

## Financial Inclusion using Digitalization and Perception of its beneficiaries

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### Abstract

Digital Finance is the financial services delivered through mobile phones, personal computers, the internet, or cards linked to a reliable digital payment statement. And inclusion implies bringing in of excluded individuals, households, and communities into an external system, and with its positive, uplifting connotations, an upbringing into a superior system. CGAP defines digital financial inclusion as “digital access to and the use of formal services by the excluded and the underserved population” (CGAP, 2015). Through this paper we have tried to study the perception of the beneficiary related to digital financial services. The respondents included people from various age group with low- or moderate-income levels from various parts of Southern Kolkata. We have based our study by collecting data related to the use of digital services by the respondent. From the study we have tried to find the perception of the respondents towards digitalization and have used ordinal regression analysis as most of our data were qualitative in nature and interpretation was done accordingly for the results obtained. Through our findings, we have tried to analyse the various form of digital finance which are leading to financial inclusiveness among the respondents by bringing a positive upliftment.

**Key words:** Digital Finance, Financial Inclusion, Perception, Digital Banking and Digital services

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### 1. Introduction

Digitalisation in India has made rapid strides reaching every corner of the country, nowadays almost all families are well connected with mobile phones, school and college classes are held online due to the high-speed connectivity and almost all individuals are benefiting out of the new schemes digital schemes and influx of capital in this sector by the government. This spread of digitalisation can only be accountable if the mode of finance can also be in the form of digital channels as specified by the various agents of digital finance. India has the second-largest unbanked population in the world with more than half of its population considered financially excluded or underserved (World Bank, 2017). The Microfinance model which has been quite successful in the developing countries mostly in the subcontinental countries and Africa requires a major update as it has been using the same strategy for quite some time and digitalization can provide this assistance required for the change. The major update which can be provided to this institution is the use of fintech and other digital tools which would not only provide the impetus to grow but also enhance economies of scale and agglomeration. This in turn will generate benefit to the grass-root level the ultimate customers by providing them a sense of social upliftment and ease of access in this world of digitalization. Nowadays mobile phones more specifically smartphones not only serve as a medium of communication but also helps to initiate banking habits among the people especially the youth who are more profound to transact using mobile banking app. If this idea can be transformed to rural youth and rural women who are the prime customers of the MFI, we can build a robust model that would attract a huge customer base and reach a wide number of people who are unaware of the benefits of transacting using mobile. Using digital finance in micro-financing should eliminate

the need for borrowers to visit the microfinance institution to fill some paperwork which is a requirement for loans to be disbursed to borrowers (Ozili, 2020). Thus, it becomes necessary to understand the reach of digital finance among this group of low income or unbanked sector to find the extent of digital financial inclusion. Also, we need to understand the level of financial literacy among the beneficiaries of digital finance to see how much adaptability it has gained in the recent times. Thorough this paper we would like to bring out the necessary suggestion and the perception of this people who are the beneficiary of this form of financial inclusion.

## 2. Review of Literature

**Parul Agarwal, Shreya Chatterjee, Prachi Agarwal (2017)** in their study Digital financial inclusion and consumer capabilities in India wanted to understand digital literacy and an assessment of specific training requirements, specific consumer segments such as migrant workers and marginalized plantation workers and the scope for targeted products, and finally understanding credit as a mode of transaction and scope for innovations in product design. Based on in-depth quantitative surveys and focus group discussions (FGD) with consumers, and semi-structured interviews with service providers, this research aims at informing service providers of consumers' willingness and ability to use digital products.

**Peterson K. Ozili (2020)** in his paper "Contesting digital finance for the poor" wanted to understand the turn from 'microfinance for the poor' to 'digital finance for the poor'. This paper examined the delivery of digital finance to poor people and contest the claim that digital finance is pro-poor and pro-development. It argues that the transition from microfinance to digital finance has benefits, but the risks are significant for poor people. It debunks the claim that technology is neutral for everybody and argue that technology is not neutral for everybody especially poor people.

**Suliman A Salem Ben Ghrbeia 2020** in his thesis investigated on issues that affect customers when implementing digital payment and proposing solutions to preserve and develop the quality of service for digital payment systems to inspire patronage repetition and loyalty and attract new customers. The result showed that there was a rather weak negative correlation between the average security and the benefits of the Digital Payment System. Another quite weak and negative correlations have to do with the age bracket of the customers and its effect on the general preference of the Digital Payment System.

**Journey Map Report March 2019 M STAR Project** in this project, India Digital Finance Report, India, dissecting the major trends and drivers, identifies key actors and the roles that they have played, and presents a roadmap for how the next phase of digital financial inclusion in India can be made more effective and more inclusive. The findings were the human touch point remains critical, digital finance is closely linked with aspiration, product design is important and underrated, a lot of people still really like cash. Linkages between digital payments and financial inclusion cannot be assumed.

**Alliance for Financial Inclusion (AFI), August 2018**, in this paper Digital transformation of microfinance and digitization of microfinance services to deepen financial inclusion in africa-2018. The role of microfinance providers in digitizing their operations how microfinance providers are digitizing their operations options and requirements. Implications for microfinance providers digitizing operations prerequisites, challenges, and risks. The contribution of digital finance to financial inclusion.

## 3. Research Gap

- a) The researchers have based theoretical overview of digital finance but a complete picture to show how the lives of lower income people have changed due to the adoption of digital financial services is not reflected in the literature surveyed.
- b) The researchers have based all their work on overall study or concentrated their study to the whole of India, but research on a particular state was missing especially in parts of West Bengal, India.
- c) There is few research that highlights the negative impact of DFI's but study on how to improve on this negative impact and how people from lower income households or people below the poverty line can be trained to use DFI properly is missing.

#### **4. Research Objective**

The main objective of our study is to determine the positive upliftment of the beneficiaries of Digital financial services from the use of digital finance.

#### **5. Limitations**

We had to face the following limitations during our course of this study:

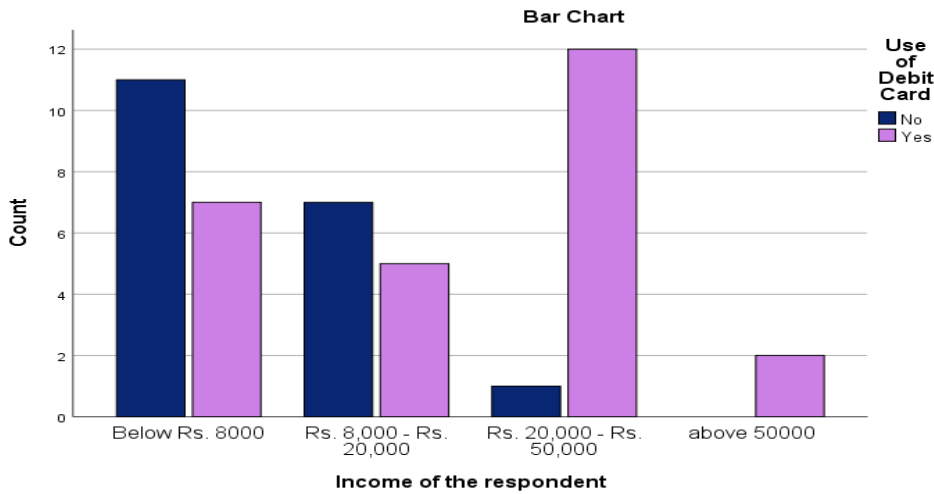
- Unavailability of large-scale data due to Covid-19 which restricted our study to only 45 respondents.
- The various assumptions associated with Ordinal Regression Analysis.

#### **6. Methodology**

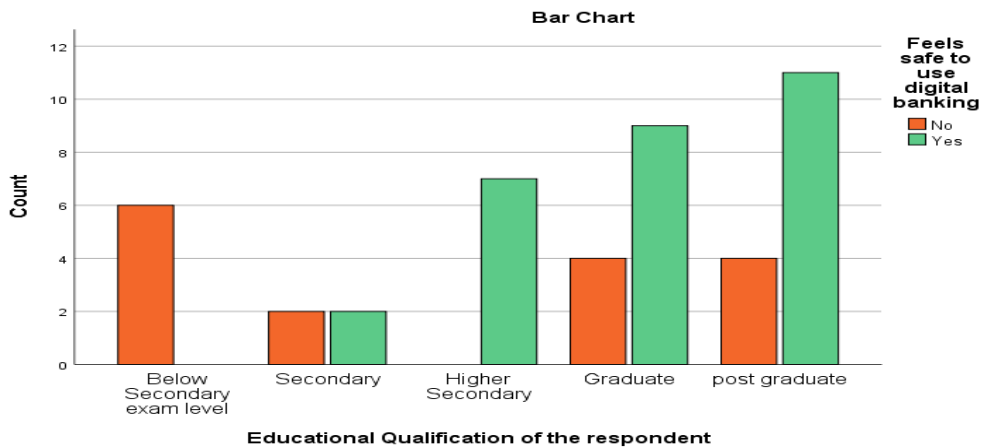
To understand the level of digital financial inclusion among the people we have considered a primary study by constructing a detailed questionnaire with the help of Google Forms. For this study we have collected data from 45 respondents from various parts of Kolkata. The main aim of the study was to understand their perception towards the various factors of digital finance. We had the following initial observation from the data we had collected. Almost all the respondents have a bank A/c, around 98%, among which most of them have a savings account. Only 9 respondents have both saving and fixed account. Few of them have recurring and current account. For digitalization one needs to have a smart phone which is evident from our survey. Approximately, 96% or 43 out of 45 respondents own a smart phone and out of them everyone has access to internet. If we talk about digital banking 57% respondents use internet banking and among them, they also prefer to use different banking app like SBI YONO. Other than banking they also prefer to use digital technology for online shopping, Facebook, YouTube, trading etc. 60% respondents also use UPI (Gpay, PhonePay) for transactions use. Out of 45 respondents 33 of them have PMJDY. And coincidentally same number of people also have debit cards but not the same people. Out of 33 respondents only 58% people prefer to use debit cards for transactions purpose. Although only 5 respondents prefer to use credit card out of the total respondents. Around a quarter of the total number of respondents have taken loan from NBFC and few other respondents have taken loan from MFI/SME like Bandhan bank or Jana bank. 62% of respondents have insurance policy. Considering the different beneficiaries of government schemes, we do not have good numbers as few of them have been benefitted from it. One of the reasons for this is because we do not have many respondents and, we have different type of respondents as it contains both lower income and middle-income people. And the schemes are also female centric, and we have approx. equal numbers of genders. If we talk about security from the use of digital finance 64% respondents feel safe in using digital banking and the other respondents feels otherwise. Fraud, data theft, financial illiteracy are the few reasons for it which we came to know while collecting data. People using digital technology also face some problems like technical error, transaction error, information issues are among them.

#### **7. Some important Statistics as observed from the data.**

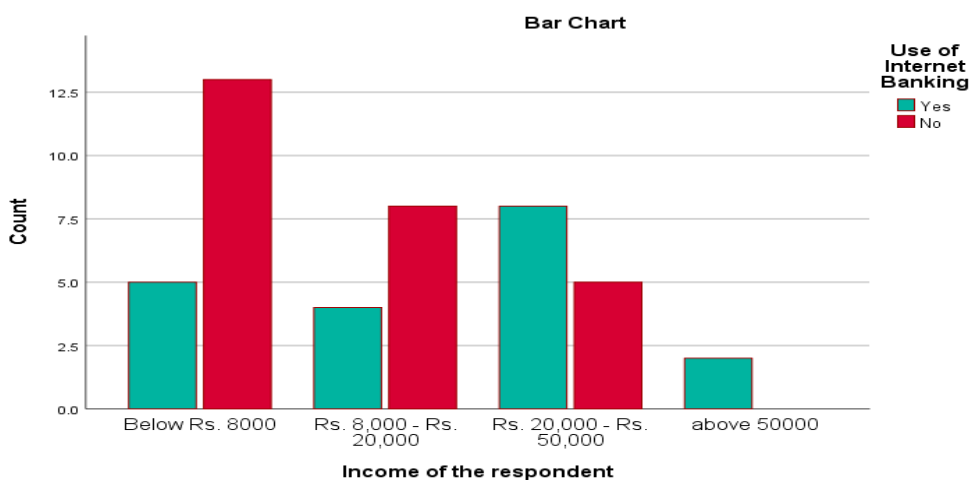
While comparing the income of the respondent with that of the use of debit cards, it was found that as income increases the use of debit cards also uses, on the other hand, people from lower-income groups were found to possess debit cards but they had no to limited usage.



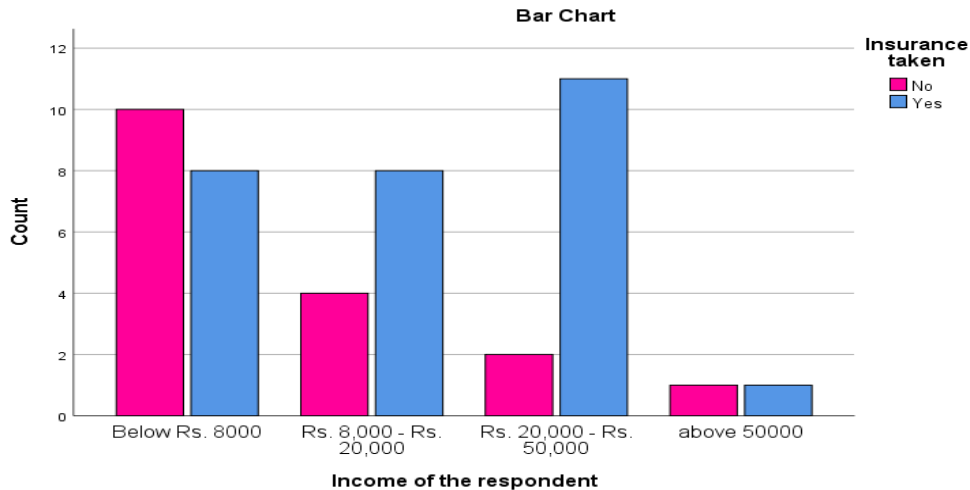
Another important statistic was the relationship between the educational qualification of the respondent and that of the security given by digital financial services. Also, we noted that the ease of use and the positive upliftment due to DFI was mainly observed among better-educated respondents.



While comparing the income of the respondent with that of the other factors it was found that most of the respondents had a bank account, a smartphone, and the internet was easily available to them. Whereas when coming to the use of internet banking, UPI transactions made, and availability of loans it was found that higher income individuals were proactive in taking this facility rather than lower income ones.



One exception to this trend was observed in the field of insurance which was taken by the respondents of all income groups in almost similar proportions.



## 8. Ordinal Regression Analysis

### Variables Specification and Scale of Analysis

In this study, an ordinal regression is constructed to examine the relationship between the positive upliftment in the lives of the respondent due to the use of digital financial services over the recent years. The explanatory variable to explain the relationship being the use of digital banking leading to development of livelihood and how much digital services have helped the respondent during Covid 19 lockdown. We have also considered certain factors like the use of Unified Payments Interface (UPI), smartphone for internet services, internet availability and whether the respondent feels secured to use digital banking which we felt would be a key to determine the positive upliftment in the daily life of the respondents.

### Detail Analysis of Each Category

#### Positive Upliftment (PU)- The dependent variable

This is our dependent variable, and it states the positive upliftment the respondent had from the use of digital financial services like that of UPI, Internet Banking, Digital Banking and Debit cards during our survey. The Positive Upliftment due to digitalization of the respondent was taken based on ranks ranging from (-2: strongly disagree, 1: disagree, 0: neutral, 1: agree, 2: strongly agree). This estimate is taken based on what the respondent thought about the impact of digital financial services in their daily life leading to a positive upliftment. We have considered the word “positive” and not just upliftment since we wanted to understand the impact and giving the value for rankings like strongly disagree in negative to analyze the required impact.

#### Digital Finance help during Covid-19 situation (DFC)

This is an important estimate as we get to see the perception of the respondent towards digital financial services during the pandemic situation of Covid-19. Due to the lockdown during the Covid-19 situation it was necessary to rely on the digital payment option and UPI was observed as an important mean of transaction. The beneficiaries could use the digital finance services from their home and paper less form of money is a key in this kind of scenario as it keeps them safe and secured.

### **Digital Banking leading to development of livelihood (DBLDL)**

This estimate helped us in determine the development in the livelihood of the respondent from the use of digital financial services. It measures the standard of development which the respondent observed from the use of digital financial services. It is an important measure as it shows how much the respondent developed the respondent from this use of technology which is helping them to transact in an easy and efficient way. We have tried to analyze the dependence of positive upliftment of the respondent from the use of digital finance through the development of livelihood among them and we have taken ranked the parameter based on the one done in PU.

### **Safety in using Digital Transactions (SDT)**

This category deals with the Safety in using digital transactions and how much the respondent feels secured in using digital transaction. Based on the questions asked the respondents have often highlighted the issues of security threats, fraudulent transactions, insecurity, technical and server related issues and also hacking related problems like loss of important information due to the use of Digital Transactions. Better policy measures, firewall and advanced protection mechanism must be made to improve safety while using digital financial services. Thus, it is a key criterion to maintain the positive upliftment though the use of DFI.

### **Unified Payments Interface (UPI)**

Unified Payments Interface is a revolutionary tool as most of the transaction are being preferred to be used by more and more Indians in their daily life. Similar trends were observed during our survey as we observed that millennials are more willing to make UPI transactions and were positive towards other digitalization avenues as well. From our research and observation, we found UPI to be an important factor influencing positive upliftment of the respondent.

### **Internet Usage (IU)**

Internet usage is a key thing for the spread of digitalization and the usage of internet is one of the basic essential to use digital finance. Thus, whether a person feels positively uplifted can be considered from their use of Internet services.

### **Smartphone Usage (SU)**

Just like internet smartphone is an essential tool for the spread of digital financial services, as most of UPI and Digital banking app can only be used if a person as IOS or Android enabled OS mobile phone.

### **Modeling positive upliftment of the respondent who have used digital financial services**

Various types of regression analysis are commonly used to model relationships between random variables. The use of a specific technique depends heavily on the level of data availability, spatial analysis and format and the specific questions to be answered (Norusis, 2004, 2005). This paper focuses on the ordinal regression modeling technique that can be applied to the model positive upliftment from the use of digital financial services.

Out of all the multiple regression techniques available, we have chosen this due to its advantages and after considering the various literature available on this kind of research. It does not assume that the response variable and the error terms are distributed normally (Norusis, 2004). Secondly, it can take into consideration and introduce into the calculations some of that extra information in the ordinal scale of the response variable compared to logistic regression models. Finally, and most importantly, it allows investigating the influence and significance of all individual categories of categorical independent variables (Polyzos, Dionysis 2011).

The logit link takes the form link  $\gamma_{ij} = \ln \left( \frac{\gamma}{1-\gamma} \right)$  The general model for ordinal regression is:

$$\ln\left(\frac{\gamma}{1-\gamma}\right) = \left\{ \begin{array}{cc} \beta_{DFC(-2)} & DFC - (-2) \\ \beta_{DFC(-1)} & DFC - (-1) \\ \beta_{DFC-0} * & DFC - 0 \\ \beta_{DFC-1} & DFC - 1 \\ \beta_{DFC-2} & DFC - 2 \end{array} \right\} + \left\{ \begin{array}{cc} \beta_{DBLDDL(-2)} & DBLDDL - (-2) \\ \beta_{DBLDDL(-1)} & DBLDDL - (-1) \\ \beta_{DBLDDL-0} * & DBLDDL - 0 \\ \beta_{DBLDDL-1} & DBLDDL - 1 \\ \beta_{DBLDDL-2} & DBLDDL - 2 \end{array} \right\} + \left\{ \begin{array}{cc} \beta_{SDT-0} * & SDT - 0 \\ \beta_{SDT-1} & SDT - 1 \end{array} \right\} \\
+ \left\{ \begin{array}{cc} \beta_{IU-0} * & IU - 0 \\ \beta_{IU-1} & IU - 1 \end{array} \right\} + \left\{ \begin{array}{cc} \beta_{SU-0} * & SU - 0 \\ \beta_{SU-1} & SU - 1 \end{array} \right\}$$

**9. Analysis**

We have conducted ordinal logistic regression to show how the Positive Upliftment (dependent variable) of the respondents by using digital finance has taken place based on the variables like use of digital finance during Covid -19 scenario, digital banking leading to development of livelihood, safety in using digital transactions, unified payment interface, internet usage and smartphone usage.

For this study, we have used a Likert Scale with 5 variables (-2: strongly disagree, -1: disagree, 0: neutral, 1: agree, 2: strongly agree) for the ordinal data which were digital finance during Covid -19 scenario and digital banking leading to development of livelihood,

For the nominal data like safety in using digital transactions, unified payment interface, internet usage and smartphone usage, we have asked a nominal response of whether they used the services in Yes and No and have coded it as (0: No, 1: Yes).

We ran our test on SPSS package 25 and based on the output we framed our analysis and working research hypotheses were determined as:

*H.1. There is a significant relationship between a respondent’s positive upliftment due to the use of digital financial services and the role of digital financial services during the Covid-19 scenario.*

*H.2. There is a significant relationship between a respondent’s positive upliftment due to the use of digital financial services and the role of digital banking leading to development of livelihood.*

*H.3. There is a significant relationship between a respondent’s positive upliftment due to the use of digital financial services and how safe the respondent feels in using digital transactions.*

*H.4. There is a meaningful relationship between a positive upliftment due to the use of digital financial services and the role of unified payment interface.*

*H.5. There is a meaningful relationship between a positive upliftment due to the use of digital financial services and the role of internet usage.*

*H.6. There is a meaningful relationship between a positive upliftment due to the use of digital financial services and the role of smartphone usage.*

**Table -1** Overall Model-fitting information, strength of association, goodness of fit statistics <sup>a</sup>

**Model Fitting Information**

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	106.495	-	-	-
Final	.000	106.495	11	.000

**Pseudo R-Square**

Cox and Snell	.906
Nagelkerke	.981
McFadden	.918

**Goodness-of-Fit.**

	Chi-Square	df	Sig.
Pearson	60.134	85	.981
Deviance	31.128	85	1.000

**Parameter Estimates**

	Estimate	Std. Error	Wald	d.f.	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
<b>Threshold</b>							
[PU = -2.00]	<b>-24.552</b>	<b>289.463</b>	<b>.007</b>	<b>1</b>	<b>.932</b>	<b>-591.890</b>	<b>542.786</b>
[PU = -1.00]	<b>-11.714</b>	<b>2.400</b>	<b>23.821</b>	<b>1</b>	<b>.000</b>	<b>-16.418</b>	<b>-7.010</b>
[PU = .00]	<b>-6.432</b>	<b>1.617</b>	<b>15.827</b>	<b>1</b>	<b>.000</b>	<b>-9.600</b>	<b>-3.263</b>
[PU = 1.00]	<b>-1.099</b>	<b>.949</b>	<b>1.340</b>	<b>1</b>	<b>.247</b>	<b>-2.958</b>	<b>.761</b>
<b>Location</b>							
[DFC=-2.00]	<b>-31.183</b>	<b>532.479</b>	<b>.003</b>	<b>1</b>	<b>.953</b>	<b>-1074.823</b>	<b>1012.456</b>
[DFC=-1.00]	<b>-7.198</b>	<b>2.552</b>	<b>7.957</b>	<b>1</b>	<b>.005**</b>	<b>-12.200</b>	<b>-2.197</b>
[DFC=.00]	<b>-7.631</b>	<b>2.085</b>	<b>13.389</b>	<b>1</b>	<b>.000**</b>	<b>-11.718</b>	<b>-3.543</b>
[DFC=1.00]	<b>-3.467</b>	<b>1.273</b>	<b>7.415</b>	<b>1</b>	<b>.006*</b>	<b>-5.962</b>	<b>-.972</b>
[DFC=2.00]	<b>0a</b>	<b>.</b>	<b>.</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>
[DBLDL=-1.00]	<b>-5.866</b>	<b>2.215</b>	<b>7.013</b>	<b>1</b>	<b>.008*</b>	<b>-10.208</b>	<b>-1.525</b>
[DBLDL=.00]	<b>-2.433</b>	<b>1.408</b>	<b>2.988</b>	<b>1</b>	<b>.084</b>	<b>-5.193</b>	<b>.326</b>
[DBLDL =1.00]	<b>-3.726</b>	<b>1.350</b>	<b>7.621</b>	<b>1</b>	<b>.006*</b>	<b>-6.371</b>	<b>-1.081</b>
[DBLDL =2.00]	<b>0a</b>	<b>.</b>	<b>.</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>
[SDT=0.00]	<b>-2.735</b>	<b>1.160</b>	<b>5.559</b>	<b>1</b>	<b>.018</b>	<b>-5.009</b>	<b>-.461</b>
[SDT=1.00]	<b>0a</b>	<b>.</b>	<b>.</b>	<b>0</b>	<b>.</b>	<b>.</b>	<b>.</b>



[UPI=.00]	<b>2.979</b>	<b>1.222</b>	<b>5.937</b>	<b>1</b>	<b>.015</b>	<b>.583</b>	<b>5.375</b>
[UPI=1.00]	<b>0a</b>	.	.	<b>0</b>	.	.	.
[IU=.00]	<b>1.578</b>	<b>825.250</b>	<b>.000</b>	<b>1</b>	<b>.998</b>	<b>-1615.883</b>	<b>1619.038</b>
[IU=1.00]	<b>0a</b>	.	.	<b>0</b>	.	.	.
[SU=.00]	<b>-.830</b>	<b>825.244</b>	<b>.000</b>	<b>1</b>	<b>.999</b>	<b>-1618.278</b>	<b>1616.618</b>
[SU=1.00]	<b>0a</b>	.	.	<b>0</b>	.	.	.

Link function: logit.

(a) This parameter is set to 0

because it is redundant.

Note: \* Significant at 10% and \*\* Significant at 5%

### 10. Findings:

The model with maximum likelihood in which the independent variables given in Table 1 that influence the Standard of living can be obtained is the logit model. The analysis results of the predicted model are summarized in the table. Out of the 45 respondents who participated in the survey it is found that 3 of them strongly disagreed, 2 disagreed, 15 were neutral, 20 agreed and 5 Strongly Agreed that digital financial inclusion has helped the respondent in bringing a positive upliftment in their daily life.

The fit-goodness test of the model is given using Pearson Chi-square and deviation statistics.

The fit-goodness test of the model is given using Pearson Chi-square and deviation statistics. The model's suitability is determined using the difference between the observed and expected values of the model. Therefore, it is assumed that the model agrees with the assumption that  $p > 0.05$  as statistically significant.

The R square values of the model are calculated, showing how many percent of the dependent variable is explained by the independent variables. For R square we take the Nagalkerke R square which is at 98.1% for our test. This explains that 98.1% of the variability in the dependent variable is expressed by the independent variables.

In the model, there are 6 independent variables (use of digital finance during Covid -19 scenario (DFC), digital banking leading to development of livelihood (DBLDL), safety in using digital transactions (SDT), unified payment interface (UPI), internet usage (IU) and smartphone usage (SU).) that are found, and the probability of these variables is examined. These probability values are the values of the Wald test to determine whether the parameters are meaningful. When the analysis results are examined in Table 2, the significance level is found to be statistically significant when p values of some variables were less than 0.05. The reference category in the study is made according to the interpretations determined as the last category.

According to the ordinal logistic regression analysis in Table 2, the reference category is determined as the last category for each independent variable, and the interpretations were made accordingly. Four categories of the threshold values calculated in the model are significant. It is found that, when the independent variables explaining the Standard of living are examined, a meaningful relationship exists for three categories in the case of DFC, three categories of DBLDL, one category of SDT and one category of UPI being statistically significant at 5%. When the value of each of these significant variables increases by 1 unit, it is observed that the predicted rate of the dependent variable will also increase.

In the category pertaining to the use of digital financial services during Covid 19 scenario, it is observed that people welcome the use of digital banking and other digital financial services as during this time people faced

lockdown and essential were purchased using digital payments due to which we see people strongly agreeing to the fact that using DFS during the pandemic has helped them in maintain a safe and secured positive upliftment, which is evident from the highly significant values. Similarly, people have agreed that their livelihood has developed from the use of digital financial services which has brought a positive upliftment in their daily life from the use of DFS. Almost 70% the respondents have agreed that with the use of covid 19 during the pandemic scenario and almost 60% of the respondent have agreed that digitalisation has led to a development in their livelihood.

Also, the use of UPI and the security offered using DFI are important factor to affect the positive upliftment, and this seems to affect the respondent as well ( $p < 0.05$  for UPI and SDT).

Although since Internet and Smartphone usage is common and all our respondent had access to this, we see that we do not get a significant result for this two.

Thus, we can accept the hypothesis 1, 2, 3 and 4 and we must reject hypothesis 5 and 6 based on the test of significance.

## **11. Analysis of Findings**

### **Model Fit Summary and Goodness of Fit**

The final ordinal regression model includes the constant, all the tested variables, and the statistically significant two-way interaction effect. The model uses the logit link function. Results about the strength of associations, the predicted ability of the model as well as goodness-of-fit statistics, are presented in Table 1. The location coefficients for all the predictor variables in the model are zero, thus the results helped us in the test of null hypothesis yielding a significance level of 0.001.

### **R Square**

The pseudo-R<sup>2</sup> statistics measure the success of the model in explaining the variations in the data, which is an indication of the strength of associations between the dependent and the independent variables. The pseudo-R<sup>2</sup> for Cox and Snell (0.906), and Nagelkerke (0.981) which can be considered highly significant as it is close to 1 or 100%. The pseudo-R<sup>2</sup> for McFadden (0.918), which is also highly significant and is a measure of entropy reduction between the intercept-only and the final model. The goodness-of-fit measures of Pearson and Deviance are reliable since it has a significance value of  $p$  (0.981) and (1.000) which is higher than (0.05)

### **Parameter Estimates**

The results are displayed in Table 2 and were considered whether they are statistically significant or not. The estimate indicates that the variables have a significant influence on the positive upliftment of the respondent.

The variable DFC has a positive coefficient for all the categories. Furthermore, the statistical significance is satisfactory for all the categories. This effectively suggest how important the role of digital financial services have been during the Covid 19 scenario.

Coming to the role of digital banking leading to development of livelihood we find a similar positive coefficient for all the categories. In this case, we have a statistically significant result for all the categories. Thus, we can say that the respondents were strongly agreed that as the livelihood developed due to the use of digital services, we see a positive upliftment among the respondent. As most people feel digital banking help in upliftment or making transactions more convenient for them as they don't have to go to the bank regularly and it there too in our data that only 13% do physical banking transaction through bank on a daily basis. And during pandemic it's kind of act as a boon for them that they were able to do all kinds of transactions at very ease.

Next, the four binary variables representing the SDT and UPI were statistically significant at 5% while IU and SU were not significant. The main reasons for this result are that it is considered as a basic tool for the digitalisation, one cannot think about digitalisation without these two and almost all the respondents have these two, so it didn't act as an independent factor for the upliftment. Thus, it was found that the other factors were more significant in providing a positive upliftment among the respondent leading to a digital financial inclusion.

## **12. Conclusion**

This empirical research helped us in understanding the views of the respondent and to determine the factors influencing the upliftment of their livelihoods. During the survey, while interacting with different respondents, few of them expressed vocally about-facing problems while doing digital transactions. It has been noticed that their views were directly proportional to their income and qualifications. As our respondents come from different backgrounds so their perception of upliftment is varying too. They cite various frauds or scams that they heard from different people because of which they are afraid of doing it digitally. Respondents who are feeling positive about the upliftment of livelihood due to digital banking earlier also have their doubts regarding it but after using the different methods of digital transactions their opinions changed and they feel safe in doing so. It can be concluded that with proper guidance and programmes to help them get acquaintance with the digitalization the positive upliftment of livelihood can be improved more of all sections of people.

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