of which a target of 10 percent towards SF & MF	18 per cent of ANBC out of which a target of 10 percent towards SF & MF

(Source: RBI PSL Circular – Sept 2021)

With this competitive environment, now it is advantageous to a farmer as he has a choice to take a loan with any bank he wishes to. There are many factors in the rural market which influence the farmer to take loan with a particular bank. These include agents/ advisors of the bank who work for a commission, the bank manager and their sales teams who walk around the village to induce the

farmer, various types of advertisements made by the banks, including hoardings, and various digital advertisement, mobiles SMS TV scrolling etc and also there many other differential benefits offered by each of the bank to induce the farmer. Under this situation, which are the factors which can significantly influence a farmer to take loan from a particular bank is the main theme of this study. to be answered. This includes a farmer who takes a fresh loan for the first time from a bank or a farmer who decides to switch to another bank to avail the loan.

Figure 1.1: Classification of Influencing Factors for a customer decision making



Source : Adopted from study done by Mr.Goiteom W / Mariam during June 2011

As per the above diagram, the decision process of a customer is dependent on 3 main aspects.

1. The internal influences of the individual, which is specific to his personality and character,
2. The situational requirements of the individual at that environment at that point of time and
3. The social influences by the people he engages with

The can be represented below with 2 examples each keeping a customer and bank in view

Figure 1.2: Grouping of Influencing Factors for a customer to choose a bank

Bank Induced Factors	Customer specific Requirement	External Influence
•Advertisements •Camps by bank	•Higher Loan amount •Any particular product	•Agent involvement •Reference from friends

Source : Study done by Mr.Goiteom W / Mariam during June 2011

1.2: Motivation for the Study:

One of the key factors is that there is a competition amongst banks to lend to agriculture and the farmer has a choice to select any bank which gives him maximum benefits. There are many strategies and plans which banks make to increase their agri-lending books, as the bank cannot grow its overall lending book unless it lends 18% to the agriculture sector. During my various professional roles, I always had this question as to, when such strategies are adopted by banks, whether these strategies are effective which of them is more significant than the other and is the effectiveness is different between different customer strata etc. and these questions motivated me to conduct a study on these aspects. For example as a banker, is it worth spending money on a TV advertisement, or whether a hoarding will work in a village and influence the customer to approach the bank to avail a loan, or is it that the bank can reduce his processing fees instead of placing and advertisement, these are questions to be answered

Through this research attempt is made to identify, which are the strategies of the banks which can be effective to induce the farmer to take an agriculture loan with the bank. Whether the farmer sticks on to his parent's bank for a loan, or is he interested only in getting lower rate of interest on loan, or will he go with a highly digitised bank with better customer service, is something which can be understood through a study, which is the topic

1.3: Relevance of the Topic

Identifying and understanding the factors which can induce a farmer to take a loan with a particular bank is a very beneficial study to any bank, so that it can put across its strategies and efforts towards the most important factors which can yield results. There are a significant number of studies made on factors influencing the consumer preferences to avail any service in general and also there are

studies available on factors influencing the decision of customer to avail a banking facility induce him to continue with the same bank. These studies have been providing sufficient information to the banks in this regard. In this specific study, we have a ‘farmer’ who is the customer having different characteristics based on the demography. This is a very specific study on the factors that influence a decision of farmer to select a bank to take an agriculture loan. It is presumed by common people in general that the farmer has very little choice and he has to take loan with the nearby bank, while in reality it looks different. This study provides important insights into factors which are important to farmer to take a loan and which have an influencing effect to take a decision, which adds to literature and important reference point for banks, hence relavant

1.4: Scope of the study

The scope of this study is limited to the decision making of a farmer to select bank for availing an agriculture loan from a bank only and it does not cover any other type of loan taken by the farmer or any other services availed from the bank

Further the scope of this study is restricted to Banks only, which includes public sector banks, private sector banks, regional rural banks and co-operative banks and hence does not include any other lending institutions or micro finance companies engaged in lending to farm sector.

The study is conducted in 2 districts of Karnataka (Chitradurga and Koppal) and hence it covers the crops and agri-products applicable to these areas only. The loans include crop loan (KCC), Land Development loans, Tractor Loans and Dairy Loans. Loans for fisheries, sericulture and or any other specialized crops / agri products financed in a different area and relevant practices at any other location are not included under the scope of this study.

1.4 (a): Demographic Details of the Selected Districts :

Criterion for selecting these 2 districts:

Karnataka state has around 11 million hectares of land under cultivation which is around 7% of the total cultivated land in the country. Food grains are the major crops in Karnataka grown on an area of around 8 million hectares of land approximately. Other 3 hectares land is utilized for growing oil seeds and other commercial crops like cotton, sugarcane and tobacco. Overall production during FY 19-20 was around 16 million tones of crops in total. There are 30 districts in Karnataka and agricultural activity is observed across all the districts in the state. Two districts selected for this study are Koppal and Chitradurga which contribute around 9% of the total agriculture production of the state (Source: Karnataka government Agriculture department annual report of cropping details and pattern- latest published on 30-09-2020) . . Food grains, oil seeds and all other commercial crops are grown in these districts and hence selected as representative districts for the state. These districts are located in central Karnataka and north Karnataka having presence of all types of banks and hence ideal districts to conduct the research.

Demography of the select Districts:

Koppal is a district in Karnataka having 4 taluks. It has a total area of 5,570 sq km wherein, 37 sq km is urban and 5533 sq km is rural. There are 5 towns and 629 villages in this district. The population in is 1,495,692 (as per aadhar uidai.gov.in Dec 2020 data). As per 2011 census of India, Koppal District has a population of 1,389,920 in 2011 out of which 699,926 are male and 689,994 are female. People living in the district depend on multiple skills, total workers are 654,766 out of which men are 387,974 and women are 266,792. Total 152,288

Cultivators are depended on agriculture farming. Literacy rate in rural areas of Koppal district is 66.05 % as per census data 2011. Hindus make up 87.63% of the population while Muslims are 11.64%. Scheduled Castes and Scheduled Tribes make up 18.61% and 11.82% of the population respectively. The district is irrigated and has water sources through canal, river water and also rainfed to some extend. The major crop grown in the district is Paddy followed by Jower, Maize and wheat. Also various fruit crops, vegetables and dhals and pulses are grown in this area.

Overall the district is agri based and consists or rural population, medium educated. Agriculture activities is a major source of income and the average land holdings is small to medium, in this district and crops grown here require more water sources like paddy and maize. (*Source: Karnataka government website, indiastatdistricts.com, slbckarnataka.com and Wikipedia.)*

Chitradurga is a district in Karnataka having 6 taluks. It has a total area of 8,436 sq km of which140 sq km is urban and 8296 sq km is rural. There are 8 towns and 1,063 villages in this district. The population in 2022 is 1,785,740 (as per aadhar uidai.gov.in Dec 2020 data). As per 2011 census of India, Chitradurga District has a population of 1,659,456 in 2011 out of which 840,843 are male and 818,613 are female. People living in Chitradurga District depend on multiple skills, total workers are 856,587 out of which men are 513,311 and women are 343,276. Total 257,076 Cultivators are depended on agriculture. Average literacy rate in Chitradurga district as per census 2011 is 85.89 % . Hindus make up 91.63% of the population while Muslims are 7.66%. Scheduled Castes and Scheduled Tribes make up 23.4% and 18.2% of the population respectively. The district is majority rainfed and irrigated to a smaller extent. The major crop grown in the district is Groundnut followed by Ragi, jowar, sunflower and

few cereals and horticulture crops. Paddy and maize are grown in smaller quantity in few irrigated areas. Soil types of the district comprise deep & shallow black soil, mixed red & black soil, red loamy & sandy soil.and more suitable for growing the above crops and the soil is fertile and supports rainfed crops which require little rain.

Overall the district is agri based and consists or rural population, medium educated. Agriculture activities is one of the major source of income and the average land holdings is marginal to small holdings in this district and crops grown here are majorly rainfed like ground nut and sunflower. (*Source: Karnataka government website, indiastatdistricts.com, slbckarnataka.com and Wikipedia.)*

1.5: Organization of the Study/Thesis - outline

The thesis has been divided into five major chapters. These chapters are preceded by Executive Summary and are followed by References and Appendix. The details of the layout are as follows:

The opening chapter introduces the basic concepts of agriculture in India and agriculture finance in India. It briefs on the concept of consumer behaviour, choice of the customer in selecting a bank and gives reference to the current study as to how this is related to a farmer's choice & brief details of the relevance of the topic and its scope

In the second chapter, a review of relevant literature is presented with the purpose of identifying gaps in the research undertaken so far. This led to the development of a research framework to be used in the study.

The third chapter details the research methodology that is used in the study. This chapters details how the questions are developed based on literature study, details of pilot study conducted to find out

robustness of the questionnaire, the research method flow involving the development of various hypotheses, the sampling plan and the overall research design details in full.

The fourth chapter gives full details of the data analysis of the primary data collected and analysis of the same using SPSS and SEM software. Details of the testing of hypotheses conducted and the outputs of regression analysis and the entire data analysis is clearly brought out in this chapter

The fifth and final chapter further interprets the results of the data analysis done in the previous chapter and relevant conclusions are drawn from the results. Limitations and future scope of research is set out in this chapter.

1.5: Summary

This chapter gives brief introduction of the topic of research starting from details about Agriculture in India, Agriculture credit in India, Competition amongst banks and the Choice available to farmer to select a bank to avail an agriculture loan. Further it deliberates on the factors which influence the decision-making process of a customer to choose a bank based on available literature and a preamble to the study topic. Next it briefs about the motivation for conducting this study, the relevance of the research topic and the scope of the research study and finally it outlines the structure in which this thesis is drawn in detail, going ahead

CHAPTER - II

REVIEW OF LITERATURE

CHAPTER - II

REVIEW OF LITERATURE

2.1: Introduction:

This literature review is performed to assess and understand the available academic content related to topic and to describe the progress so far in the selected field. Literature available through various books, journal articles, research papers, data magazines, and publication from the government departments, RBI, NABARD and similar other sources are reviewed as much as possible. The literature review was essential for evaluating the existing literature work, identify the previous work done on the topic, identify the research gap and to establish the scope of the research to be conducted by the researcher.

The topic chosen for research is to identify the significant factors which influence the decision making of a farmer to choose a bank to avail an agriculture loan. Hence this study represents a consumer decision-making model, wherein the farmer (a consumer) who wants to take an agri loan (a service/product) need to select a Bank (a seller/ service provider), out of the given set of banks (competition) around him who provide the agri-loan and compete with each other. Considering the above topic, the literature study conducted is classified under 3 categories as mentioned below

1. **Literature review on 'Agri Lending, Competition amongst Banks & Choice of farmer'** - Studies on competition amongst banks to lend to agriculture sector, issues related to agri-finance, the reasons and details wherein a farmer as a customer gets a choice to select a bank to taken an agri loan for himself (which is the key research topic & research Gap)

2. **Literature review on 'Consumer Decision Models and Theories'** - Studies on the literature related to consumer decision-making models and theories which are in similar lines with the decision making of a farmer to select a bank for availing an agri loan to study the robustness of the model

3. **Literature review on 'Influencing Factors & their Characteristics'** - Study on the individual elements (Influencing factors) which impact the decision of farmer to select a bank for taking an agri-loan, and their characteristics which include the bank induced factors and the farmer related factors

The literature classified under the above 3 categories and detailed as below:

2.2 (i) Literature review on 'Agriculture finance & competition amongst banks

In the research article 'Competition in Indian commercial banking sector in the liberalized regime" written by Nishita Dutta, (2011) the competition amongst banks is studied between the years 1996 to 2005. Basing on primary research done in this article, it, mentions that the competitive environment of Indian banking sector which started since 1991, increased during the period 1996 to 2005 substantially. The competition was severe in the last two years compared to that of earlier periods, wherein the banks had taken positive steps to increase their business. This article projected this competition to be severe in future, post that period, which same has come true which can be verified in the forthcoming studies

The research report 'Report of the internal working group to review Agriculture credit- 2019' gives a complete review and picture of agriculture credit in India since 1951. It bifurcates the period into 3 phases, Phase-1 period 1951 to 1969, Phase-2 from 1970 to 1990 and Phase-3 from 1991 onwards and analyses the development of various financial institutions during the year, nationalization of

banks, set up of private banks and how credit moved across sectors during the period which touches upon growth of competition amongst banks.

Dr. Raghurama Rajan, former RBI governor mentions in his Journal article on competition amongst banks (May 2014) that with the changing environment in India, the competition amongst banks has increased to make the banks be more efficient and to remain competitive in the financial market. He further explains that, from the deposits side, the cheaper government funds available with banks earlier is not available in the same manner due to the government investment in various other financial instruments available at present. . The liquid balances available in the savings bank accounts which were kept for transaction purposes earlier, are becoming difficult with the emergence of new payment institutions and development of technology in terms of RTGS, IMPS, UPI etc and other source of investment options available to the customers to do it online, which has resulted in higher cost of funds to the banks. On the lending side as well, with the availability of other alternate sources of funding at lower cost to the SME/Corporate borrowers, like FDI, Private equity etc, the margins on rate of interest available has decreased drastically. He also touches upon the advent of payment banks which are the new entrants for the competition. Also he points out the requirement of priority sector lending which the banks need to adhere, which forces them to open more branches in the rural sector and make financial inclusion as a part of banking, which opens up completion in this area.

The IMF Working paper – competition policy for Modern banks – May 2013 by Lev Ratnoski, explains the different facets of competition amongst banks at different levels and how it is facilitated by the regulator and what are the benefits of competition

In another research article 'Financial deregulation, competition and cost efficiency of Indian commercial banks: is there any convergence' by Zaman & Bhandari during Oct 2020, the growth path of Indian banks since the financial liberation policy of 1992, is analysed with specific highlights

on the productivity and efficiency of banks. As regards competition amongst banks, the article concludes that “the overall competition level in the Indian banking industry has increased over time. This may be one important influencing factor for the observed convergence of cost efficacy”.

As regards the current study topic, the focus is on the competition amongst banks in the agriculture lending space, due to the priority sector lending targets and agriculture lending targets prescribed by the RBI. The Reserve bank of India vide its priority sector guidelines, which is updated every year (latest update in July 2021), has stipulated that 40% of the total lending of the banks need to be towards priority sector only and 18% of the total lending need to be towards agriculture sector. In case the agri-lending book of a bank falls below 18%, of the total lending book on 31st March of any financial year, the shortfall amount has to be mandatorily deposited with NABARD under its RFID scheme which earns a comparatively lower rate of interest and will not be cost effective to that bank. This circular clearly states the categories of loans which fall under the agriculture sector to qualify as a priority sector lending. It includes mainly the small loans given to farmers for cultivation and land development, which forms the basis of Agri Lending. There are some other bigger loans also categorized under priority sectors- agriculture like funding towards agri-infra structure, to agri-ancillary services etc, which are having a capping on the amount lent and are closely monitored by RBI, to ensure the majority of the agriculture finance goes to the individual farmer.

The understanding from the above literature study is that it is compulsory for a bank, who wish to grow their overall lending business to proportionately increase its lending share towards the agriculture sector. In view of the above all the banks have taken positive initiatives to improve their lending towards agriculture. The regional rural banks were the ones who had predominantly lending to farming sector in villages followed by the public sector banks. These banks continue their strong hold on the segment. The public sector banks have further penetrated in rural areas by opening new

branches in smaller areas and extended agri-lending. All the major private sectors banks have since 2008 onwards have made rural and inclusive banking as one of the major agenda of the bank. These banks have opened branches in the rural and semi-urban areas which are focused mainly towards lending to agriculture. All these developments have increased the competition in the agri-finance field. The farmer has a choice to select the bank which gives him maximum benefits while availing an agri loan. The current study is to identify the factors which are significant in influencing the farmer to select a bank to avail an agri loan amongst the competitive banks which provide finance for agriculture. The decision-making model and factors related study done in the next section. List of literature surveyed on the first point is as per Table 2.1 below

Table 2.1: List of Articles on Agri Lending, Competition & Farmers choice

Tag	Title Details	Author(s) & Year	Gist & linkage to study
Research paper	Competition in Indian commercial banking sector in the liberalized regime: An empirical evaluation	Nitish Dutta - 2011	Studies the competition amongst banks, how it started since 1991 and analyses the degree of competition in Indian commercial banking sector for the period 1996 to 2005
Journal Article	Competition in Banking Sector: Opportunities & Challenges	Dr. Raghurama Rajan- May 2014	A descriptive article on the various facets of competition amongst banks with the reasons and future outlook

Tag	Title Details	Author(s) & Year	Gist & linkage to study
Reports & other literature	Report of the internal working group to review Agriculture credit	Reserve bank of India, Sep 2019	This report gives a complete picture with data of the growth in agriculture credit from banks and other financial institution since 1951 to 2018
Journal Article	A Study on Institutional Credit to Agriculture Sector in India	Dr S Ponnarasu, - 2017	This article analyses the progress of institutional credit to farm sectors since 2001 by various banks, provides data and touches upon competition
Reports & other literature	RBI Master Circular of Priority Sector Guidelines	RBI- Year 2007	This circular in 2007 re-defines the Priority sector norms wherein the banks are mandated to lend to individual farmers to include under agriculture
Reports & other literature	RBI Master Circular of Priority Sector Guidelines	RBI- Year 2020	This is the latest circular on PSL classification by RBI which define the latest norms for PSL and Agri classification
Reports & other literature	Karnataka govt Department agriculture data updated every year	Karnataka Agri Dept	This report gives details of the agriculture crops grown in Karnataka with acreage and volumes, basis for selection of 2 districts for the study
Journal Article	Formal Agriculture credit system in India	M V Gadgil - 1994	This article analyses the viability of lending to the agri-sector by banks and suggests various measure to be adopted to keep the banks profitable as well, relevant related article
Journal Article	Efficiency Of Public And Private Sector Banks In India	Sushma Vegesna& Mihir Dash	Discusses how liberalization and deregulation in the 1990s increased the competition among banks and financial institutions and impacted profitability, forcing banks to use their financial resources more efficiently
Research paper	Competition among banks: Good or bad?	Nicola Cetorelli – 2001	Discusses both positive and negative effects of competition in the banking sector and how unregulated competition among banks can negatively impact the credit markets and increase the risk of systemic failure in the economy

Tag	Title Details	Author(s) & Year	Gist & linkage to study
Research paper	Is Competition Among Cooperative Banks a Negative Sum Game?	Paolo Coccorese& Giovanni Ferri - 2017	Examines why unregulated competition and lender-borrower information asymmetry caused by lack of long-term banking relationships can lead to inefficiency among cooperative banks in Italy and how inner competition (competition within cooperative banks) has negative consequences
Research paper	How Rising Competition Among Microfinance Lenders Affects Incumbent Village Banks	Craig McIntosh, Alain de Janvry& Elisabeth Sadoulet - 2003	Examines how the increasing competition due to the entry of microfinance institutions and lenders in Uganda has negatively impacted the repayment performance and savings deposited with village banks and social capital-based lenders
Research paper	Does competition make banks riskier in dual banking system?	NafisAlam, Baharom Abdul Hamid &Dyi Ting Tan - 2018	Examines the difference in risk-taking behaviour of Islamic banks and conventional banks with respect to Islamic banking countries and the level of competitiveness between the two types of banks
Research paper	The effect of product market competition on stability and capital ratio of banks in Southeast Asian countries	Md Aminul Islam, & Mohammad Shibli Shahriar – 2020	Examines the effect of product market competition on the stability and capital ratio of commercial banks in the Southeast Asian countries of Philippines, Malaysia, Singapore, Indonesia and Thailand
Journal Article	The Impact Of Foreign Banks On Market Concentration: The Case Of India	Milind Sathye - 2002	Examines how deregulation of the financial markets and the entry of foreign banks impacted the market concentration and level of competition in the Indian banking sector
Research paper	How Regulation and Globalization Affected Organizational Legitimation and Competition Among Commercial Banks in Singapore	Glenn R. Carroll & Albert C.Y. Teo - 1999	Examines the impact of competition in the banking sector in Singapore which is characterized by strong regulations and the presence of many diverse international competitors

Tag	Title Details	Author(s) & Year	Gist & linkage to study
Research paper	Does Competition Lead to Efficiency? The Case of EU Commercial Banks	Barbara Casu& Claudia Girardone-2009	Examines the relationship between competition and cost efficiency with reference to the credit institutions in the five largest banking sectors of the EU - France, Germany, Italy, Spain and the UK
Research paper	The Effect of Credit Competition on Banks' Loan Loss Provisions	Yiwei Dou, Stephen G. Ryan &Youli Zou - 2017	Examines the impact of increased competition due to banking deregulation on the level of loss provisioning by commercial banks in the US which further affects their risk taking behaviour and ability
Journal Article	An investigation into the relationship between efficiency and competition among banks listed in Tehran Stock Exchange	GhodratFarahi and Seyed Ali Reza Mousavi-2017	Examines the relationship between competition and efficiency with respect to the banks and credit institutions listed on the Tehran stock exchange
Research paper	A Comparative Study on the Performance of Various Types of Loans Availed by the Farmers in Thiruvananthapuram District	Kshama, A.V. and Santha, A.M. -2019	Examines the various forms of agricultural credit offered by SBI and cooperative banks to farmers in Thiruvananthapuram District under the Kisan Credit Card (KCC) Scheme and its adequacy in comparison to the requirement for commercial farming
Journal Article	Measuring the competition and banking efficiency level: a study at four commercial banks in Indonesia	Setyo Tri Wahyudi, Rihana Sofie Nabella& Kartika Sari - 2021	Discusses how due to the monopolistic nature of the banking industry in Indonesia, competition has a negative correlation with bank efficiency because the banks focus more on achieving higher profits & recommends that banks should move towards a cost-conscious culture with more invest in technology to improve efficiency.

Tag	Title Details	Author(s) & Year	Gist & linkage to study
Research paper	Financial deregulation, competition and cost efficiency of Indian commercial banks: is there any convergence	Mohammad Shahid Zaman & Anup Kumar Bhandari - 2020	Investigates the difference in cost efficiency of Indian commercial banks across various ownership categories & concludes that state-owned banks are the most efficient followed by foreign-owned and domestic private banks with competition being a significant factor influencing cost efficiency.
Journal Article	Competition, bank fragility, and financial crisis	DewiHanggraeni - 2018	Examines the relation between competition and bank fragility with reference to the Indonesian banking industry and how this relation varies during a financial crisis.
Journal Article	Banking competition and misconduct: how dire economic conditions affect banking behaviour	Ezelda Swanepoel, & Ronnie Lotriet - 2016	Competition amongst banks analysed on the parameters such economic conditions, competition, bank profitability, and misconduct
IMF Working Paper	Competition Policy for Modern Banks	Lev Ratnovski - 2013	Discusses the changes required in the competition policy in banking in view of the recent changes in the global financial scenario

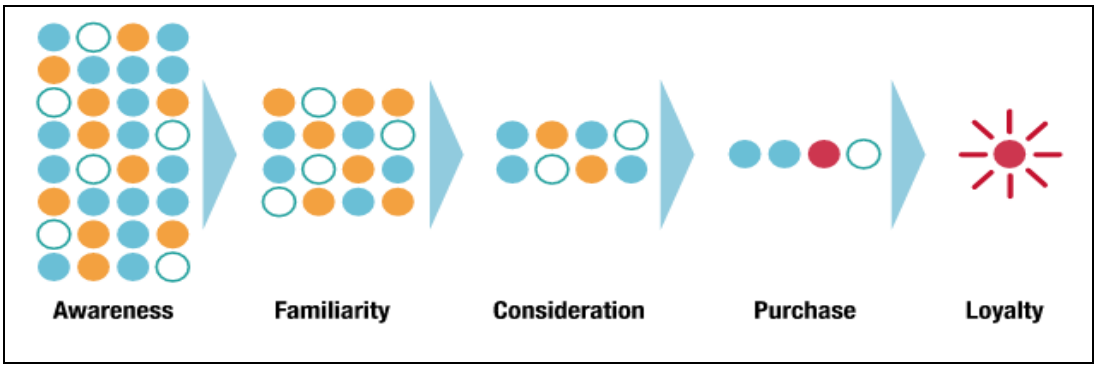
2.2 (ii) : Literature review on ‘Consumer decision making Models and Theories’:

The study topic is on decision making of farmer to select a bank to avail an agriculture loan, hence this is a study on a ‘Decision Making’ model. Study on the customers choice to select a service provider/ product/ bank have been carried out by researchers using different models and theories. The most common model used in banking is the SERVQUAL Model (Service Quality Model), and theories are developed on the same. We have reviewed many articles on ‘Consumer decision making’ for this research which are mentioned below.

Alina Stankevitch in her article ‘Explaining the Consumer Decision Making Process: Critical Literature Review’ (2017) focuses on consumer decision making process and various models and

theories adopted by various authors. The Traditional Funnel model of customer decision making adopted in her study is as below

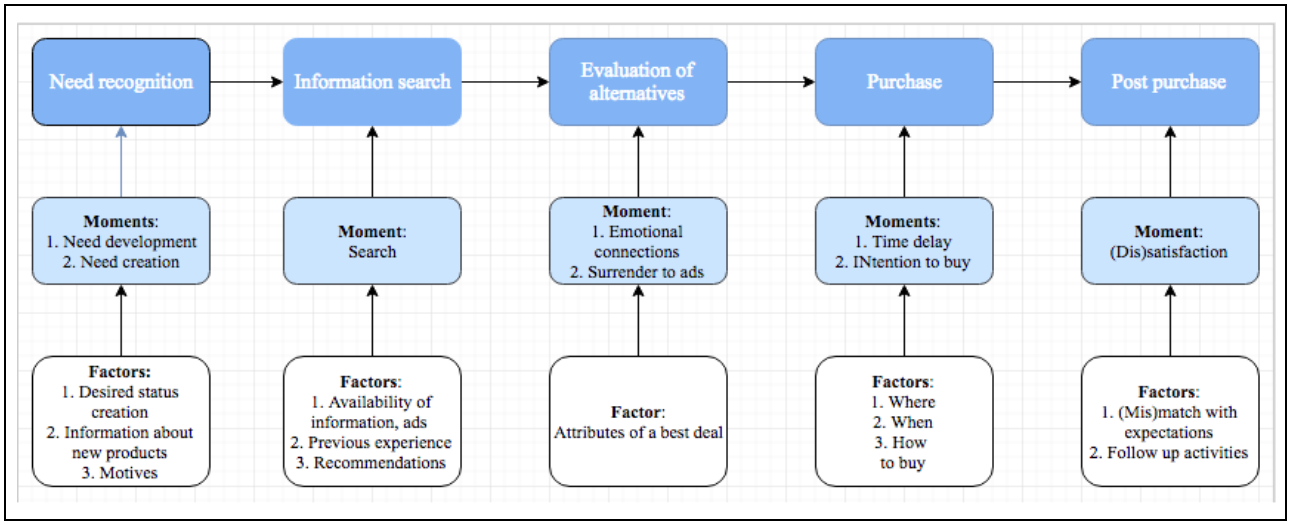
Fig 2.1: The Traditional Funnel of customer Decision making



Source : Adopted from A Stankevitch 'Explaining the Consumer Decision Making Process.2017

The consumer starts with a lot of products/brands/banks in his mind and gains awareness of these. As he progresses and gets familiar and considers one of them to purchase and goes with that product, which is at the end of the funnel in the diagram. This model gives basic idea of customer decision making process. Following diagram illustrated by Alena (based on a paper of Hoyer (1984), illustrates the Framework of factors and moments that influence decision-making.

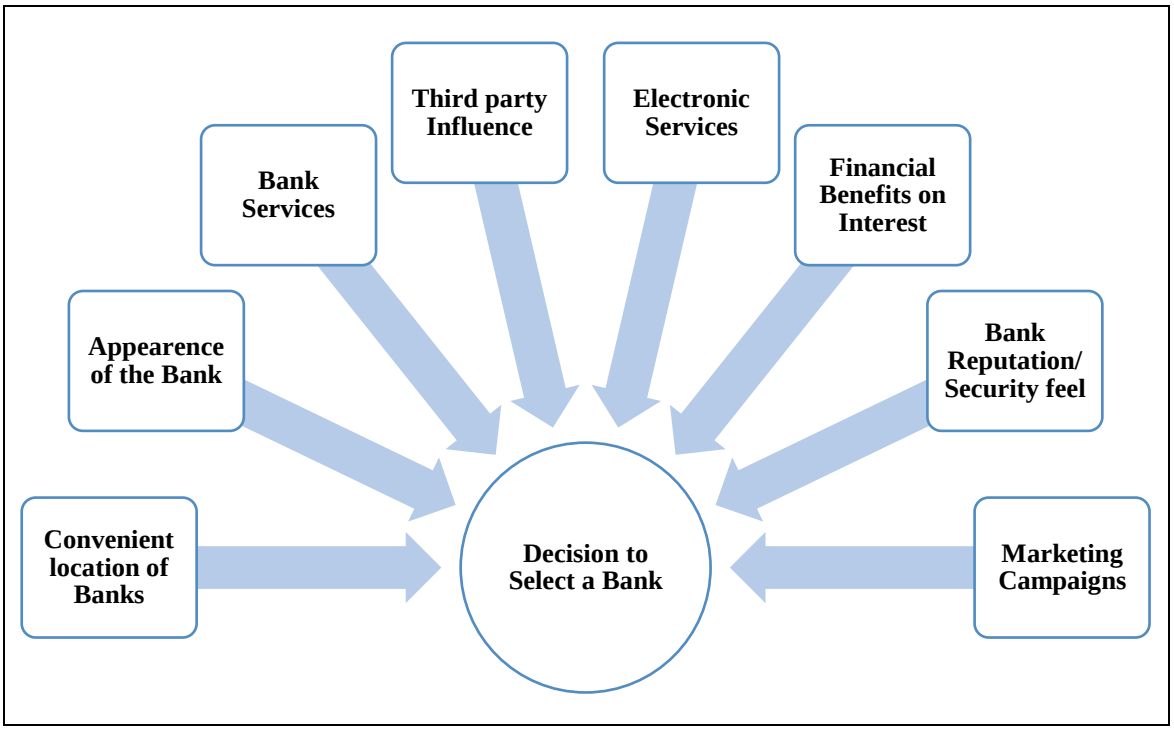
Fig 2.2: The Consumer Decision Model: Factors Framework



Source : Adopted from A Stankevitch 'Explaining the Consumer Decision Making Process.2017

Narrowing down on the topic on customer decision to avail banking services, few more research articles are examined. A research article by 'Robert E Hinson & others "Determinants of Bank Selection (2013) R the following 9 factors are chosen as important and influencing a customer to select a bank.

Fig 2.3: Determinants of Bank Selection – by Robert E Hinson



Source : Adopted from R E Hinson "Determinants of Bank Selection (2013)

This article also focuses on the factors a customer (students) consider to select a bank and is in line with the study topic.

Charles Blankson and others in their article Retail Bank Selection in Developed and Developing Countries: - A Cross-National Study of Students' Bank-Selection Criteria (2009) has done a cross-national study that compares students' selection of retail banks in a developed (the United States) and a developing (Ghana) country. It concludes that the the key determining factors in both countries are convenience, competence, recommendation by parents, and free banking. This articles is a reference article to select influencing factors

Mohamad Sayuti Md. Saleh and others in their article, Bank Selection Criteria in a Customers' Perspective (2013) has examined the factors influencing a customer in while he chooses a bank for banking services. These factors are also similar to the current study topic.

Safiek Mokhlis, Nik & Hazimah Nik Mat in their research article 'Commercial Bank Selection: The Case of Undergraduate students in Malaysia' (2008) have examined the various factors which influence an undergraduate student to select a bank for his financial requirements. Factors are to some extent similar to our study topic

Zafar Iqbal and others in their research article 'An Empirical Analysis of Customers' Preferences for Bank Selection: A Comparative Study of Small Business and Individual Customers' does a comparative study of the factors influencing an individual and a Business customer (SME) in selecting the bank. This article brings out the factors in detail which influence both the categories to select a bank for their requirement

H.Vasanthakumari and Dr. S. Sheela Rani in their article 'Customer Selection of Banks – A Biographic Segmentation' (2011) have examined the factors considered as important in selection of a bank by customers in Chennai and conclude that branch location and reputation and competitive rates are the most important

Dr. Cris Abraham and others in their research article 'Factors influencing choice of banks in a millennial customer perspective' examines the factors influencing bank selection with reference to customers in the age group of 21 to 30 years (millennial) in Kerala and have shortlisted the key factors which influence the millennial (ATM etc)

Jesmin Ara & Humaira Begum in their Research article 'Factors Influencing Customers in Bank Selection: A Study on Northern Region of Bangladesh' - 2018 Examines the bank selection criteria

for customers in the northern region of Bangladesh and concludes that security, use of technology and trustworthiness of staff are the most important factors

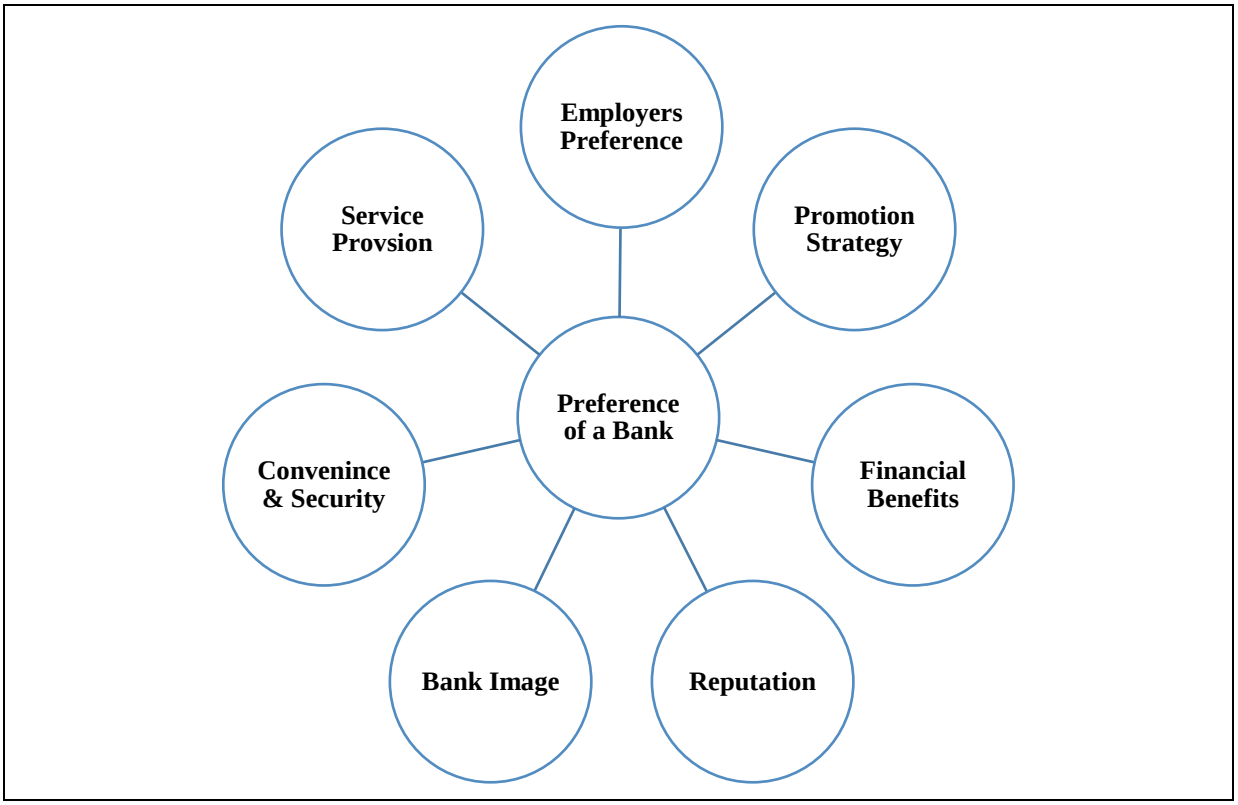
Judit Csizmásné Tóth & Péter Szöllősi in their research article ‘Bank Selection Criteria When Borrowing a Personal Loan’ (2019) have examined the bank selection criteria for personal loans in Hungary in the context of the huge increase in demand for personal loans during 2018 & concludes that interest cost is the major influencing factor.

Mohamad Sayuti Md and others in their research article ‘Bank Selection Criteria in a Customers’ (2013) Perspective’ Investigates the factors influencing customer’s choice of a bank in Kelantan, Malaysia & finds that accessibility is the most significant criteria followed by reliability, responsiveness, value added services and convenience.

Layla A Alamoudi & Jamaldeen Faleel in their article ‘Bank Selection Criteria of a Businessman (2021), have examined the selection criteria of banking for businessman in Saudi Arabia & concludes that the bank's product offerings, ATM network & availability of internet banking are the most important as per this study.

The research study by Mr. Goiteom W / Mariam during June 2011 , named “Bank selection Decision Factors Influencing the Choice of Banking Services” have derived the following 7 factors group as key influencing factors for a selecting the bank, in their model as below :

Fig 2.4: Factors for selecting bank as per research of Mr. Goiteom W



Source : Adopted from Goiteom W 'Bank Selection Decision factors' (2011)

Table 2.2: Ranking of Factors as per research of Mr. Goiteom W

Factors	Mean	Rank
Convenience & security	3.251	1
Efficient Customer Service	3.101	2
Influence of employers & others	2.594	3
Banks Ambience & environment	2.554	4
Promotion strategy of Bank	2.260	5
Reputation of the Bank	2.184	6
Financial /technology benefits	1.954	7

Source : Adopted from Goiteom W 'Bank Selection Decision factors' (2011)

This study is closely related to the current study topic as it is a study on the factors influencing the customer decision to select a bank for all banking transactions. The research article is considered as a base article for the current study to consider the factors for analysis and developing a questionnaire

and model study with minor changes on the factors which are specific to the agri loan segment List of literature review done on this topic is given below:

Table 2.3: List of Articles on Consumer Decision Model/ Theories

Tag	Title details	Author(s) & Year	Gist of the article
Research paper/article	Banks Selection Decision - Factors Influencing the choice of banking services	Goiteom W / mariam	This research paper has studied the various factors which influence the choice of a customer to select a bank, article is similar to the study topic
Journal Article	Determinants of Bank Selection: A Study of Undergraduate Students in the University of Ghana	Robert E. Hinson-2013	Examines the factors influencing the selection criterion of a bank by a general banking customer, in similar line with study topic
Research paper/article	Factors affecting consumers' buying decision in selecting a ' coffee brand'	Tanja Lautiainen 2015	Analyses the various factors which influence the decision of consumers, consumer decisioning model
Journal Article	Explaining he consumer decision making process-critical literature review	Alina Stankevich-2017	Analyses various models and literature on consumer decision making process and a very useful article linked to study
Research paper/article	Commercial Bank Selection: The Case of Undergraduate students in Malaysia	Safiek Mokhlis, Nik & Hazimah Nik Mat 2008	This paper studies the various factors which influence an undergraduate student to select a bank for his financial requirements
Journal Article	An Empirical Analysis of Customers' Preferences for Bank Selection: A Comparative Study of Small Business and Individual Customers	Zafar Iqbal,Mushtaq A Sajid, Muhammad Khalique & Muhammad Saim Hashmi -2018	Discusses the bank selection criteria of individuals and SME customers such as quality of service, location, charges for services, speed of service, availability and rate of credit, complaint handling and previous experience

Tag	Title details	Author(s) & Year	Gist of the article
Research paper/article	Bank selection criteria in the banking industry: An empirical investigation from customers in Romanian cities	Salih Turan Katircioglu, Mustafa Tumer and Ceyhun Kılınç	Examines the bank selection criteria of customers in two main cities of Romania and concludes that extensive ATM and branch network and availability of mobile and internet banking are crucial factors for Romanian people whereas advertisements and peer recommendations do not affect their decision.
Journal Article	Factors Influencing Customers' Bank Selection Decision in Ethiopia: The Case of Bahir Dar City	Tilahun Aemiro Tehulu & Gedifew Agalu Wondmagegn - 2014	Examines the bank selection criteria of customers in Ethiopia and concludes that ATM service, service quality, proximity, extensive branch network and long operating hours are significant factors
Journal Article	An Empirical Analysis of Customer Choice of Banks in Ghana	Anthony Abbam, Ishmael Dadson & Joy Say-2015	Examines the bank selection criteria of customers in Ghana and discusses the impact of deregulation which led to increased competition in the financial sector
Research paper/article	An Empirical Analysis of Attributes Influencing Bank Selection Choices by Customers in the UAE: The Dubai Context	Shirin KHaitbaeva, Abdulaziz Ahmed Al-Subaiey & Chris I. Enyinda - 2014	Examines the determinants of banks selection by university students in Dubai and discusses the necessity to procure and retain this profitable and well informed segment of customers
Journal Article	The Determinants of Bank Selection Choices by Customers: Recent and Extensive Evidence from Nigeria	Omo Aregbeyen- 2011	Examines the criteria for bank selection by individual and business banking customers in Nigeria and concludes that safety of funds and the availability of technology based services are the major determinants of a customer's choice
Journal Article	Analysis of Factors Affecting Customer's Selection of Bank Services (Case Study of Worabe, Ethiopia)	Mifta Shewmolo and Biniam Getnet- 2020	Examines the factors which influence the customer's patronisation of a particular bank and the level of importance associated with each factor when making the final choice

Tag	Title details	Author(s) & Year	Gist of the article
Journal Article	Factors affecting bank selection: An urban customer perspective	Menka Pathria & Dr Ramandeep Saini - 2020	Examines the factors affecting selection of a bank by customers in Gurugram and concludes that products offered and reputation of the bank are major influencers
Journal Article	Commercial Bank Selection Process Used by Individual Customers: Factor Analysis on Banks of Bangladesh	Afroza Parvin & Rumana Perveen - 2012	Examines the bank selection criteria for customers in Bangladesh and concludes that responsiveness, convenience and safety are the crucial factors
Journal Article	Factors Affecting Customers' Decision for Taking out Bank Loans: A Case of Greek Customers	Christos C. Frangos, Konstantinos C. Fragkos , Ioannis Sotiropoulos, Giannis Manolopoulos and Aikaterini C. Valvi	Explores the factors that affect a customers' decision to avail a loan from a particular bank and concludes that customer service and interest rates are the most significant influencers
Journal Article	Customers Retail Bank Selection Criteria in South Africa	Allexander Muzenda- 2014	Discusses the factors that determine a customer choice of bank with respect to the retail banking sector in South Africa
Journal Article	Identifying Factors Influencing Selection of Banks by Customers in Rwanda: Principal Components Analysis Approach	Ntaganzwa Joseph & Dr. Joseph K. Mung'atu - 2018	Explores the factors that influence a customer's choice of bank and how these differ across geographies due to the difference in cultural, political, economic and legal atmosphere
Journal Article	An Empirical Investigation on the Factors Influencing Customers' Decision in Choosing Banks	Benazir Rahman, Shobnom Munira, S M Sohel Rana and Md. Sazidur Rahman- 2018	Examines the factors which affect the perception of customers when selecting banks and concludes that effective communication, availability of ATM and use of advanced technology in services affect the customer's attitude significantly
Journal Article	Current Trend of Bank Selection Criteria of Retail Customers in Bangladesh: An Investigation	Protap Kumar Ghosh, Sutap Kumar Ghosh and Lubna Mahjabin Khan - 2015	Discusses the bank selection criteria of retail customers in Bangladesh and concludes that service quality and competitive interest rates can generate competitive advantage for a bank

Tag	Title details	Author(s) & Year	Gist of the article
Journal Article	Factors Influencing Customer Loyalty in The Banking Sector A Case of Commercial Banks in Mombasa Kenya	Elkana Cheruiyot Rorio - 2015	Examines the factors promoting customer loyalty in the face of a highly competitive and complex banking industry in Kenya and the challenges faced by banks in retaining customers
Journal Article	Factors influencing choice of banks in a millennial customer perspective	Dr. Cris Abraham Kochukalam & others - 2018	Examines the factors influencing bank selection with reference to customers in the age group of 21 to 30 years (millennials) in Kerala
Journal Article	Factors Influencing Customers in Bank Selection: A Study on Northern Region of Bangladesh	Jesmin Ara & Humaira Begum - 2018	Examines the bank selection criteria for customers in the northern region of Bangladesh and concludes that security, use of technology and trustworthiness of staff are the most important factors
Journal Article	Customer Selection Of Banks – A Biographic Segmentation	H.Vasanthakumari and Dr. S. Sheela Rani - 2011	Discusses the factors considered important in bank selection by customers in Chennai and conclude that branch location and reputation and competitive rates are the most important
Journal Article	Customers' perceptions towards bank selection based On demographic factors: Evidence from Bangladesh	Md. Redwanuzzaman - 2018	Examines the role of demographic differences in the bank selection criteria of customers in Bangladesh
Journal Article	Determinants of Bank Selection Choices and Customer Loyalty the Case of Ethiopian Banking Sector	Metasebiay Boru Lelissa & Tesfaye Boru Lelissa - 2017	Explores the factors which influence the bank selection criteria of customers in Ethiopia and conclude that service quality and accessibility are the major determinants
Journal Article	Revisiting Young Customers' Bank Selection and Loyalty Decisions in Ghana	Hadi Ibrahim, Ibn Kailan Abdul-Hamid & Muhammed Abdulai - 2020	Examines the bank selection criteria for first time student-users (who are opening and operating their first account) in Ghana and concludes that convenience and service quality influence their decision

Tag	Title details	Author(s) & Year	Gist of the article
Journal Article	What Determines Customers' Choice of a Bank? Evidence from Sokoto-Nigeria	Haruna Mohammed Aliero, Ibrahim Hussaini Aliero & Sulaiman Zakariyya'u - 2018	Examines the factors that determine the choice of a bank by customers in Nigeria and concludes that speed of service and ease of obtaining loans at competitive rates have a significant influence
Journal Article	Bank Selection Criteria of a Businessman	Layla A Alamoudi & Jamaldeen Faleel - 2021	Investigates the selection criteria of banking for businessman in Saudi Arabia & concludes that the bank's product offerings, ATM network & availability of internet banking are the most important
Journal Article	Bank Selection Criteria in the Saudi Community Empirical Study of Saudi Banks' Customers in Tabuk City	Bakhita Hamdow Gad Elkreem Braima - 2018	Investigates the factors determining the choice of bank among Saudi community & concludes that satisfaction, service quality & service cost are the most important
Journal Article	Bank Selection Criteria When Borrowing a Personal Loan	Judit Csizmásné Tóth & Péter Szöllősi - 2019	Investigates the bank selection criteria for personal loans in Hungary in the context of the huge increase in demand for personal loans during 2018 & concludes that interest cost is the major influencing factor
Research paper/article	Consumers' Bank Selection and Patronage Factors of Islamic and Conventional Banks: A field Research from Oman	Omiama Mohamed Abdalla & Ilham Hassan F. Mansour - 2018	Investigates the selection criteria that influence the bank selection decision of customers in Oman & concludes that service quality is the most important followed by convenience, bank reputation and privacy.
Journal Article	Consumer decision-making models within the discipline of consumer science: a critical approach	Alet C Erasmus, Elizabeth Boshoff and GG Rousseau - 2001	Discusses the importance and shortcomings of consumer decision making models
Journal Article	Reviewing a Consumer Decision Making Model in Online Purchasing:	Javier Andrés Gómez-Díaz - 2016	Investigates the factors affecting a customer's purchase decision with respect to online purchases & concludes that internet purchases are unplanned & highly dependent on the information available.

Tag	Title details	Author(s) & Year	Gist of the article
Journal Article	Consumer Decision Making Process Models and their Applications to Market Strategy	Diksha Panwar, Swati Anand, Farmaan Ali, and Kanika Singal - 2019	Discusses the various models for the consumer decision making process and how they help organizations improve their marketing strategies.
Research paper/article	Consumer Purchase Decision Models: A Review of Financial Services Context	Chaudhry Kashif Mahmood & Rohaizat Baharun - 2018	Discusses the consumer purchase decision model with reference to the financial services sector & observes that most purchase decisions are made in short timeframes compared to decisions for financial services which may be longer and involve continuous decision making including a number of failed attempts to purchase.
Journal Article	Models of Affective Decision Making: How Do Feelings Predict Choice?	Caroline J. Charpentier, Jan-Emmanuel De Neve, - 2016	Discusses a computational model of how feelings predict choices & observed that feelings affected choices more than objective criteria.
Journal Article	Review of Models of Consumer Behaviour and Influence of Emotions in the Decision Making	Mikel Alonso Lopez - 2016	Analyses various consumer decision models on whether they consider the presence of emotions in the decision making process and how they impact consumer choices.
Journal Article	Bank Selection Criteria in a Customers' Perspective	Mohamad Sayuti Md. Saleh, & others- 2013	Investigates the factors influencing customer's choice of a bank in Kelantan, Malaysia & finds that accessibility is the most significant criteria followed by reliability, responsiveness, value added services and convenience.
Research paper/article	Retail Bank Selection in Developed and Developing Countries: A Cross-National study	Charles Blankson - 2009	Explores the factors determining selection of a bank among students in the United States and Ghana & draws a cross-national comparison of the difference in environmental settings.
Research paper/article	Bank Selection Criterion of a Businessman	Layla A Alamoudi1 , Jamaldeen Faleel- March 2021	Studies about the factors influencing a businessman to select a bank to open a business account.

Tag	Title details	Author(s) & Year	Gist of the article
Research paper/article	A Model to Identify Factors Influencing Customers' Bank Selection Decision: Case Study of Fereshtegan Credit and Financial Institute	Hossein Najafi, Fatemeh Rahman – June 2016	Studies about the factors influencing t selection of a bank to open a bank account by employees of a financial institution for themselvesl
Research paper/article	Factors Influencing Customers' Bank Selection Decision in Nepal	Sahadev Bhatt and Dr. Swati Jain B- June 2020	Studies about the factors influencing t selection of a bank to open a bank account by customers of banks at Nepal in a city
Research paper/article	Determinants of Bank Selection Preference among Customers in the Kumasi Metropolis of Ghana	Dr.Isaac Tandoh- Jan 2019	Studies about the factors influencing t selection of a bank to open a bank account by customers of banks at Ghana
Research paper/article	Factors affecting choice of banks for agricultural lending in rural areas	Dr Navdeep Barwal (2019)	This study conducted at HP state with customers of 2 co-operative banks as to why they chose co-operative banks, have considered quick loan and low interest are critical factors to select the bank
Journal Article	Factors influencing the farmers to prefer the Canara bank about agricultural credit	U Jayaprakash (2020)	Studies the key factors which induces the farmers at Erode district to take agri loan with Canara Bank
Research paper/article	Bank Selection Criteria of Retail Customers in Bangladesh	Jahiruddin and Rumana Haque- Feb 2009	Studies about the factors influencing t selection of a bank to open a bank account by customers of banks at Khulana city

2.2 (iii) : Literature review on the 'Influencing factors and their characteristics':

The following literature articles focus on the individual influencing factors, their characteristics and their importance:

Advertisement by Banks:

Shani Bashir & Alhassan Bunyaminu have examined the various advertisement channels and practices of banks in their research paper "A Critical Analysis on Advertising Banks Products and Services in Ghana" (2013). The impact of advertisement as a tool to generate business is tabulated under Table 2.28 below:

Table 2.4: Impact of Advertisement by Banks, study at Ghana

Impact of bank advertisement	Very high	High	Reason - able	Not high	Not at all high
Influences me to operate with this bank	25.60%	65.10%	9.30%		
Influence others to operate with bank	32.10%	53.60%	14.30%		
Has positive impact on the bank product	15.20%	41.00%	36.20%	6.70%	1.00%
Does banks advertise, to what extent	11.70%	29.30%	36.70%	20.80%	1.70%

Source : Adopted from S Bashir 'Critical analysis on Advertising Bank Products (2013)

This article lists out the various types of advertisements by banks like, TV advertisement, radio, advertisement, magazine advertisements, internet advertisement, outdoor visible advertisements, direct mailers etc. It also lists out the benefits and drawbacks of these set of advertisement and its effectives. In the current study, the types of advertisement are considered to the extent it is suitable to farmers in the select districts

Arshad Mehmood in his article influence of banking advertisement on bank customer satisfaction: an examination of Pakistani bank Customers' choice – 2018, has done an study on the impact of advertisement and has concluded that advertisement has strong impact on bank customer satisfaction.

Dr. Subho Ray in the article 'Digital Advertising in India'(2012) have done a very detailed study on the concept & role of digital advertising in India, its features, importance and growth numbers which is very much applicable to banking industry and gives a full brief of the same.

In another research article "Advertisement in the banking sector: analysis and comparison between private and public limited banks in India" by Anita Ramrakhyani and others (2020), the authors examine the effectiveness of advertisement and its components/strategies used in private and public sector banks in India. The components of advertisement examined were Exhibitions, Sports sponsors, Newspapers& magazines, TV & movies, internet & mobiles, hoardings, pamphlets & posters, and sales persons. Based on the survey conducted with 600 customers of ICICI bank and SBI, this article concludes that the TV Advertisement, newspapers and internet play lead role in attracting new customers as compared to other means of advertising.

Dr Deepak Jarolia in his article during 2014 has made a study on internet advertisement of banking products and its effectiveness. He has compared the advertising modes like SMS, MMS, ATM, TV etc for banking products with advertisement on internet. He discusses about the various dimensions in which an internet advertisement works, like relevance to the particular viewers , the confusion factor it creates when the advertisement pops up, the entertainment impact of such advertisements etc in brief, which attributes to the success of the advertisement. The recent advertisement trend is on internet banking, which is backed by analytics and artificial intelligence. Products are advertised on internet through a click of the mouse and pop ups. Based on the observations in these articles and

taking clues wherever possible, we have taken the relevant advertisement strategies which are prevalent in the agri finance in the state of Karnataka.

Vinod Vaishnav has analysed the impact of advertisement methods adopted by 2 major banks in India in his article 'Impact of promotional strategies on Indian Banking Sector,- 2018.

Anil Kumar in his article , Scope and Impact of SMS Advertising in India: The Case of Bundelkhand Region (2013) has made a study of SMS advertising.. He concludes that majority of the respondents are in favor of receiving SMS ads if their preferences are taken into consideration before sending the ads. Those who disagree, have a negative attitude toward SMS, which is a smaller number

Ani Bencollins & Anyasor Okwuchukwu in their article 'Radio and television advertising of commercial bank products in Anambra State' (2018) have investigated the extent of influence of radio and television advertising on customer's choice of a particular bank in the state of Anambra in Nigeria and study concludes these both are effective advertisements to influence customers

Israel Kofi Nyarko in his article 'Effects of Electronic Media Advertising on Rural Banking' (2013) examines the influence of electronic media advertising on rural banking in Ghana & concludes that radio advertising is an effective tool adopted by the Unity Rural Bank

a) Conveniences to Farmers:

Internet banking is the first one in India which brought the convenience to customers through which they could access the details of their bank accounts and bank loans sitting at home, which was followed by the other modes of digital conveniences.

Dr. Preeti Singh, in her article. "An exploratory study on the internet banking usage in Semi- Urban Areas in India (2013) has attempted to analyse the usage of internet banking in semi-urban and rural

areas in India, its uses and constraints faced by the customers. She has listed down the benefits which include viewing their accounts, balance enquiry, getting bank statements, making repayment of loans, funds transfers and information about other banking products and how it is convenient to the semi urban and rural population and they prefer such bank, despite the constraints faced like connectivity, infra structure etc and their perception on internet banking compared to a brick and mortar structure.

In another article by Ms. Jayashree chawan, "Internet Banking- Benefits and Challenges in an Emerging Economy" (2013), examines the various benefits, constraints and perception towards internet banking & she mentions that internet banking facility provided by the bank is the one which can build and continue the relationship of a customer with a bank.

The development of Mobile banking was the next in line which started with SMS banking and with the advent of smart mobile phones in India, into a full fledged mobile banking. Dr Garima Mallik, in their article "An Exploratory Study on Adoption and Use of SMS/Mobile Banking in India with Special Reference to Public Sector Banks" (2013) have examined in detail the usage of mobile banking in India, its features , acceptability, benefits and constraints. This study is quite older compared to the current developments in this field. The authors have explained the services utilised – both balance checking and enquiries and transactions done through mobile banking and concluded that still mobile banking was in a nascent stage and need to pick up in a bigger manner during 2012-13.

SG Gunasinghe and others in their article, Factors affecting customers' intention towards the adoption of Internet Banking (2019) have made an analysis on the usage, risks and perceptions on internet banking usage adoption by customers. They conclude that customers' intention to adopt internet banking depends on the security and the legal background of the country and the Banks concern for

security, accessibility, solutions to improve trustworthy and secured internet banking systems. There is a need to update the internet banking website security which goes a long way.

A Aruna Shantha in her article Customer Perception on Internet Banking: With Special Reference to Bank of Ceylon (2019) has examined the internet banking awareness and usage in Srilanka. She lists out the key factors which impact usage of internet banking and concludes that awareness among people need to be improved. Bank should provide necessary guidance for their customers on internet banking usage and further bank should organized seminars and workshops to increase the customers knowledge regarding internet banking.

B.Anisha and others in their article A Study On Satisfaction Level Of Internet Banking Customers of Public Sector Banks And Private Sector Banks In Kanyakumari District (2018), have examined the satisfaction level of internet banking amongst 4 leading public sector banks and 3 leading private sector banks, and have commented on the demographic impact on internet banking by the users.

Lavanya D, Parveen Roja M and Geethanjali N in their article 'Risk Perception of Customers Towards Online Banking Security' (2020), Discuses the risk perception of customers in relation to online banking and recommends that customers should be informed in advance about the changes proposed to the bank's security systems as non communication was perceived as a high risk.

B. Upendra, Dr. V. Krishnamohan, J. Prabhakar in their article 'M-Banking and the rural India: yet a galactic distance to travel? - An analytical study' (2018) discusses the factors contributing to the reluctance of rural India to adopt the use of mobile banking and the means to bridge the gap & bring them at par with the urban population at Srikakluam district in AP state.

Isha Apte & Varsha Nerlekar in their article 'Influence of Digital Banking on Customer Satisfaction-Case of Urban Cooperative Banks in Pune City' (2020) analyses the impact of digital banking

channels on level of customer satisfaction with respect to urban co-operative banks & concludes that speed of transactions & easy accessibility to digital banking channels have a strong positive correlation with customer satisfaction.

Martin Mabeifam Ujakpa, and others in their article ‘ Farmers’ Use of Mobile Devices in Developing Countries’ (2020) have examined the use of mobile devices in the rural arrears of Namibia & finds that farmers use mobile devices to get up to date information on market transactions and banking services

Dr. Pramodkumar V. Deshani in his research article ‘ Customer Adoption and Customer Satisfaction towards Internet Banking A study of selected Public, Private and Foreign sector Banks (2018) examines the customer’s adoption of and level of satisfaction from internet banking with reference to banking sector in Surat City

b) Bankers Meetings with Customers:

Meetings of Bankers with customers is an activity conducted by banks on a regular basis. As per the recommendation of the Committee on Customer Service in Banks (Goiporia Committee), the RBI has notified the banks during April 2007 to conduct a branch level customer service committee meeting to address the queries and complaints of the customer if any, every month. Few banks have branded the meeting activity to do it in an attractive way. For example, ICICI Bank had branded the meeting of customers at branch premises as ‘MILAP’ (Ref: ICICI Bank website) and the meeting conducted at villages on agri loan products as “Gram Samvad”, which the bank staff used to announce in advance, invite attendees and conduct in a very structured manner.

c) Influencers / Agents in Bank Loans:

Menka Pathria in her article ‘Factors affecting bank selection: An urban customer perspective has analysed the importance of reference/ influence from friends and relatives to avail a banking facility (2020) .

Charles GitongaNdungu, in their article ‘Assessment of Factors Influencing Adoption of Agency Banking in Kenya” (2014) have elaborated on the role of agents in lending. In India agency. RBI has banned the usage of agents or Direct Selling agents to be used in the retail loans segments which include farmers as well since October 2019. Despite this there are agents available in the micro markets who unofficially assist the farmers to get loans from banks and their influence is studied in the research.

d) Loan Recovery Process of banks:

The loan recovery process of banks is identified as an influencing factor from two angles, one is the pressure for repayment and the other is the advance follow up measure. Banks are government by the RBI in terms of recovery norms and hence they have little choice in taking steps in this regard. As per RBI Circular on prudential norms (revised July 2015), for any loan where the interest is not served for period of 90 days or in case of instalments if 3 monthly installments are not paid, then such a loan is required to be treated as a NPA . Provisioning to be done on the entire loan as per RBI stipulations and interest amount debited to that account shall not be considered as income for the balance sheet of the bank.

Dr. Dhruba Charan Hota in his article ‘A Study on Recovery of Non-Performing Assets in Scheduled Commercial Banks in India’ (2019) , Details the provisioning norms introduced by RBI in light of the increasing NPAs in banks and financial institutions & various channels of recovery such as Lok Adalats, DRTs and the SARFAESI Act.

Mr Robin Thomas in his article 'Performance of Legal Methods of Loan Recovery in Indian Banks, An Empirical analysis" examines the various aspects and channels for recovery and Analyses the performance of three specific legal measures of loan recovery in the Indian banking: Debt recovery tribunals, SARFAESI Act and Lok adalats sector over a period of 10 years.

Mr. Srisai Chilukuri in his article 'Effective Credit Approval and Appraisal System: Loan Review Mechanism of Commercial Banks" (2014) describes the various steps taken by banks in follow up an recovery process, which start from credit appraisal process and covers regular account monitoring, analysis of financial and stock statements, stock audits, insurance and repayment follow up.

As per RBI classification (Ref: RBI notification: DOR (PCB).BPD. Cir.No.7/13.05.000/ 2019-20dtd 27 Dec 2019), where the interest/instalment is not paid within 30 days, it is called as SMA-0, 30 to 60 days as SMA-1 and more than 60 days as SMA-2, which are warning signals for a banker to do a smart follow up. With the increase in customer base the banks themselves are unable to do this follow up work through the bank staff. So call centers and care engaged who do the reminder calling on behalf of the banks. Then there are recovery agencies who follow up with the customers to make payments of dues. These processes are effective as well as irritating to the customers and hence these aspects are considered in this study.

An article in Economic Times highlights the issued faced by the customers where these calls turn to be irritating and abusive in nature and create unhappiness among the customers. Article mentions the guidelines put by RBI which these agencies need to adhere to , like- call from same number, identify themselves, call between the restricted banking timelines only and not during odd hours or late night, not to be abusive, give full details to the customer , leave message if he is not available etc, which the banks need to adhere to.

e) Cost of Loan (rate of interest & other charges):

The cost of loan is a crucial factor in selecting a bank. MenkaPatharia in her article 'Factors affecting bank selection: An urban customer perspective' mentions that "Price too plays an important factor in selecting a loan and when the customers are financially literate and rational and they want cost efficient banking". In another landmark study done by Devlin (2002) for the customer's banking choices with respect to his financial knowledge and it was discovered that customer with high degree of financial knowledge needs incentives from banks as the most important factor for him is cost while selecting a bank

f) Rapport with bankers & Service Experience of Farmers:

Customer service efficiency is one of the key influencers for any customer to continue his banking relationship with a particular bank or to shift his relationship to other bank.

Dr Manasa Naghabushan has done a detailed study on this aspect through her research paper "A study on customer service quality of banks in India" (2014). The research was done based on primary data from 600 customers across 4 cities in India covering 14 banks. The study is conducted based on the 'SERVQUAL' model where the study is categorized and conducted under 5 main heads of service which are as follows

1. 'Empathy to customers', which include convenient location of branch, suitable working hours, bankers ability to understand the needs, having sincere concern on the customers and willing to help them.
2. 'Responsiveness' which include quick responses, lesser waiting time, error free execution and customer support
3. 'Assurance' which includes safety and security features provided by bank, knowledgeable and trustworthy employee behavior and assured execution within a faster turn-around time

4. ‘Tangibility’ which include Centrally location, visual appeal on ambience, employees dressed with proper attire and availability of all require modern banking equipment.
5. ‘Reliability” which include online reliability, consistent and error free service and execution and reliable information provided by the bank in their communications

While the factor are ranked in the study all these factors have shown importance in terms of service provided by bank

Dr Meenu Kumar has also conducted a study on customer service in banking (2015), focusing on private sectors banks based on the same ‘ SERVQUAL’ model with same factors. In this research paper she concludes that amongst the private sector banks, they need to work more on the ‘Empathy to customers’ factors while they are doing well on the other 4 factors.

The rapport of the customer with the bank manager of other bank staff is another key important factor which influences a customer to continue the relationship with the bank and take a fresh loan as well, which we have considered in this study. A Research article “Investigating the Antecedents of Rapport for Developing Customer Satisfaction in the Banking Services of Bangladesh” by Johra

Dr. K. Pushpa Veni and V. Gayathri in their article A study on customer relationship management practices followed by state bank of India branches (2016) have studied the customer relationship management practices followed in banking and their impact on customer satisfaction with respect to SBI, virudhunagar and concludes mentioning the importance of CRM is recognised by the customers

Ms Nilakshi Tale in her article A Comparative Study of Nationalized and Private Banks with Reference to Customer Relationship Management (2019) has analysed the customer relationship management methods with its customer including loan customers of 2 public sector banks and 2 private sector banks. She examines various features of CRM and concludes the private sector banks have better managed CRM as compared to public sector banks

S. Sameena and dr. R. T. Saroja in their research article a study on service quality and customer satisfaction in private sector banks (2017) have examined the service quality of 3 top private sector banks in chennai through a likert scale survey of customers as per the serqual model. They have concluded that 'service quality is the basic and also most important factor that influences the overall customer satisfaction. This finding reinforces the need for banks managers to place an emphasis on the underlying dimensions of service quality especially on responsiveness and should improve service quality for higher customer satisfaction.

J Joshua Selvakumar, in his article, Impact of Service Quality on Customer Satisfaction in Public Sector and Private Sector Banks (2015), analyses the key predictors of customer satisfaction as per SERVQUAL Model and concludes that in Coimbatore area which is his survey location, private banks are better than public sector banks on service quality parameters

Wahyudi, Endang Ruswanti in their article 'The Effect of Service Quality, Trust and Satisfaction of Banks Customer Loyalty' (2021) examines the effect of service quality, trust and satisfaction on customer loyalty towards a bank & concludes that service quality impacts customer satisfaction, trust & loyalty & customer satisfaction & trust in turn improves customer loyalty.

Table 2.5: List of Articles on Factors Influencing a customer to choose a bank

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Research paper/article	Digital Advertising in India	Dr. Subho Ray - 2012	Detailed article which discusses the concept & role of digital advertising in India.
Journal Article	Effects of Electronic Media Advertising on Rural Banking in Ghana: A Study of Unity Rural Bank Limited, Ho Ghana	Israel Kofi Nyarko - 2013	Examines the influence of electronic media advertising on rural banking in Ghana & concludes that radio advertising is an effective tool adopted by the Unity Rural Bank

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Strategies for Marketing to the Rural Customer in India: The 4 As Model of Rural Marketing	Aditi Naidu - 2017	Discusses the 4 As model of rural marketing in the context of current practices in rural marketing in India
Journal Article	Evaluating the effectiveness of TV advertisement and analyzing its influence on attraction of saving deposit accounts of Ansar Bank in the city of Isfahan	Ali Sanayei, Arash Shahin & Seyede Nasim Amirosadt - 2013	Investigates the effectiveness of advertising on attraction of deposit account customers by measuring the impact of advertisement on each step of the AIDA model.
Research paper/article	Advertisement and Publicity: A Classical Tool to Measure Net Marketing Contribution of Banks of Bangladesh	Farhanaz Luna & Ahmad Bin Yamin, 2018	Discusses on the contribution of advertisement by banking under various other advertisement groups
Research paper/article	Influence Of Banking Advertisement On Bank Customer Satisfaction: An Examination Of Pakistani Bank Customer’s choice	Arshad Mehmood & Najam Ul Sabeeh - 2018	Discusses the impact of advertisements on the level of customer's satisfaction with respect to the banking sector
Journal Article	Measuring the Relationship among the Advertisement Expenditure, Sales Revenue and Profit on Steel Industries and Banking Industries in Bangladesh	Sultana Razia Chowdhury - 2017	Examines the relationship between advertisement expenditure and increase in sales revenue with respect to five banking companies in Bangladesh
Journal Article	A Study on Banking Advertisements in Turkish TV Channels	Seyit Ahmet Capan -2013	Details how advertisements telecasted on Turkish TV channels use specific cultural references to add to the credentials of the advertised banking products by following a common method - setting a pessimistic scene where the banking product / service acts as the solution to the problem

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Level of Advertisement by Commercial Banks on Utilisation of International Trade Finance Products by Business Customers in Kenya	George Ondiek Nyasudi & John Muhoho Kimani - 2015	Examines the level of advertising for international trade finance products offered by commercial banks and comments on how increase in advertising can improve their adoption and increase ease of trade for businesses in Kenya
Journal Article	The language of online bank advertisements in English	Vesna Lazović- 2014	Details how the banks in UK use specific linguistic strategies on their websites to attract customers after the global financial crisis created a trust deficit for banks and their products
Journal Article	Assessing Response towards Internet Advertisements- with special reference to banking products	Dr. Deepak Jaroliya-2014	Gives details about internet advertisement of banking products and factors to measure its effectiveness
Journal Article	Role of advertisement in banking - a study in UK & Bangladesh	Mohd Quadar & Kamrul Hussain- 2005	Details the advertising strategies adopted by various banks in these states and suggests what are the areas banks need to focus on
Journal Article	Advertisement in the Banking Sector: Analysis and comparison between Private & Public Ltd Banks	Anita Ramrakhyani,- 2010	Examines the various types of advertisements done by public sector banks and private banks in select cities in India
Journal Article	A Critical Analysis on Advertising Banks Products and Services in Ghana	Shani Bashiru1 & Alhassan Bunyaminu2- 2013	This article analyses in detail the various types of advertisement and its effectiveness of banking customers
Journal Article	Impact of promotional strategies on Indian Banking Sector	Vinod Vaishnav, 2018	Examines the advertisement tools used by 2 major banks and their impact
Journal Article	Radio and television advertising of commercial bank products in Anambra State, Nigeria	Ani Bencollins & Anyasor Okwuchukwu - 2018	Investigates the extent of influence of radio and television advertising on customer's choice of a particular bank in the state of Anambra in Nigeria and study concludes these both are effective advertisements to influence customers

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Scope and Impact of SMS Advertising in India: The Case of Bundelkhand Region	Anil Kumar - 2013	Examines the consumer's attitude towards mobile & SMS based advertising in the Bundelkhand region of India & finds that majority of the respondents are in favour of receiving SMS advertisements if their preferences such as time convenience, prior permission etc. are taken into consideration
Research paper/article	Banking through Networks of Retail Agents	Ignacio Mas and Hannah Siedek-2008	Discusses the technological and operational challenges of agency banking, the structure and performance of agent networks and how they support policy makers and banks expand their reach and address customer complaints
Research paper/article	Agent Banking and Financial Inclusion: The Nigerian Experience	Achugamonu, B. Uzoma, Taiwo, J. N , Ikpefan, Ochei Ailemen, I. O Olurinola and Okorie Uchechukwu Emena-2016	Analyses the extent to which agency banking has contributed towards financial inclusion in Nigeria and how illiteracy is among the major challenges on the path to financial inclusion
Journal Article	An assessment of the challenges facing commercial banks in sustainability of agency banking in Kenya: a case of commercial banks	Ruth Mary Vutsengwa & Dr. Karanja Ngugi-2013	Explains the factors affecting growth of agency banking in Kenya and recommends that banks develop adequate systems to address issues of security, confidentiality and infrastructural support
Journal Article	Assessment of Factors Influencing Adoption of Agency Banking in Kenya: The Case of Kajiado North Sub County	Charles Gitonga Ndungu & Dr. Agnes Njeru-2014	Investigates the factors such as easy service availability and convenience in the form of extended hours which contribute to the adoption of agency banking in Kenya
Journal Article	The Role of Agency Banking in Promoting Financial Inclusion: Descriptive Analytical Evidence from Tanzania	Dr Josephat Lotto-2016	Analyses how financial inclusion has been accelerated in Tanzania by the use of agency banking which provides greater geographical coverage at lower operating cost but also has related security concerns

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Risk Perception of Customers Towards Online Banking Security	Lavanya D, Parveen Roja M and Geethanjali N - 2020	Discusses the risk perception of customers in relation to online banking and recommends security systems as non communication was perceived as a high risk.
Research paper/article	Impact of Internet Banking on Customer Satisfaction and Business Performance	Shiffu Abrol - 2014	Explores the factors which influence customer satisfaction among internet banking users in the city of Jammu in India
Research paper/article	Customers Satisfaction Measurement of Internet Banking	Mahtab Alam - 2012	Explores the factors which influence customer satisfaction among internet banking users in the Western states of India
Journal Article	Customer Adoption and Customer Satisfaction towards Internet Banking: A study of selected Public, Private and Foreign banks	Dr. Pramodkumar V. Deshani - 2018	Investigates customer's adoption of and level of satisfaction from internet banking with reference to the Indian banking sector in Surat City
Research paper/article	Factors affecting customers' intention towards the adoption of Internet Banking	SG Gunasinghe, GMMR Gamlath, NS Fernando and WDH De Mel - 2019	Investigates the factors that affect a customer's intention to adopt internet banking with reference to the TPB (Theory of Planned Behaviour) and TAM (Technology Acceptance Model) frameworks & concludes that intention is significantly influenced by attitude, PBC (Perceived Behavioural Control) & PR (Perceived Risk).
Journal Article	Customer Perception on Internet Banking: With Special Reference to Bank of Ceylon in Sri Lanka	A Aruna Shantha - 2019	Examines the factors influencing a customer's perception towards internet banking in Sri Lanka with reference to the Bank of Ceylon & concludes that accessibility, cost & ease of use have significant positive effect on customer perception towards internet banking.

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	A Study On Satisfaction Level Of Internet Banking Customers Of Public Sector Banks And Private Sector Banks In Kanyakumari District	B.Anisha & Dr.C.L.Jeba Melvin - 2018	Investigates the level of satisfaction among internet banking customers in Kanyakumari with references to six banks - SBI, Canara Bank, Indian Overseas Bank, ICICI, HDFC & Federal bank.
Journal Article	Internet Banking Users's Competence and its Influence On Usage Satisfaction-A View from India	Vijayakumar Rajarathinam & Chandra Kumar Mangalam	Details how the adoption rate of internet banking is dependent on the accessibility of internet and the extent of technical competency and knowledge of the end user
Journal Article	Drivers and Inhibitors of Internet Banking Adoption in India	Ankit Kesharwani and Gajulapally Radhakrishna	A study of the impact of security concerns, computer literacy and ease of use on the adoption of internet banking in India
Journal Article	Internet Banking-Benefits And Challenges In An Emerging Economy	Jayshree Chavan - 2013	Details the security concerns and regulatory and infrastructural challenges impacting the adoption of internet banking
Research paper/article	Analyzing the Factors that Influence the Adoption of Internet Banking in Mauritius	Kesseven Padachi, Sawkuk Rojid, and Boopen Seetanah - 2007	Examines the impact of factors such as demographics, trust, cost and accessibility of internet, security concerns and ease of use on the adoption of internet banking in Mauritius
Journal Article	Customer's Perception on Usage of Internet Banking	Rajesh Kumar Srivastava -2008	A study of the existing perceptions about internet banking and how factors such as trust, ease of use, education, gender and income influence the adoption of internet banking
Journal Article	The future of Internet banking in India	L Arunachalam-2007	Details the features of internet banking in India and the difficulties in adopting the same
Journal Article	A Study on Customer Perception Towards Internet Banking:	Divya Singhal-2008	This research article analyses the banking features which are effectively used under internet banking
Journal Article	An exploratory study on Internet banking usage in Semi Urban areas in India	Dr. Preeti Singh-2013	This article examines the barriers and difficulties in semi urban areas for usage of internet banking and further prospects

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Internet Banking in India: Challenges and Opportunities	Arun Ingle -2012	Details about internet banking and about its benefits to the customer
Journal Article	M-Banking and the rural India: yet a galactic distance to travel? - An analytical study with reference to Srikakulam District of Andhra Pradesh, India	B. Upendra, Dr. V. Krishnamohan, J. Prabhakar - 2018	Discusses the factors contributing to the reluctance of rural India to adopt the use of mobile banking and the means to bridge the gap & bring them at par with the urban population
Journal Article	Influence of Digital Banking on Customer Satisfaction- Case of Urban Cooperative Banks in Pune City	Isha Apte & Varsha Nerlekar - 2020	Investigates the impact of digital banking channels on level of customer satisfaction with respect to urban co-operative banks & concludes that speed of transactions & easy accessibility to digital banking channels have a strong positive correlation with customer satisfaction.
Research paper/article	Farmers' Use of Mobile Devices in Developing Countries	Martin Mabeifam Ujakpa, & others- 2021	Investigates the use of mobile devices in the rural areas of Namibia & finds that farmers use mobile devices to get up to date information banking services
Journal Article	Exploring the Effect of Mobile Banking Services Provided by Banks on Customer Satisfaction	Dr. Vishal B. Javiya - 2017	Examines the factors influencing customer satisfaction in the context of mobile banking services & finds that reliability, responsiveness and accessibility are the most significant whereas availability of mobile network, security & service charges levied by the banks are the issues yet to be addressed
Journal Article	Empirical paper on financial inclusion: Does mobile banking increase financial inclusion in terms of the number of people availing bank services? (Especially with respect to credit services)	Nithya Menon - 2020	Discusses the reasons behind people availing different kinds of bank services & the various obstacles faced by them while using these services

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	A Study on Mobile banking Financial Transaction of Major Nationalized Banks in India	Krishna Prasad K & P Ushadevi - 2018	Presents a comparative study of mobile banking transactions among major banks in India using ABCD analysis & makes recommendations for the banks to increase digital transactions in India
Journal Article	Mobile Banking In India: Issues And Challenges	Gurmeet Singh Saini - 2014	Details the benefits of mobile banking for both banks and customers and the reasons why consumers choose not to use mobile banking
Journal Article	An Exploratory Study on Adoption and Use of SMS/Mobile Banking in India with Special Reference to Public Sector Banks	Dr. Garima Malik & Mr. Kapil Gulati-2013	Details the mobile banking services most frequently used by the customers of public sector banks in India and how security, convenience and accessibility are influencers of the adoption intention
Journal Article	Factors Affecting The Adoption Of Mobile Banking Services	Minna Mattila	Evaluates the drivers and inhibitors impacting the adoption of mobile banking services through a quantitative survey conducted in Finland researching three categories of responders – the non users, the occasional users and the regular users
Journal Article	Mobile banking in India: Barriers in adoption and service preferences	Prerna SharmaBamoriya - 2012	This article gives details on the barriers on usage of mobile banking and its features in use under various demographic variables
Research paper/article	Factors affecting behavioural intentions towards mobile banking usage- empirical evidence from India	Siddhartha dasgupta-2011	This paper analyses the perceived benefits and risks associated with usage of mobile banking facility, through its research
Journal Article	The Effect of Service Quality, Trust and Satisfaction of Banks Customer Loyalty	Wahyudi, Endang Ruswanti - 2021	Examines the effect of service quality, trust and satisfaction on customer loyalty towards a bank & concludes that service quality impacts customer satisfaction, trust & loyalty & customer satisfaction & trust in turn improves customer loyalty.

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Service Quality in Public and Private Sector Banks of India	Shruti Agrawal, Manish Mittal, Ratish Gupta - 2016	Examines the impact of service quality on customer satisfaction among private and public sector banks in India & concludes that service gap is lower among private sector banks compared to public sector banks.
Research paper/article	A Study on Service Quality and Customer Satisfaction in Private Sector Banks	S. Sameena & Dr. R. T. Saroja - 2017	Examines the impact of perceived service quality on overall customer satisfaction with reference to private banks in India & concludes that the most important dimension of service quality is responsiveness.
Research paper/article	Investigating the Antecedents of Rapport for Developing customer satisfaction in Banking	Johra Kayeser Fatima - 2011	This article analyses the relationship between rapport of customer with banker and customer satisfaction.
Journal Article	Enhanced Customer Relationship: By Improving Accessibility and Operational Efficiency of Banks	Dr. R.C.S Rajpurohit & Swati Surana	Analyses the customer's perception towards accessibility and operational efficiency of banks in India and how these affect customer satisfaction levels
Journal Article	A study on customer relationship management practices followed by SBI	Dr. K. Pushpa Veni and V. Gayathri-2016	Analyses the customer relationship management practices followed in banking and their impact on customer satisfaction with respect to SBI, Virudhanagar
Journal Article	Emotional Intelligence (EI) among Bank Employees: An Empirical Study	Anurag Pahuja and Anu Sahi-2012	Explores the importance of emotional intelligence in the banking sector and how it influences employee performance and consequently customer satisfaction with services
Journal Article	An empirical study of customer satisfaction with the service quality of private banks using servqual model	Dr (Mrs.) Meenu Kumar, March 2015	Research paper which focuses on customers' satisfaction from the services provided by private sector banks

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Customer Relationship Management in Practice: A Study of Multicredit Ghana Limited, a Micro Finance Institution in Ghana	Prosper Gameli Agbanu, Ogyamkpa Martin Ampomah, Peggy Dzifa Tagbotor, Peace Fiadzomor, Israel Kofi Nyarko - 2016	Explores the various CRM practices prevalent at a company, Multi Credit Ghana Limited in Kumasi, Ghana
Journal Article	A Comparative Study of Nationalized and Private Banks with Reference to Customer Relationship Management	Nilakshi Tale - 2019	Analyses the various factors involved in customer relationship management and compares their perceived presence by the customers across private & public sector banks.
Journal Article	A Study on Recovery of Non-Performing Assets in Scheduled Commercial Banks in India	Dr. Dhruba Charan Hota - 2019	Details the provisioning norms introduced by RBI in light of the increasing NPAs in banks and financial institutions & various channels of recovery such as Lok Adalats, DRTs and the SARFAESI Act.
Journal Article	Non-Performing Loans Increase in the Albanian Banking Sector during the Last Global Economic Crisis - An Analysis Based on the Client Groups	Turan Şan - 2018	Discusses the reasons for increase in non performing loans in Albania and makes recommendations on the steps to prevent future delinquencies
Research paper/article	Loan delinquency among small farmers in Developing countries: A case study of the small-farmer Credit programme in Lagos state of Nigeria	E. D. Balogun & Adekunle Alimi	Discusses the extent and nature of loan defaults in agricultural credit and its causes and consequences with respect to the small-farmer credit programme of Nigeria
Research paper/article	Determinants of loan repayment default among farmers in Ghana	Dadson Awunyo-Vitor -2012	Examines the repayment behaviour of farmers in Ghana and recommends that longer repayment periods and access to training can significantly reduce defaults

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Research paper/article	Determinants of Loan Repayment Performance Among Women Self Help Groups in Bayelsa State, Nigeria	George M. M., Felix Odemero, Victor IDEH & Albert Ukaro - 2008	Examines the loan repayment performance of women self-help groups availing credit for agriculture related activities in Nigeria and discusses how the social cohesion of women farmers in these groups positively influences their repayment behaviour
Research paper/article	Nonperforming Loans in the Banking Sector of Bangladesh: Realities and Challenges	Bishnu Kumar Adhikary	Examines the volume of non-performing loans in the banking sector of Bangladesh since the adoption of loan classification and provisioning systems in 1990 and how the maintenance of inadequate loan loss provisions has diminished the overall credit quality
Journal Article	Effective Credit Approval and Appraisal System: Loan Review Mechanism of Commercial Banks	Srisai Chilukuri & Dr. Kankipati Srinivasa Rao- 2014	Discusses the need of effective credit appraisal and loan review mechanisms as a means to mitigate the loss due to defaults and improve the financial health of banks
Research paper/article	Loan Recovery In Bangladesh: An Empirical Study Using Rural Bank Branch Data	Gregory L. Gregory, Richard L. Meyer, and Dale W Adams- 1989	Examines the factors which influence collection efficiency of financial institutions with respect to banks in Bangladesh
Journal Article	Loan Recovery and Performance of Commercial Banks:	Ayasha Siddiqua & Nishrat Zaman- 2015	Examines and compares the loan recovery performance of two commercial banks in Bangladesh
Journal Article	Performance of legal methods of loan recovery in Indian banks - An empirical analysis	Robin thomas - 2018	Analyses the performance of three specific legal measures of loan recovery in the Indian banking: Debt recovery tribunals, SARFAESI Act and Lok adalats sector over a period of 10 years
Journal Article	The Quality of Asset Portfolio and Loan Recovery of Commercial Banks: An Implication in Indian Context	Jaynal Ud-din Ahmed-2010	Discusses the factors resulting in increase in NPAs and the poor recovery process of commercial banks in India which impacts their future lending capacity

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	Customer Relationship Management in Banks	Tejaswini Sahoo - 2020	Examines the concept of CRM in the context of banking & customer satisfaction regarding service facilities, internet services and customer interactions
Journal Article	Factors affecting service quality at Vietnamese retail banks	Tran Phi Hoang - 2018	Investigates the factors which affect customer satisfaction at retail banks in Vietnam & concludes that service quality at these banks is influenced by reliability, responsiveness & security.
Journal Article	Principal Factors Measuring Service Quality: A Study of Selected Banks in India	Vaishali Pagaria - 2020	Investigates the relationship between service quality and customer satisfaction with reference to the applicability of SERVQUAL model of measuring service quality in the banking industry
Journal Article	A Study of Customer Service Quality of Banks in India	Dr Manasa Nagabhushan , Sept 2014	Understanding the various factors and dimension of customer service quality at banks and comparison between public sector, pvt banks and foreign banks
Research paper/article	Role of Service Marketing In Banking Sector with Special Reference to State Bank of India	K V S Gayathri, 2017	Examine the various service factors in banking and how it is effective in marketing
Journal Article	Customer relationship management in banking sector: a comparative study of sbi and other nationalised commercial banks in India	Sanjay Kanti Das - 2012	Discusses the perception of customers with respect to the CRM practices of SBI and other nationalised banks in India and comments on the difference in customer reach despite their similar approach
Research paper/article	How bank branches affect customer service quality perceptions	Alvin Lee Yiam Chuah and Dr. Katherine Mizerski-2005	Examines five aspects of a service relationships with reference to bank branches in Australia: Access, Atmospherics, Waiting Time, Technology, and Security

Tag	Title details	Author(s) & Year	Gist & Linkage to Study
Journal Article	A Study of the Service Quality Issues of Internet Banking in Non-Metro Cities of India	Yasser Mahfooz and Mohammad Al-Motairi , Farah Ahmad and Altaf Khan	Examines the quality of service and level of customer satisfaction from online banking services in non metro cities of India

2.5: Gist of Literature Survey:

The various literature surveyed bring out the importance of funding to agriculture by banks in India and the priority sector norms of RBI compelling the banks to finance to the agriculture sector. Few studies also narrate about the competition amongst banks in general and the choice to the farmer to select a bank which gives him optimum benefits. Few articles describe the factors which influence a customer to select a bank and their relative characteristics and benefits which a customer considers important to bank with a particular bank.

There are developed models which describe consumer behavior which is also studied in relationship to a banking customer as a consumer. Few articles reviewed focus in detail, the various strategies and action plans developed by various banks which are based on the influencing factors which induces a customer to open and maintain a relationship with that bank. These articles describe the importance of every factor in detail and its impact on the customers, which we have studied in our previous articles. Overall these articles bring out the need for agriculture finance, competition amongst banks and their strategies and various influencing factors which induce customer to avail a services from a bank, whether it is a normal banking services or taking a loan.

2.3: Research Gap:

As mentioned above, there are several studies carried out on the consumer behavior in selecting a product or specifically the factors that influence the choice of a customer to select a particular bank

to avail banking services/loans. The developments in the economy during the last 30 years including computerization and digitisation, changing banking requirements of the customers, the changes of customers in the preferences towards various banking channels have been so dynamic and continuing so that, the research on identifying the factors influencing the choice of a customer continues to be an ongoing topic. Researchers always have been investigating the relationship between various strategies adopted by the banks to acquire customers and the customers preference over the banks and the same is being continued. The factors which influence a customer to take start his relationship with a bank, or continue with a bank or take a loan with a specific bank has been studied as a normal banking customer. This research gets further in deep in this area and focusses specifically on the farmer when he wants to select a bank for availing an agriculture loan and the specific factors which are significant in this aspect. A farmer in a village, as a customer has few specific characteristics, based on the demography and type of loan taken, as compared to any other retail customer. Hence there is larger scope of research in this area under banking and agriculture finance. This is the identified research gap and the same is the study topic. The study is conducted mainly based on the primary data collected through the farmers in the two districts of Karnataka state.

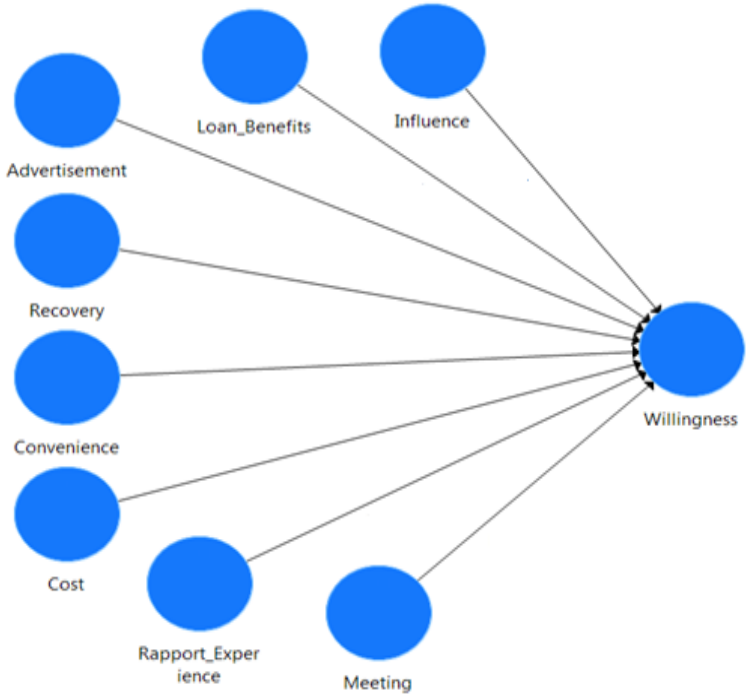
2.4: Conceptual Framework:

Through the review of various literature mentioned above, we have studied the consumer behaviours and models as to how the consumer choses the products or service of his need and more specifically a customer of a bank choses a bank for his requirement basing on various factors which are beneficial to his specific purposes. These studies have considered many types of customers of a bank in general including businessmen, salaried employees, retail loans and also students and conducted a study on the significance of factors influencing these customers to select a particular bank for their banking needs. Robert E Hinson (2013) has listed the factors Location of bank, Services of the bank,

Electronic upgradations by the bank, Appearance and Reputation of the bank, Advertisement by the bank, cost effectiveness of the bank and influence from third parties are key factors for selecting a bank by a customers. H Vasantha Kumari (2011) examined the factors considered as important in selection of a bank by customers in Chennai and concluded that branch location and reputation and competitive rates are the most important. Dr Chris Abraham (2015) at Kerala analysed the millennials needs and considered ATM and Internet banking as important. Dr Navdeep Barwal (2019), did a study at Himachala Pradesh State from farmers who have taken loans from two co-operative banks on the factors influencing their choice to select the co-operative banks to take the loan and he concluded the 'Quick loan disbursal', 'lower interest rate' and 'higher loan amount' were critical factors. While most of the studies have considered all the banking services or any specific banking service to a general customer, this study is specific to a farmer (as a customer of a bank) who has to make a choice to select a bank to avail an agriculture loan (as a product of the bank). The model used by the research study by Mr. Goiteom W / Mariam (June 2010) "Bank selection Decision Factors Influencing the Choice of Banking Services" and considering as support model and the research is conducted with the is 'farmer' as a customer and the banking product/service limited to 'agricultural loan. The proposed model by the researcher is shown in the figure below:

Fig : 2.5 : Conceptual Framework of this study

Conceptual Framework of this study based on literature- Farmer/Agri loan specific



*Willingness denotes 'decision making of farmer' to avail a loan and others are factors impacting the decision

Source: Drawn by Researcher

2.7: Chapter Summary:

This chapter outlines the existing literature studied which are closely linked to the research topic and relevant to the study. The research articles reviewed are grouped under 3 heads and gist of some of these studies is presented in the chapter. The research gaps is found based on these existing literature and conceptual framework is designed to go ahead with the research, the research methodology and research plan to achieve the research objectives are explained in the next chapter

CHAPTER - III

RESEARCH METHODOLOGY

CHAPTER - III

RESEARCH METHODOLGY

3.1: Introduction:

This chapter gives details of the research methodology used in this study to solve the research problem. Based on the subject knowledge the researcher has through his work experience and the literature study done, the research gap is identified and research questions are formed. The systematic approach adopted for solving the chosen research problem, the statistical methods and tools and the various techniques used to find a solution to the problem are detailed through research methodology. The flow of the research methodology is as below

1. Research questions, Research problem & Gap
2. Research objectives
3. Hypothesis Formulation
4. Scope of the research
5. Population, Sampling Methods and Sampling plan
6. Questionnaire Preparation
7. Conducting a Pilot study and based on results validate the questionnaire
8. Primary Data Collection
9. Data analysis through SPSS/PLS SEM & Drawings the results

3.2: Research Questions:

Based on the gist of the literature review discussed in the previous chapter, and the practical knowledge of the researcher, this study attempts to find answers to the following research questions:

- Which are the factors considered by a farmer to be important and significant for selecting a bank to avail an agricultural loan
- Whether any of these factors also have an indirect and significant effect on another factor in impacting the decision making of the farmer. ?
- Whether these factors are impacted by various demographic factors like age of the farmer, category of the bank where loan is availed, type of farmer etc

3.3. Research Problem

- Identifying the factors which can induce a farmer to take a loan with a particular bank is a very beneficial study to any bank, so that it can put across its strategies and efforts towards the most important factors which can yield results. Whether a factor is really significant in influencing a farmer to select a particular bank or not and to what extent does it impact the decision and which are these factors' is the key research problem to be tested and answered in this research study.
- In addition to the above, whether these factors also exercise any indirect impact on the significance of any other factor on the decision making of the farmer and whether the demographic variables also have an impact on the factors are other related issues to be examined in this research.

3.4: Research Objectives:

After a thorough review of literature and based on the research questions and research problems and gap mentioned above, the research objectives are stated below:

1. To identify the factors which influence the decision making of a farmer to select a bank to avail an agriculture loan and to study these factors in details

2. To help the banks in building suitable strategies in agriculture finance using the results and outcome of this research, which can be used as a reference

3. To add to the existing literature this specific content which is specific work in the field of agriculture finance.

3.5: Theories/Model Adopted for the study:

Out of the various research articles studies, which are mentioned earlier, the research study done by Mr. Goiteom W / Mariam during June 2011, named "Bank selection Decision – Factors Influencing the Choice of Banking Services", is taken as the base research article for this study. The reasons being:

- The study has in its survey population included many types of customers of a bank in general including businessmen, salaried employees and students and conducted a study on the significance of factors influencing these customers to select a particular bank for their banking needs and hence included most of the factors in a customer decision making model, as far a banker- customer is related

- There are 12 citations of this article which were noted
- The questionnaire adopted had 42 questions and had covered most of the common questions which were covered in other Indian literature in parts

This study derived the following 7 factors group as key influencing factors for a selecting the bank as below.

Table 3.1: Ranking of Influencing Factors (Goiteom& Mariam)

Factors	Mean	Rank
Convenience/ security	3.2513	1
Service provision	3.1008	2
Employers' influence	2.5937	3
Bank image	2.5538	4
Promotion strategy	2.2604	5
Reputation	2.1841	6
Financial benefits/ technology	1.9544	7

This model is similar to the study topic with the following two customisations:

i. Customer in the existing model need to be a 'farmer' in specific and
ii. Banking services need to be 'availing an agriculture loan in specific.

Based on the above stipulation the questionnaire was developed and data was collected from the farmers. Data analysis done through SPSS Software and based on the factor loading under exploratory factor analysis outputs the latent variables were derived and taken up for further hypothesis testing and analysis.

Model Proposed by the Researcher: The model proposed is as follows

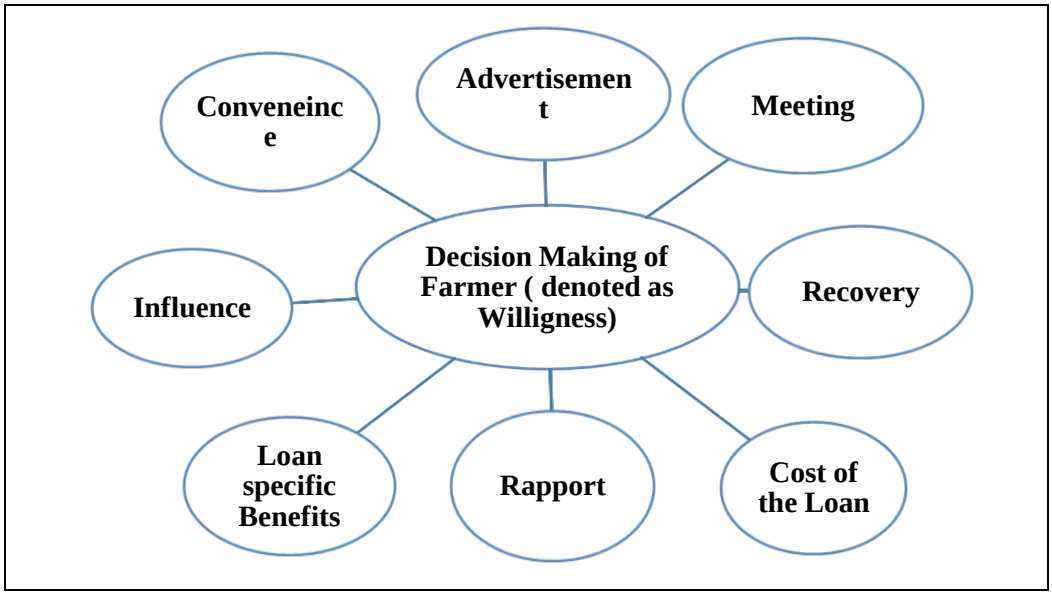
Table 3.2: Influencing Factors grouping as per Exploratory Factor Analysis:

Sl	Factor/Variable	Variable Type	Short Name
1	Advertisement by Bank	Independent	Advertisement
2	Convenience to Farmer	Independent	Convenience
3	Meeting with Bankers	Independent	Meeting
4	Influence from Others	Independent	Influence
5	Recovery Process of Bank	Independent	Recovery
6	Loan Specific Benefits	Independent	Loan
7	Cost of Loan	Independent	Cost
8	Rapport & Service Experience of farmer	Independent	Rapport
9	**Decision making of the Farmer to avail Agriculture loan with given bank**	**Dependent**	**Willingness**

Source: Drawn by Researcher

The first 8 are factors grouped as per factor analysis and the last row is the independent variable, 'decision making by the farmer is whether he will avail the loan with that bank or not. This is denoted by short name **'Willingness'** for data analysis in this study, wherein positive willingness means he wants to avail the agri loan with that bank. Model is depicted in the figure below:

Figure 3.1: Influencing Factors' Model (IFM)



(Source: Model proposed by researcher based on the research study of Mr. Goiteom /Mariam)

3.5 (a) : Definitions :

- Decision making of the farmer to take a loan is denoted as **'Willingness'** in this study

- The Factors which impact the decision making of the farmer are denoted as **'Influencing Factors'** in this study, whether the factor is proved to significant or not significant in impacting the decision making of the farmer, in this study

3.5 (b) : Hypotheses Formulation:

Based on the objectives, the following hypotheses were tested under 3 categories

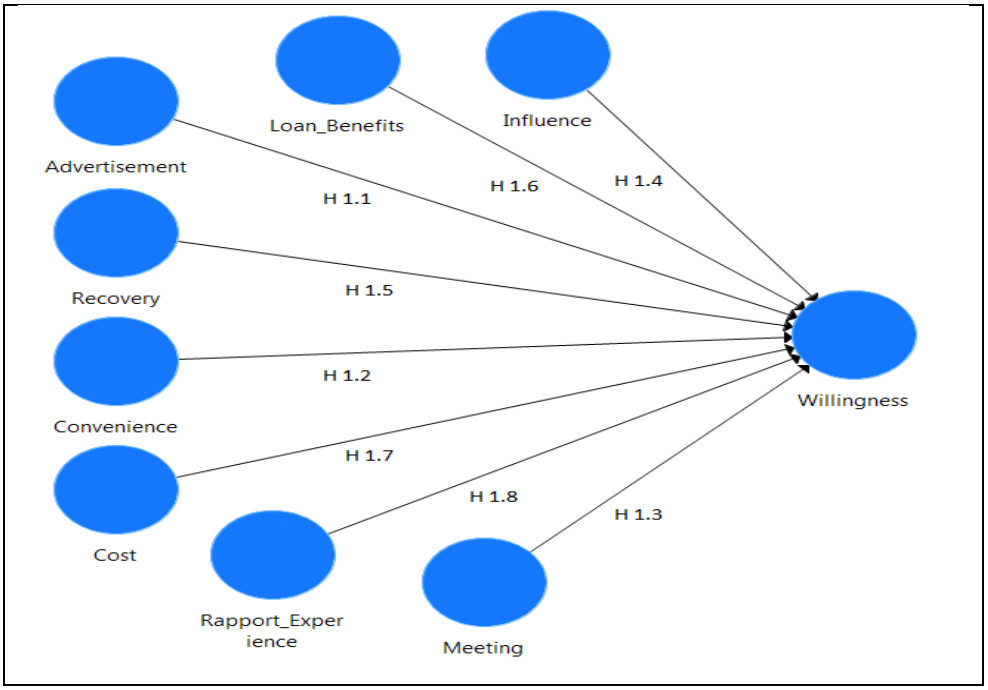
Hypothesis 1: Significance testing of the elements in the model

This is the first hypothesis wherein every influencing factor is tested to identify whether that factor significantly influences the decision making of the farmer to avail the agri loan with the bank are identified. The Null Hypothesis is stated as below:

H1: There is no significant impact of the Influencing Factors on the decision making of a farmer to avail an agriculture loan with a bank.

As there are 8 influencing factors the main hypothesis is divided into 8 sub-hypotheses as depicted in the figure below:

Fig 3.2: Hypothesis 1 -Sub-Hypotheses (H1.1 to H1.8)



Source : Drawn by Researcher

The Null hypothesis statements for the 8 sub-hypotheses are defined as follows: The Null Hypothesis is accepted at the significance level of p >0.05.

H1.1: There is No significant impact of 'Advertisement' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.2: There is No significant impact of 'Convenience' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.3: There is No significant impact of 'Meeting' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.4: There is No significant impact of 'Influence' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.5: There is No significant impact of 'Recovery' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.6: There is No significant impact of 'Loan Benefits' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.7: There is No significant impact of 'Cost' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank
H1.8: There is No significant impact of 'Rapport' on the willingness of a farmer to avail an agri loan/ retain an agri loan with a particular bank

Hypothesis 2: Effect of mediation of Mediating Factors on IV-DV relationship:

The basis of this hypothesis is that as there are more than one factor impacting the decision of the farmer, a study is required to know what would be impact of one factor in altering the significance on some other factor on the decision-making process of the farmer. To give an example, if we consider 'Influence from family' is a significant factor in impacting the decision making of one farmer, what would be the indirect impact of another factor 'rate of interest' on the farmer. Whether 'Influence from family' still continues to be a significant factor or not. This question was in the minds of the researcher which needs an answer. Also there are various studies on 'Factors influencing a customer to select a bank – in general' where every study has come up with different a aspect as more important than the other & hence it is important to understand the same in the context of a farmer who wants to choose a bank to avail an agri loan with the bank. Following are few studies quoted in this regard

- In a study, 'Bank selection criterion by a businessman' by Layla A Alamoudi and Jamaldeen Falee during March 2021, it is concluded that most of the customers prefer to open an account where they have convenient internet banking facilities, even over a lower rate of interest and other facilities.
- In a study 'Factors Influencing Customers' Bank Selection Decision in Nepal' by Sahadev Bhatt and Dr. Swati Jain B- during June 2020, the result reveals that reliability of the bank (such as security arrangement, reputed brand name) is considered as the most considered factors while choosing a particular bank as compared to convenience and other customer service provided by the bank.

- In a study ‘Determinants of Bank Selection Preference among Customers in the Kumasi Metropolis of Ghana’ by Dr.Isaac Tandoh- during Jan2019, availability of ATM machines and lower service charges and more number of bank branches are the preferred factors as compared to other factors like internet bank, lower rate of interest etc.
- In another study ‘A Model to Identify Factors Influencing Customers' Bank Selection Decision’ by Fereshtegan Credit and Financial Institute - Hossein Najaf during June 2016, concludes that Employee behaviour and customer service is the most preferred factor to select a bank, as compared to image of the bank, other facilities provided by the bank.
- In a study ‘Bank Selection Criteria of Retail Customers in Bangladesh: A Study on Khulna City Jahiruddin Khulna University during Aug 2009, it concludes that convenience to customer in terms of proximity of the bank branch and rapport with branch manager are more important factors than the cost of the services and other advertisements.

The second hypothesis studies the change in the significance of an independent variable on the dependent variable, when the relationship is mediated by another variable. In case the significance between the IV and DV changes post mediation by a mediating variable, it is called ‘complete mediation’. In case the significance between IV and DV does not change, however the indirect relationship between IV-MV-DV is significant then it is called, Partial mediation and in case the IV-MV-DV relationship is non-significant then it is called, No Mediation.

This hypothesis statistically explains the indirect impact one influencing factor on the other influencing factor, whether it is significant or not. For example, if we take Advertisement is a significant factor, when it is mediated by Cost of Loan, whether the significance of advertisement remains the same, or is it partially or fully impacted. As this hypothesis tests the impact of mediating variables on the relationship of any independent variable, all the other independent

variables are considered as mediating variables and analysed accordingly. As there are 8 independent variables considered in this study, taken 2 at a time, there are 56 sub hypotheses derived. The Null Hypothesis is formulated as below: The first sub- hypothesis is stated as below:

Hypothesis 2.1 (H2.1)

'Convenience to Farmers (Mediating Variable) does not mediate the relationship between 'Advertisement by Banks' (Independent variable) and 'Willingness of the farmer to avail an agri loan with the bank' (Dependent variable)

'Convenience to Farmers (Mediating Variable) mediates the relationship between 'Advertisement by Banks' (Independent variable) and 'Willingness of the farmer to avail an agri loan with the bank' (Dependent variable)

Hypothesis 2.2 to 2.56

The other sub hypothesis shall form the same pattern as Hypothesis 2.1 above. The testing results of these hypothesis shall be the conclusion of hypothesis -2

Table 3.3: Hypothesis 2 – Mediation variables count

Sl No.	IV	DV	MV Count
1	Advertisement	Willingness	7
2	Convenience	Willingness	7
3	Meeting	Willingness	7
4	Influence	Willingness	7
5	Recovery	Willingness	7
6	Loan	Willingness	7
7	Cost	Willingness	7
8	Rapport	Willingness	7
	Total Hypothesis		**56**

Source: Drawn by Researcher

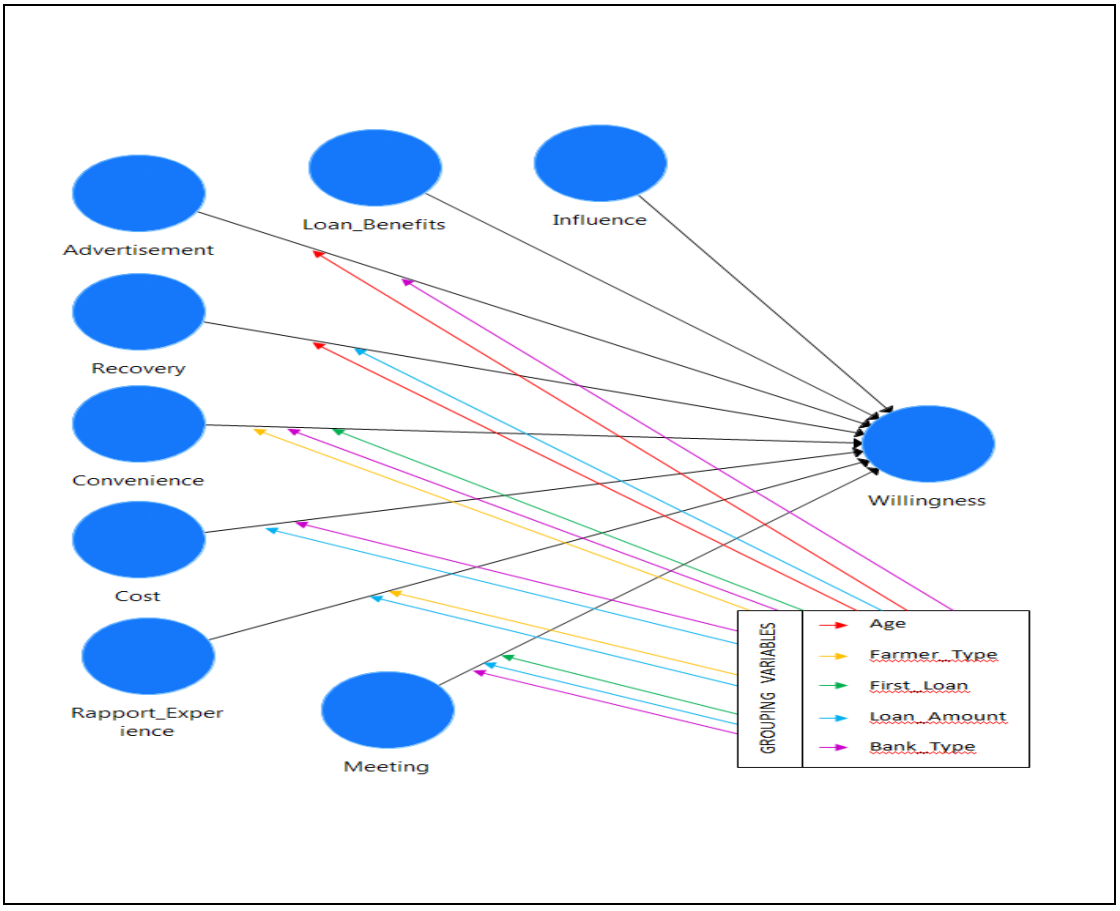
Hypothesis 3: Effect of moderation of Demographic / Categorical Variables:

The significance of the influencing factors may or may not be same under different demographic conditions or where the respondents belong to different categories. This third hypothesis studies the impact of moderation between independent variables and dependent variable by a third variable. *"A moderator is a variable that affects the direction and/or strength of a relationship between an independent and dependent variable" (Henseler, 2010*). Few demographic (categorical) variables are taken as moderators for analysis using SMART PSL -3. The variables considered for analysis are 'Age of the Farmer', 'Education of the Farmer', 'Type of Farmer (SF/MF)', 'Loan amount availed' and 'Type of Bank where loan is availed'. Further details are given under data analysis section. The Null Hypothesis is stated as below :

"H-0 Moderating variable (MV) does not moderate the relationship between Influencing factors (IV) and Willingness of the farmer (DV)."

There are totally 48 sub hypotheses under Hypothesis 3, which are analysed using Smart PLS-3 for moderation as depicted in the following diagram

Fig 3.4: Hypothesis H3 and sub-Hypotheses H 3.1 to H3.48



Source: Drawn by Researcher

The impact of these moderating variables are analysed to find out if there is an impact between the relationship of Independent variable (IV) and Dependent variable (DV), under the demographic variables and if so, what is the impact is also studied under this hypothesis.

3.6: Research Design

The type of research design in Quantitative Research. John W Creswell (2007) in his book 'The Research Designs' mentions that *" Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures."* Under the Quantitative research design, the **'Survey Method'**, is adopted wherein responses are

generated using questionnaires. The data is collected through questionnaire in one go from the respondents and hence this is a '**Cross sectional study'** at a given point of time.

The researcher has some prior knowledge about the research subject, the target population and the research questions and this study builds upon the same. The hypothesis is based on the existing literature reviewed and also the knowledge of the researcher in the given area and hence the type of research is '**Descriptive Research'** as it builds upon existing literature and derives the answers to the research questions through the study output.

3.7: Population :

The study is conducted in 2 districts of Karnataka (Chitradurga and Koppal) which is the population. As per the data of SLBC Karnataka state data (FY 2017), the number of farmers who have taken agri loan is 270102 in Chitradurga district and 175337 in Koppal district as at FY 2017, hence total number of farmers is 445439 which is the population for the study. Criterion for selection of these 2 districts is already explained under introduction section. These districts are located in central Karnataka and north Karnataka having presence of all types of banks and hence ideal districts to conduct the research.

Criterion for selecting the banks for the purpose of this study

- As per the SLBC data on agri-funding in FY 2017, the following banks have major presence in these districts are selected for sampling. SBI contributes 27% of the agri business at Chitradurga followed by Syndicate bank and Vijaya bank at 16% and 14% each, while from the private sector banks, Axis bank contributes 6% and ICICI bank contributes 4% of the share. Karnataka Gramin bank contributes 22% of the share. Similar is the share at Koppal also amongst these banks and hence these banks were selected for conducting the study. Chitradurga co-operative

bank has 6% share in agri business in Chitradurga district. Hence these banks were selected as below for the study

- Public Sector banks: SBI, Vijaya Bank & Syndicate Bank
- Private Sector banks: Axis Bank and ICICI Bank
- Regional rural banks: Karnataka Gramin Bank
- Co-operative banks: Chitradurga Co-operative bank

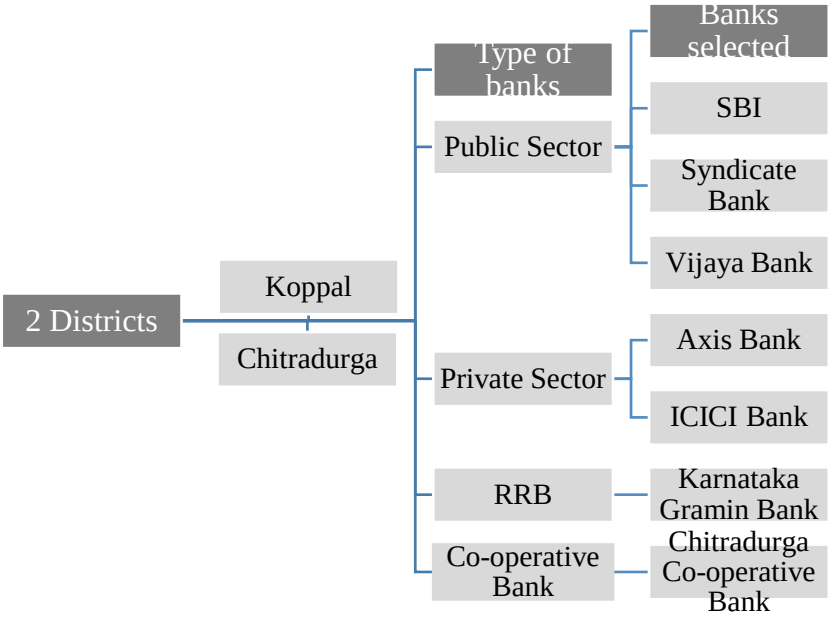
3.7 : Sampling Frame, Sampling Plan, Sampling Size and Sampling Method:

The population being around 4.4 lakhs, sampling is proposed to get a reasonable number of farmers who would be the best possible representatives of the population. For the study precision rate of 5% and Confidence level of 95% was considered. The formula to calculate sample size (n) is given below ,Where, n= size of the sample, N= Size of the population, e= acceptable sampling error 5%).

Formula	$\mathbf{n = \frac{N}{1+N*(e)^2}}$
N =	445339
e =	0.05
e^2 =	0.0025
N*e^2 =	1113.3475
‘n =	399.6410455

The required sample as above was minimum 400. As per the requirements of this study there need to be representative samples from both the districts and also from each category of bank. Hence the method of data collection planned was ‘**Stratified Random Sampling’** based on the volume of agri loan amongst the 2 districts and the types of banks, diagrammatically represented as below:

Sampling Plan



As the agri loan portfolio is approximately similar in both districts, minimum 45% of the sample was decided to be collected at each district. The major agri-lending volumes at these districts constituted from public sector banks followed by Regional rural banks and then private sector bank. Co-operative banks were lending only to an extent of Rs.1 lakh to Rs.2 lakh per person and hence the volumes were limited. Hence it was planned to collect data at least 40% from public sector banks, 20% from Regional Rural Banks 20% from private sector banks and around 6 to 9 % plus from co-operative banks (30 samples). The data collection plan given in per the table below :

Table 3.4: Stratified Random Sampling Plan

Type of Bank	Sample %		Chitradurga Dist			Koppal Dist			Total Sample		
	Min	Max	Plan	Min	Max	Plan	Min	Max	Plan	Min	Max
Public Sector	40%	55%	110	96	130	80	64	90	190	160	220
Private Sector	20%	30%	60	48	70	40	32	50	100	80	120
Region Rural bank	20%	30%	60	48	70	40	32	50	100	80	120
Co-operative bank	6%	9%	16	14	20	12	10	15	28	24	36
Total			246			172			418		

With the above sampling count table plan, it was decided to approach each of these districts and banks and further selection of bank branches and individual farmers was on random basis based on the availability of farmers at the bank branches and at villages.

Note: We have approached around 453 farmers for data collection. Data was collected from 442 respondents and data from 430 was considered after verification. So, the actual sample size for this study is 430 and is compatible with the sampling plan as above. The details explained under primary data collection below.

3.8: Questionnaire Development:

The data collection method used is Questionnaire Method for primary data collection. The questionnaire designed contains 39 statements presented to the respondents in total. First 12 statements are related to the demography and personal information of the farmer like his age, gender, bank etc. where the farmer need to select the correct option (out of the multiple options given in the questionnaire). Other 27 statements are on a Five Point Likert scale. The first 26 statements are related to the influencing factors. The respondent needs to tick the option between a scale of 1 to 5, where the numbers means as follows :

- '1' denotes that the given factor did not influence him to take a loan with the bank / factor was not existing / not at all a reason for him to take loan with the bank and
- '5' denotes that the given factor was the most influencing factor / the main reason why he has taken loan with the bank

The 27th statement represents the decision making of the farmer to avail a loan with the bank denoted by 'willingness (dependent variable), where the respondent farmer to select choices as below:

- Select ‘1’ if he is not at all willing to take an agri loan with that particular bank and
- Select ‘2’ if he is not convinced to take an agri loan with that particular bank and
- Select ‘3’ if it does not matter to him to select this bank or some other bank and
- Select ‘4’ if he is agreeable to take loan with this bank to some extent and
- Select ‘5’ if he is totally willing to take an agri loan with that particular bank only.

Factors Derived from Literature review

The Questionnaire Development process started through the literature review A study done by Mr.Goiteom W / Mariam during June 2011, in their research article “Bank selection Decision – Factors Influencing the Choice of Banking Services” was taken as the base literature article. This literature study had a questionnaire containing 42 statements including demographic details, dependent and independent variables. There were 24 statements on the factors influencing the decision of the customer as below.

Table 3.5: Questionnaire Statements List (Goiteom & Mariam)

Sl No	Factors as per questionnaire	Sl No	Factors as per questionnaire
1	Low interest rate on loans	13	Availability ATM services
2	High interest rate on saving	14	Variety of services offered
3	Attractive interest rate	15	Establishment time (open before others)
4	Phone banking facilities	16	Bank’s reputation
5	Internet banking facilities	17	Being a government owned bank
6	Low service charge	18	External appearance of the bank
7	Security arrangement	19	Recommendation of family or Friends
8	Good customer services	20	Advertisement via mass-media
9	Speedy/ quick services	21	Several branches
10	Reception at the bank	22	Availability of parking place nearby
11	My employer influence	23	Proximity to home and/ or workplace
12	Extended operation hours	24	Pleasant bank environment

Source: Adopted from Goiteom W / Mariam ‘ Selection of Bank (2011)

The factors considered in this literature was related to general banking service including loans, deposits and other banking transactions. In the current study we are focussing only the type of customer who is a ‘ Farmer’ , which has its own specific characteristics and the service provided is limited to ‘ availing an agriculture loan’. Hence taking clue from this questionnaire with few modifications based on other literature reviewed and researchers knowledge on the subject a suitable questionnaire is developed a questionnaire considering the factors and demographic variables related to a farmer which impact his decision to take a loan, in tune with the objectives of this study.

The questionnaire so developed by the researcher are similar to the above, modified to suit the current study based on the literature study and the practical and theoretical knowledge of the researcher. The statements in the questionnaire are categorized and grouped as below:

Table 3.6: Questionnaire statements - Grouping

Sl. No	Group	Statement	Count
1	Demographic Factors	Information regarding farmer & loans	12
2	Dependent variable	Decision making to take loan (Willingness)	1
3	Independent variable	Advertisement by Bankers	7
4	Independent variable	Convenience to Farmers	4
5	Independent variable	Meeting of Farmer with Bankers	3
6	Independent variable	Influence from others	3
7	Independent variable	Recovery & follow up process or bank	2
8	Independent variable	Loan specific benefits of the bank	2
9	Independent variable	Cost of the loan	2
10	Independent variable	Rapport & service experience of farmer	3
	Total		**39**

Source : Drawn by researcher

** Survey Questionnaire is appended at the end of this thesis: Annexure

3.9: Pilot Study:

A pilot study was conducted during Sept 2018 to ascertain the reliability of the scale and the appropriateness of the questionnaire for achieving the objectives of the study. A questionnaire was framed and administered to 40 farmers of Chitradurga district pertaining to 2 banks. The questionnaire contained 28 statements eliciting information on dependent and independent variables and 12 statements based on demographic variables. Responses were drawn using a 5-point Likert-scale. The data obtained from the pilot study was analysed through SPSS software. Reliability analysis (Cronbach alpha) and a few cuts of descriptive analysis on demographic was done, which was presented during the half yearly presentations earlier. Factor analysis was not done as the number of samples was on the lower side compared to the variables.

The purpose of the pilot study was achieved as the Cronbach alpha was within the acceptable range and questionnaire was validated as below

Table 3.7: Reliability Analysis:

Case Processing Summary			
		N	%
Cases	Valid	40	100.0
	Excluded	0	0.0
	Total	40	100.0

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha based (Standardized Items)	No of Items excluding demographic variable
.772	.765	28

Based on the views of the respondents, experience gathered during pilot and the reliability analysis, a similar questionnaire was used for main study, with a very few minor changes. These changes had a very minor impact in the structure on the questionnaire, which are summarized below:

One aspect which was included in the initial survey (benefit of digitized charge creation), did not find proper response from the farmers as they were not aware of its benefits and was not found relevant to this study and hence it was removed

1. Additional factor under advertisement 'Radio Jingle' was mentioned as effective by few farmers during pilot study discussions and was included in the study

2. The wordings of the questionnaire were slightly changed and made it simple for the farmers to understand and reply

3.10: Primary Data collection:

The primary data collection first commenced at Chitradurga District. As per the research design the number of farmers from whom questionnaires to be obtained pertaining to each type of bank was already plotted. The researcher with the help of his contacts arranged to meet the bank staff of the respective banks, who have guided us to the local branches where we can collect data from the farmers of these respective banks, some of them at the bank branches and some of them at their respective villages. Few known bank staff accompanied the researcher to the villages and identified farmers on random basis. They survey was conducted on face-to-face contact method in person with the farmers wherein they were asked to fill up the questionnaire in front of the interviewers. Statements were discussed with the farmers in person. The literate farmers who are able to read the questionnaire could fill up the questionnaire on their own whereas the questions were to be read out to the farmers who were unable to read and understand the contents of the questionnaire and get their responses ticked on the questionnaire. After Chitradurga district data collection was completed researcher moved to Koppal district. The process of data collection started from January 2019 and was completed only during November 2019 & hence has taken around 11 months period to complete

this activity in these villages. Totally 20 villages/towns were visited led by the bank staff and overall 453 farmers were interviewed and questionnaire were administered and the details are given in the table below:

Table 3.8: Details of primary data collection

Particulars	Details/Data
Number of Districts considered for study	2
Number of Banks where the farmers have taken loan	7
Number of farmers to whom the questionnaire was administered	453
Number of farmers from whom we could get the questionnaire reply	442
Number of valid responses which we have considered for analysis	430

Secondary data: The researcher has gone through various secondary data sources in the forms various books on agriculture finance, banking laws and practice, books on agriculture marketing etc. Secondly the internal publications of banks by way of circulars and reports which are also available on bank website have given information on practical aspects on agriculture and banking. Also relevant secondary data was gathered from reports published by RBI, NABARD, various banks and other government publications and reports. This data is used to substantiate various data cuts for explanations and to identify the sample districts and banks considered for the study.

3.11: Data Analysis Tools & Summarization

The steps adopted for data analysis is given in the table below. Details are in the next chapter

Table 3.9: Data analysis framework

Step in Data analysis	Purpose	Tool used
Data Entry and updation	Data Entry, Identification of variables and removal of outliers if any	MS- Excel

Descriptive Analysis	Determination of distribution of data, Frequency, Mean and Standard deviation	Descriptive statistics (SPSS 20)
Reliability Test & Normality test	Determination whether data set is normal and as per norms	Reliability test (SPSS 20)
Factor analysis	Identification of factors	Exploratory factor analysis (EFA) (SPSS 20)
Confirmatory factor analysis	Measurement model to determine convergent and Discriminant validity and reliability of constructs	Structural equation modelling (SEM) Smart PLS 3.0
Hypothesis testing	SEM for testing of hypothesis, Mediation & Moderation	Structural equation modelling (SEM) Smart PLS 3.0 (Bootstrapping, MGA, Mediation, PLS Predict etc)

3.12: Summary

This chapter on research methodology has explained framework as to how the research study was designed and taken up. Based on the research questions objectives, research hypothesis was formulated, which is explained. The research population and sample size and research design were defined . Post that the process of questionnaire development is detailed with. The details of the pilot study undertaken for reliability testing of the questionnaire and then primary data collection method is explained. The tools used for interpretation and analysis of the data is mentioned. This process has paved the way for critical analysis of the data output and conclusion of the thesis, which taken up in the next section.

CHAPTER - IV

DATA ANALYSIS

AND INTERPRETATION

CHAPTER - IV

DATA ANALYSIS AND INTERPRETATION

4.1: Introduction

The primary data collected is analysed in this chapter using suitable statistical tools as per research design. This analysis provides descriptive and inferential statistical analysis of the data to derive the results of the research and draw conclusions. The data collected is first sorted and coded using Excel workbook. . Post that the data analysis is done using SPSS-20 and Smart PLS-3, to obtain desired outputs as per research objectives which is explained in this chapter The Questionnaire had 3 category of statements to which the respondants had to respond as follows:

1. Statement on the demographic variables which were on nominal and ordinal scales and the respondent had multiple choice to tick the right choice

2. Statement of the independent variables were on a 5-point Likert scale, where the respondent had to choose the answer from ‘1’ to ‘5’ based on the increasing level of importance of that variable for him to consider that bank to take the loan as below:

   1 = Not at all an important factor considered

   2= Not such an important factor

   3= Neither important not important factor (neutral);

   4= A significant factor and

   5 = Very important and significant factor

3. Statement of the dependent variable was also on a 5-point Likert scale, where the respondent had to choose the answer from '1' to '5' on an increasing order of his willingness to avail an agri loan with that particular bank as below:

   1 = Definitely not willing to take loan with this bank

   2 = May not take a loan with this bank

   3 = May or may not take a loan with this bank (neutral)

   4 = May (willing) take a loan with this bank

   5 = Definitely take a loan with this bank

4.2: Demographic profile of the Respondents:

As per the research methodology, primary data was collected from the farmers situated in 2 districts in Karnataka and who have taken loans with various banks. The demographic profile of the farmers from whom the data is collected is given in table below, as per various demographic / categorical variables.

Table 4.1: Demographic Profiles of the Farmers

Sl No	Demographic Variable	Profile	Count	Percentage
1	Type of Bank	Public Sector Bank	193	45%
		Private Sector Bank	97	23%
		Regional Rural bank	110	25%
		Co-operative bank	30	7%
2	District	Chitradurga	235	55%
		Kolar	195	45%
3	Age of Farmer	Up to 25 years	42	10%
		Above 25 to 45 years	161	36%
		Above 45 to 60 years	191	45%
		Above 60 years	36	9%

Sl No	Demographic Variable	Profile	Count	Percentage
4	Loan Amount	Up to Rs.1 lakh	110	26%
		Abv Rs.1 lakh up to Rs.3 lacs	163	38%
		Abv Rs.3 lakhs to Rs.15 lakhs	111	26%
		Above Rs.15 Lakhs	46	11%
5	Farmer Type	Marginal Farmer (2.5 acres)	100	23%
		Small Farmer (5 acres)	195	45%
		Medium Farmer (15 acres)	102	24%
		Large Farmer (abv 15 acres)	33	8%
6	Education of Farmer	Illiterate	95	22%
		Up to 10th Standard	180	42%
		Above 10th up to Graduate	115	27%
		PG/Professional	40	9%
7	Religion	Hindu	333	77%
		Muslim	74	17%
		Christian	23	5%
		Others	0	0%
8	Caste	General	249	58%
		SC/ST	60	14%
		OBC	121	28%
		Other caste	0	0%
9	Main Loan	KCC (Crop Loan)	314	73%
		Land Development Loan	59	14%
		Tractor Loan	29	7%
		Dairy Loan	28	6%
10	First time borrower	First time borrower	69	16%
		Seasoned borrower	361	84%

(Source: Primary Data, SPSS-20, Frequencies)

Interpretation:

The data collection was done on random sampling method based on availability of farmers hence represents the population. The inferences from the demographic profile is as given below:

1. The age group between 25 years to 60 years constituted 81% of the sample, which is the major population which takes agri-loans. Farmers below 25 years was 10% and above 60 years were 9%, of the sample.

2. Loan amount wise there are 4 categories. Loans upto Rs.1 lakh is given collateral free as per RBI guidelines (RBI guidelines on collateral free loans , latest feb 07 2019). Loans upto Rs.3 lakh (eligible for interest subvention as per Karnataka government guidelines- Apr 2017). Loans upto Rs.15 lakhs and above Rs.15 lakhs classified by banks as large loans as per convenience. Loans from 1 lakh to Rs.3 lakhs was 38 %, which was the highest followed by Loans upto Rs.1 lakh which is 26% of the sample. Together loans up to Rs.3 lakhs was 60% of the sample. (Loans up to Rs.3 lakhs are eligible for lower interest and interest subvention schemes and hence this category of loans was found to be the highest. Also loans upto Rs.1 lakhs does not require mortgage of agri land in these areas and hence this population constituted 26% of random sample. Loans above Rs.15 lakhs was 12% of the sample which constitute the bigger farmers in the area.

3. The small and marginal farmers categorization was made as per RBI Definition (Ref : RBI Master circular on PSL guidelines May 2020) in the sample was 68%, which constitutes farmers holding land upto 5 acres of land. The balance constitutes large and very large farmers The very large farmers having more than 15 acres of land were 8% of the sample is a categorization made for convenience practiced by bankers.

4. The percentage of literate farmers was 78% where Illiterate farmers were 22%. Out of the Literates up to 10th standard were 42% and hence most of the farmers were lower educated. Also 9% of the sample were postgraduates / professionals who had taken loans from the bank for agriculture pruposed

5. 77% of the sample belonged to Hindu community and 17% to Muslim community in the given sample in these 2 districts

6. 58% of the sample belonged to general- caste and 28% belonged to other backward caste followed by scheduled caste and scheduled tribes which is 14% of the sample

7. KCC (Crop Loan) was the main loan of 73% of the borrowers. Borrower having dairy, tractor and land development loans were around 27% of the sample

8. 84% of the borrowers had more than 3 years vintage in taking the loan or taken loan with more than one bank while 16% of the borrowers had taken loan for the first time and had less than 3 years vintage with the bank

4.3: Data Sorting and Validation:

This study followed the model followed by Mr. Goiteom W / Mariam in their article "Bank selection Decision by customer – Factors Influencing the Choice of Banking Services". The current study is an addition to the previous study and differs in its scope as to the extent that, in the current study the customer is a 'farmer 'and the banking services is restricted to avail an agriculture loan. Hence the variables taken for the current study are slightly different from the original article. The current study has considered 26 variables derived from the various literature and the experience of the researcher in the area of banking in addition to the above study. Hence to group these 26 variables, Exploratory Factor analysis was done using SPSS-20 software. Prior to factor analysis, data reliability and consistency was tested using 'Cronbach Alpha' and 'KMO and Bartlett's tests, and the results are given below. The grouping of variables done based on the output of factor loading using SPSS Software is taken as Latent variables for further analysis through Structural Equation Modelling using Smart PLS-3 software, which is explained below

a) Mean & SD of Dependent Variable:

Table 4.2: Mean and SD of items pertaining to the Dependent Variable

Code	Dependent Variable	N	Mean	SD
DV	Willingness to avail loan with the Bank	430	3.53	1.144

(Source: Primary data using SPSS 20; Maximum value=5 & Minimum value=1)

As per the above table the mean value of the willingness of the farmers to is '3.53' out of '5' which indicates that the farmers have shown higher inclination towards taking loan from the bank

b) Reliability Test:

Table 4.3: Cronbach's Alpha Value for the Farmer Questionnaire

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.757	.758	26

(Source: Primary Data- results through SPSS-20)

Interpretation - The Questionnaire for the main study consisted 26 independent variables, which are tested for reliability. The value of Cronbach Alpha obtained was 0.757 which states that the scale of reliability is good. Greater the value of Cronbach Alpha, higher is the consistency within the set of items in the questionnaire.

c) **Results of KMO& Bartlett Test:**

Table 4.4: KMO and Bartlett's Test result for farmer questionnaire

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.743
Bartlett's Test of Sphericity	Approx. Chi-Square	5876.844
	df	325
	Sig.	0.000

(Source: Primary Data- results through SPSS-20)

Interpretation –The above test measures the adequacy of each variable and higher the value, the data of this study is more suited for the Factor Analysis. KMO value is 0.743 (greater than 0.5) which states that the sampling is adequate and acceptable and the significance level of the Bartlett's test of Sphericity is 0.00, which indicates it is significant and accepted and hence ok to go ahead with factor analysis.

d) Grouping of Variables (Factor Loading) :

Table 4.5: Factor Loading- Rotating component Matrix

Rotated Component Matrix									
Latent	Variables	1	2	3	4	5	6	7	8
Advertisement by Banks	Hoardings	.787	.064	.160	.005	.098	-.044	.031	-.059
	Brochures	.710	.193	.039	.221	-.107	.004	.008	.257
	TV/Movies	.774	.118	-.031	-.079	-.010	-.059	.001	-.007
	Radio	.741	.053	.315	.030	.034	-.091	.113	-.125
	Email	.728	.007	-.145	-.174	-.116	.140	-.040	.178
	SMS c	.715	-.186	.238	.092	-.013	-.110	.072	-.214
	Adv-Internet	.670	.290	.361	.084	.076	-.021	.010	.161
Convenience to Farmer	Near-Bank	.138	.813	.189	.026	.048	.070	.134	.046
	Only Bank	.142	.818	.146	-.039	.050	-.090	-.070	.150
	Internet Banking	.088	.841	.059	-.141	-.045	-.015	-.098	-.106
	Mobile banking	-.026	.757	.099	.198	.028	-.045	.012	-.086
Influence/ Reference from others	Family	.045	-.003	-.021	.841	.216	-.068	.042	-.190
	Friends	-.001	-.049	-.016	.902	-.037	-.032	-.082	-.019
	Agents	.011	.089	.047	.823	-.059	-.031	-.139	-.019
Meetings with Farmers	Village Meet	.261	.273	.693	-.013	.034	.010	.070	.350
	Resid-Meet	.200	.138	.865	.001	-.017	-.102	.098	.095
	Bank-Meet	.102	.174	.844	.012	-.119	-.098	-.032	-.041
Loan specific Benefit	Higher Loan	.057	-.022	-.026	.018	.178	.077	.910	.057
	All loans	.081	-.007	.143	-.231	.060	-.027	.849	.032

Latent	Variables	1	2	3	4	5	6	7	8
Rapport & Service Excellence	Rappt-BM	-.151	.076	-.216	.046	.739	.049	.326	-.086
	Rappt-Staff	-.056	.012	.117	-.021	.831	.044	.178	-.073
	Service	.145	.007	-.070	.066	.796	.006	-.130	.153
Cost of Loan	Lower ROI	-.072	-.043	-.082	-.102	.031	.938	.069	-.028
	Other chgs	-.040	-.026	-.089	-.019	.051	.929	-.016	-.105
Recover Process of Bank	Recovery	.037	-.040	.054	-.111	.061	-.096	.163	.820
	Follow up	-.012	.005	.126	-.080	-.045	-.038	-.076	.836

(Source: SPSS-20, Rotated component matrix)

The data set had 26 independent variables which had to be grouped further for analysis. Using SPSS-20 software the variables are grouped under eight components based on the Factor analysis method. The Rotated components Matrix output along with Factor loading output and the relevant variables is given in Table 4.3 above. The names of the latent variables are chosen closely in line with the individual variables, which are grouped together as given in Table 4.5 below:

Table 4.6: Factor Loading: Variables count

Latent Variable	Short Name	Variables count
Advertisement by Banks	Advertisement	7
Convenience to Farmer	Convenience	4
Meeting with Bankers	Meeting	3
Influence from Others	Influence	3
Recovery Process of Banks	Recovery	2
Loan Specific Benefits	Loan	2
Cost of the Loan	Cost	2
Rapport & Service Experience of farmer	Rapport	3
And		
Decision Making (Dependent variable)	**Willingness**	**1**

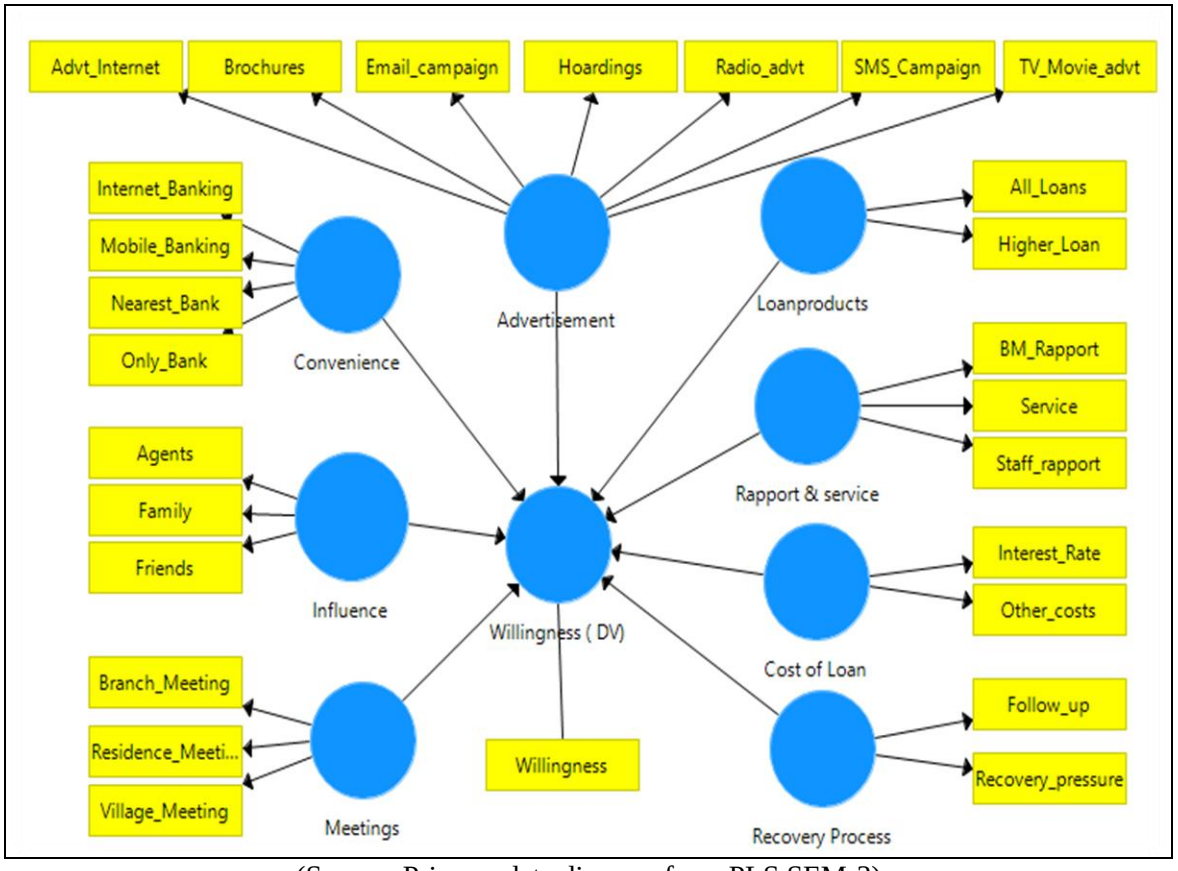
(Source: Primary Data- results through SPSS-20)

The grouping of variables done as above based on the output of factor loading using SPSS Software is taken for further research through structural equation model using Smart PLS -3 software .

4.4 : Data Analysis through Structured Equation Modelling :

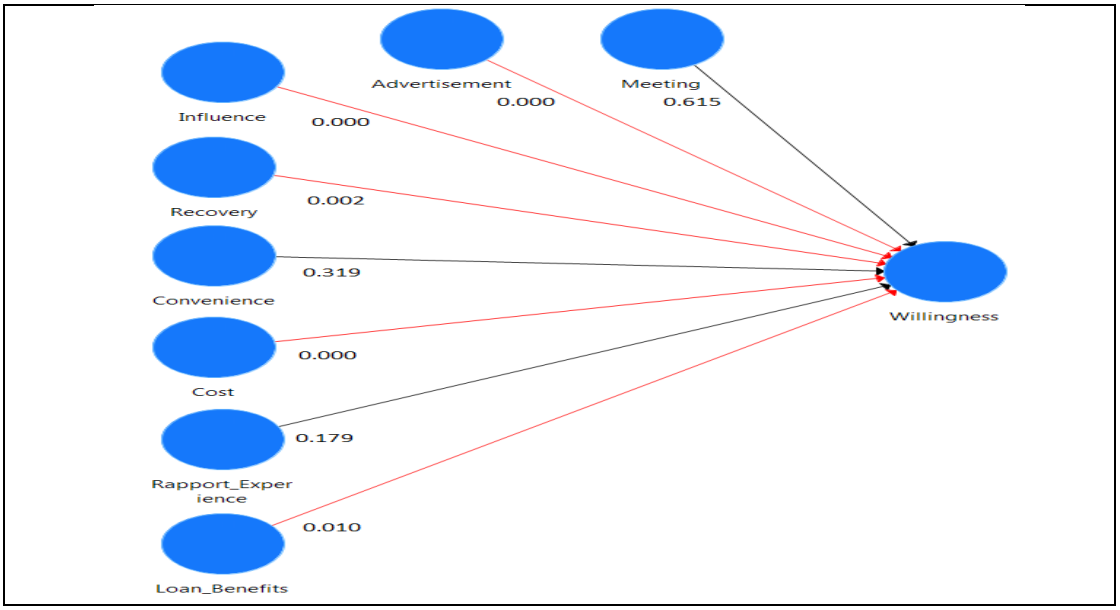
To get a better results on the hypothesis, mediation and moderation Structure Equation Modelling was adopted using the software Smart PLS -3. The grouping of factors derived from SPSS is taken for drawing the path model under the SEM Model. The outer model represents the grouping of the independent variables into latent variables and the inner model shows the pathway between the independent and dependent variables . Both are depicted below for structure clarity purpose

Fig 4.1: Structure for analysis of data – Measurement Model



(Source: Primary data diagram from PLS SEM-3)

Fig 4.2: Structure for analysis of data using PLS SEM (p value)



(Source: Primary data diagram from PLS SEM-3).
Numbers given here are for illustration only, does not have any meaning.

4.5: Confirmatory Factor Analysis and Model Testing for Robustness:

As we had 26 independent variables and we have grouped them as 8 factors (latent variables), we have used the same under Smart PLS-3 for further analysis. Confirmatory Factor Analysis (CFA) on the 'Influencing Model' (IFM) was carried out using structural equation model under Smart PLS-3 and the model was tested for robustness, construct validity and robustness. The construct validity includes testing of convergent validity, Discriminant validity and model fit criterion

a) Convergent Validity:

Table 4.7: Convergent Validity: alpha, CR & AVE values

Sl No	Latent Variable	alpha	CR	AVE
1	Advertisement	0.876	0.868	0.501
2	Convenience	0.847	0.843	0.586
3	Cost	0.895	0.903	0.824
4	Influence	0.838	0.837	0.636
5	Loan Benefits	0.781	0.789	0.653

6	Meeting	0.856	0.855	0.668
7	Rapport	0.718	0.714	0.531
8	Recovery	0.711	0.714	0.556

(Source: Primary Data, Results of path diagram, Smart PLS-3)
Primary Data, Results of path diagram, Smart PLS-3)

Average Variance Extracted (AVE) is an indicator which explains to what extent the exogenous variables explain the latent variable on an average. The range for AVE values is as follows: above 0.7=very good, 0.7-0.5=acceptable, <0.5=not acceptable. The Composite Reliability indicates the ratio of explained portion of the exogenous variable to the total variable including error term. If CR>0.7, CR>AVE and AVE>0.5 then the data is considered to have convergent validity (Hair, et al, 2010). As per Table 4.8 above, it is clear that AVE values are all above 0.5 and CR values are above 0.7. For each construct, CR value is greater than AVE value and hence it is concluded that convergent validity conditions were met for the given data set.

b) Discriminant Validity:

Table 4.8: Discriminant validity Table

Variable	ADVT	CONV	COST	INFLU	LOAN	MEET	RAPP	RECO
Advertisement	0.708							
Convenience	0.292	0.765						
Cost of Loan	-0.145	-0.079	0.908					
Influence	0.100	0.021	-0.127	0.797				
Loan Benefit	0.125	0.008	0.092	-0.179	0.808			
Meeting	0.532	0.445	-0.177	0.010	0.150	0.817		
Rapport	-0.112	0.047	0.141	0.044	0.384	-0.098	0.729	
Recovery	0.089	0.049	-0.141	-0.249	0.149	0.312	-0.024	0.746
Willingness	0.411	0.171	0.107	0.318	0.224	0.279	0.142	0.124

(The diagonal values highlighted are square root of AVE and the other values are the correlations between latent variables). (Source: Primary Data: Results from CFA path diagram, SmartPLS-3)

According to the Fornell-Larcker testing system (1981), discriminant validity can be assessed by comparing the square root of the Average Variance Extracted as compared to the correlation amongst

the respective constructs. The square root of the AVE for each construct should be greater than the correlation involving the constructs. As per table 4.9 above, all the values of square root of AVE were greater than the correlations and hence discriminant validity conditions were satisfied.

c) **Model Fit Criterion:** The model fit was assessed using three parameters-R^2, f^2, Q^2 and SRMR values as below:

d) **Cohen's f-square :** Effect size is a measure of the strength of the relationship between variables. Cohen's *f* statistic is one effect size index to measure the magnitude of significance of an independent variable with the dependent variable. Jacob Cohen (Statistical power analysis - Cohen (1988) has suggested that the values of 0.10, 0.25, and 0.40 represent small, medium, and large effect sizes, respectively proposed f = 0.1 is a small effect, f = 0.25 is a medium effect, and f = 0.4 is a large effect). Table 4.10 gives details of f-square value of the 8 paths.

Table 4.9: Cohen's f-square Value for the Farmer Questionnaire

Path	f2 Value (of DV)	Effect Size bracket	Effect Size	p' value
Advertisement_ -> Willingness	0.128	0.02 and 0.15,	Small	0.000
Convenience -> Willingness	0.003	less than 0.02	No effect	0.324
Cost of Loan -> Willingness	0.067	0.02 and 0.15,	Small	0.000
Influence -> Willingness	0.200	0.15 and 0.35	Medium	0.000
Loan Benefits -> Willingness	0.034	0.02 and 0.15,	Small	0.007
Meetings -> Willingness	0.001	less than 0.02	No effect	0.608
Rapport & service_ -> Willingness	0.007	less than 0.02	No effect	0.147
Recovery Process -> Willingness	0.043	0.02 and 0.15,	Small	0.001

. (Source: Primary Data: Results from SmartPLS-3)

From the above table it is evident that the 5 paths, where the p value is significant the f-square values depict an effect size which is either medium or small. There are 3 variables where the effect size is not there, and the 'p' values are also insignificant in these 3 variables.

e) Coefficient of Determination (R^2) and Predictor Q^2 Value

R^2 value is used to evaluate the structural model, to what extent it is good predictor of the model. In the article, 'PLS-SEM: Indeed a Silver Bullet', Hair et al (2011) have suggested that R^2 values of 0.75, 0.50, or 0.25 in the structural model can be described as substantial, moderate, or weak, respectively. The R^2 value of the model is as follows

Table 4.10: Value of R^2 and Q^2 of Value of Willingness (DV)

DV	R Square	R^2 Adjusted	Q Square
Willingness	0.374	0.362	0.310

(Source: Primary Data – Smart PLS-3)

The R^2 value of 0.374 is moderate as per Table 4.10 and hence considered to be a good predictor for the dependent variable. In addition, the predictive value (Q^2) can effectively be used as a criterion for predictive relevance (Fornell & Cha 1994; Chin 2010). Q^2 shows how well the collected data empirically can be reconstructed with the help of model and the PLS parameters. The Value of Q^2 is 0.310 close to the value of R^2, 0.376 and it is indicative of a moderate predictive value

f) Model Fit -SRMR Value :

SRMR (Standardised root mean square residual) is a measure of approximate fit of the researcher's model. It measures the difference between the observed correlation matrix and the model-implied correlation matrix. As per the ebook on PLS 2016, the SRMR reflects the average magnitude of such differences, with lower SRMR being better fit. By convention, a model has good fit when SRMR is less than .08 (Hu & Bentler, 1998). The Model Fit index is an overall measure of model fit for PLS-SEM (Smart PLS-3). The SRMR value is considered to be the main criteria to decide the Model Fit. In the given sample, the SRMR value is 0.79, which is below 0.80, and hence acceptable

Table 4.11: Model Fit criterion & Values

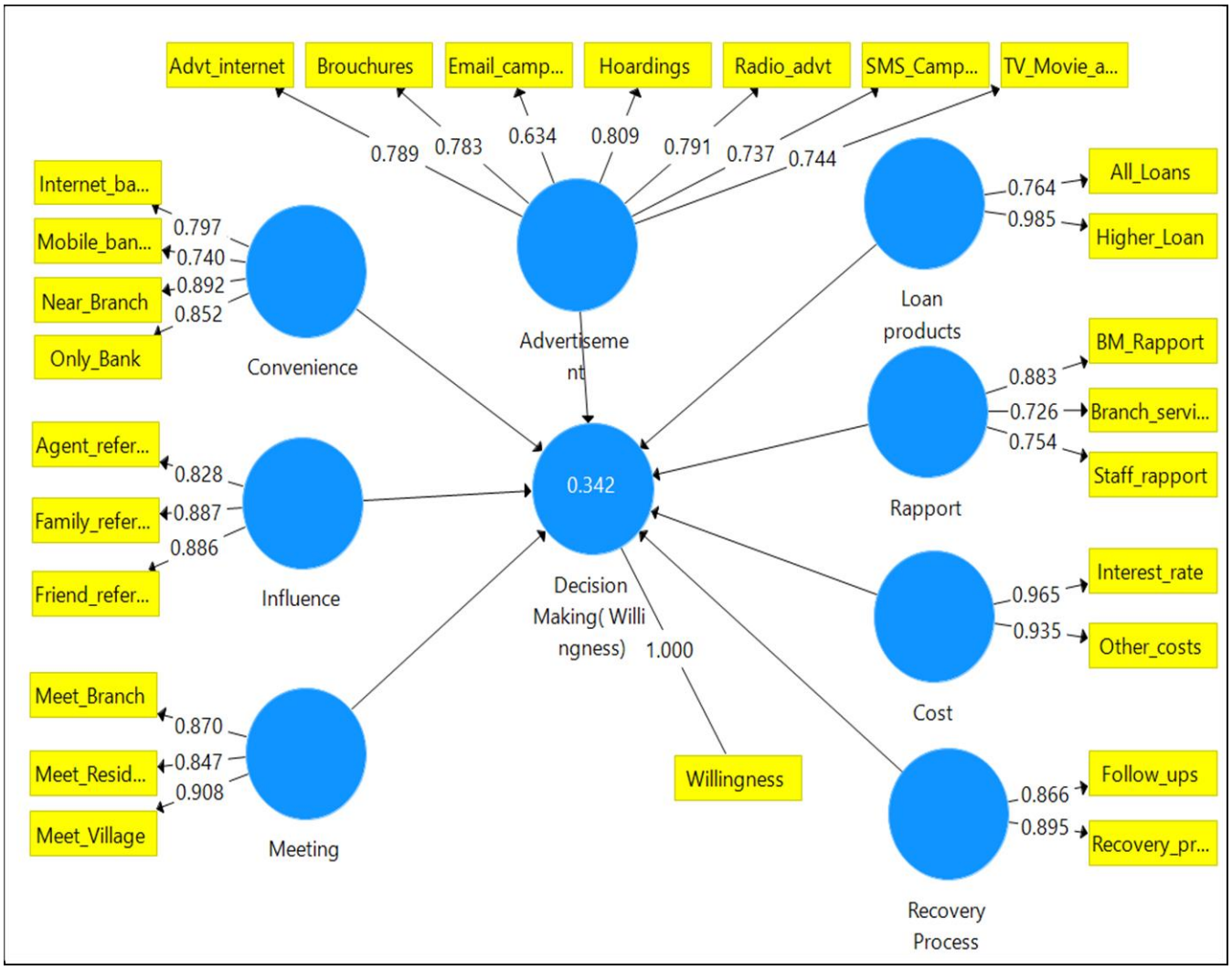
Model Fit	Saturated Model	Estimated Model
SRMR	0.079	0.079

(Source: Primary Data: Results from SmartPLS-3)

g) Influencing Model :

The following diagram 4.3 is an output of path diagram from PLS SEM. It is the measurement model which shows the loadings of the variables on the latent variable. A higher outer loading (above 0.5) on a variable indicates that the associated measure has much in common. The table of outer loadings showed all items had higher loading on one of the eight variables. Hence, it is estimated that the 8 latent variables are loading cleanly on their respective factors. As this model developed consists of the factors influencing the decision making of the farmer to avail an agri loan with the bank, researcher has named this model as 'Influencing Model'.

Fig 4.3: Path Diagram of Measurement Model (Influencing Model)

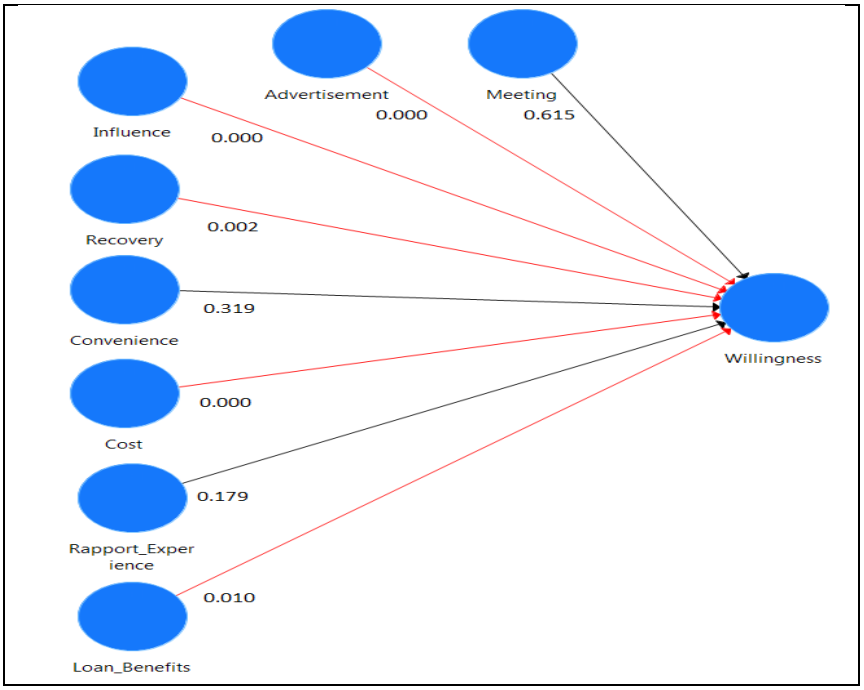


(Source Primary Data: from PLS SEM-3**, (Figures are 'p' values significant at 0.05 level)**

h) **Data Interpretation:**

The following diagram shown the 'p' values of the model denoting the significance of the influencing model. The results of bootstrapping and the path model are explained below

Fig 4.4: Path coefficients of Influencing model (with significance levels (p value))



(Source Primary Data: from PLS SEM-3**,** (Figures are 'p' values significant at 0.05 level)

The values from the output are given in the Table 4.7 below:

Table 4.12: Path coefficients, p-values and T-values of the Model

Paths	B-value	T-value	p-value	Significance
Advertisement -> Willingness	0.342	6.217	0.000	Significant
Convenience -> Willingness	0.052	0.997	0.319	Not significant
Cost -> Willingness	0.215	4.688	0.000	Significant
Influence -> Willingness	0.382	7.122	0.000	Significant
Loan Benefits -> Willingness	0.169	2.596	0.010	Significant
Meeting -> Willingness	0.033	0.503	0.615	Not significant
Rapport -> Willingness	0.074	1.346	0.179	Not significant
Recovery -> Willingness	0.183	3.064	0.002	Significant

(Source: computation of primary data through SEM, Smart PLS-3)

The bootstrapping results of the 8 paths presented in the table above keeping a significance level at the 'p' values less than 0.05, has resulted in 5 paths which are significant and 3 are Not significant. The details are explained under Hypothesis-1 results in the succeeding paragraphs

Table 4.15: Criteria considered for reaching conclusions of data analysis

Conditions	Conclusion
Significance levels	
T-value should be 1.96 or higher; p-value should be < 0.05	There is less than a 5% probability the null is correct (**)
Effect size (Cohen, 1988)	
f2 values	
Small effect size =0.02-0.15 Medium effect size=0.15-0.35 Large effect size=0.35 and above	Effect size is the measure of the effect size of a path
R^2 values (Chin, 1998)	
values of R^2> 0.19	Good predictor of EI (DV)
Values of R^2< 0.19	Not a good predictor of EI (DV)
Q^2 values (Fornell & Cha, 1994)	
Q^2value > 0; Q^2value close to R^2value	highly predictive model
Q^2value < 0; Q^2value vastly different from R^2value	not a predictive model

4.6: Testing of Hypothesis, Results and findings:

Following are the 3 sets of Hypothesis which were formulated for testing

1. Hypothesis 1: Significance testing of the elements in the model (Influencing Factors)
2. Hypothesis 2: Effect of mediation of Mediating Factors on IV-DV relationship
3. Hypothesis 3: Effect of moderation of Demographic / Categorical Variables

Smart PLS-3 tool was used to test the above hypothesis using the various techniques under PLS Algorithm, Bootstrapping, PLS Predict and MGA analysis for significance testing mediation analysis and impact of moderation. Details are given below:

4.7: Hypothesis 1: Significance of Independent Variables (IV) on Dependent Variable (DV)

The significance of the elements of Influencing Model on the willingness of the farmer is tested with the significance level kept up to 0.05 p value. If p value is greater than 0.05 the null hypothesis is accepted. Null Hypothesis is mentioned as below:

- H0: There is no significant impact of the influencing factor on the decision making of a farmer to avail an agri loan with a bank (willingness)

- Ha: There is a significant impact of the influencing factor on the decision making of a farmer to avail an agri loan with a bank (willingness)

The Hypothesis 1 is made of 8 sub-hypotheses. Testing of the 8 sub-hypotheses was performed through bootstrapping and the results are given below:

Hypothesis 1.1 (H1.1)

- H0: There is no significant impact of 'Advertisement by Banks' on the Willingness of a farmer to avail an agri loan with a bank

- Ha: There is a significant impact of 'Advertisement by Banks' on the Willingness of a farmer to avail an agri loan with a bank

Table 4.13: Testing of hypothesis H1.1

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.1	Advertisement -> Willingness	0.342	6.217	0.000	Yes	H0 Rejected & Ha Accepted	Advertisement has a significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.000 which is <0.05 indicating a significance up to 0.05 level, null hypothesis is rejected and the alternate hypothesis is accepted. Hence it is concluded that Advertisement by bank has a positive impact on the willingness of a farmer to avail an agri loan with the bank with a B-value of 0.342.

Hypothesis 1.2 (H1.2)

- H0: There is no significant impact of 'Convenience to Farmer' on the Willingness of a farmer to avail an agri loan with a bank

- Ha: There is a significant impact of 'Convenience to Farmer' on the Willingness of a farmer to avail an agri loan with a bank

Table 4.14: Testing of hypothesis H1.2

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.2	Convenience -> Willingness	0.052	0.997	0.319	No	H0 Accepted & Ha Rejected	Convenience has NO significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.319 which is >0.05 indicating a significance above 0.05 level, null hypothesis is accepted and the alternate hypothesis is rejected. Hence it is concluded that Convenience provided by Banks to the farmer has a No Significant impact on the willingness of a farmer to avail an agri loan with the bank.

Hypothesis 1.3 (H1.3)

- H0: There is no significant impact of 'Meeting with Bankers' on the Willingness of a farmer to avail an agri loan with a bank
- Ha: There is a significant impact of 'Meeting with Bankers' on the Willingness of a farmer to avail an agri loan with a bank

Table 4.15: Testing of hypothesis H1.3

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.3	Meeting -> Willingness	0.033	0.503	0.615	No	H0 Accepted & Ha Rejected	Meeting has NO significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.615 which is >0.05 indicating a significance above 0.05 level, null hypothesis is accepted and the alternate hypothesis is rejected. Hence it is concluded that 'Meeting of Farmers with Bankers' has No Significant impact on the willingness of a farmer to avail an agri loan with the bank.

Hypothesis 1.4 (H1.4)

- H0: There is no significant impact of 'Influence from others' on the Willingness of a farmer to avail an agri loan with a bank.

- Ha: There is a significant impact of 'Influence from others' on the Willingness of a farmer to avail an agri loan with a bank.

Table 4.16: Testing of hypothesis H1.4

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.4	Influence -> Willingness	0.382	7.122	0.000	Yes	H0 Rejected & Ha Accepted	Influence has a significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.000 which is <0.05 indicating a significance up to 0.05 level, null hypothesis is rejected and the alternate hypothesis is accepted. Hence it is concluded that 'Influence from Others' has a Significant impact on the willingness of a farmer to avail an agri loan with the bank, having a 'b' value 0f 0.382.

Hypothesis 1.5 (H1.5)

- H0: There is no significant impact of 'Recovery Process of Banks' on the Willingness of a farmer to avail an agri loan with a bank.

- Ha: There is a significant impact of 'Recovery Process of Banks' on the Willingness of a farmer to avail an agri loan with a bank.

Table 4.17: Testing of hypothesis H1.5

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.5	Recovery -> Willingness	0.183	3.064	0.002	Yes	H0 Rejected & Ha Accepted	Recovery has a significant impact on the willingness

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.002 which is <0.05 indicating a significance up to 0.05 level, null hypothesis is rejected and the alternate hypothesis is accepted. Hence it is concluded that 'Recovery Processes of the bank' has a positive impact on the willingness of a farmer to avail an agri loan with the bank with a B-value of 0.183.

Hypothesis 1.6 (H1.6)

- H0: There is no significant impact of 'Loan Specific Benefits' on the Willingness of a farmer to avail an agri loan with a bank.

- Ha: There is a significant impact of 'Loan Specific Benefits' on the Willingness of a farmer to avail an agri loan with a bank.

Table 4.18: Testing of hypothesis H1.6

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.6	Loan Benefits -> Willingness	0.169	2.596	0.010	Yes	H0 Rejected & Ha Accepted	'Loan Benefits' has a significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.010 which is <0.05 indicating a significance up to 0.05 level, null hypothesis is rejected and the alternate hypothesis is accepted. Hence it is concluded that 'Loan Specific Benefits' has a significant impact on the willingness of a farmer to avail an agri loan with the bank with a B-value of 0.169.

Hypothesis 1.7 (H1.7)

- H0: There is no significant impact of 'Cost of the Loan' on the Willingness of a farmer to avail an agri loan with a bank.
- Ha: There is a significant impact of 'Cost of the Loan' on the Willingness of a farmer to avail an agri loan with a bank.

Table 4.19: Testing of hypothesis H1.7

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.7	Cost -> Willingness	0.215	4.688	0.000	Yes	H0 Rejected & Ha Accepted	'Cost' has a significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.000 which is <0.05 indicating a significance up to 0.05 level, null hypothesis is rejected and the alternate hypothesis is accepted. Hence it is concluded that 'Cost of Loan' has a positive impact on the willingness of a farmer to avail an agri loan with the bank with a B-value of 0.215

Hypothesis 1.8 (H1.8)

- H0: There is no significant impact of 'Rapport & Service Experience of Farmer' on the Willingness of a farmer to avail an agri loan with a bank.

- Ha: There is a significant impact of 'Rapport & Service Experience of Farmer' on the Willingness of a farmer to avail an agri loan with a bank.

Table 4.20: Testing of hypothesis H1.8

Tag	Hypothesis	B - value	T- value	P - value	Significant*	Result	Interpretation
H1.8	Rapport -> Willingness	0.074	1.346	0.179	No	H0 Accepted & Ha Rejected	Rapport has NO significant impact on the willingness of the farmer

(Source: Primary Data from output of bootstrapping, Smart PLS-3)

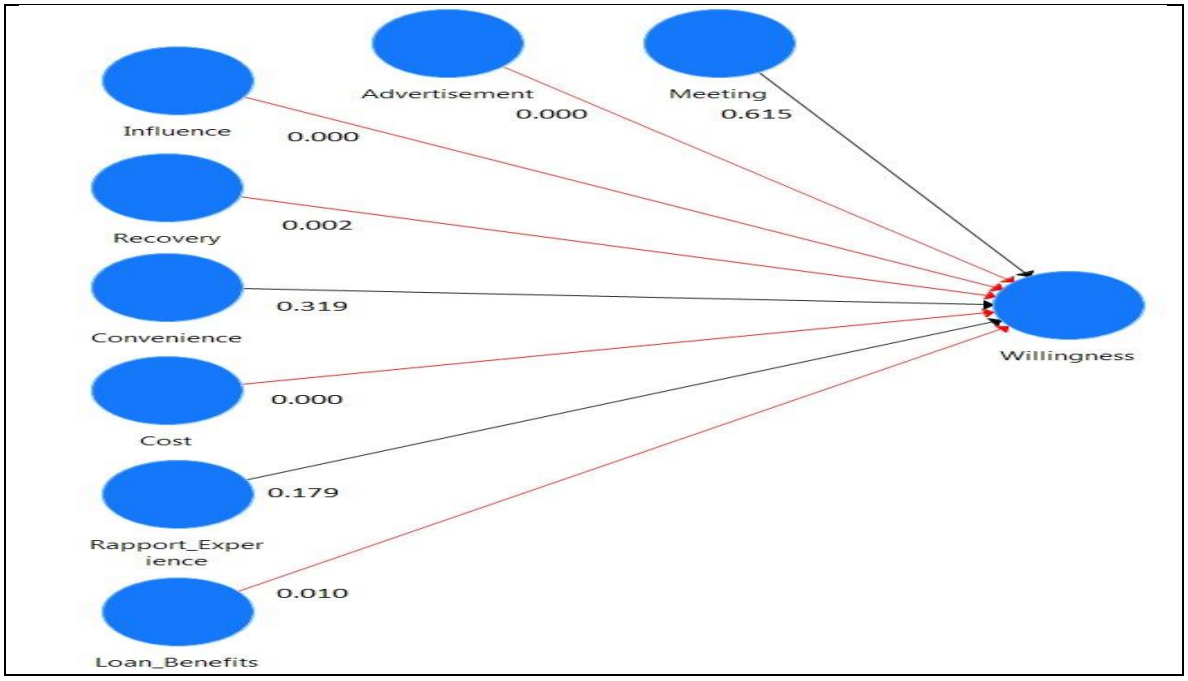
(*Significant at p-value<0.05, where Ho is rejected and Ha is accepted)

As the p-value=0.179 which is >0.05 indicating a significance above 0.05 level, null hypothesis is accepted and the alternate hypothesis is rejected. Hence it is concluded that 'Rapport and Service Experience of Farmer' has No Significant impact on the willingness of a farmer to avail an agri loan with the bank.

Summary of Hypothesis-1:

As per the hypothesis testing results detailed above, out of the 8 influencing factors there are 5 factors which significantly impact the willingness of the farmer and 3 factors have not significant impact on the willingness of the farmer to avail an agri loan with the bank. The results are depicted in the figure below:

Fig 4.5: Testing of hypothesis- 1 with significance levels



(Source: Primary Data, Smart PLS-3, figures - p values, significant up to 0.05 level)

Table 4.12: Path coefficients, p-values and T-values of the Model

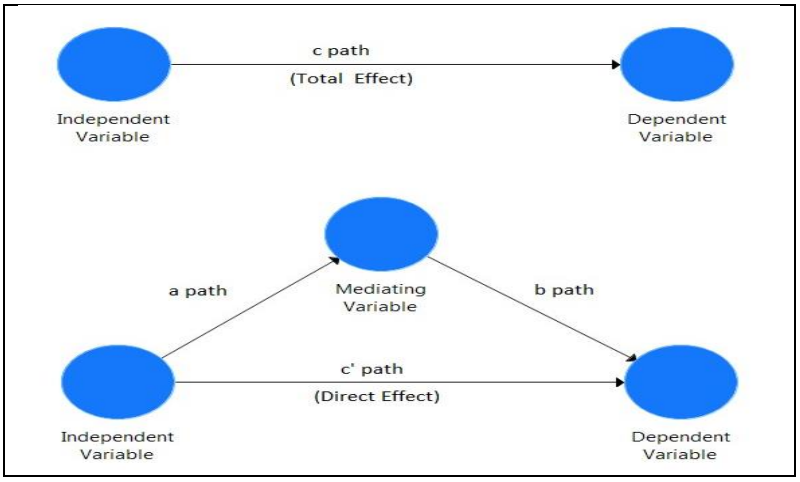
Paths	B-value	T-value	p-value	Significance	Result (Significance level of 0.05)
Advertisement -> Willingness	0.342	6.217	0.000	Significant	Significant and positive relationship
Convenience -> Willingness	0.052	0.997	0.319	Not significant	Insignificant
Cost -> Willingness	0.215	4.688	0.000	Significant	Significant and positive relationship
Influence -> Willingness	0.382	7.122	0.000	Significant	Significant and positive relationship
Loan Benefits -> Willingness	0.169	2.596	0.010	Significant	Significant and positive relationship
Meeting -> Willingness	0.033	0.503	0.615	Not significant	Insignificant
Rapport Experience -> Willingness	0.074	1.346	0.179	Not significant	Insignificant
Recovery -> Willingness	0.183	3.064	0.002	Significant	Significant and positive relationship

(Source: computation of primary data through SEM, Smart PLS-3)

4.8 : Hypothesis 2: Impact of Mediation :

Mediation is depicted in the figure below:

Fig 4.6: Mediation Path Illustration



The relationship between an independent variable and Dependent variables without mediation is reflected under Total Effect, which is denoted through - c path. When the relationship between IV an DV is mediated by another mediating variable, the relationship between IV – MV is denoted through - a path, the relationship between MV-DV is denoted through - b path and the direct relationship effect between IV-DV post mediation is denoted by c' path

There are 3 measures of the effect of Mediation:

1. Complete Mediation: In case the significance (p value) of the independent variable on the dependent variable becomes in-significant post mediation by the impact of mediating factor, then the mediation impact is considered as 'complete mediation'

2. Partial Meditation: In case the significance (p value) of the independent variable on the dependent variable remains significant post mediation even with the impact of the mediating

factor, however the indirect effect of mediation is significant ($p < 0.05$), then the mediation impact is considered as 'partial mediation'

3. No Meditation: In case the significance (p value) of the independent variable on the dependent variable remains significant post mediation even with the impact of the mediating factor, however the indirect effect of mediation is non- significant ($p >= 0.05$), then the mediation impact is considered as 'NO mediation'

Mediating effect is tested on the direct path between the independent variables and the dependent variable taking all the other influencing factors as mediating variables using SMART PLS-3 tools

Testing of Hypothesis 2: Mediating effect on Willingness of the Farmer

Hypothesis 2 was tested to determine the impact of mediating variables on the relationship of the independent variable on the willingness (DV) considering other influencing factors as mediating variables and analysed accordingly. As there are 8 independent variables considered in this study, taken 2 at a time, there are 56 sub hypotheses derived and studied one by as below.

Based on the result of the hypothesis testing out of 56 sub-hypotheses in 14 cases mediation existed and 42 cases there was no mediation. Hypothesis testing of each sub-hypothesis is mentioned below:

Hypothesis 2.1(H2.1)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.21: Testing of hypothesis 2.1

H	IV	MV	DV	Result	Mediation status
2.1	Advertisement	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.397	9.905	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.381	9.732	0.000
a path	Advertisement -> Convenience	0.278	7.055	0.000
b path	Convenience -> Willingness	0.059	1.359	0.175
Indirect Effect(a * b path)	Advertisement -> Convenience -> Willingness	0.016	1.288	0.199

(Source: Primary Data: Mediation analysis- SmartPLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Convenience (MV) as mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.397 before mediation (c path) which shrunk to 0.381 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.199 and corresponding T statistic is 1.288. As the 'p' value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.2)

- H0: 'Meeting with Farmers' (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Meeting with Farmers' (MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.22: Testing of hypothesis 2.2

H	IV	MV	DV	Result	Mediation status
2.2	Advertisement	Meeting	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.391	9.280	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.344	7.275	0.000
a path	Advertisement -> Meeting	0.475	14.398	0.000
b path	Meeting -> Willingness	0.100	1.998	0.046
Indirect Effect(a * b path)	Advertisement -> Meeting -> Willingness	0.047	1.946	0.052

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Meeting (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.391before mediation (c path) which shrunk to 0.344 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.052 and corresponding T statistic is 1.946. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.3)

- H0: 'Influence from others' (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Influence from others' (MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).

Table 4.23: Testing of hypothesis 2.3

H	IV	MV	DV	Result	Mediation status
2.3	Advertisement	Influence	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.398	10.533	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.375	9.576	0.000
a path	Advertisement -> Influence	0.089	1.689	0.092
b path	Influence -> Willingness	0.264	6.524	0.000
Indirect Effect(a * b path)	Advertisement -> Influence -> Willingness	0.023	1.640	0.102

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.398 before mediation (c path) which shrunk to 0.375 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000)after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.102 and corresponding T statistic is 1.640. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.4)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.24: Testing of hypothesis 2.4

H	IV	MV	DV	Result	Mediation status
2.4	Advertisement	Recovery	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.398	10.112	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.392	9.838	0.000
a path	Advertisement -> Recovery	0.080	1.569	0.117
b path	Recovery -> Willingness	0.073	1.593	0.112
Indirect Effect(a* b path)	Advertisement -> Recovery -> Willingness	0.006	0.981	0.327

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.398 before mediation (c path) which shrunk to 0.392 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000)after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.327 and corresponding T statistic is 0.981. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.5)

- H0: 'Loan specific benefits to farmer (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Loan Specific benefits'(MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.25: Testing of hypothesis 2.5

H	IV	MV	DV	Result	Mediation status
2.5	Advertisement	Loan Benefits	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.395	10.393	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.377	9.964	0.000
a path	Advertisement ->Loan Benefits	0.092	1.730	0.084
b path	Loan Benefits -> Willingness	0.198	4.580	0.000
Indirect Effect(a * b path)	Advertisement ->Loan Benefits -> Willingness	0.018	1.732	0.084

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Loan Benefits (MV) as mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.395 before mediation (c path) which shrunk to 0.377 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000)after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.084 and corresponding T statistic is 1.732. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.6)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.26: Testing of hypothesis 2.6

H	IV	MV	DV	Result	Mediation status
2.6	Advertisement	Cost of Loan	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.395	9.889	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.415	10.663	0.000
a path	Advertisement -> Cost	-0.126	2.393	0.017
b path	Cost -> Willingness	0.156	3.483	0.001
Indirect Effect(a* b path)	Advertisement -> Cost -> Willingness	-0.020	1.815	0.070

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Cost of Loan (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.395 before mediation (c path) which became 0.415 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000)after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.070 and corresponding T statistic is 1.815. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.7)

- H0: 'Rapport & Service experience of farmer' (MV) does not mediate the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Rapport & Service Experience of Farmer' (MV) mediates the relationship between 'Advertisement by Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.27: Testing of hypothesis 2.7

H	IV	MV	DV	Result	Mediation status
2.7	Advertisement	Rapport & Service	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Advertisement -> Willingness	0.396	9.665	0.000
Direct Effect (c' path)	Advertisement -> Willingness	0.428	10.373	0.000
a path	Advertisement -> Rapport	-0.152	1.096	0.273
b path	Rapport-> Willingness	0.210	2.825	0.005
Indirect Effect(a*b path)	Advertisement -> Rapport_> Willingness	-0.032	1.552	0.121

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Advertisement (IV) and Willingness (DV) using Rapport (MV) as the mediating variable and results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.396 before mediation (c path) which strengthened to 0.428 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained at < 0.05 (0.000)after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.121 and corresponding T statistic is 1.552. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.8)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.28: Testing of hypothesis 2.8

H	IV	MV	DV	Result	Mediation status
2.8	Convenience	Advertisement	Willingness	H0 Accepted	Complete mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.164	3.599	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.059	1.408	0.160
a path	Convenience -> Advertisement	0.278	6.516	0.000
b path	Advertisement -> Willingness	0.381	9.357	0.000
Indirect Effect (a*b path)	Convenience > Advert-> Willingness	0.106	5.508	0.000

(Source: Primary Data: Mediation analysis Smart PLS – 3) . (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Advertisement (MV) as mediating variable and results are as per the table above. The relationship between the above mentioned IV & DV was 0.164 before mediation (c path) which shrunk to 0.059 after mediation (c' path). The corresponding 'p' value before mediation was 0.001which increased above 0.05 (0.160) after mediation denotes that the Independent variable which had a significant impact on the dependent variable before mediation does not have the same s impact post mediation. Hence Null hypothesis is accepted and alternate hypothesis is rejected.

As per above table, a path and b path both are significant ($p<0.05$) while c' path is in-significant ($p >=0.05$). The impact of the mediator (MV) has resulted in change in the significance between IV and DV post mediation from significant to non significant ($p > 0.05$). Hence it is concluded that there is presence of mediation which is a 'Complete Mediation'

Hypothesis 2. (H2.9)

- H0: 'Meeting with Bankers' (MV) does not mediate the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Meeting with Bankers' (MV) mediates the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.29: Testing of hypothesis 2.9

H	IV	MV	DV	Result	Mediation status
2.9`	Convenience	Meeting	Willingness	H0 Accepted	Complete mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.162	3.399	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.068	1.351	0.177
a path	Convenience -> Meeting	0.396	9.359	0.000
b path	Meeting -> Willingness	0.238	4.596	0.000
Indirect Effect (a*b path)	Convenience -> Meeting -> Willingness	0.094	4.335	0.000

(Source: Primary Data: Mediation analysis-Smart PLS – 3) , (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Meeting (MV) as the mediating variable and the results displayed in the table above. The relationship between the above mentioned IV & DV was 0.162 before mediation (c path) shrunk to 0.068 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which increased above 0.05 (0.177) after mediation, which denotes that that the IV which had a significant impact on the dependent variable before mediation does not have the same significant impact post mediation. Hence the Null hypothesis is accepted and alternate hypothesis is rejected.

The indirect effect of the mediation as measured by 'p' value is 0.000 and corresponding T statistic is 4.335 which is a significant 'p' value. As it has resulted in a change in the significance of the IV on DV, as compared to the total effect, it is concluded that there is presence of mediation which is considered as 'Complete Mediation'

Hypothesis 2. (H2.10)

- H0: 'Influence from Others' (MV) does not mediate the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Influence from others' (MV) mediates the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.30: Testing of hypothesis 2.10

H	IV	MV	DV	Result	Mediation status
2.10	Convenience	Influence	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.166	2.954	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.144	1.965	0.032
a path	Convenience -> Influence	0.077	0.530	0.578
b path	Influence -> Willingness	0.285	6.172	0.000
Indirect Effect (a* b path(	Convenience -> Influence -> Willingness	0.022	0.481	0.610

(Source: Primary Data: Mediation analysis-Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.166 before mediation (c path) which shrunk to 0.144 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.032) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.787 and corresponding T statistic is 0.270. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.11)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.31: Testing of hypothesis 2.11

H	IV	MV	DV	Result	Mediation status
2.11	Convenience	Recovery	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.170	3.527	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.165	3.449	0.001
a path	Convenience ->Recovery	0.059	0.673	0.501
b path	Influence -> Willingness	0.094	1.983	0.048
Indirect Effect (a* b path(	Convenience ->Recovery -> Willingness	0.006	0.621	0.535

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.170before mediation (c path) which shrunk to 0.166 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.001) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.535 and corresponding T statistic is 0.621. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.12)

- H0: 'Loan specific benefits to farmer' (MV) does not mediate the relationship between 'Convenience to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Loan Specific benefits' (MV) mediates the relationship between 'Convenience to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.32: Testing of hypothesis 2.12

H	IV	MV	DV	Result	Mediation status
2.12	Convenience	Loan Benefits	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.173	2.902	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.166	3.426	0.001
a path	Convenience ->Loan Benefits	0.033	0.274	0.784
b path	Influence -> Willingness	0.237	5.685	0.000
Indirect Effect (a* b path)	Convenience ->Loan Benefits -> Willingness	0.008	0.270	0.787

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Loan Benefits (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.173 before mediation (c path) which shrunk to 0.166 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.001) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.787 and corresponding T statistic is 0.270. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.13)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Convenience to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Convenience to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.33: Testing of hypothesis 2.13

H	IV	MV	DV	Result	Mediation status
2.13	Convenience	Cost	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.163	3.784	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.172	4.117	0.000
a path	Convenience -> Cost	-0.075	1.316	0.189
b path	Cost -> Willingness	0.116	2.322	0.021
Indirect Effect (a* b path)	Convenience -> Cost -> Willingness	-0.009	1.109	0.268

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T- stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Cost (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.163 before mediation (c path) which strengthened to 0.172 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.268 and corresponding T statistic is 1.109. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.14)

- H0: 'Rapport & Service experience' (MV) does not mediate the relationship between 'Convenience to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Rapport & Service Experience' (MV) mediates the relationship between 'Convenience to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.34: Testing of hypothesis 2.14

H	IV	MV	DV	Result	Mediation status
2.14	Convenience	Rapport	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Convenience -> Willingness	0.172	3.929	0.001
Direct Effect (c' path)	Convenience -> Willingness	0.163	3.769	0.000
a path	Convenience ->Rapport	0.068	1.030	0.303
b path	Influence -> Willingness	0.136	2.988	0.003
Indirect Effect (a* b path)	Convenience ->Rapport -> Willingness	0.009	0.955	0.340

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Convenience (IV) and Willingness (DV) using Rapport (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.172 before mediation (c path) which shrunk to 0.163 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.340 and corresponding T statistic is 0.955. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.15)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Meeting with Bankers' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Meeting with Bankers' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.35: Testing of hypothesis 2.15

H	IV	MV	DV	Result	Mediation status
2.15	Meeting	Advertisement	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.263	5.739	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.100	2.024	0.043
a path	Meeting -> Advertisement	0.475	15.305	0.000
b path	Advertisement -> Willingness	0.344	7.178	0.000
Indirect Effect (a* b path)	Meeting -> Advt -> Willingness	0.163	6.385	0.000

(Source: Primary Data: Mediation analysis-Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Meeting (IV) and Willingness (DV) using Advertisement (MV) as the mediating variable and the results displayed in the table above. The relationship between the IV & DV was 0.263 before mediation (c path) which shrunk to 0.100 after mediation (c' path). The 'p' value before mediation was 0.000 which has remained below 0.05 (0.043) after mediation, denotes that the IV continues to have a significant impact on the DV after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

As per above table, all 3 PATHS are significant post mediation ($p<0.05$). The indirect effect of the mediation as measured by 'p' value is 000 and corresponding T statistic is 6.385. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'

Hypothesis 2. (H2.16)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Meeting with Bankers' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Meeting with Bankers' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.36: Testing of hypothesis 2.16

H	IV	MV	DV	Result	Mediation status
2.16	Meeting	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.265	6.010	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.238	4.865	0.000
a path	Meeting ->Convenience	0.396	8.993	0.000
b path	Advertisement -> Willingness	0.068	1.356	0.176
Indirect Effect (a* b path)	Meeting ->Convenience -> Willingness	0.027	1.301	0.194

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Meeting with Bankers (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.265 before mediation (c path) which shrunk to 0.238 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.194 and corresponding T statistic is 1.301. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.17)

- H0: 'Influence from others' (MV) does not mediate the relationship between 'Meeting with Bankers' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Influence from others' (MV) mediates the relationship between 'Meeting with Bankers' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.37: Testing of hypothesis 2.17

H	IV	MV	DV	Result	Mediation status
2.17	Meeting	Influence	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.274	6.808	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.272	6.842	0.000
a path	Meeting ->Influence	0.007	0.129	0.898
b path	Advertisement -> Willingness	0.295	7.177	0.000
Indirect Effect (a* b path)	Meeting ->Influence -> Willingness	0.002	0.126	0.900

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Meeting with Bankers (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.274 before mediation (c path) which shrunk to 0.272 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.900 and corresponding T statistic is 0.126. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.18)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.38: Testing of hypothesis 2.18

H	IV	MV	DV	Result	Mediation status
2.18	Meeting	Recovery	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.275	6.422	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.267	6.284	0.000
a path	Meeting ->Recovery	0.273	6.342	0.000
b path	Advertisement -> Willingness	0.031	0.654	0.514
Indirect Effect (a* b path)	Meeting ->Recovery -> Willingness	0.009	0.628	0.530

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Meeting with Bankers (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.275 before mediation (c path) which shrunk to 0.267 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.530 and corresponding T statistic is 0.628. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.19)

- H0: 'Loan specific benefits' (MV) does not mediate the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Loan Specific benefits to farmer' (MV) mediates the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.39: Testing of hypothesis 2.19

H	IV	MV	DV	Result	Mediation status
2.19	Meeting	Loan Benefit	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.273	6.606	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.251	5.846	0.000
a path	Meeting ->Loan Benefit	0.118	1.472	0.142
b path	Advertisement -> Willingness	0.184	2.594	0.010
Indirect Effect (a* b path)	Meeting ->Loan Benefit -> Willingness	0.022	1.273	0.204

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Meeting with Bankers (IV) and Willingness (DV) using Loan Benefit (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.273 before mediation (c path) which shrunk to 0.251 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.204 and corresponding T statistic is 1.23. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.20)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.40: Testing of hypothesis 2.20

H	IV	MV	DV	Result	Mediation status
2.20	Meeting	Cost	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.262	5.855	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.285	6.501	0.000
a path	Meeting ->Cost	-0.161	2.935	0.003
b path	Advertisement -> Willingness	0.147	3.043	0.002
Indirect Effect (a* b)	Meeting ->Cost -> Willingness	-0.024	1.972	0.049

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on the relationship between Meeting (IV) and Willingness (DV) using Cost (MV) as mediating variable and the results displayed in the table above. The relationship between the above mentioned IV & DV was 0.262 before mediation (c path) which strengthened to 0.285 after mediation (c' path), due to the negative impact of 'a' path. The corresponding 'p' value has remained below 0.05 (0.000) after mediation also, denoting that the IV has a significant impact on the DV after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted .As per above table, all 3 PATHS are significant post mediation ($p<0.05$).

The indirect effect of the mediation as measured by 'p' value is 049 and corresponding T statistic is 1.972. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'

Hypothesis 2. (H2.21)

- H0: 'Rapport & Service experience' (MV) does not mediate the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan' (IV).
- Ha: 'Rapport & Service Experience' (MV) mediates the relationship between 'Meeting with Bankers'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.41: Testing of hypothesis 2.21

H	IV	MV	DV	Result	Mediation status
2.21	Meeting	Rapport	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Meeting -> Willingness	0.264	5.884	0.000
Direct Effect (c' path)	Meeting -> Willingness	0.292	6.695	0.000
a path	Meeting ->Rapport	-0.136	1.609	0.108
b path	Advertisement -> Willingness	0.200	4.552	0.000
Indirect Effect (a* b path)	Meeting ->Rapport -> Willingness	-0.027	1.731	0.084

(Source: Primary Data: Mediation analysis output Smart PLS – 3)

(Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Meeting (IV) and Willingness (DV) using Rapport (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.264before mediation (c path) which is strengthened to 0.292 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.084 and corresponding T statistic is 1.731. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.22)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.42: Testing of hypothesis 2.22

H	IV	MV	DV	Result	Mediation status
2.22	Influence	Advertisement	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.297	6.215	0.000
Direct Effect (c' path)	Influence -> Willingness	0.264	6.059	0.000
a path	Influence -> Advertisement	0.089	1.586	0.113
b path	Advertisement -> Willingness	0.375	9.130	0.000
Indirect Effect (a* b path)	Influence -> Advertisement -> Willingness	0.033	1.618	0.106

(Source: Primary Data: Mediation analysis-Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence of Others (IV) and Willingness (DV) using Advertisement (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.297 before mediation (c path) which shrunk to 0.264 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.106 and corresponding T statistic is 1.618. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.23)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Influence from Others' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Influence from Others' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.43: Testing of hypothesis 2.23

H	IV	MV	DV	Result	Mediation status
2.23	Influence	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.296	6.660	0.000
Direct Effect (c' path)	Influence -> Willingness	0.285	6.444	0.000
a path	Influence -> Convenience	0.077	0.541	0.589
b path	Convenience -> Willingness	0.144	1.979	0.048
Indirect Effect (a* b path)	Influence -> Convenience -> Willingness	0.011	0.527	0.598

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence of Others (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.296 before mediation (c path) which shrunk to 0.285 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.598 and corresponding T statistic is 0.527. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.24)

- H0: 'Meeting with Bankers' (MV) does not mediate the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Meeting with Bankers' (MV) mediates the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.44: Testing of hypothesis 2.24

H	IV	MV	DV	Result	Mediation status
2.24	Influence	Meeting	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.297	6.435	0.000
Direct Effect (c' path)	Influence -> Willingness	0.295	6.702	0.000
a path	Influence -> Meeting	0.007	0.139	0.889
b path	Meeting -> Willingness	0.272	6.735	0.000
Indirect Effect (a* b path)	Influence -> Meeting -> Willingness	0.002	0.139	0.890

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence of Others (IV) and Willingness (DV) using Meeting with Bankers (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.297 before mediation (c path) which shrunk to 0.295 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.0890 and corresponding T statistic is 0.135. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.25)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.45: Testing of hypothesis 2.25

H	IV	MV	DV	Result	Mediation status
2.25	Influence	Recovery	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.300	7.061	0.000
Direct Effect (c' path)	Influence -> Willingness	0.335	8.280	0.000
a path	Influence -> Recovery	-0.203	4.580	0.000
b path	Recovery -> Willingness	0.173	3.699	0.000
Indirect Effect (a* b path)	Influence -> Recovery -> Willingness	-0.035	2.832	0.005

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.300 before mediation (c path) became 0.335 after mediation (c' path). The 'p' value before mediation was 0.000 & remained below 0.05 (0.000) after mediation, which denotes that that the IV has a significant impact on the DV after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

As per above table, all 3 PATHS are significant post mediation ($p < 0.05$). The indirect effect of the mediation as measured by 'p' value is 0.005 and corresponding T statistic is 2.832. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'

Hypothesis 2. (H2.26)

- H0: 'Loan specific benefits to farmer' (MV) does not mediate the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Loan Specific benefits to farmer' (MV) mediates the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.46: Testing of hypothesis 2.26

H	IV	MV	DV	Result	Mediation status
2.26	Influence	Loan Benefits	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.289	6.274	0.000
Direct Effect (c' path)	Influence -> Willingness	0.330	7.194	0.000
a path	Influence -> Loan Benefits	-0.165	1.927	0.055
b path	Loan Benefits -> Willingness	0.248	4.179	0.000
Indirect Effect (a* b path)	Influence -> Loan Benefits -> Willingness	-0.041	1.949	0.052

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence of Others (IV) and Willingness (DV) using Loan Benefits (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.289 before mediation (c path) which strengthened to 0.330 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.052 and corresponding T statistic is 1.949. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.27)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.47: Testing of hypothesis 2.27

H	IV	MV	DV	Result	Mediation status
2.27	Influence	Cost	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.296	6.625	0.000
Direct Effect (c' path)	Influence -> Willingness	0.313	7.232	0.000
a path	Influence -> Cost	-0.124	2.307	0.021
b path	Cost -> Willingness	0.145	3.365	0.001
Indirect Effect (a* b path)	Influence -> Cost -> Willingness	-0.018	1.896	0.059

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence of Others (IV) and Willingness (DV) using Cost (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.296before mediation (c path) which strengthened to 0.313 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained below 0.05 (0.000) after mediation, which denotes that that the Independent

variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.059 and corresponding T statistic is 1.896. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.28)

- H0: 'Rapport & Service experience of farmer' (MV) does not mediate the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Rapport & Service Experience of farmer' (MV) mediates the relationship between 'Influence from Others'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.48: Testing of hypothesis 2.28

H	IV	MV	DV	Result	Mediation status
2.28	Influence	Rapport	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Influence -> Willingness	0.302	6.667	0.000
Direct Effect (c' path)	Influence -> Willingness	0.290	6.535	0.000
a path	Influence -> Rapport	0.097	1.456	0.146
b path	Rapport -> Willingness	0.116	2.768	0.006
Indirect Effect (a* b path)	Influence -> Rapport-> Willingness	0.011	1.216	0.224

(Source: Primary Data: Mediation analysis-Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Influence of Others (IV) and Willingness (DV) using Rapport (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.302 before mediation (c path) which shrunk to 0.290 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.224 and corresponding T statistic is 1.216. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.29)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV)
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.49: Testing of hypothesis 2.29

H	IV	MV	DV	Result	Mediation status
2.29	Recovery	Advertisement	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.105	1.976	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.073	1.538	0.049
a path	Recovery -> Advertisement	0.080	1.528	0.127
b path	Advertisement -> Willingness	0.392	10.256	0.000
Indirect Effect (a*b path)	Recovery -> Advertisement -> Willingness	0.031	1.493	0.136

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery Process of the Bank (IV) and Willingness (DV) using Advertisement (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.105 before mediation (c path) which shrunk to 0.118 after mediation (c' path). The corresponding 'p' value before mediation was 0.040 which remained < 0.05 (0.049) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.136 and corresponding T statistic is 1.493. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.30)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank (IV).
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Recovery Process of Banks' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.50: Testing of hypothesis 2.30

H	IV	MV	DV	Result	Mediation status
2.30	Recovery	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.104	1.994	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.094	1.830	0.046
a path	Recovery -> Convenience	0.059	0.719	0.473
b path	Convenience -> Willingness	0.165	3.181	0.002
Indirect Effect (a*b path)	Recovery -> Convenience -> Willingness	0.010	0.785	0.433

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery Process of the Bank (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.105 before mediation (c path) which shrunk to 0.094 after mediation (c' path). The corresponding 'p' value before mediation was 0.044 which remained < 0.05 (0.046) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.433 and corresponding T statistic is 0.785. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation

Hypothesis 2. (H2.31)

- H0: 'Meeting with Bankers' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'
- Ha: 'Meeting with Bankers' (MV) mediates the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.51: Testing of hypothesis 2.31

H	IV	MV	DV	Result	Mediation status
2.31	Recovery	Meeting	Willingness	H0 Accepted	Complete mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.104	2.099	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.031	0.639	0.523
a path	Recovery -> Meeting	0.273	6.171	0.000
b path	Meeting -> Willingness	0.267	6.149	0.000
Indirect Effect (a*b path)	Recovery -> Meeting -> Willingness	0.073	4.608	0.000

(Source: Primary Data: Mediation analysis -Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the IV & DV was 0.104 before mediation (c path) which shrunk to 0.031 after mediation (c' path). The corresponding 'p' value before mediation was 0.040 increased to a 'p' value > 0.05 (0.523 as per table above), after mediation, which denotes that that the IV which had a significant impact on the DV before mediation does not have the same significant impact post mediation. Hence the Null hypothesis is accepted and alternate hypothesis is rejected.

The indirect effect of the mediation as measured by 'p' value is 0.00 and corresponding T statistic is 4.608which is a significant 'p' value. However as it has resulted in a change in the significance of the IV on DV, as compared to the total effect, it is concluded that there is presence of mediation which is considered as 'Complete Mediation'

Hypothesis 2. (H2.32)

- H0: 'Influence from Others' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Influence from Others' (MV) mediates the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).

Table 4.52: Testing of hypothesis 2.32

H	IV	MV	DV	Result	Mediation status
2.32	Recovery	Influence	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.105	2.086	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.173	3.679	0.000
a path	Recovery -> Influence	-0.203	4.330	0.000
b path	Influence -> Willingness	0.335	7.964	0.000
Indirect Effect (a*b path)	Recovery -> Influence -> Willingness	-0.068	3.750	0.000

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.105 before mediation (c path) which strengthened to 0.175 after mediation (c' path). The corresponding 'p' value (0.040) remained below 0.05 (0.000) after mediation, denoting that that the IV has a significant impact on the DV after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

As per above table, all 3 PATHS are significant post mediation ($p<0.05$). The indirect effect of the mediation as measured by 'p' value is 000 and corresponding T statistic is 3.750. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'.

Hypothesis 2. (H2.33)

- H0: 'Loan specific benefits' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV)
- Ha: 'Loan Specific benefits' (MV) mediates the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.53: Testing of hypothesis 2.33

H	IV	MV	DV	Result	Mediation status
2.33	Recovery	Loan Benefits	Willingness	H0 Accepted	Complete mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.103	2.040	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.070	1.273	0.204
a path	Recovery -> Loan Benefits	0.158	2.720	0.007
b path	Loan Benefits -> Willingness	0.210	4.142	0.000
Indirect Effect (a*b path)	Recovery -> Loan Benefits -> Willingness	0.033	2.292	0.022

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery (IV) and Willingness (DV) using Loan Benefits (MV) as the mediating variable and the results displayed in the table above.

The relationship between the IV & DV was 0.103 before mediation (c path) which shrunk to 0.070 after mediation (c' path). The corresponding 'p' value before mediation was 0.040 increased to a 'p' value > 0.05 (0.204 as per table above), after mediation, which denotes that that the IV which had a significant impact on the DV before mediation does not have the same significant impact post mediation. Hence the Null hypothesis is accepted and alternate hypothesis is rejected.

The indirect effect of the mediation as measured by 'p' value is 0.22 and corresponding T statistic is 2.292 which is a significant 'p' value. However as it has resulted in a change in the significance of the IV on DV, as compared to the total effect, it is concluded that there is presence of mediation which is considered as 'Complete Mediation'

Hypothesis 2. (H2.34)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.54: Testing of hypothesis 2.34

H	IV	MV	DV	Result	Mediation status
2.34	Recovery	Cost	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.105	2.057	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.118	2.323	0.021
a path	Recovery -> Cost	-0.119	2.672	0.008
b path	Cost -> Willingness	0.114	2.197	0.028
Indirect Effect (a*b path)	Recovery -> Cost -> Willingness	-0.014	1.759	0.079

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery Process of the Bank (IV) and Willingness (DV) using Cost of Loan (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.105 before mediation (c path) which strengthened t to 0.118 after mediation (c' path). The corresponding 'p' value before mediation was 0.040 which remained < 0.05 (0.021) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.079 and corresponding T statistic is 1.759. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.35)

- H0: 'Rapport & Service experience of farmer' (MV) does not mediate the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Rapport & Service Experience' (MV) mediates the relationship between 'Recovery Process of Banks'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'

Table 4.55: Testing of hypothesis 2.35

H	IV	MV	DV	Result	Mediation status
2.35	Recovery	Rapport	Willingness	H0 Accepted	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Recovery -> Willingness	0.105	1.990	0.040
Direct Effect (c' path)	Recovery -> Willingness	0.101	1.911	0.047
a path	Recovery -> Rapport	0.030	0.291	0.771
b path	Rapport -> Willingness	0.146	3.156	0.002
Indirect Effect (a*b path)	Recovery -> Rapport-> Willingness	0.004	1.305	0.076

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Recovery Process of the Bank (IV) and Willingness (DV) using Rapport (MV) as the mediating variable and the results displayed above.

The relationship between the above mentioned IV & DV was 0.105 before mediation (c path) which shrunk to 0.101 after mediation (c' path). The corresponding 'p' value before mediation was 0.040 which remained < 0.05 (0.047) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.076 and corresponding T statistic is 1.309. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation

Hypothesis 2. (H2.36)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Loan Specific Benefit'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'

Table 4.56: Testing of hypothesis 2.36

H	IV	MV	DV	Result	Mediation status
2.36	Loan Benefits	Advertisement	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.232	5.669	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.198	4.575	0.000
a path	Loan Benefits -> Advertisement	0.092	1.659	0.098
b path	Advertisement -> Willingness	0.377	9.197	0.000
Indirect Effect (a* b path)	Loan Benefits -> Advertisement -> Willingness	0.035	1.615	0.107

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Advertisement (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.232 before mediation (c path) which shrunk to 0.198 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.107 and corresponding T statistic is 1.615. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.37)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Loan Specific Benefit to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank'
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Loan Specific Benefit to Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.57: Testing of hypothesis 2.37

H	IV	MV	DV	Result	Mediation status
2.37	Loan Benefits	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.242	5.796	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.237	5.524	0.000
a path	Loan Benefits -> Convenience	0.033	0.279	0.781
b path	Convenience -> Willingness	0.166	3.078	0.002
Indirect Effect(a* b)	Loan Benefits -> Convenience -> Willingness	0.005	0.356	0.722

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.242 before mediation (c path) which shrunk to 0.237 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.722 and corresponding T statistic is 0.356. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.38)

- H0: 'Meeting with Bankers' (MV) does not mediate the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'
- Ha: 'Meeting with Bankers' (MV) mediates the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.58: Testing of hypothesis 2.38

H	IV	MV	DV	Result	Mediation status
2.38	Loan Benefits	Meetings	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.214	4.029	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.184	2.929	0.004
a path	Loan Benefits -> Meeting	0.118	1.497	0.135
b path	Meeting -> Willingness	0.251	5.585	0.000
Indirect Effect (a* b path)	Loan Benefits -> Meeting -> Willingness	0.030	1.404	0.161

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Meetings (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.214 before mediation (c path) which shrunk to 0.184 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.004) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.161 and corresponding T statistic is 1.404. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.39)

- H0: 'Influence from Others' (MV) does not mediate the relationship between 'Loan Specific Benefits'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Influence from Others' (MV) mediates the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).

Table 4.59: Testing of hypothesis 2.39

H	IV	MV	DV	Result	Mediation status
2.39	Loan Benefits	Influence	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.194	2.720	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.248	4.177	0.000
a path	Loan Benefits -> Influence	-0.165	2.036	0.042
b path	Influence -> Willingness	0.330	7.581	0.000
Indirect Effect (a* b path)	Loan Benefits -> Influence -> Willingness	-0.054	1.931	0.054

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.194 before mediation (c path) which strengthened to 0.248 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.054 and corresponding T statistic is 1.931. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.40)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Loan Specific Benefits'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'

Table 4.60: Testing of hypothesis 2.40

H	IV	MV	DV	Result	Mediation status
2.40	Loan Benefits	Recovery	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.221	4.542	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.210	4.147	0.000
a path	Loan Benefits -> Recovery	0.158	2.259	0.024
b path	Recovery -> Willingness	0.070	1.280	0.201
Indirect Effect (a* b path)	Loan Benefits -> Recovery -> Willingness	0.011	1.088	0.277

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.221 before mediation (c path) which shrunk to 0.210 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.277 and corresponding T statistic is 1.088. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.41)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Loan Specific Benefit to Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.61: Testing of hypothesis 2.41

H	IV	MV	DV	Result	Mediation status
2.41	Loan Benefits	Cost	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.248	5.816	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.238	5.538	0.000
a path	Loan Benefits -> Cost	0.124	2.375	0.018
b path	Cost -> Willingness	0.076	1.586	0.113
Indirect Effect (a* b path)	Loan Benefits -> Cost -> Willingness	0.009	1.293	0.197

(Source: Primary Data: Mediation analysis - Smart PLS – 3), Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.248 before mediation (c path) which shrunk to 0.238 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.197 and corresponding T statistic is 1.293. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.42)

- H0: 'Rapport & Service experience' (MV) does not mediate the relationship between 'Loan Specific Benefit'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Rapport & Service Experience of farmer' (MV) mediates the relationship between 'Loan Specific Benefit'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.62: Testing of hypothesis 2.42

H	IV	MV	DV	Result	Mediation status
2.42	Loan Benefits	Rapport	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Loan Benefits -> Willingness	0.225	4.827	0.000
Direct Effect (c' path)	Loan Benefits -> Willingness	0.201	3.694	0.000
a path	Loan Benefits -> Rapport	0.353	10.199	0.000
b path	Rapport -> Willingness	0.068	1.391	0.165
Indirect Effect (a* b path)	Loan Benefits -> Rapport -> Willingness	0.024	1.336	0.182

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Loan Specific Benefits (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.225 before mediation (c path) which shrunk to 0.201 after mediation (c' path). The corresponding 'p' value before mediation was 0.000 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.182 and corresponding T statistic is 1.336. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.43)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.63: Testing of hypothesis 2.43

H	IV	MV	DV	Result	Mediation status
2.43	Cost Loan	Advertisement	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.103	1.971	0.044
Direct Effect (c' path)	Cost -> Willingness	0.156	3.427	0.001
a path	Cost -> Advertisement	-0.126	2.242	0.025
b path	Advertisement -> Willingness	0.415	10.567	0.000
Indirect Effect (a*b path)	Cost -> Advertisement -> Willingness	-0.052	2.244	0.025

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Advertisement (MV) as the mediating variable and the results displayed in the table above.

The relationship between the IV & DV was 0.103 before mediation (c path) which becasme0.156 after mediation (c' path). The corresponding 'p' value before mediation was 0.044 which remained below 0.05 (0.001) after mediation, which denotes that that the IV has a significant impact on the DV after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

As per above table, a path, b path and c path all 3 are significant post mediation ($p<0.05$). The indirect effect of the mediation as measured by 'p' value is 0.025 and corresponding T statistic is 2.244. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'

Hypothesis 2. (H2.44)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Cost of the Loan' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Cost of the Loan' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.64: Testing of hypothesis 2.44

H	IV	MV	DV	Result	Mediation status
2.44	Cost Loan	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.103	2.016	0.044
Direct Effect (c' path)	Cost -> Willingness	0.116	2.401	0.017
a path	Cost -> Convenience	-0.075	1.227	0.220
b path	Convenience -> Willingness	0.172	3.749	0.000
Indirect Effect (a*b path)	Cost -> Convenience -> Willingness	-0.013	1.121	0.263

(Source: Primary Data: Mediation analysis- Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.103 before mediation (c path) which strengthened to 0.116 after mediation (c' path). The corresponding 'p' value before mediation was 0.044 which remained below 0.05 (0.017) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.263 and corresponding T statistic is 1.121. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation

Hypothesis 2. (H2.45)

- H0: 'Meeting with Bankers' (MV) does not mediate the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Meeting with Bankers' (MV) mediates the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.65: Testing of hypothesis 2.45

H	IV	MV	DV	Result	Mediation status
2.45	Cost Loan	Meeting	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.101	2.007	0.044
Direct Effect (c' path)	Cost -> Willingness	0.147	3.118	0.002
a path	Cost -> Meeting	-0.161	2.854	0.004
b path	Meeting -> Willingness	0.285	6.214	0.000
Indirect Effect (a*b path)	Cost -> Meeting -> Willingness	-0.046	2.602	0.010

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Meeting (MV) as the mediating variable and the results displayed in the table above.

The relationship between the IV & DV was 0.101 before mediation (c path) which became 0.147 after mediation (c' path). The 'p' value before mediation was 0.044 which remained below 0.05 (0.002) after mediation, which denotes that that the IV has a significant impact on the DV before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted.

All the 3 paths (a,b&c) are significant post mediation ($p<0.05$). The indirect effect of mediation, 'p' value is 0.010 and corresponding T statistic is 2.602. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'

Hypothesis 2. (H2.46)

- H0: 'Influence from Others' (MV) does not mediate the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Influence from Others' (MV) mediates the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).

Table 4.66: Testing of hypothesis 2.46

H	IV	MV	DV	Result	Mediation status
2.46	Cost Loan	Influence	Willingness	H0 Rejected	Partial mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.106	2.049	0.044
Direct Effect (c' path)	Cost -> Willingness	0.145	3.058	0.002
a path	Cost -> Influence	-0.124	2.543	0.011
b path	Influence -> Willingness	0.313	7.156	0.000
Indirect Effect (a*b path)	Cost -> Influence -> Willingness	-0.039	2.422	0.016

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the IV & DV was 0.106 before mediation (c path) which became 0.145 after mediation (c' path). The 'p' value before mediation was 0.044 which remained below 0.05 (0.002) after mediation, which denotes that that the IV has a significant impact on the DV before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

All the 3 paths (a,b&c) are significant post mediation (p<0.05). The indirect effect of mediation, 'p' value is 0.016 and corresponding T statistic is 2.422. As the 'p value of the indirect effect is less than 0.05 and T statistic is greater than 1.96, while the overall significance impact has not changed, it is concluded that there is presence of mediation which is considered as 'Partial Mediation'

Hypothesis 2. (H2.47)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.67: Testing of hypothesis 2.47

H	IV	MV	DV	Result	Mediation status
2.47	Cost Loan	Recovery	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.100	1.997	0.044
Direct Effect (c' path)	Cost -> Willingness	0.114	2.305	0.022
a path	Cost -> Recovery	-0.119	2.570	0.010
b path	Recovery -> Willingness	0.118	2.259	0.024
Indirect Effect (a*b path)	Cost -> Recovery -> Willingness	-0.014	1.560	0.119

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.100 before mediation (c path) which strengthened to 0.114 after mediation (c' path). The corresponding 'p' value before mediation was 0.044 which remained below 0.05 (0.022) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.119 and corresponding T statistic is 1.560. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation

Hypothesis 2. (H2.48)

- H0: 'Loan specific benefit to farmer' (MV) does not mediate the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Loan specific benefit to farmer' (MV) mediates the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.68: Testing of hypothesis 2.48

H	IV	MV	DV	Result	Mediation status
2.48	Cost Loan	Loan Benefits	Willingness	H0 Accepted	Complete mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.106	2.164	0.044
Direct Effect (c' path)	Cost -> Willingness	0.076	1.602	0.110
a path	Cost -> Loan Benefits	0.124	2.349	0.019
b path	Loan Benefits -> Willingness	0.238	5.562	0.000
Indirect Effect (a*b path)	Cost -> Loan Benefits -> Willingness	0.029	2.231	0.026

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Loan Benefits (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.106 before mediation (c path) which shrunk to 0.076 after mediation (c' path). The 'p' value before mediation was 0.044 increased to a 'p' value > 0.05 (0.110 as per table above), after mediation, which denotes that that the IV which had a significant impact on the DV before mediation does not have the same significant impact post mediation. Hence the Null hypothesis is accepted and alternate hypothesis is rejected.

The indirect effect of the mediation as measured by 'p' value is 0.026 and corresponding T statistic is 2.231 which is a significant 'p' value. As it has resulted in a change in the significance of the IV on DV, as compared to the total effect, it is concluded that there is presence of mediation which is considered as 'Complete Mediation'

Hypothesis 2. (H2.49)

- H0: 'Rapport & Service experience of farmer' (MV) does not mediate the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Rapport & Service Experience of farmer' (MV) mediates the relationship between 'Cost of the Loan'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.69: Testing of hypothesis 2.49

H	IV	MV	DV	Result	Mediation status
2.49	Cost Loan	Rapport	Willingness	H0 Accepted	Complete mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Cost -> Willingness	0.102	2.054	0.044
Direct Effect (c' path)	Cost -> Willingness	0.085	1.699	0.090
a path	Cost -> Rapport_	0.127	2.775	0.006
b path	Rapport -> Willingness	0.137	3.171	0.002
Indirect Effect (a*b path)	Cost -> Rapport -> Willingness	0.018	2.312	0.021

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Cost of Loan (IV) and Willingness (DV) using Rapport (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.102 before mediation (c path) which shrunk to 0.085 after mediation (c' path). The 'p' value before mediation was 0.044 increased to a 'p' value > 0.05 (0.090 as per table above), after mediation, which denotes that that the IV which had a significant impact on the DV before mediation does not have the same significant impact post mediation. Hence the Null hypothesis is accepted and alternate hypothesis is rejected.

The indirect effect of the mediation as measured by 'p' value is 0.021 and corresponding T statistic is 2.312 which is a significant 'p' value. As it has resulted in a change in the significance of the IV on DV, as compared to the total effect, it is concluded that there is presence of mediation which is considered as 'Complete Mediation'

Hypothesis 2. (H2.50)

- H0: 'Advertisement by Banks' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Advertisement by Banks' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.70: Testing of hypothesis 2.50

H	IV	MV	DV	Result	Mediation status
2.50	Rapport	Advertisement	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.145	2.940	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.210	3.396	0.001
a path	Rapport -> Advertisement	-0.152	1.160	0.247
b path	Advertisement -> Willingness	0.428	10.154	0.000
Indirect Effect (a* b path)	Rapport -> Advertisement -> Willingness	-0.065	1.162	0.246

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Advertisement (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.145 before mediation (c path) which strengthened to 0.210 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.001) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.246 and corresponding T statistic is 1.162. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.51)

- H0: 'Convenience to Farmer' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Convenience to Farmer' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer' (DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.71: Testing of hypothesis 2.51

H	IV	MV	DV	Result	Mediation status
2.51	Rapport	Convenience	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.147	3.779	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.136	3.245	0.001
a path	Rapport -> Convenience	0.068	1.062	0.289
b path	Convenience -> Willingness	0.163	4.011	0.000
Indirect Effect (a* b path)	Rapport -> Convenience -> Willingness	0.011	1.056	0.291

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Convenience (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.147 before mediation (c path) which shrunk to 0.136 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.001) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.291 and corresponding T statistic is 1.056. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.52)

- H0: 'Meeting with Bankers' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Meeting with Bankers' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.72: Testing of hypothesis 2.52

H	IV	MV	DV	Result	Mediation status
2.52	Rapport	Meeting	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.161	3.557	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.200	3.978	0.000
a path	Rapport -> Meeting	-0.136	1.576	0.116
b path	Meeting -> Willingness	0.292	6.382	0.000
Indirect Effect (a* b path)	Rapport -> Meeting -> Willingness	-0.040	1.478	0.140

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Meeting (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.161 before mediation (c path) which strengthened to 0.200 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.000) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.140 and corresponding T statistic is 1.478. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.53)

- H0: 'Influence from Others' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Influence from Others' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).

Table 4.73: Testing of hypothesis 2.53

H	IV	MV	DV	Result	Mediation status
2.53	Rapport	Influence	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.144	3.336	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.116	2.547	0.011
a path	Rapport -> Influence	0.097	1.381	0.168
b path	Influence -> Willingness	0.290	6.053	0.000
Indirect Effect (a* b path)	Rapport -> Influence -> Willingness	0.028	1.492	0.136

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Influence (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.144 before mediation (c path) which shrunk to 0.116 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.011) after mediation, which denotes that that the independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.136 and corresponding T statistic is 1.492. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.54)

- H0: 'Recovery Process of Banks' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer '(DV) and 'Willingness of the farmer to avail an agri loan with the bank'(IV).
- Ha: 'Recovery Process of Banks' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.74: Testing of hypothesis 2.54

H	IV	MV	DV	Result	Mediation status
2.54	Rapport	Recovery	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.149	3.372	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.146	3.132	0.002
a path	Rapport -> Recovery	0.030	0.312	0.755
b path	Recovery -> Willingness	0.101	1.819	0.069
Indirect Effect (a* b path)	Rapport -> Recovery -> Willingness	0.003	0.289	0.773

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Recovery (MV) as the mediating variable and the results displayed in the table above.

The relationship between the above mentioned IV & DV was 0.149 before mediation (c path) which shrunk to 0.146 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.002) after mediation, which denotes that that the IV has a significant impact on the DV before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.773 and corresponding T statistic is 0.289. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2. (H2.55)

- H0: 'Loan specific benefit to farmer' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Loan specific benefit' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank'

Table 4.75: Testing of hypothesis 2.55

H	IV	MV	DV	Result	Mediation status
2.55	Rapport	Loan Benefit	Willingness	H0 Accepted	Complete Mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.139	3.460	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.068	1.488	0.137
a path	Rapport -> Loan Benefits	0.353	10.440	0.000
b path	Loan Benefits -> Willingness	0.201	3.631	0.000
Indirect Effect (a* b path)	Rapport -> Loan Benefits -> Willingness	0.071	3.346	0.001

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Loan Benefits (MV) as the mediating variable and the results displayed in the table above. The relationship between the IV & DV was 0.139 before mediation (c path) which shrunk to 0.068 after mediation (c' path). The 'p' value before mediation was 0.001 increased to a 'p' value > 0.05 (0.0137 as per table above), after mediation, which denotes that that the IV which had a significant impact on the DV before mediation does not have the same significant impact post mediation. Hence the Null hypothesis is accepted and alternate hypothesis is rejected.

The indirect effect of the mediation as measured by 'p' value is 0.001 and corresponding T statistic is 3.346 which is a significant 'p' value. As it has resulted in a change in the significance of the IV on DV, as compared to the total effect, it is concluded that there is presence of mediation which is considered as 'Complete Mediation'

Hypothesis 2. (H2.56)

- H0: 'Cost of the Loan' (MV) does not mediate the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).
- Ha: 'Cost of the Loan' (MV) mediates the relationship between 'Rapport & Service Experience of Farmer'(DV) and 'Willingness of the farmer to avail an agri loan with the bank' (IV).

Table 4.76: Testing of hypothesis 2.56

H	IV	MV	DV	Result	Mediation status
2.56	Rapport	Cost	Willingness	H0 Rejected	No mediation

Path	Path Description	Path Value	T-value	p-value
Total Effect (c path)	Rapport -> Willingness	0.148	3.890	0.001
Direct Effect (c' path)	Rapport -> Willingness	0.137	3.492	0.001
a path	Rapport -> Cost	0.127	2.563	0.011
b path	Cost -> Willingness	0.085	1.685	0.093
Indirect Effect (a* b path)	Rapport -> Cost -> Willingness	0.011	1.263	0.207

(Source: Primary Data: Mediation analysis - Smart PLS – 3), (Significance level: p-value<0.05; T-Stat>1.96)

Mediation analysis was performed on relationship between Rapport (IV) and Willingness (DV) using Cost (MV) as the mediating variable and the results displayed in the table above.

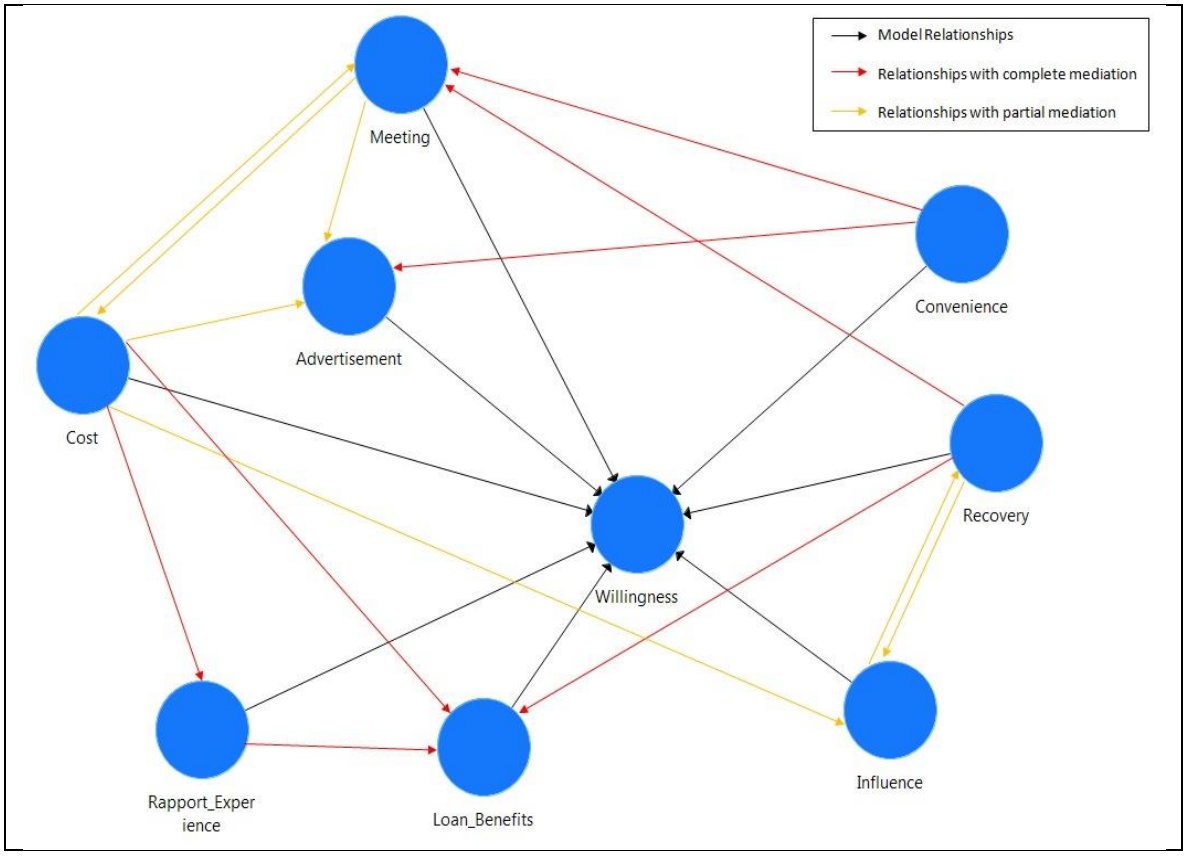
The relationship between the above mentioned IV & DV was 0.148 before mediation (c path) which shrunk to 0.137 after mediation (c' path). The corresponding 'p' value before mediation was 0.001 which remained < 0.05 (0.001) after mediation, which denotes that that the Independent variable has a significant impact on the dependent variable before mediation and the same continues after mediation also. Hence the Null hypothesis is rejected and alternate hypothesis is accepted

The indirect effect of the mediation as measured by 'p' value is 0.207 and corresponding T statistic is 1.26. As the 'p value is greater than 0.05 and T statistic is lesser than 1.96, it is concluded that the mediation effect is in-significant and there is NO Mediation.

Hypothesis 2: Overview

Hypothesis 2 were formulated and tested for mediation, using all the other independent variables as mediating variables. 14 mediations were found to be significant out of which, 7 were partial mediations and 7 were complete mediations, as per figure 4.5 below. The rest of the 42 mediating variables did not show any impact and hence treated as 'No Mediation'

Fig 4.7: Mediation Impact on Influencing Factors (IV) & Willingness (DV):



(Source: Primary Data, Smart PLS-3, Mediation)

The Pink arrows show the complete mediation and yellow lines show partial mediation relationships.

The summary of mediation are presented in a tabular form below. The impact of the mediations are discussed in the next chapter

Table 4.77: Results of Hypothesis-2, Mediation

Sl No	Independent Variable	Mediating variables	Complete Mediation	Partial Mediation	No Mediation
1	Advertisement of Bank	7	0	0	7
2	Meeting with Bankers	7	0	2	5
3	Convenience to farmer	7	2	0	5
4	Influence from others	7	0	1	6
5	Recovery Process of Bank	7	2	1	4
6	Loan specific benefits	7	0	0	7
7	Cost of Loan	7	2	3	2
8	Rapport & Service	7	1	0	6
	Total	**56**	**7**	**7**	**42**

4.9: Hypothesis 3 – Impact of Moderation:

A moderator is a variable that affects the direction and/or strength of a relationship between an independent and dependent variable (Henseler, 2010). Under this study we have analysed the effect of few demographic (categorical) variables as 'Moderators' on the relationship between the independent variable and the depended variable, with the help of SMART PSL -3 software.

For this analysis we have considered the effect of the following 6 key demographic / categorical variables to understand the impact of moderation of these variables. These 6 variables are chosen as they have some differentiating factors which can impact the dependent variable willingness. The first two variables, 'Age' and 'Education' are intrinsic to the farmers and they can behave differently based on their age and education levels. The next variable 'Type of farmer' distinguishes the farmers based on their land holdings and the moderating variable differentiates how a big farmer with larger land holdings and a small farmer with lower land holding has responded to the study. The next variable is 'Loan amount availed' which also goes to some extent along with the land holding of the farmer, but there are quite a few other differences in terms of the loan formalities, rate of interest on loans, interest

subvention benefit for smaller value loans and collateral security required andfor small value loans and large value loans, hence studied separately. The next variables are 'District' which speaks about the location/area to which the farmer respondents belong to and 'Type of banks where the farmer has his existing loan' try to differentiate and understand if these farmers have responded differently to the questions.

The analysis was done using SMART PLS-3 using the parametric approach which involved a modified two independent-sample t-test to compare path coefficients across two groups of data. The main idea was to check if the variances of the PLS parameter estimates (i.e. path coefficients) differed significantly across the two groups. The sample means of the PLS parameter estimates were found using the bootstrapping procedure under Smart PLS-3. The variables had to be categorized into two levels categories for impact testing. The data collection on the demographic variables were based on specific reasons and the categorisation below follows the same. In case of age of farmer, the minimum age to avail an agri loan is 18 years and the maximum is 72 years normally, the difference is 54 years. Hence while grouping 54 years was divided into 2 and added the minimum age which comes to 45 years & hence grouping was done upto 45 years and above 45 years. The other categorisations are self explanatory.

Table 4.78: List of the Moderating (category) variables considered for analysis:

Variable	Category -1	Category -2
Age of Farmer	Up to 45 years	45 years and above
Education of farmer	Up to 10^{th} standard (including illiterate)	Above 10^{th} std (including Graduates, PG &Professionals)
Type of the farmer	Small & Marginal Farmers (holding up to 5 acres land)	Large Farmers (holding above 5 acres of land)
District of Farmer	Chitradurga District	Koppal District
Loan amount availed	Up-to Rs.3 lakhs	Above Rs.3 lakhs
Type of Bank-1	Public Sector Banks	Private sector banks
Type of Bank-2	Regional Rural Banks	Co-operative banks

Testing of hypothesis -3 - impact of Moderator on IV-DV Relationship:

H-0 (Null Hypothesis): Moderating variable (MV) Does Not moderate the relationship between Influencing factors (IV) and Willingness of the far (DV). As there are 8 independent variables and we have considered 6 demographic variables (MV) for this analysis, we have totally 48 hypothesis which are developed and tested below. The first hypothesis is given below for clarity.

Hypothesis 3.1 (H3.1)

Independent variable is 'Advertisement, Dependent variable is 'Willingness' and the Moderating Categorical variable is Age of the farmer, as grouped below:

- Farmer age up to 45 years and
- Farmer age above 45 years and above

H0: Age Does Not moderate the relationship between Advertisement (IV) and Willingness of the farmer to avail and agri-loan with a bank (DV)

Ha: Age Moderates the relationship between Advertisement (IV) and Willingness of the farmer to avail an agri-loan with a bank (DV)

Table 4.79: Testing of hypothesis 3.1.1

H	IV	MV	DV	Result
3.1	Advertisement	Age	Willingness	H0- Rejected, H2- Accepted

Path Description	Below 45 years (B-value)	Above 45 years (B value)	Difference	t-Value	p-Value
Advertisement -> Willingness	0.501	0.337	0.163	2.231	0.030

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per above table, the moderation of Age in the IV-DV relationship displayed a mean difference of 0.163, and 'p' value of 0.030. As 'p' value was less than 0.05, the moderation was considered to be significant. Hence, it was concluded that Age has a significant moderating impact on the IV-DV relationship, hence Null Hypothesis is rejected and Alternate Hypothesis is accepted

Also, as the Beta-value for the farmers below 45 years of age was found to be 0.501 and for farmers above 45 years it was 0.337, it is concluded that farmers below 45 years of age are more impacted by advertisement to avail a loan with a bank, as compared to the farmers above 45 years of age.

Hypothesis 3.1 to 3.8

In tune with the above analysis, keeping Age as the moderating factor, the group Analysis as above is done for all the 8 independent variables including the above), using SMART PLS-3, as per table below:

Table 4.80: Results of testing of hypothesis 3.1 to 3.8

Hyp-3	IV-DV Path	Up to 45 years (B)	Above 45 years (B)	Diff	t-Value	p-Value	Result
3.1	Advertisement -> Willingness	0.501	0.337	-0.163	2.180	0.030	H0 Rejected
3.2	Convenience -> Willingness	0.248	0.107	-0.140	0.980	0.327	H0: Accepted
3.3	Meeting -> Willingness	0.307	0.244	-0.063	0.818	0.414	H0: Accepted
3.4	Influence -> Willingness	0.324	0.284	-0.040	0.477	0.634	H0: Accepted
3.5	Recovery -> Willingness	0.268	-0.041	-0.308	2.931	0.004	H0 Rejected
3.6	Loan Benefits -> Willingness	0.321	0.190	-0.130	1.335	0.183	H0: Accepted
3.7	Cost -> Willingness	0.103	0.122	0.019	0.154	0.877	H0: Accepted
3.8	Rapport -> Willingness	0.205	0.136	-0.069	0.755	0.451	H0: Accepted

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of Age as a moderating variable is seen to be significant in case of 2 independent variables, where the 'p' value of the moderation is significant (<0.05), which are 'Advertisement of Banks' and 'Recovery Process of Banks'. Hence the Null Hypothesis is rejected and alternate hypothesis is accepted for these two IV-DV path relationships. For all other relationships, the impact is non-significant and hence the Null hypothesis is accepted and alternate hypothesis is rejected, which means the impact of these independent variables does not significantly change due to age factor of the farmers. Also, in case one independent variable 'Cost of Loan' the B-value for the farmers above 45 years of age was higher than the farmers up to 45 years and hence it is concluded that farmers above 45 years of age are more inclined by 'Cost of Loan' (which includes rate of interest and other costs of loan) to avail a loan with a bank, as compared to the farmers below 45 years of age. For all the other 7 independent variables, B-value for the farmers up to 45 years of age is higher than that of the farmers above 45 years of age and hence the inclination towards the other factors is higher on the age group up to 45 years of age.

Hypothesis 3.9 to 3.16

Similar to the above, keeping Education as the moderating factor, Group Analysis as above is done for all the 8 independent variables using Smart PLS-3. The grouping is done as below:

- Up to 10th standard (includes illiterates) and
- Above 10th standard (includes graduates, PG & Professionals)

The result of the analysis is given in the following table no.4.81

Table 4.81: Results of testing of hypothesis 3.9 to 3.16

Hyp-3	IV-DV Path	Up to 10th Standard	Above 10th Standard	Diff	t-Value	p-Value	Result
3.9	Advertisement -> Willingness	0.392	0.387	-0.006	0.078	0.938	H0: Accepted
3.10	Convenience -> Willingness	0.160	0.147	-0.013	0.108	0.914	H0: Accepted
3.11	Meeting -> Willingness	0.268	0.328	0.060	0.286	0.775	H0: Accepted
3.12	Influence -> Willingness	0.341	0.253	-0.088	0.982	0.326	H0: Accepted
3.13	Recovery -> Willingness	0.049	0.215	0.166	1.615	0.107	H0: Accepted
3.14	Loan Benefits -> Willingness	0.277	0.214	-0.063	0.363	0.717	H0: Accepted
3.15	Cost -> Willingness	0.096	0.157	0.061	0.582	0.561	H0: Accepted
3.16	Rapport -> Willingness	0.167	0.152	-0.015	0.112	0.911	H0: Accepted

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of Education as a categorical moderating variable is Not significant for any of the IV-DV relationship (as the p value is >=0.05). Hence the Null Hypothesis is accepted for all the relationships. The education grouping has not impacted the relationship of the IV & DV in any case, which means the farmers who are educated up to 10^{th} standard and above 10^{th} standard have not shown a significant difference in their opinion on any of the IV-DV relationship.

The B-value for the farmers having education above 10^{th} standard was higher in case of 3 variables, Meetings with bankers, Recovery Processes and Cost of the loan and hence higher educated farmers are more impacted by these 3 variables as compared to the other farmers, despite the impact not being significant. For the other 5 variables the impact is higher on the lower educated farmers as compared to the higher education farmers, despite the impact is not significant.

Hypothesis 3.17 to 3.24

Similar to the above, keeping 'Type of Farmer' as the moderating factor, Multi Group analysis is done for all the 8 independent variables using Smart PLS-3. The grouping of farmers is maintained similar as done by Reserve bank of India:

- Small Farmers & Marginal Farmers (SF/MF, Farmer owning up to 5 acres of land)
- Large Farmers (Farmers owning above 5 acres of land)

The result of the analysis is given in the following table

Table 4.82: Results of testing of hypothesis 3.17 to 3.24

Hyp-3	IV-DV Path	SF/MF	Large Farmers	Diff	t-Value	p-Value	Result
3.17	Advertisement -> Willingness	0.436	0.338	-0.098	1.200	0.231	H0: Accepted
3.18	Convenience -> Willingness	0.229	-0.265	-0.493	2.508	0.013	H0 Rejected
3.19	Meeting -> Willingness	0.242	0.365	0.123	1.409	0.160	H0: Accepted
3.20	Influence -> Willingness	0.332	0.211	-0.122	1.232	0.219	H0: Accepted
3.21	Recovery -> Willingness	0.096	0.182	0.086	0.657	0.512	H0: Accepted
3.22	Loan Benefits -> Willingness	0.239	0.261	0.022	0.240	0.810	H0: Accepted
3.23	Cost -> Willingness	0.155	0.138	-0.016	0.111	0.912	H0: Accepted
3.24	Rapport -> Willingness	0.235	-0.105	-0.339	3.177	0.002	H0 Rejected

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of the categorical variable 'Type of Farmers' is seen to be significant in case of 2 independent variables, where the 'p' value of the moderation is significant (<0.05), which are 'Convenience to Farmers' and 'Rapport & Service experience of the farmer.' Hence the Null Hypothesis is rejected and alternate hypothesis is accepted for these two IV-DV path

relationships. For all other relationships, the moderation impact is non-significant and hence the Null hypothesis is accepted.

The B-value for the Large Farmers was higher in case of 3 variables, Meetings with bankers, Recovery Processes and Loan specific benefits and hence Large farmers are more impacted by these 3 variables as compared to the other farmers. For the other 5 variables the impact is higher on the small and marginal farmers category and hence they consider convenience provided to them and rapport with bankers as more important.

Hypothesis 3.25 to 3.32

Similar to the above, keeping 'District' as the moderating factor, Multi Group analysis is done for all the 8 independent variables as per grouping below:

- Chitradurga District (Farmer Respondent belongs to Chitradurga District)
- Koppal District (Farmer Respondent belongs to Koppal District)

The result of the analysis is given in the following table no.4.83

Table 4.83: Results of testing of hypothesis 3.25 to 3.32

Hyp-3	IV-DV Path	Chitradurga District	Koppal District	Diff	t-Value	p-Value	Result
3.25	Advertisement -> Willingness	0.479	0.314	0.165	2.283	0.023	H0: Rejected
3.26	Convenience -> Willingness	0.322	-0.163	0.485	3.288	0.001	H0 Rejected
3.27	Meeting -> Willingness	0.318	0.234	0.083	0.997	0.319	H0 Accepted
3.28	Influence -> Willingness	0.373	0.193	0.180	2.008	0.045	H0 Rejected
3.29	Recovery -> Willingness	0.069	0.184	-0.115	0.891	0.373	H0: Accepted
3.30	Loan Benefits -> Willingness	0.313	0.263	0.050	0.214	0.831	H0: Accepted
3.31	Cost -> Willingness	0.061	0.156	-0.095	0.876	0.382	H0: Accepted
3.32	Rapport -> Willingness	0.205	0.120	0.085	0.580	0.562	H0: Accepted

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of the Moderating variable 'District' is seen to be significant in case of 3 independent variables, where the 'p' value of the moderation is less than 0.05, which are 'Advertisement', 'Convenience to Farmers' and 'Influence from others' and hence the Null Hypothesis is rejected and alternate hypothesis is accepted for these three IV-DV path relationships. For all other relationships, the impact is non-significant and hence the Null hypothesis is accepted.

The B-value for the farmers belonging to Koppal District was higher in case of 2 variables, 'Loan Specific Benefits' and 'Rapport/Service quality of the bankers' Hence the farmers at Koppal district are of the view that 'Loan specific benefits and the rapport they enjoy with the existing bankers are more impactful for them to take a loan with the bank. For the other 6 variables the impact is higher among the farmers belonging to Chitradurga District .

Hypothesis 3.33 to 3.40

Similar to the above, keeping 'Loan amount availed' as the moderating factor, Multi Group Analysis is done for all the 8 independent variables. The grouping is done as per the criterion mentioned below:

- Loan amount up to Rs.3 lakhs (The agri-loan amount availed is up to Rs.3 lakhs)
- Loan amount above Rs.3 lakhs (The agri loan amount availed is above Rs.3 lakhs)

The result of the analysis is given in the following table no.4.84 :

Table 4.84: Results of testing of hypothesis 3.33 to 3.40

Hyp-3	IV-DV Path	Loan amt up to Rs.3 lacs	Loan amt above Rs.3 lacs	Diff	t-Value	p-Value	Result
3.33	Advertisement -> Willingness	0.409	0.381	-0.028	0.364	0.716	H0: Accepted
3.34	Convenience -> Willingness	0.198	0.322	0.124	0.525	0.600	H0: Accepted
3.35	Meeting -> Willingness	0.181	0.405	0.223	2.557	0.011	H0 Rejected
3.36	Influence -> Willingness	0.344	0.228	-0.116	1.292	0.197	H0: Accepted
3.37	Recovery -> Willingness	-0.133	0.298	0.431	2.290	0.023	H0 Rejected
3.38	Loan Benefits -> Willingness	0.257	0.196	-0.062	0.565	0.573	H0: Accepted
3.39	Cost -> Willingness	0.216	-0.219	-0.435	2.559	0.011	H0 Rejected
3.40	Rapport -> Willingness	0.223	-0.126	-0.348	2.766	0.006	H0 Rejected

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of the categorical variable 'Loan Amount availed' is seen to be significant in case of 4 independent variables, where the 'p' value of the moderation is less than 0.05, which are 'Meeting with the banker', 'Recovery Process of the bank', 'Cost of the Loan' and 'Rapport & Service Experience of Farmer' and hence the Null Hypothesis is rejected and alternate hypothesis is accepted for these four IV-DV path relationships. For all other relationships, the impact is non-significant and hence the Null hypothesis is accepted.

The B-value for the Farmers who have availed loan amount of more than Rs.3 lakhs was higher in case of 3 variables, 'Convenience to Farmers', 'Meetings with Bankers' and 'Recovery Process of the Bank'. Hence the farmers who have availed loan more than Rs.3 lakhs are more impacted by these 3 variables as compared to the farmers who have availed a loan amount of Rs.3 lakhs and below. For

the other 5 variables the impact is higher with the borrowers who have availed a loan amount of Rs.3 lakhs and below.

Hypothesis 3.41 to 3.48

Keeping 'Type of Bank-1' as the moderating factor, Multi Group analysis is done for all the 8 independent variables. The grouping is done as below:

- Public Sector Bank (Farmer respondent has a loan with a public sector bank)
- Private Sector Bank (Farmer respondent has a loan with a private sector bank)

The result of the analysis is given in the following table no.4.85

Table 4.85: Results of testing of hypothesis 3.41 to 3.48

Hyp-3	IV-DV Path	Private Bank	Public Bank	Diff	t-Value	p-Value	Result
3.41	Advertisement -> Willingness	0.483	0.358	0.124	1.376	0.170	H0: Accepted
3.42	Convenience -> Willingness	0.472	0.073	0.398	2.375	0.018	H0 Rejected
3.43	Meeting -> Willingness	0.480	0.197	0.283	2.270	0.024	H0 Rejected
3.44	Influence -> Willingness	-0.186	0.171	-0.357	1.616	0.107	H0: Accepted
3.45	Recovery -> Willingness	0.242	0.195	0.047	0.387	0.699	H0: Accepted
3.46	Loan Benefits -> Willingness	0.123	0.332	-0.209	1.409	0.160	H0: Accepted
3.47	Cost -> Willingness	-0.339	0.147	-0.486	2.222	0.027	H0 Rejected
3.48	Rapport-> Willingness	0.206	0.158	0.047	0.251	0.802	H0: Accepted

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of the categorical variable 'Type of Banks, Private & Public' is seen to be significant in case of 3 independent variables, where the 'p' value of the moderation is less than 0.05, which are 'Convenience to Farmers', 'Meeting with the bankers' and Cost of Loan' and Hence the Null Hypothesis is rejected and alternate hypothesis is accepted for these three IV-DV path relationships. For all other relationships, the impact is non-significant and hence the Null hypothesis is accepted.

The B-value for the Public Sector bank farmers was higher in case of 3 variables, 'Influence from others', 'Loan Specific Benefits' and' Cost of Loan' Hence the farmers of public sector banks are more impacted by these 3 variables as compared to the farmers having loans with the private sectors banks and they consider these are more important than other factors. For the other 6 variables the impact is higher on the borrowers of private sector banks as compared to the public sector bank borrowers.

Hypothesis 3.49 to 3.56

Keeping 'Type of Bank-2' as the moderating factor, Multi Group analysis is done for all the 8 independent variables. The grouping is done as below:

- Regional Rural Bank (Farmer respondent has a loan with a regional rural bank)
- Co-operative Bank (Farmer respondent has a loan with a co-operative bank)

The result of the analysis is given in the following table No.4.86

Table 4.86: Results of testing of hypothesis 3.49 to 3.56

Hyp-3	IV-DV Path	RRB	Co-op Bank	Diff	t-Value	p-Value	Result
3.49	Advertisement -> Willingness	0.312	-0.606	-0.918	2.848	0.005	H0 Rejected
3.50	Convenience -> Willingness	-0.262	0.733	0.995	2.299	0.023	H0 Rejected
3.51	Meeting -> Willingness	0.267	0.605	0.338	0.685	0.494	H0: Accepted
3.52	Influence -> Willingness	0.262	0.348	0.086	0.316	0.753	H0: Accepted
3.53	Recovery -> Willingness	0.073	0.273	0.200	0.753	0.453	H0: Accepted
3.54	Loan Benefits -> Willingness	0.341	0.430	0.090	0.717	0.474	H0: Accepted
3.55	Cost -> Willingness	0.238	0.578	0.340	1.895	0.060	H0: Accepted
3.56	Rapport -> Willingness	0.246	0.596	0.350	0.881	0.380	H0: Accepted

(Source: Primary data: Output of MGA and bootstrapping, SmartPLS-3)

As per the table above, the impact of the categorical variable 'Type of Banks-2, RRB & Co-Operative Bank' is seen to be significant in case of 2 independent variables, where the 'p' value of the moderation is less than 0.05, which are 'Advertisement by Banks' and Convenience to Farmers' and Hence the Null Hypothesis is rejected and alternate hypothesis is accepted for these two IV-DV path relationships. For all other relationships, the impact is non-significant and hence the Null hypothesis is accepted.

The B-value for the borrowers with Regional rural banks was higher only in case of 'Advertisement by Banks'. Hence the farmers of Regional Rural Banks are more impacted by advertisement as compared to the farmers having loans with the co-operative banks. For all other variables the impact is higher on the borrowers of co-operative banks compared to the farmers having loans with regional rural banks.

4.11: Chapter 4 - Summary:

This chapter analysed the data collected from 430 farmers across 2 districts in Karnataka. The Model meets all the parameters of construct validity norms and Model fit norms. Testing of hypotheses was performed for significance of the relationship between IV & DV (Hyp-1), Impact of mediation on the relationship of IV-DV (Hyp-2) and the impact of moderation of demographic variables on the IV-DV relationship (Hyp-3). The overall conclusions of the study are detailed in the next chapter.

CHAPTER - V

RESULTS, DISCUSSIONS

AND CONCLUSIONS

CHAPTER - V

RESULTS, DISCUSSIONS & CONCLUSIONS

5.1: Introduction

In this chapter the results and findings of data analysis done in the previous chapter are discussed. The conclusion drawn in this chapter shall enable us to get a better insight of the research topic. This research will add to existing literature on the topic 'Decision making of a customer to select a bank for his banking requirement' with specific reference to farmer availing an agri-loan with a bank. ThE study results would help the banks in formulating creative products and policies in the agri financing which will enable the farmers to take loan with them, and to significantly perform with the given competition amongst the banking sector.

5.2: Summary of Significance of the variables – Results of the Study:

As per data analysis done in the previous chapter, the significance level of the factors influencing a farmer to avail a loan with a bank is given in the table no 5.1 below:

Table 5.1: List of Influencing Factors with Significance:

Sl. No	Influencing Factor (IV)	B' Value	P' Value	Significant
1	Influence from Others	0.382	0.000	YES
2	Advertisement by Banks	0.342	0.000	YES
3	Cost of Loan	0.215	0.000	YES
4	Recovery Process of Banks	0.183	0.002	YES
5	Loan specific Benefits	0.169	0.010	YES
6	Rapport & Service Experience	0.074	0.179	NO
7	Convenience to Farmers	0.052	0.319	NO
8	Meeting with Bankers	0.033	0.615	NO

It is evident from the above table that there are 5 factors which are significant in impacting the decision of the farmer and 3 factors are non-significant. Following is the summary of each of the factor

1. **Influence from Others:** The traditional influence from family, friends & neighbours and agents & advisors, still continues to be the most significant factor the impact the farmer to take a loan with a bank (Beta value of 0.382). Out of the 3 variables which form part of the factor 'Influence' based on the regression co-efficient as depicted below, the influence from 'parents & family' is the highest influencing factor (B= 0.307) followed by agents and advisors which the next influencing factor (B=0.089) in impacting the farmer to avail an agri loan with a bank. The influence of friends and neighbours did not seem to be of importance to the farmers (B= - 0.024) in inducing them to take a loan with that bank as per the data analysis results. From the above it is evident that many farmers carry on with the bank which their family banks on as a first priority. Agents and advisors are also active in the villages who induct the farmers to avail loan with specific banks, which is a specific feature in these districts

Table 5.2: Comparison of Variables under 'Influence from Others':

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	2.548	.164
Parents & Family having loan with this bank	.307	.067
Agent/Advisor induced to take loan with this bank	.089	.074
Friends / Neighbours recommended this bank	-.024	.073

Dr Navdeep Barwal (2019), *Factors affecting choice of banks for agricultural lending in rural areas* and U Jayaprakash (2020) *Factors influencing the farmers to prefer the Canara bank about agricultural credit* these articles does not consider recommendation from friends/relatives as significant as in their research, which are done in different states within India

2. **Advertisement by Banks:**

Advertisement made by banks is also a most significant factor the impact the farmer to take a loan with a bank (Beta value of 0.342). This is a bank induced factor which plays equally prominent importance in the rural market as well, as seen in urban markets. Out of the 7 variables which form part of the factor 'Advertisement' based on the regression co-efficient table depicted below, the highest impact on the farmers is from 'leaflet and brochures distributed in villages'(B= 0.254). The leaflets are distributed either door to door to every farmer's house by the bank or as newspaper inserts, both are shown as very effective advertising tools. It is followed by 'SMS' sent by the bank to the farmers mobile (B=0.095), which remained quite impactful, being a personal communication to the farmer. This followed 'Hoarding placed at villages' (B=0.094) and then 'TV Scrolls and Movie advertisement at villages' (B=0.069) which have remained impactful in the village to influence the farmers to select a bank to avail an agri-loan. The next in line is the advertisement on internet websites on agri loan (B=0.042). With the extended us of mobile technology for browsing in villages as well, the pop ups displaying the advertisement of banks have shown positive impact among the farmers. The impact of the other 2 factors, email sent to the farmers (B= -0.002) and the radio jingles and information (B=-0.059) seem to be negligible and does not seem to have any recall value with the farmer and hence with least impact amongst the advertisements in inducing the farmer to take a loan with that bank as per the data analysis:

Table 5.3: Comparison of Variables under 'Advertisement by Bank':

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	2.455	.141
`	.254	.055
SMS sent by the bank on the agri loan facility	.095	.067
Hoarding of the bank in the Village on agri loans	.094	.070

Media - TV/Movie theatre advertising & scrolling	.069	.065
Info of this Bank on loan facility on Internet websites	.042	.063
Email sent by this bank on the agri loan facility	-.002	.057
Info in radio /radio jingle about this bank loan	-.059	.074

Advertisement & Promotion has remained a significant factor in few the articles reviewed in influencing customer to select a bank, and the same has remained significant in the current research as well

3. **Cost of Loan:**

The Cost of Loan is the third significant factor the impacts the farmer to take a loan with a bank (Beta value of 0.215). Out of the 2 variables which form part of the factor 'Cost of Loan' based on the regression co-efficient as depicted below, the impact of 'Lower Rate of Interest' is the higher and significant (B= 0.130) which induces the farmer to avail a loan with that bank in the village which offers lower rate of interest on the loan. The impact of the second factor 'Lower processing fee and other costs' (B= -.023) is lower and it does not seem to be a considered by the farmers as important while selecting the bank to avail the agri-loan as per the data analysis results. It was informed by few farmers that the other costs paid is not a significant amount and all the banks charge similar amounts

Table 5.4: Comparison of Variables under 'Cost of Loan':

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	3.276	.134
Lower Rate of Interest	.130	.082
Lower Processing fee & other administrative costs	-.023	.078

Cost of loan is a significant factor in the articles Dr Navdeep Barwal (2019), *Factors affecting choice of banks for agricultural lending in rural areas* and U Jayaprakash (2020) *Factors*

influencing the farmers to prefer the Canara bank about agricultural credit and also few other articles where the specific product is a retail loan or a business loan and the same remains significant for farmers also.

4. **Recovery Process of Banks:**

The Recovery Process of Banks is the fourth significant factor the impacts the farmer to take a loan with a bank (Beta value of 0.183). Recovery process here measures the convenient recovery process followed by the farmer and the follow up system in advance before the due date to enable/remind the farmer to make payment on time. Out of the 2 variables which form part of the factor 'Recovery Process' based on the regression coefficients, the impact of 'Recover-pressure for repayment (less and convenient)' (B=0.07) is slightly higher as compared to 'Follow up in advance (pleasant & informative) (B=0.054). Both these recovery related factors are considered quite significant and farmers have given opinions that the recovery processes where the repayments are linked to the crop seasons and they get sufficient time to make payments are appreciated and Advance follow up processes from the bank employees and call centres of the banks for repayment of loans and payment of interest, to the extent they are informative to them are very useful to them and if it is of repetitive and irritating nature, they do not wish to take loan with such bank. Overall, both recovery and follow processes are treated as quite considerable factors for the farmer to consider that bank for taking an agri-loan

Table 5.5: Comparison of Variables under 'Recovery Process of Banks':

Model	Unstandardized Coefficients	
	B	**Std. Error**
(Constant)	3.293	.127
Recovery: Pressure for repayment (Less and convenient)	.074	.060
Follow Up: Advance follow up (Pleasant & informative)	.054	.066

Convenient Loan recovery process as a significant variable in the decision making of a farmer to select a bank to avail a loan is a unique outcome of this research and could not be found in other literature reviewed. This is a key finding in this area and can be taken up for further analysis in other areas/demographics

5. **Loan Specific Benefits:**

Loan Specific Benefit from a particular bank is the fifth significant factor which impacts the farmer to take a loan with a bank (Beta value of 0.169). Out of the 2 variables which form part of the factor 'Loan Specific Benefits' based on the regression co-efficient as depicted below, the impact of 'Higher Loan per acre of land' is the higher and significant (B= 0.325) to induce the farmer to avail a loan with that bank. In general, the agri- loan amount eligibility per acre of land is pre-determined by the Lead bank and it is common to all farmers. However many banks have put across various other calculation methods wherein they are able to lend higher amount of loan for the same acreage of land, under different circumstances. This is a significant factor which many farmers have considered to be important and induces them to take loan with that particular bank. The impact of the second factor 'All other loans available at the same bank' (B= -0.150) does not seem to be such an important factor considered by the per the data analysis results, despite the fact that many farmers acknowledged that it was a great advantage to them to have all the loan availability at a same branch

Table 5.6: Comparison of Variables under 'Loan Specific Benefits':

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	3.101	.131
Higher Loan amount per acre of Land	.325	.051
All loans/services available at the same bank	-.150	.053

The other literature articles mentioned above which are specific on loans related, farmer loan or other loans have also considered higher loan amount as a significant factor and it is in tune with the current finding.

6. **Rapport & Service Experience:**

Rapport of the farmer with bankers based on the previous dealings with the bank and the service experience of the farmer with the bank is not a significant factor which impacts the decision of farmer, based on data analysis. The 'p value is greater than 0.05 (P=0.179) and ranked 6th in terms of impact (Beta Value =0.074). Despite the overall factor is not significant in its impact, on further analysis of the 3 variables which form part of this factor based on the regression co-efficient as depicted below, the variable 'Rapport with the Bank Manager' (B= 0.142) is the most important factor considered by the farmers as relevant to them to take the decision to avail a loan with that bank. Next is the 'Service Experience of the farmer' (B=0.070), based on their earlier experience with this bank which they farmers consider important to take a loan with the bank and the last one is 'Rapport with other staff" (B= -0.63), which include rapport of anyother bank staff o with the farmer, which is considered as least important factor to avail a loan with the bank.

Table 5.7: Comparison of Variables under 'Rapport of Farmer with Bankers':

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	3.134	.163
Rapport of Farmers with Branch manager	.142	.050
Service experience of the farmer with the bank	.070	.055
Rapport of Farmers with other bank staff	-.063	.065

The classification of 'Service and Rapport' factor in the current study has 3 sub factors. The rapport with branch manager and service experience show a positive 'B' value whereas the rapport with other staff including sales staff and other branch staff shows a negative 'B' value.

The article of Goitem/Mariam which we had taken for comparison also considers branch service alone as a significant factor in that study in tune with the current research.

7. **Convenience to Farmers:**

Convenience factor to the farmer is Not a Significant factor which impacts the decision of farmer as per the data. The 'p value is greater than 0.05 (P=0.319) and Beta Value =0.054. Despite the overall factor is not significant in its impact, on further analysis of the 4 variables which form part of this factor based on the regression co-efficient as depicted below, the proximity factors which are 'Nearest Bank to the Farmers Residence' (B= 0.197) and 'Only bank in the village' (B = 0.053) are considered by the farmers as more relevant to them to take a decision to avail a loan with that bank. The other two conveniences provided by the bank to the farmers 'Mobile Banking Facility' (B=0.010) and 'Internet Banking Facility' (B= -0.119) rank last in the order. Despite the fact many farmers have acknowledged the utility of mobile banking facility as very important the data reveals that this factor is not considered as an important factor to select a bank to avail an agri loan by the farmers

Table 5.8: Comparison of Variables under 'Convenience to Farmers':

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	3.078	.221
Nearest Bank to the farmers residence	.197	.064
Only bank in the village to grant the loan	.053	.067
Mobile banking facility given by the bank	.010	.098
Internet banking facility by the bank	-.119	.097

8. **Meetings with Bankers:**

'Meetings of farmers with Bankers is another bank induced factor which influences the farmer to avail an agri loan with the bank. Based on the data analysis, this factor is not a significant factor

which impacts the decision of farmer. The ‘p value is greater than 0.05 (P=0.615) and Beta Value =0.033. Despite the factor is not significant in its impact, on further analysis of the 3 types of meetings based on the regression co-efficient as depicted below, ‘Village level meetings conducted by the bank with farmers on agri loans’ (B= 0.343) is the most important factor which induces a farmer to avail a loan with that particular bank. Many farmers had the opinion that they received lot of information during the village meeting which later induced them to take loan with that bank. The next meeting type which induced the farmer to take a loan with that bank is the visit of the bank manager/staff to the residence of the farmer’ (B = 0.083). Personal visit of bank staff is also acknowledged by the farmers as one which induces them to take a loan with that bank. and ‘Only bank in the village’ (B = 0.053) is the first two more important factor considered by the farmers as relevant to them to take the decision to avail a loan with that bank. ‘Meetings of the farmer at the bank branch with bankers’ (B= -0.139) ranks last and is not considered to be important to induce the farmer to take a loan with that bank as per the views of the farmers.

Table 5.9: Comparison of Variables under ‘Meetings with Bankers’

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	2.690	.147
Village level meeting conducted by bank on agri loans	.343	.062
Visit of bank manager/staff to the residence of the farmer	.083	.067
Farmer's meeting at bank branch with bankers	-.139	.077

Hence the conclusion here is that there are 5 influencing factors, ‘Influence’, ‘Advertisement’, ‘Cost of Loan’, ‘Recovery Process of Bank’ and ‘Loan Specific Benefit’ as detailed above, which significantly impact the decision of a farmer to avail an agri loan based on the study conducted at the two districts in Karnataka. We have also compared the individual items under each factor and their importance in ranking. This study would help in further studies and the banks in formulating their business plans, which we shall discuss at the end of the chapter.

5.3: Summary of Meditation (indirect effects) - Results of the Study:

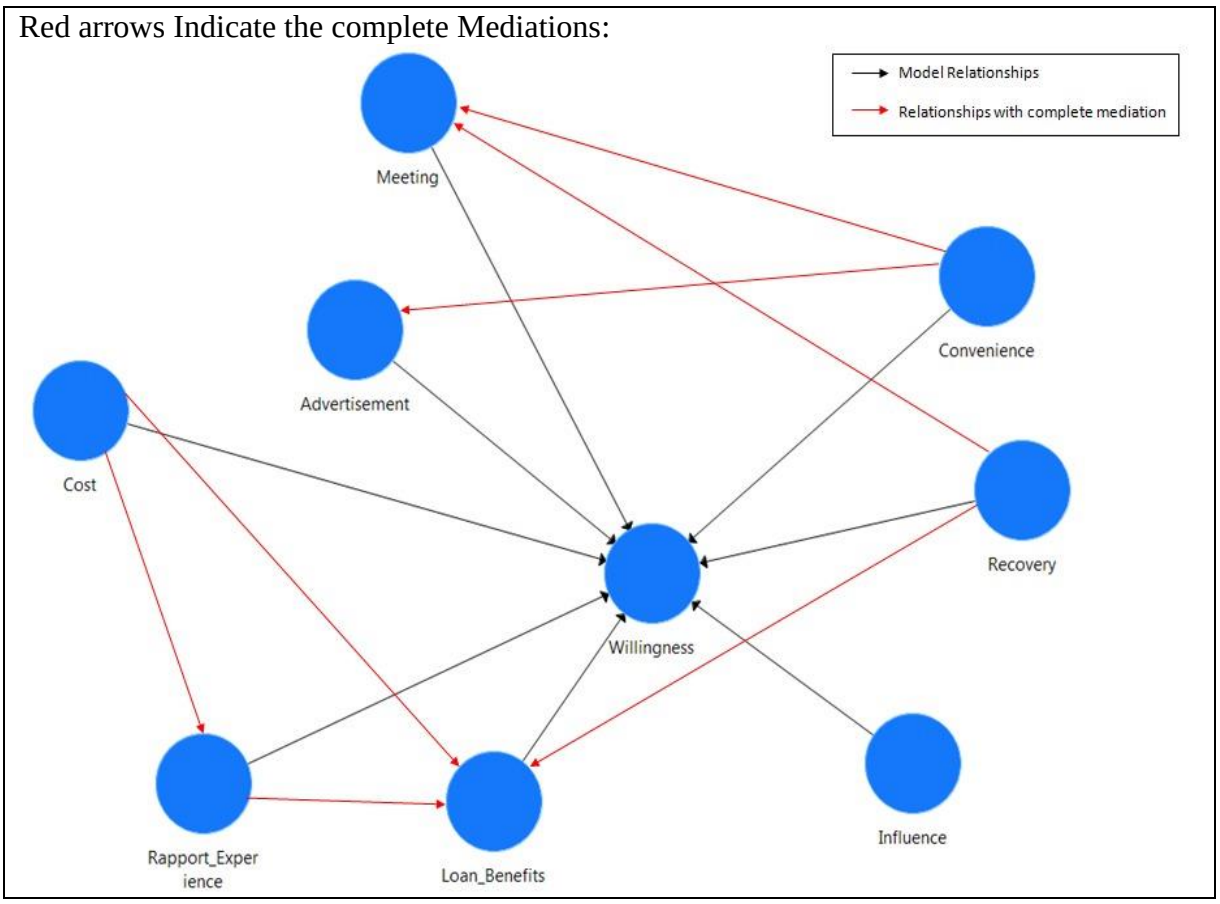
Mediation analysis also has shown the following 14 indirect effects which were significant, which can further strengthen the significance as listed below:

Table 5.10: List of Significant Mediator Relationships'

Sl.	Mediator	Independent Variable	Path Description	Mediation
1	Advertisement	Convenience	Convenience -> Advt -> Willingness	Complete
2	Loan Benefits	Recovery	Recovery -> Loan Benefits -> Willingness	Complete
3	Loan Benefits	Cost of Loan	Cost -> Loan Benefits -> Willingness	Complete
4	Loan Benefits	Rapport	Rapport -> Loan Benefits -> Willingness	Complete
5	Meetings	Convenience	Convenience -> Meeting -> Willingness	Complete
6	Meetings	Recovery	Recovery -> Meeting -> Willingness	Complete
7	Rapport	Cost of Loan	Cost -> Rapport -> Willingness	Complete
8	Advertisement	Meeting	Meeting -> Advertisement -> Willingness	Partial
9	Advertisement	Cost of Loan	Cost -> Advertisement -> Willingness	Partial
10	Meetings	Cost of Loan	Cost -> Meeting -> Willingness	Partial
11	Influence	Recovery	Recovery -> Influence -> Willingness	Partial
12	Influence	Cost of Loan	Cost -> Influence -> Willingness	Partial
13	Cost of Loan	Meeting	Meeting -> Cost -> Willingness	Partial
14	Recovery	Influence	Influence -> Recovery -> Willingness	Partial

Of the 14 indirect effects which are significant as per table above 7 are complete mediations and 7 are partial mediations. In case of the 7 partial mediations, the independent variable still holds on to the same pre-mediation significance levels. In case of the 7 complete mediations, these mediations impact the significance of the IV-DV relationship, explained below:

Figure 5.1: Complete Mediations:



(Source: Primary Data: Results from SmartPLS-3)

a) Advertisement as a mediator is a significant factor which has a complete mediation impact on convenience, with a significant indirect effect (0.000). which infers that effective advertisement influences a farmer to avail a loan with that bank, despite the convenience benefit which the farmer would be having in mind

b) Loan specific benefit as a mediator has complete mediation impact on 3 factors with a significant indirect effect on Cost of Loan (p=0.026), Rapport with bankers (p=0.001) and Recovery process (p= 0.022). This indicates the importance of loan products and highlights the need for creating products which are important to farmers, wherein it can induce the farmer to take a loan, despite the cost of loan being higher, rapport with the bankers and recovery process also being stricter to the farmer.

c) Meetings of farmers with bankers also has a substantial indirect impact inferring the importance of meetings. It has a complete mediation impact on ‘Convenience with a significant indirect effect (p=0.000), which infers that meetings can influence a farmer to avail a loan with that bank, despite the convenience benefit which the farmer would be having in mind

d) Rapport of farmers with bankers also has a substantial indirect impact inferring the importance of the rapport & service experience of farmers. It has a complete mediation impact on ‘Cost Loan’ with a significant indirect effect (p=0.021), which infers that a farmer having a rapport with the bank, can be induced to take loan, even if ‘cost of loan’ is on the higher side.

Hence the conclusion here is that there are 4 influencing factors, which exercise significant indirect impact on 7 independent variables as mediators and able to completely mediate the IV-DV relationship and also there are 7 partial mediation impacts which also are strong, and these 14 significant indirect relationships also form consideration while taking further decisions based on this study. This study would help the bankers in formulating their business plans, which we shall discuss at the end of the chapter.

This analysis gives an indication on the importance of various factors, wherein the bankers can decide on which factor they need to focus more and spend money. Questions like is it worth spending on advertisement or a reduction in the loan processing fee or rate of interest will give similar benefits can be answered through mediation analysis.

5.4: Demographic Variables: Descriptive Analysis & Moderation Impact:

The research had 430 respondents and the split of the willingness data is as follows:

Table 5.11: 'Overall spread table of Willingness (DV)'

Willingness to avail Loan (DV)	Number of Farmers		% of Farmers	
	Count	Cumulative	Count	Cumulative
Definitely Not Take	33	67	8%	16%
May Not take	34		8%	
Neutral	116	116	27%	27%
May take	161	247	37%	57%
Definitely Take	86		20%	
Total	**430**	**430**	**100%**	**100%**

(Source: Primary Data: SPSS-20, Descriptive Statistics)

Interpretation:

From the above table, it is found that 57% of the farmers who fall in the last two rows are willing to avail loan with this bank. Of the above, 20% of farmers have told they would definitely take loan with this bank while, 37 % are Ok to take with the bank. Farmers who have remained neutral on this count is 116 which is 27% of the sample. Of the balance of 67 farmers (16%) who are not showing inclination towards this bank, 33 farmers (8 %) are not at all happy with the bank and not willing to take loan with the bank while, 34 farmers (8%) are also not in favour of taking loan with this bank. Hence overall the percentage of farmers favouring to take loan with the bank is higher as compared to the farmers who do not favour to take loan with the same bank. The above interpretation is further analysed under each demographic variable, which are considered for moderation analysis.

1) Moderation Analysis Summary:

The moderation impact was examined under different categorical / demographic variables using the MGA technique under Smart PLS-3. The categorical variables were bifurcated under two groups and the impact analysis was examined. There were 16 moderations which were significant as per table no. 5.12 below:

Table 5.12: List of Significant 'Moderating Variables'

Sl No	Moderating Variable	Variables Significantly Impacted	Count
1	Age Up to 45 years & above 45 years	Advertisement & Recovery	2
2	Education (Up to & above 10th)	Nil	0
3	Type of Farmer (SFMF/ Others)	Convenience & Rapport	2
4	District- Chitradurga & Koppal	Convenience & Meeting	3
5	Loan amount (Up to & above 3 lakh)	Convenience, Rapport, Cost of Loan & Meeting	4
6	Public Sector v/s Private Sector Banks	Convenience, Cost of Loan & Meeting	3
7	RRB & Co-operative banks	Convenience & Advertisement	2
	Total		**16**

(Source: Primary Data: Smart PLS -3)

2) Descriptive analysis & Moderation Impact analysis of variable 'Age Group'

Table 5.13: 'Age-wise spread table of Willingness (DV)'

Willingness to Avail loan/ Continue loan with this bank	Farmer's Age				Total
	Up to 25 years	Above 25 up to 45 years	Above 45 up to 60 years	Above 60 years	
Definitely Not Take	7%	10%	5%	11%	8%
May Not take		12%	6%	11%	8%
Neutral	10%	17%	35%	50%	27%
May take	52%	50%	28%	17%	37%
Definitely Take	31%	11%	27%	11%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

(Source: Primary Data: SPSS-20, Descriptive Statistics)

Interpretation of Descriptive Analysis:

Between the four age groups of farmers who have shown inclination towards taking loan from this bank (based on the sum of last 2 rows in the table), the percentage of farmers with age group up to 25 years is 83 %, which is the highest followed by 61% of farmers between 25 to 45 years and 55 % of farmers in the age group 45 to 60 years. Farmers above 60 years have shown highest percentage in the neutral category (50%) and hence lowest in terms of inclination.

The percentage of farmers who have not shown inclination to take loan with this bank (based on the sum of the first 2 rows in the above table) is lowest amongst the age group of below 25 years at 7% followed by 45 to 60 years group at 11% and above 60 years group at 16%

Basing on the above, we can infer that the farmers of age group below 25% have shown decisions without much weight on neutral category having the highest inclination to take the loan and lowest for not taking the loan.

Interpretation of Moderation Impact:

Moderation impact of age on the relationship between the IV and DV is analysed under 2 groupings – 'Up to 45 years of age' and 'above 45 years of age'. Impact of age as a moderator is significant on two Independent variables 'Advertisement by Bank' and 'Recovery Process of the bank' where the p value is less than 0.05. In both these cases the path value of farmers up to 45 years of age has shown higher inclination towards the above variables as compared to the other group. For all other variables the impact of the moderating variable age was found to insignificant to alter the IV-DV relationships.

3) Descriptive analysis & Moderation Impact analysis of variable: Education

Table 5.14: 'Education wise spread table of Willingness (DV)'

Willingness to Avail with this bank	Education of Farmer				Total
	Illiterate	Up to 10th Std	Above 10th up to graduate	PG/ Professional	
Definitely Not Take	8%	13%	1%		8%
May Not take	8%	7%	11%	3%	8%
Neutral	27%	32%	22%	18%	27%
May take	33%	26%	51%	60%	37%
Definitely Take	23%	22%	15%	20%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

(Source: Primary Data: SPSS-20, Descriptive Statistics)

Interpretation of Descriptive Analysis:

Between the four categories of farmers base on their education the category which has shown inclination towards taking loan from this bank (based on the sum of last 2 rows in the table), the percentage of farmers under the last category (PG/Professional) is 80 %, which is the highest. It is followed by 66 % of farmers under the third category (Above 10th standard) and then by first category (illiterate) with 56 % and finally the second category (up to 10th standard) with 48 % of the farmers inclined to take loan with the bank

The percentage of farmers who have not shown inclination to take loan with this bank (based on the sum of the first 2 rows in the above table) is lowest amongst the fourth category (PG/professional with 3 % and highest is the second category (up to 10th std) with 20%

Basing on the above, we can infer that the farmers with higher education above 10th standard have shown higher inclination on to take the loan/continue the loan with the bank and lowest inclination for not taking the loan from the bank. The illiterate customers have also shown better tendency to continue loan/take loan with the bank. The farmers educated up to 10th standard have hinted to move out of the bank.

Interpretation of Moderation Impact:

Moderation impact of education on the relationship between the IV and DV is analysed under 2 groupings – 'Education up to 10th standard, including illiterate' and 'Education above 10th standard'. The impact of moderation is non-significant on any relationships of IV-DV and hence education grouping has not made a significant impact on decision and relationship. While further analysis of the same we noted that 69% of the sample considered fall under the category of literates upto graduates. Only 9% of the sample fall under post graduates and 22% of the sample were illiterates. As the major populations falls under literate category and most of them are educated around 10^{th}

standard, despite they fall under 10th standard or above 10th standard category, education has not made a moderating impact on the farmers on the importance of the influencing factors in this area. This can be different if the same survey is done in a different area.

4) Descriptive analysis & Moderation Impact analysis of variable: Farmer Type

Table 5.15: 'Farmer Type/Category wise spread table of Willingness (DV)

Willingness to Avail loan/ Continue loan with this bank	Type/ Category of Farmer				Total
	MF (up to 2.5 acre land)	SF (Above 2.5 up to 5 acre land)	Big Farmer (Above 5 up to 15 acres)	Very Big farmer (Above 15 acres)	
Definitely Not Take	7%	9%	7%	6%	8%
May Not take	3%	10%	10%	6%	8%
Neutral	21%	26%	28%	45%	27%
May take	46%	38%	31%	27%	37%
Definitely Take	23%	17%	24%	15%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

(Source: Primary Data: SPSS-20, Descriptive Statistics)

Interpretation of Descriptive Analysis:

The categorisation of MF/SF was done as per RBI Definition (RBI Master circular PSL 2017-onwards) Between the four categories of farmers, the first category (Marginal Farmers) has shown highest inclination towards taking loan from the bank (based on the sum of last 2 rows in the table) which is 69% and highest compared to other categories. Next both small farmers and large farmers have shown similar inclination (55%) and even very large farmers (last category) also have shown 52% inclination to avail loan with the bank

The percentage of farmers who have not shown inclination to take loan with this bank (based on the sum of the first 2 rows in the above table) is lowest amongst the first category with 10% (marginal Farmers) and highest is the second category (Small farmers) with 19 %

Basing on the above, we can infer that the farmers under the first category (marginal farmers) have shown higher percentage inclination towards taking the loan with the bank and also on their opinion not to take loan with the bank. The very large farmers categories have chosen not given opinion and remained neutral (45%) whether to take the loan or not, keeping their options open.

Interpretation of Moderation Impact:

Moderation impact of 'Type/Category of Farmer' on the relationship between the IV and DV is analysed under 2 groupings – SF/MF (farmers up to 5 acres of land) and Big Farmers (above 5 acres of land). The impact of moderation is significant on two relationships, 'Convenience to Farmers' and 'Rapport of Farmers with Bankers' with a 'p' value less than 0.05. In both these cases the path value of farmers up to SF/MF has shown higher inclination towards the above variables as compared to the other group. For all other variables the impact of the moderating variable 'Type of Farmer' was found to insignificant to alter the IV-DV relationships.

5) Descriptive analysis & Moderation Impact analysis of variable: Loan Amount

Table 5.16: 'Loan amount wise spread table of Willingness (DV)

Willingness to Avail loan/ Continue loan with this bank	Loan Amount				Total
	Up to 1 Lakh	>1 lakh to 3 lakhs	>3 lakhs to 15 lakhs	> 15 lakhs	
Definitely Not Take	3%	12%	8%	4%	8%
May Not take	8%	2%	14%	11%	8%
Neutral	25%	26%	29%	33%	27%
May take	42%	40%	30%	37%	37%
Definitely Take	23%	20%	19%	15%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

(Source: Primary Data: SPSS-20, Descriptive Statistics)

Interpretation of Descriptive Analysis:

Of the four categories, the first category of Between the four categories farmers who have availed loans under different buckets, the farmers under first category (Loans up to Rs. 1 lakh) have shown highest inclination (65%) towards taking loan from the bank (based on the sum of last 2 rows). It is followed by 60 % of farmers under the 2nd category (loans above Rs.3 lakhs to Rs.15 lakhs) and 52 % of farmers under the 4th category (loans above Rs.15 lakhs) and 49% under the third category (loans between Rs. 3 lakhs to Rs.15 lakhs)

The percentage of farmers who have not shown inclination to take loan with this bank (based on the sum of the first 2 rows in the above table) is lowest amongst the first category with 11% and highest is the third category with 22%. Basing on the above, we can infer that the farmers under the first two categories (up to Rs.3 lakh loan) have higher inclination on to take the loan/continue the loan with the bank.

Interpretation of Moderation Impact:

Moderation impact of 'Loan amount availed by the farmer' on the relationship between the IV and DV is analysed under 2 groupings – 'Loans up to Rs.3 lakhs' and 'Loans above Rs.3 lakhs'. The impact of moderation is significant on 4 relationships, 'Convenience to Farmers' and 'Rapport of Farmers with Bankers' Cost of Loan' and 'Meeting of Farmers with Bankers' with a 'p' value less than 0.05. The path values of cost of loan and rapport were higher with the farmers who have availed loans up to Rs.3 lakhs, indicating their preference of these 2 parameters, where the farmers having loan above Rs.3 lakhs have higher path value and preference on Recovery process of the bank and the meetings with bankers.

6) Descriptive analysis & Moderation Impact analysis of the Factor: District

Table 5.17: 'District' wise spread table of Willingness (DV)

Willingness to Avail loan/ Continue loan with this bank	District (% sample)		
	Chitradurga	Koppal	Total
Definitely Not Take	11%	4%	8%
May Not take	5%	11%	8%
Neutral	27%	27%	27%
May take	38%	36%	37%
Definitely Take	19%	22%	20%
Total	**100%**	**100%**	**100%**

(Source: Primary Data: SPSS-20, Descriptive Statistics)

Interpretation of Descriptive Analysis:

Between the two districts, farmers who have shown inclination towards taking loan from this bank (based on the sum of last 2 rows in the table), the percentage of farmers of Chitradurga District is 57 % , while the corresponding percentage of farmers is 58 % in Koppal District.

The percentage of farmers who have not shown inclination to take loan with this bank (based on the sum of the first 2 rows in the above table) in Chitradurga district is 16 % while the same is 15 % in Koppal District. The sample size of Chitradurga district was 235 (55%) and Koppal was 195 (45%), and both the districts have shown similar percentage distribution trends in their opinion on the willingness to take a loan with the bank

Interpretation of Moderation Impact:

Moderation analysis with 'District' as the moderator shows significant impact on 3 relationships between the IV and DV with a 'p'value less than 0.05. These 3 factors are 'Convenience to Farmers', 'Advertisement' and 'Influence from Others'. The path values of all these 3 variables is higher with the farmers of Chitradurga District as compared to Koppal district, hence Chitradurga district farmers consider, these 3 factors are more important than the other district

7) Descriptive analysis & Moderation Impact analysis of the Factor 'Type of Bank'

Table 5.18: 'Bank Type' wise spread table of Willingness (DV)

Willingness to Avail loan/ Continue loan with this bank	Type of Bank				Total
	Public Sector Bank	Private Sector Bank	RRB	Co-operative Bank	
Definitely Not Take	13%	8%			8%
May Not take	10%	7%	6%		8%
Neutral	34%	23%	19%	23%	27%
May take	34%	37%	43%	43%	37%
Definitely Take	9%	25%	32%	33%	20%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Interpretation of Descriptive Analysis:

Between the four types of Banks, farmers who have shown inclination towards taking loan from this bank (based on the sum of last 2 rows in the table), the percentage of farmers of co-operative banks is 76 %, which is the highest followed by 75% of regional rural banks, 62 % of private sector banks and 43 % of public sector banks

The percentage of farmers who have not shown inclination to take loan or continue loan with this bank (based on the sum of the first 2 rows in the above table) is NIL amongst the co-operative banks while it is 6% with RRBs, 15 % with private sector banks and 23% of private banks which is the highest. Basing on the above, we can infer that the farmers of co-operative banks and regional rural banks are more inclined to stay with the bank.

Interpretation of Moderation Impact:

Moderation impact of 'Type of Bank' on the relationship between the IV and DV is analysed separately for 'Public sector and Private sector banks and for RRB and Co-operative banks.

Between public sector banks and private sector banks, the impact of moderation is significant on 3 relationships, ‘Convenience to Farmers’, ‘Cost of Loan’ and ‘Meeting of Farmers with Bankers’ with a ‘p’ value less than 0.05. The path values of cost of loan was higher with Public Sector banks which indicated that PSB is preferred for better rates of interest whereas the path value of ‘ Convenience to farmers’ and ‘ meetings with bankers’ is higher for private sector banks, which are the preference points for the banks.

Between the regional rural banks and co-operative banks, as moderators the significance in relationship between IV and DV is noted on 2 variables, ‘Advertisement’ and Convenience’ provided. Regional rural banks are preferred on advertisement where the co-operative banks are preferred on convenience factors (which include nearest bank and only bank in the village)

Hence the conclusion here is that the demographic variables (type of bank, district) and the categorical variables (age, education, loan amount availed, type of farmer) have a substantial impact on the decision making of the farmer to select a bank to avail an agri-culture loan. The descriptive analysis done above has brought out the differences in willingness to avail a loan by the various categories. The moderation analysis has identified the demographic & categorical variables which significantly impact the relationship between each of the individual independent and the dependent variables

The overall conclusion based on the above analysis is the out of the 8 Independent variables considered for analysis (Influencing Factors), 5 are identified as significant to impact the decision making of the farmers and as per mediation analysis, 14 indirect relationships are also identified as significant.

The comparison with different demographical an categorical variables have identified how each variables has its impact on the dependent variable. 57% of respondents were ok to take loan with the bank while 16% of the respondents were not inclined to take loan with the bank. Further we have checked under each group the inclination levels and ranked the same (highest being, farmers below

25 years, above 10th standard educated, Small & Marginal Farmers, Loans availed up to Rs.10 lakhs, RRB & Co-operative bank customers in each group). Further we have categorised moderation analysis where we have identified 15 significant moderating impacts which impact the IV-DV relationship. This research data shall be very useful for conducting further research in this area for the banks and other financial institutions to strategise their business plans and budgeting towards increasing the agriculture funding.

5.5: Comparison of findings of the study with existing literature:

The existing literature studies have examined various factors influencing the choice of a customer to select a bank for regular banking services including loans given by banks. This study has specifically focused on the factors influencing the choice of a farmer to take an agri-loan with the banks. Hence this study is an addition to the existing literature to that extent. The influencing factors remain somewhat similar with other research studies as given below

The current study considers the following 5 factors as significant in influencing the decision of a farmer to select a bank to avail an agri loan with the bank which are Advertisement by banks, Cost of the Loan (Rate of Interest), Influence/Reference by others about the bank, Loan related benefits and the Recovery policies of the bank. The research study done by Mr. Goiteom W / Mariam during June 2011, named "Bank selection Decision – Factors Influencing the Choice of Banking Services has derived 7 key influencing factors – Cost & other benefits, Service, Influence, Bank Reputation, Promotions, and Ambience and ranked them in the order of preference by the respondents who were businessman, students and salaried employees in that area, hence the significance and rankings were different from current studies. The classification of 'Service and Rapport' factor in the current study includes service and rapport with branch manager and other branch staff as well, which has remained a non significant factor. However if taken branch service alone in comparison with earlier research it follows in line with the current research. There are few more research articles in similar lines on

customer decision to select a bank, either for banking relationship in general or for SME/Personal loans, few are mentioned below

H.Vasanthakumari and Dr. S. Sheela Rani in their article 'Customer Selection of Banks – A Biographic Segmentation' (2011) have examined the factors considered as important in selection of a bank by customers in Chennai and conclude that branch location and reputation and competitive rates are the most important, which is also a similar to the factors of the current study (convenience provided to farmers)

Jesmin Ara & Humaira Begum in their Research article 'Factors Influencing Customers in Bank Selection: A Study on Northern Region of Bangladesh' - 2018 Examines the bank selection criteria f and concludes that security aspects and the bank , customer service and trustworthiness of staff are the most important factors, which are not considered as significant factors in the current study

Judit Csizmásné Tóth in the research article 'Bank Selection Criteria When Borrowing a Personal Loan' (2019) have examined the bank selection criteria for personal loans, concludes that interest cost is the major influencing factor, which is in tune with the current study where cost is a significant influencing factor

Mohamad Sayuti Md in the research article 'Bank Selection Criteria in a Customers' (2013) concludes the factors influencing customer's choice are accessibility and proximity of the bank and followed by reliability, responsiveness, value added services , to little extent similar to current study

Layla A Alamoudi & Jamaldeen Faleel in their article 'Bank Selection Criteria of a Businessman (2021), concludes that the bank's product offerings, ATM network & availability of internet banking are the most important as per the study, which lists out somewhat similar factors related to the current study. To conclude overall the current study is an addition to the given literature which adds value getting in depth into the aspect of the farmer finance.

5.6: Research Contributions:

This study provides an in-depth analysis about the various influencing factors that affect the decision of a farmer to take an agri loan as per the data collected in the two districts of Karnataka. This being a study specifically on the factors influencing the farmers, is a specialized study on the customer choice under the farmer segment on bank loans, shall be a reference material for further studies in this area.

Banks build various strategies and adopt different marketing methods and techniques to induce the farmers to take farm loans with them. This study throws light on the factors which are more impactful in inducing the farmers. The banks can build the strategies based on these test results and improve their areas of performance like rapport or service, whichever needs improvement. For example, the farmers also consider mobile banking as a most important convenience factors, which shows the digital improvements have penetrated in the rural areas to a large extent and they are getting ready to the next gen- AI based advertisement

5.7: Implications of the Study:

Theoretical Implications of the Study:

This research is a continuation and addition to various studies on the factors influencing a customer to select a bank for banking facilities. This study focusses specifically on the lending activity of the bank specific to lending in agriculture sector and considering the farmer as a customer. Hence this study has gone in depth into one segment in lending in banking. This study has analysed the impact of various demographical factors on the behaviour of the farmer while selecting a bank. Also this study has attempted to identify the indirect impact of one influencing factor on the relationship between other influencing factors in decision making of a farmer to select a bank to avail an agri loan. These aspect would be helpful for further researchers in this are

Practical Implications of the Study:

The practical implications of this study is mainly to the banks who grant loans and the farmers who avail the loan, apart from research scholars, detailed mentioned below:

Practical Implications to Banks:

The Banks implement various strategies to increase their lending into the agriculture sector, which including advertisement, marketing, various new loan products, competitive pricing etc. This research has tried to understand the relative importance of these factors and hence the study will be of use to the bankers while formulating their strategies. Also the study has analysed the relative importance of the other external factors which influence the farmer like

a) 'demographic factors' which he belongs to like the district, his age etc
b) 'external factors' like agents . friends who influence etc and
c) 'individual requirement' of each farmer like 'need of a higher loan amount', 'not willing to pay higher rates of interest', 'convenient and nearby location of bank' etc

Basing on this study, bankers can make similar study and depending on the analysis of the farmer demographic strata, and further though Data analytics and Artificial Intelligence techniques bankers can decide the marketing plan. While the mass advertisements on TV and internet shall continue and meetings have their impact, the recent trends show that these strategies are going to be taken over by personal communications based on data analytics supported by artificial intelligence (through his account data and web browsing history of the farmer on mobile etc. Whether an e-mailer will work to this farmer, or a SMS message will be sufficient or a relationship manager is to allocated to the farmer need to be dependent on the importance of the factor derived through AI algorithms based on his demographic profile and preferences

Based on the findings of the study the following are the specific pointers to bankers

- ***Farmers place more importance on four bank induced factors 'Advertisement of Banks', 'Loan specific Benefits', 'Cost of Loan' and the 'Recovery Process of the bank' provision, Therefore, these four factors should be considered as more important by the lending banks while designing the agri-loan products and formulating their marketing strategies, recovery policies and pricing of the loans.***

- ***'Meetings of farmers with bankers' is a key influencing factor has not seen as a significant influencing factor in this survey by the farmers. Banks need analyse this factor to make it impactful by reworking on the meeting designs and follow up the implementation of the same at every branch level.***

- ***'Rapport with bankers and Service experience of farmers' and 'has also not seen as a significant influencing factor in this survey with the farmers. This could be eye-opener to the bankers to check on various aspects of customer service in the agriculture sector to make required improvements in service levels***

- Conveniences provided by the bank- including mobile banking and internet banking are not seen as significant factor by the farmers at this area. This calls for further penetration by the banks by creating additional awareness wherever required as a campaign

Practical Implication to Farmers:

This research gives an idea on the various benefits available to farmers with the banks and their significance. The farmer is in an advantageous position to reap the benefits provided by the banks. He need to be aware of the competitive products by gaining information through participation in the village meetings conducting by banks, various advertisement channels and visiting the bank for additional information. The farmer need to be watchful before considering the advises of extraneous

channels and friends who may always not give a proper advise to his benefit wherein this study can make an impact.

5.8: Limitations of the research:

The present study suffers from few limitations as listed below:

- The data collection was done using questionnaire method personally administered to the farmers. Most of the respondents have given the opinion based on discussions and options were ticked by the interviewer on the questionnaire. Few farmers have filled up the questionnaire on their own. Where utmost care is taken in updating accurate data, there could be minor differences in understanding of the questionnaire, considering the education & age of the respondents.

- The data was collected during the year 2018-19, post there are many changes in the environment, impact of COVID and other farm laws hence and there could be some changes in perceptions and responses compared to present times.

- This study was specifically towards the factors influencing a farmer while taking a loan for agricultural purpose only This study does not consider the factors influencing the farmer while he takes any other types of loans like personal loans, home loans, car loans etc.

- This study considers the factors influencing a farmer while taking agri loans from banks only. This does not consider the factors influencing the farmer while he takes loans from any other NBFC, Financial institution or any money lender, ever for agriculture purpose.

5.9: Suggestions for future research:

The suggestions for future research are given below:

- This study has included the farmers in the 2 select districts of Karnataka, the same may be conducted in any other geographies. A comparison of the results of such studies with the present study may yield valuable insights. The factors which are considered here are more specific to these areas which are in practice and hence new factors can be considered for future study, based on the area selected geography

- An in depth study on the influencing factors can be conducted for a particular type of bank only, (Private banks or public sector banks etc), as these types of banks have different management and characteristics and hence it gives better results on that type of banks.

- Future research can explore the role played government institutions and the impact of digitisation and analytics at present on the influencing factors. This survey was done during 2018-19 and post that there are many events happened in the economy including, role out of the new agriculture policy, COVID etc, which have impact on government policies in this regard.

- This study is focused on the factors which influence the farmers in the agri-loan sector alone and from the banks. Similar study can be taken up for other loans also, in the semi urban and rural areas where, these economies are also picking up for other loans.

- Since the results of this study are based on 'farmers'' perceptions only, investigating the correspondence between 'bankers' could be an important research area among interested future researchers. This will help the researcher to better understand whether both farmers and banks have the same perceptions regarding the factors influencing the farmers in deciding their willingness to select bank

5.10: Concluding remarks:

During the course of the study, there were constraints in getting responses from the farmers due to local issues in the state on account of ‘Farm Loan Waiver ‘announced by Karnataka government during 2018 and the banks asking for data from the farmers on their cropping patterns towards loan waiver requirements. So the farmers were reluctant to answer the survey questions during this period. Hence the data collection activity which was planned during the year 2018 had to be postponed for approximately 10 months and it was done during 2019, when the loan waiver data collection was completed by the banks. Sincere efforts were made to interact with the farmers and get their choices noted in the questionnaire which has resulted in getting proper answers to the questions which is documented in this study. This study in the field would be fruitful for further research work as mentioned above and a tool for bankers in this field.

ANNEXURES

6.1 : Survey Questionnaire Structure

Sl	Details	Type of Variable	Questions Count
1	Farmer Details	Nominal	2
2	Demographic Factors	Nominal & Ordinal	12
3	Influencing Factors (Independent variables)	Scale	26
4	Willingness to take loan (Dependent variables	Scale	1

6.2: Survey Questionnaire

1. Details of the Farmer

Sl No	Put give details in the next column	
1	Date of this Survey	
2	Name of Farmer	
3	Name of Present bank having Agri Loan	
4	Name of the Branch (District)	
5	Farmer’s age in years	
6	Gender (male/female)	
7	Agri Loan amount (rupees in lakhs)	
8	Land Holding (in acres)	

2. Additional Details of Farmer

Sl No	Put tick (✓) mark	
9	Farmer's Education	
	1. Post Graduate / Professional	
	2. Above 10^{th} std up to Graduation	
	3. Up to & including 10^{th} standard	
	4. Illiterate	
10	Farmer's Religion	
	1. Hindu	
	2. Muslim	
	3. Christian	
	4. Others	
11	Farmer's caste Bracket	
	1. General	
	3. Other Backward Caste (OBC)	
	2. SC/ST	
12	Main Loan availed by the Farmer	
	1. Crop Loan (KCC)	
	2. Irrigation (Land Dev) Loan	
	3. Tractor Loan	
	4. Dairy (Milch Animals/Sheep etc)	
13	Is this the first time you are taking a Agri Loan in your name	
	1. No. I had taken agri loan before this from some other bank	
	2. YES, this is the first time I am taking agri loan I my name	
14	Since how many years do you hold loan from the present bank	
	1. Up to 1 year	
	2. More than 1 year up to 4 years	
	3. Above 4 years up to 10 year	
	4. Above 10 years	

3. Survey Questions:

Note: There are 26 questions below. One option out of 1 to 5 to be ticked (☑), based on the importance you give to the factor mentioned in each of the statements in the questionnaire. Where '1' means not reason & '5' a most important reason as explained below

1	This was not there or This is not at all a reason for me to take loan with this bank
2	This could be there, but not a main reason for me to take loan with this bank
3	Neutral. May be this is there, Not sure whether this is a reason to take loan with the bank
4	This could be another reason for me to take loan with this bank
5	Yes, this is the main reason for me to take loan with this bank

4. <u>Five Point Survey Questionnaire</u>

Sl No	Statement (Factor/Reason to take loan)	1	2	3	4	5
1	This bank is the nearest to my residence & hence I took loan with this bank					
2	This is the only bank in my village to grant a loan & hence I took loan with this bank					
3	My parents/family have always been banking with this bank & hence I take loan with this bank					
4	My friends/neighbours have recommended me to take loan with this bank & hence I took loan with this bank					
5	One advisor/agent recommended this bank and arranged to get loan & hence took loan at this bank					
6	The hoarding of this bank at our village gave information of agri loan of this bank & hence I took with this bank					
7	I saw the brochure on loan distributed by this bank at my residence/through news paper and got information on loan & hence took loan with this bank					
8	I saw an advertisement on TV / TV scroll/Movie/Movie scroll by this bank on agri loan & hence took loan with this bank					
9	The radio jingle of the loan facility with this bank gave information that this bank gives loan & hence took loan with this bank					
10	I got an email on the agri loan facility of this bank to my email id which I checked & hence took loan with this bank					
11	I got an SMS on loan facility of this bank & then called the number mentioned in the message & hence took loan with this bank					
12	I saw information of this bank loan on an internet website while browsing and hence took loan with this bank					
13	I attended the village meeting done by this bank on agri loans which gave lot of information & hence took loan with this bank					

14	I attended a meeting with bank manager & staff at branch where they explained about the agri loans facilities & hence took loan with this bank					
15	The bank staff visited my house and explained loan details of the bank & hence took loan with this bank					

Sl No	Statement (Factor/Reason to take loan)	1	2	3	4	5
16	I know the present bank manager /earlier bank manger of this bank for quite some time & hence I take loan with this bank					
17	I know one of the branch staff /relationship/field office & hence I take loan with this bank					
18	The customer service at this bank is very pleasant and efficient, so I take loan with this bank					
19	Internet banking facility of this bank is very useful & hence I take loan with this bank					
20	Mobile banking facility of this bank is very convenient & hence I take loan with this bank					
21	The rate of interest is lower at this bank compared to other banks & hence I take loan with this bank					
22	There are no/very less other processing charges/fees etc at this bank & hence I take loan with this bank					
23	The loan recovery process is convenient at this bank & hence I take loan with this bank					
24	The advance follow up mechanism is pleasant and informative to me & hence I take loan with this bank					
25	This bank grants higher loan amount per acre compared to others bank & hence I took loan with this bank					
26	I get many variety of agri loans and other products at this bank & hence I took loan with this bank					

5. Willingness to take the loan:

Note: For the last question, One option out of 1 to 5 to be ticked (☑), based whether I am willing to take /continue taking loan with this bank as below

1	I will definitely Not take / continue my loan with this bank
2	I may not take / continue my loan with this bank
3	Neutral. I may or may not take / continue my loan with the bank
4	I may take / continue my loan with this bank
5	I will definitely take / continue loan with this bank

Sl No	Willingness to take loan	1	2	3	4	5
1	I am willing to take a fresh loan/another loan/continue my existing loan with this bank					

BIBLIOGRAPHY

Books

1. Rajesh Kharche (2018). Bankers Handbook on Kisan Credit Card, *Edu-creation Publishing*,
2. S S Reddy, P R Ram (2018). Agriculture Finance and Management, *Oxford & IBH Publishing Co Pvt. Ltd.*
3. S S Acharya, N L Agharwal (2021). Agricultural Marketing in India, *CBS Publishers & Distributors*
4. S N Thakur, (2018). Rural banking and Agricultural Finance in India, *Solar Books*
5. Indian Institute of Bankers (2017). Rural Banking Operations, *Taxmann Publications Pvt Ltd*
6. M N Gopinath (2017). Banking Principles and operations, *Snow White Publishers*
7. T K Parida, Sumit Jain (2016). Rethinking Priority Sector Lending by Banks in India, *Lap Lamber Academic Publishing.*
8. Agriculture, Rural banking & Micro Finance (2012), Rais Ahmed, *New Century Publications*

Journal Articles

1. KSS Reddy. (2020). A Study on Farmers Awareness on agriculture loans in rural areas with reference to Rayalaseema region. *International Journal of Management, 11(11), 663-671*

2. C Saxena, V Kaur, P Kumar (2019). A Study on Measuring Customer Grievance Redressal Service Quality in Banks in India. *A Bankers' Perspective. International Journey for Multidisciplinary Research, 1(3), 672-677*

3. L S Shimpi, DVerma, Bimal Jaiswal (2018). An Empirical Study of E-Banking Service Quality & Its Effect on Customers Satisfaction in India. *International Journal of Research in Management, Economics and Commerce, 8(2). 92-98*

4. S. Nagendra, Dr. C. L K Reddy (2018). Banking Sector Reforms and its impact on Agriculture Finance in India: *Pre And Post Reform Periods, Zenith International Journal of Multidisciplinary Research, 8(11), 144-154*

5. J.P. S Kumar, R Aluvala (2020). An empirical study on Financial Inclusion in the Banking Sector Post & Pre-Independence with special reference to Business Correspondents. *International Journal of Advanced Research in Engineering and Technology, 11(7), 648-657*

6. K Abdulaziz, K K Kundu, D P Malik (2020). Contribution of Lending Institutions in the growth of Indian Agriculture. *Journal of Economics, Business & Market research, 2(20), 225-223*

7. Kanika Garg, Sargam, Monika, Avantika (2020). Customer Awareness towards Online Banking in Public Banks and Private Banks. *International Research Journal of Management Science & Technology, 11(5), 33-38*

8. R. Ganapathi (2016). Customer satisfaction of private sector banks in Madurai city, Tamil Nadu. *Journal of Management Research & Analysis,3(2),67-73*

9. G Bugyei (2020). Determinants of Customers' Bank Selection Decision in the Mfantseman Municipality of Ghana. *European Journal of Business & Management, 12(28), 2222-2839*

10. M Geeta, C N Shivanand (2020). Micro Finance and Impact of Digitalization. *International Journal of Management (IJM), 11(7),1651-1659*

11. N A Ramli, H Latan, G V. Nartea (2018). Why should PLS-SEM be used rather than Regression? Evidence from the Capital Structure Perspective. *Springer international publication, International series in Operations research & management, vol 267, 171-209*

12. S Hussain, Z Fangwei (2018). Structural Equation Model for Evaluating Factors affecting Quality of Social Infrastructure Projects. *Sustainability journal 10(5), 2-25*

13. ST Akinyele ,K. Olorunleke (2010). Technology and Service Quality in the Banking Industry: An Empirical Study of Various Factors in Electronic Banking Services. *International Business management, 4(4), 209-221*

14. Ashta, Arvind, Hermann (2021). Artificial Intelligence and Fintech: an overview of opportunities and risks for banking, investments, and microfinance. *Strategic change ,30(3), 211-222*

15. S K Maiti (2021). Impact of Covid-19 on Indian Agriculture. *Journal of Orient Research Madras, 2(1), 433-443*

16. M J Alsamydai, R O Yousif, M H Khasawneh (2012) The Factors influencing customer satisfaction and continuity to deal with ebanking services. *Global Journal of Management and Business Research, 12(14), 129-141*

17. J S Patil (2020). Customer analytics improves anks Performance: A Descriptive Study of Analytical CRM among Private, Cooperative and Nationalised Banks. *Test Engineering and Management, 83, 10464-10470*

18. G N Mandala, V R Gandreti (2021). Problems and Constraints Faced by Farmers in Financing and Marketing of Agricultural Produce in India. *Universal journal of Accounting and Finance, 9 (2), 139-144*

19. P Singh, A. Attarwala (2018). Role of social media marketing in Indian Banking Sector. *International Journal of Scientific Engineering & Research, 9 (12), 115-117*

20. A Shankar, P Kumari (2016). Factors Affecting Mobile Banking Adoption Behavior in India. *Journal of International Banking & commerce, 21(1), 1-23*

21. A M Chanu, A R Singh (2021). Examining Factors Affecting customers adoption towards E-banking services at Manipur. *ISBR Management Journal, 38(49) 39-49*

22. A J Joshua, M Koshy (2016).Usage patterns of electronic banking Services by urban educated customers- Glimpses from India. *Journal of Internet Banking and Commerce, 16(1), 1-12*

23. M Sanni, L A Oke, I T Alayande (2020). Bank Credit Accessibility & Performance of SMEs In Kwara State, Nigeria: A PLS-SEM Analysis. *Copernican Journal of Finance & Accounting, 9(2), 45-64*

24. A Hoda, P Terway (2015). Credit Policy for Agriculture in India an Evaluation. *Indian council for research on International Economic relations, 302, 1-34*

25. T Haque & S Verma (1988). Regional and class disparities in the flow of agricultural credit in India. *Indian Journal of Agricultural Economics, 43(3), 356-363*

26. N Naveen, R S Kumar, T Rajendran, R G Selvi (2020) Growth of Agricultural Credit in India-before and after introduction of Kisan credit card. *International Journal of current Microbiology and Applied sciences, 9(9), 2593-2601*

27. A Asyraf, N Ahmad, A Sabri (2014). A Parametric Approach to Partial Least Square Structural Equation Modelling of Multi Group Analysis (PLS-MGA*). International Journal of Economics, Commerce and Management, 2(10), 1-15*

28. J F. Hair & M. Ringle (2018). When to use and how to report the results of PLS-SEM. *European Business Review, 31/1, 2-24*

29. P Gemar, G Gemar & V G Parra (2019). Modelling the Sustainability of Bank Profitability Using Partial Least Squares. *Sustainability Journal, 11(4950), 1-13*

30. B P O'connor (2000). SPSS and BAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behaviour Research Methods, Instruments & computers, 32(3), 396-402*

31. K J. Preacher, A F. Hayes (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behaviour Research Methods, Instruments & computers, 36(4), 717-731*

32. N A B Latif & S Z Adruce (2013). Internal Factors Affecting Perceived Impact of ICT on Rural Business Potential: The Mediating Role of Productive Internet Usage. *Journal of Asian Specific Research, 3(36), 587-589*

33. T Kusre (2021). How Does RBI Regulate Co-Operative Banks. *International Journal of Management, 12(3), 847-854*

34. V Bavoso (2020). Financial Intermediation in the Age of Fintech: P2P Lending and The Reinvention of Banking. *Oxford Journal of Legal Studies, 42 (1), 48-75*

35. A Ananth, R Ramesh, B Prabaharan (2011). Service Quality GAP Analysis in Private Sector Banks A Customer Perspective. *Indian Journal of commerce & Management studies, 2(1), 245-252*

36. A Naidu (2017) Strategies for Marketing to the Rural Customer in India. *Journal of Rural and Industrial Development, 5 (1), 35-39*

37. A S Khot (2019). The Impact of Mobile Banking on Customer Satisfaction. *International Journal of Trend in Scientific Research and Development, 3, 21-23*

38. S Singh (2016). Impact of Digital marketing on Rural Banking. *AIMA Journal of Research and Management, 10(2), 1-5*

39. Z UHaq (2019). A Study on consumer attitude towards email advertising, *Journal of retail and leisure property, 8(3), 207-223*

40. G U Maheshwari (2019) Banking Technology Services Quality Gap between private and public sector banks. *International Journal of Engineering and Advanced Technology, 9 (1), 970-973*

41. T D Little, N A Card, J A Bovaird, K J Preacher & C S Candle (2007). Structural Equation Modeling of Mediation and Moderation With Contextual Factors, *Chapter 9 Little, 2(12) 207-223*

42. A Adesoga, V S Louise (2016). Consumer Perceptions of Banking Services: Factors for Bank's Preference. *Risk Governance & Control: Financial markets & institutions, 6(4), 375-379*

43. M Kattel, A Shah (2020). Bank Attribute Factors in Determining Customers' Choice of Commercial Banks. *Journal of Business and Social sciences research, 5(1), 51-62*

44. S Singh, V Srivastava, R.K.Srivastava (2010). Customer Acceptance of Mobile Banking: A Conceptual Framework. *SIES Journal of Management, 71(1), 55-64*

45. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, *19*(2),139-152.

46. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, *46*(1-2),1-12.

47. I Gadhi, N H Alwi, K A Bakur, O Talib (2012), Construct Validity Examination of Critical Thinking Dispositions for Undergraduate Students in University Putra Malaysia. *Higher Education Studies, 2(2) , 138-145*

Reports & Circulars:

1. RBI (2019). Credit flow to Agriculture, Collateral Free agricultural loans, *Reserve bank of India circular ,13(118)*
2. RBI (2015) Master circular on Customer Service in Banks. *Reserve bank of India Circular 16/59*
3. D Subbarao (2008). Agricultural Credit - Accomplishments and Challenges. *RBI Monthly Bulletin, 8, 1413-22*
4. RBI (2021) Directions- Priority Sector Lending (PSL). Targets and Classification *Reserve bank of India Circular 72/2021*

Paper publications:

1. K G Shetty, V. Kumar, S. Lohana (2021). Impact of Advertisement on a Farmer's decision to select a bank to avail an Agriculture loan. *Vidyabharati International Interdisciplinary Research Journal, Special Issue -3 (8), 1000-1005*

   This is a WOS affiliated journal with ISSN: 2319-4979. http://www.viirj.org

2. K G Shetty, S R Lohana, V Kumar (2021). Digitisation of mortgage creation process on Agri land for availing a bank loan by farmers-an eye view on the practices followed across different states in India. *Vidyabharati International Interdisciplinary Research Journal, Special Issue -5(8), 2033-2039*

   This is a WOS affiliated journal with ISSN: 2319-4979. http://www.viirj.org

Conference Attended:

- National Conference on "Digital Transformation for Socio-Economic Development of Rural India" held on 25th February 2020 at ICFAI University Jharkhand Campus, Ranchi and presented a paper 'A study on Digitised Mortgage creation processes across select southern states in India'