



## A STUDY OF POST-DEMONETIZATION IMPACT OF LIMITED-CASH RETAILING IN UTTARAKHAND, INDIA

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### Abstract

**Purpose of Study:** The paper aims to assess the new face of retailing after demonetization with specific focus to the role of financial intermediaries and it also focuses on Long term solutions to drive the digital cash enabled retailing in India.

**Methodology:** This study used a questionnaire for data collection among 250 retailers in Uttarakhand, India. The questionnaire was later on analyzed using SPSS. Qualitative data was gathered from the interview with the officials from 100 financial intermediaries from banks.

**Findings:** The Indian retail market has been fostered by the cash dealings. The step of demonetization caught the black marketers, retailers and common people by surprise. The move was supported by the majority of people despite facing difficulties. After the demonetization, people started using the adoption of different forms of digital payment options. The trade in the market was affected and the retail sales witnessed a severe dip. The market is recovering but the actual recovery will depend on devising the substitute for the cash payments at all levels of retailers.

**Social implications:** Financial inclusion is important for inclusive growth and bank to have a crucial role to play in financial literacy campaigns and should ensure that those deprived sections that come to exchange their old notes are properly taken care of. Banks could make unbanked people aware about the financial instruments available with banks and the importance of saving and putting their money in these instruments. This step would further help the economy move from unorganized to organized sector.

**The originality of Study:** This study is original and first of its kind conducted in Uttarakhand, India.

**Keywords:** *Demonetization, Digital, Cash Retailers, Financial, intermediaries, Inclusion.*

### INTRODUCTION

Demonetization is stripping the legal usage of a currency. Demonetization was introduced in India for the third time on 8<sup>th</sup> November 2016 when the Prime Minister of India announced the change of currency. When we look into the possible impacts if we take first the household sector, it was inconvenient initially as they had problems in meeting some of their daily requirements. The impact on black money could be strong which one of the reasons behind this step is. Accountability of income is crucial for the development of our economy. This is also helpful for inclusive growth or Sustainable development of all the sections of the economy. Financial inclusion is important for inclusive growth and bank to have a crucial role to play in a financial literacy campaign and should ensure that those deprived sections that come to exchange their old notes are properly taken care of. "As per RBI report, cash transactions are around 87% and people involved in corruption build a parallel economy with unaccounted money. This parallel economy helps in terror funding which in turn restricts the growth and development of the economy. In the short run, this step could have an impact on the economy" (Abda 2017). "The rationale put forth by the Government sources for such a bold move was to tackle with the black money problem, counterfeit currency, corruption, checking the terror funding and money laundering and forced adoption of the online transaction by the citizens of the country" (Singh 2018)

This research work would help to analyze the impact of the demonetization process on the sellers, shop owners, street vendors, small and medium scale organizations in Uttarakhand. Uttarakhand is a small state with 13 districts and includes hilly and plain areas in two parts Kumaun and Garhwal regions.

**Objectives of the study:** This paper is an attempt to:

1. Review the role of cash in the Indian Retailing scenario.
2. Demonetization drive and the immediate threats to the cash-oriented retailing at various levels and types of retailing.
3. Analyze the factors responsible for demonetization
4. Long-term solutions to drive the digital cash enabled retailing in India.



**Hypothesis:** There is no significant impact of Demonetization on Retailing.

## LITERATURE REVIEW

[Alvares, Clifford](#) (2009) analyzed the issues related to the fake currency in India. He interpreted that many fake currencies or unaccounted incomes are going undetected and could affect the growth of the economy.

[Saini, B. M.](#) (2016) believes that “main thought behind demonetization was, to control the black money in the economy, anti-money laundering and to increase E-transactions in the country. However, the result will come in due course of time, but it is sure that all developed countries are moving towards cashless transactions. No doubt, control of currency needs huge expenses like printing, preserving, security, etc”.

[Geeta Rani.](#) (2016) conducted “a study which shows that initially the demonetization effects on the market were painful but this investigate the shopkeepers and consumers to adopt cashless means such as paytm, debit card use, internet banking to buy goods. By adopting the cashless means the economy will be sound in the coming time and the Indian Economy will get benefits of early and hassle-free transactions”.

Demonetization was a bold move from the Indian government and was intended to curb the issues of black money, corruption, terrorism funding, and fake money issues that are predominant in India ([Mali](#) 2016).

As analyzed by [Pankaj Renjhen](#) (2016) demonetization was an extraordinary move for future prospects of India and its economy. It will influence numerous customers to begin utilizing plastic cash in the long haul. As of now, the use of credit/charge cards and eWallets has expanded amid enormous deals, when banks and Fintech startups offer cashback or rebates. This pattern will rise generously in the long run as such payment methods become more mainstream.

[Chelladurai and Sornaganesh](#) (2016) analyzed the impact of demonetization on the Indian economy. The citizens of India faced many challenges for a short period of time as they felt the problem in replacing old currencies and faced cash shortage. The government's decision was mainly to reduce black money and fake currency and to put a substantial reduction in terror funding. It was move initiated by the government to go digital by using technology.

[Jaiswal and Jagtap](#) (2017) described “the several economic changes and the possible consequences of demonetization on various sectors. This study helps in determining the helpful and harmful consequences of note ban decisions taken by the Indian government”.

[Kaur, Manpreet](#) (2017) studied that remonetizing is a major step towards a cashless or digital economy. An increase in the utilization of plastic cards, internet banking payment apps and other online installment instruments will be another constructive outcome of demonetization.

[Pradeep](#) (2017) examines the promptness of the Indian economy to become cashless & its suggestions in the future. Demonetization only effects narrow money & leaves the major component of the money supply; the broad money wide open, which if left unchecked would leave the issues as it is. In this case, the transition towards a cashless society proves to be a good way of achieving economic welfare.

[Betz et.al.](#) (2017) concluded that the implementation was imperfect because not all the society had banking accounts to accomplish the transition of money, and the government did not print a supply of the new money before implementing the policy.

[Negi and Pant](#) (2017) stated that term shocks. Banking is a service industry and now a day banks are catering to the services at the fingertips of customers. One of the most influenced sectors from demonetization was the banking industry and it made vibrations in the operations as well as the products and services of banks.

[Preethi and Sangeetha](#) (2017) mentioned that the government was in continuation of a series of measures taken during last two years to eliminate black money, corruption, counterfeit currency, terror funding, and to help the Indian economy by greater digitization, increased the flow of financial savings, higher GDP and tax avenues. India is a cash-intensive economy

[Samuel and Saxena](#) (2017) studied the short-period and long-period influences of demonetization with mention to the different divisions of the Indian economy. It also deliberates whether demonetization will be involved in removing the black currency from the Indian economy which is the key objective after the currency switch. It can be assumed that demonetization determination creates cash crisis and liquidity crisis causing a problem to the overall public in short time, but its resolution is shown to be helpful to the budget in the long run on aspects like government income, the rise in credit, little interest charges on mortgages, and decay in inflationary force.

[Sankar, B.P. Bijay et.al.](#) (2018) suggested that the demonetization has positively affected the digital financial services provided by the bank. It also found that villagers are perceived that the use of digital financial services is risky.



[Srinath et.al.](#) (2018) through a research work explored how demonetization affected marginal actors in one such informal economy space, the scrap market in some cities in south India. By accessing the narratives of these marginal subjects, we hope to show how the consumption of the governmental-corporate discourse of utopia is simultaneously implicated in the injustices and violence being experienced by several people.

[Rashmi et.al.](#) (2018) studied the impact of the decision taken by the Government of India to demonetize Rs.500 and Rs.1000 currency which meant that the legal tender of currency units was announced invalid from 9<sup>th</sup> November 2016. They concluded that demonetization has a temporary effect on the stock market and investors tend to look towards the plastic money. However, they were bound by the time due to various constraints imposed on cash flow in the market.

[Sandeep Goel](#) (2018) The biggest positive effects of this move were the eradication of stocked and staked up money, cleansing of the financial system and improving governance in India. But its implementation had mix outcomes with its own challenges for future improvement.

[Sivathanu](#) (2019) suggested that behavioral intention (BI) use and innovation resistance (IR) affect the usage of digital payment systems. The relation between BI to use digital payment systems and the AU of digital payment systems is moderated by the stickiness to cash payments.

[Hindochoa and Pandya](#) (2019) analyzed that **demonetization** has a significant positive impact on e-transactions, specifically on RTGS and NEFT, in terms of volume and value of transactions. Mobile banking transactions also increased in volume and value significantly in the post-**demonetization** period.

## METHODOLOGY

**Research Design:** The present study is analytical and descriptive in nature.

**Sample Size:** The identification of sample size for applying factor analysis was done as mentioned by Bentler and Chou, that the required sample size for Factor Analysis 8:1 which means for every one variable, there have to be at least 8 respondents.

**Sampling Technique:** Judgmental quota sampling.

**Primary Data:** This study used a questionnaire for data collection among 250 retailers in Uttarakhand, India. Qualitative data was gathered from an interview with the officials from 100 financial intermediaries from banks.

**Secondary data:** The secondary data was collected from the published source of information available from Journals, Websites, and Magazines.

**Statistical Tool:** Data analysis was done using the **factor analysis** for identifying significant cost drivers and the development of the framework was done using multiple regression. The questionnaire was done using SPSS.

## Data Analysis & Interpretation

### Analysis of Data from Retailers

As a part of research work and by visiting Retail shops in many places in UP and Uttarakhand and after discussing with retail shopkeepers and the general public about demonetization the following points were analyzed:

1. The result was an interesting one for the Government as 90% of rural people believe demonetization will have a positive impact.
2. 75% of people don't face difficulty in exchanging old notes. The retailers and general public deposited money in their account and later on withdrew it as per the requirement.
3. It was analyzed that people that don't have too many savings or have less income are unaffected by demonetization.
4. About 88% of people analyzed to have a bank account.
5. Small retail shops have some problems as sales have decreased and are mostly on credit terms.
6. The usage of digital mode of payment is not there. But the majority of shopkeepers believe that they can adjust to this situation as it will have a good impact in the future and it will help to curb black money.
7. The majority of the people (87%) believed the existence of black money in India and 69% of people think that the government's move to tackle black money is excellent and should be appreciated. 87% response received from the general public shows that demonetization will help to bring a substantial reduction in black money, fake currency, corruption, and terrorism. 52% of people are using a debit card, but still, 35% depends upon cash transactions. 80% of people are aware of banking formalities and 61% faced no difficulty in exchanging old notes but felt it could have been implemented in a better manner. Only 34% of people had faced a problem in meeting daily requirements and curtailed consumption.

Running factor analysis with orthogonal rotation. All variables are referred to by labels which in turn saves space. E.g. For Question 2 Variable (V1) is used and so on.

**Preliminary analysis (Factor analysis)**

**SPSS output 1** show the Pearson correlation coefficient between all pairs of questions on the upper half and the significance of one-tailed coefficients towards the bottom half. The correlation matrix helps to check the pattern of relationships between variables. Firstly, the researcher scans the significance value and check for a variable whose majority of value lies above 0.05 and then scan the correlation coefficient and look for a variable with a value greater than 0.9, if found any then problem can arise because of singularity in data.

For this, determinants of correlation matrix should be checked and if necessary variable causing problems can be eliminated. The determinant value is listed at the bottom of the matrix and has a value of 0.29. Its value should be above 0.00001 which is fairly above the required thereby multicollinearity is not a problem. Since all correlate fairly thereby there is no need of eliminating any variable.

**Table 1:** SPSS output 1 shows the Pearson correlation coefficient between all pairs of questions on the upper half and the significance of one-tailed coefficients towards the bottom half

	VAR 01	VAR 02	VAR 03	VAR 04	VAR 05	VAR 06	VAR 07	VAR 08	VAR 09	VAR 10	VAR 11	VAR 12	VAR 13
VAR01	1	0.499	0.787	0.859	0.813	0.657	0.284	0.208	0.466	0.356	0.675	0.786	0.612
VAR02	0.499	1	0.482	0.652	0.658	0.264	0.425	0.184	0.438	0.013	0.023	0.218	0.313
VAR03	0.787	0.482	1	0.819	0.853	0.601	0.271	0.219	<b>0.787</b>	<b>0.482</b>	0.678	0.819	0.853
VAR04	0.859	0.652	0.819	1	0.841	0.571	-0.381	-0.291	0.859	<b>0.652</b>	<b>0.819</b>	0.678	0.841
VAR05	0.813	0.658	0.853	0.841	1	0.654	0.425	0.183	0.813	0.658	<b>0.853</b>	<b>0.841</b>	0.789
VAR06	0.657	0.264	0.601	0.571	0.654	1	0.088	0.256	0.657	0.264	0.601	<b>0.571</b>	<b>0.654</b>
VAR07	0.284	0.425	0.271	-0.381	0.425	0.088	1	0.474	0.284	0.425	0.271	-0.381	<b>0.425</b>
VAR08	0.208	0.184	0.219	-0.291	0.183	0.256	0.474	1	0.208	0.184	0.219	-0.291	0.183
VAR09	0.466	0.438	0.787	0.859	0.813	0.657	0.284	0.208	1	0.151	0.611	0.503	0.557
VAR10	0.356	0.013	0.482	0.652	0.658	0.264	0.425	0.184	0.151	1	0.684	0.483	0.615
VAR11	0.675	0.023	0.678	0.819	0.853	0.601	0.271	0.219	0.611	0.684	1	0.819	0.357
VAR12	0.786	0.218	0.819	0.678	0.841	0.571	-0.381	-0.291	0.503	0.483	0.819	1	0.366
VAR13	0.612	0.313	0.853	0.841	0.789	0.654	0.425	0.183	0.557	0.611	0.357	0.366	1

**SPSS output 2** shows the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. KMO value lies in the range from 0 to 1. A "0" value reflects that the sum of correlations is small relative to the sum of partial correlations which indicates diffusion in the correlation pattern which results in factor analysis being inappropriate. A "1" value indicates the correlation pattern to be compact thereby yielding reliable and distinct factor analysis. For our data, the value is 0.663 which lies in an acceptable region and it reflects that the factor analysis is appropriate for the given data set.

**Table 2:** SPSS output 2 shows the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity

Kaiser -Meyer Olkin Measure of Sample Adequacy		0.683
Bartlett's Test of Sphericity	Approx. Chi-Square	401.142
	df	78
	Sig.	0.0000

For factor analysis, the relationship between variables should work and if the R-matrix was an identity matrix, then all coefficients of correlation would be zero. Therefore, it has to be significant with values less than 0.05. Bartlett's test is highly significant for these data sets, as value is 0.000 thereby making factor analysis appropriate.

### Factor Extraction

**SPSS output 3** lists out the eigenvalues associated with the components, i.e. the initial eigenvalues or before extraction, the Extracted sum of squared loading or after extraction and Rotation sum of squared loadings or after rotation. Before data is extracted, SPSS has identified 13 components explaining 67% of the variables linear in nature within the data sets available.

**Table 3 - SPSS output 3 shows lists out the eigenvalues associated with the components**

Component	Total Variance Explained										
	Initial Eigenvalues			Extraction	Sums of Squared			Rotation	Sums of Squared		
	Total	% of Variance	Cumulative %	Loadings	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.581	27.546	27.546	3.581	27.546	27.546	2.208	16.988	16.988		
2	1.608	12.389	39.916	1.608	12.369	39.916	1.823	14.021	31.009		
3	1.338	10.289	50.205	1.338	10.289	50.205	1.665	12.808	43.817		
4	1.213	9.332	59.537	1.213	9.332	59.537	1.662	12.782	56.599		
5	1.030	7.920	67.457	1.030	7.920	67.457	1.412	10.858	67.457		
6	0.872	6.711	74.168								
7	0.813	6.255	80.422								
8	0.662	5.091	85.513								
9	0.484	3.725	89.238								
10	0.470	3.614	92.852								
11	0.360	2.769	95.621								
12	0.321	2.468	98.089								
13	0.248	1.911	100.000								

The eigenvalue connected with every factor shows the variance as described by the particular linear components and SPSS displays the percentage of variance for these eigenvalues. It is clear that few first factors describe the relatively larger amount of variance as can be seen for factor 1 and the following factors explain a smaller amount. After extraction, SPSS lists down factors with an eigenvalue greater than 1 thereby giving us five factors. Under the Extracted sums of squared loadings, eigenvalues of factors are displayed again, the only difference being these values are just displayed for the selected factors. Under the Rotation sums of squared loading, the eigenvalues after rotation are displayed where the rotation factor structure is optimized and results in the equal importance of these five factors. Before rotation, factor 1 had the highest variance, whereas after rotation all factors are equalized and the gap is reduced as can be seen in the table. **SPSS output 4**, displays a table of commonalities, both before and after extraction. The principal component analysis method works on an initial assumption and considers all variance common, i.e. commonalities before extraction is all equal to 1.

**SPSS output 5** The column of Extraction shows the commonalities which have common variance in the data structure, i.e. 50.1% of the variance associated with factor 1 is the common or shared variance. Another way commonalities are defined is in the form of a proportion of variance for individual factors. After the extraction is done some factors are eliminated, thereby stating the loss of some information as well. Commonalities after extraction represent the amount of variance explained by

**Table 4:** SPSS output 4 displays a table of communalities, both before and after extraction

**Communalities**

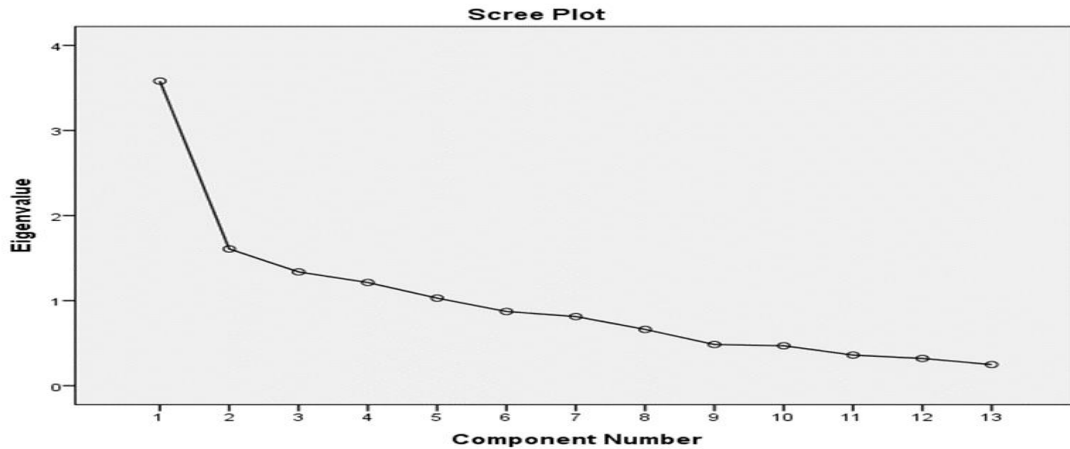
	Initial	Extraction
Black Money	1.000	.542
Fake Currency	1.000	.305
Financial Inclusion	1.000	.561
E Transaction	1.000	.641
Availability of Credit	1.000	.362
Savings	1.000	.739
Government Finances	1.000	.567
Usage of Credit Card Variables	1.000	.571
Usage of Debit Card Variables	1.000	.533
Digitalization	1.000	.751
Use of BHIM & other app for payment	1.000	.647
Knowledge and interaction of Bank executives	1.000	.607
Terms and Conditions of Bank	1.000	.653

	Component						
	1	2	3	4	5	6	7
Black Money	-.137	.437	.289	-.071	.033	-.464	-.163
Fake Currency	.488	.028	-.076	.137	-.069	.116	.150
Financial Inclusion	-.180	.257	.283	.275	-.467	-.298	-.019
E Transaction	.708	.253	.179	-.181	-.101	-.016	-.019
Availability of Credit	.538	.162	.090	.117	-.043	.139	.055
Savings	.509	.208	.141	.209	-.368	.471	-.124
Government Finances	-.410	.235	-.311	.489	.037	.062	-.046
Usage of Credit Card Variables	-.052	.483	.346	.153	.088	.008	.429
Usage of Debit Card Variables	.476	.117	-.234	-.108	-.201	-.253	.350
Digitalization	.087	.490	-.171	-.353	-.049	-.156	-.568
Use of BHIM & other app for payment	-.366	.457	-.264	.195	-.196	.369	-.147
Knowledge and interaction of Bank executives	.590	.146	-.155	.273	.332	-.160	.055
Terms and Conditions	-.367	.277	.464	-.193	-.379	.118	.176

retained factors. The Component matrix gives the component loading or factor loading which is the correlation coefficient between the factors and variables. Values above 0.6 are high values and below 0.4 are usually low values. Factor loading acts as the basis for computing labels to various factors. This is also stated as the central output for factor analysis.

**Factor Extraction: SPSS Output 6,** the Rotated component matrix is a matrix of component loading for each variable onto each factor. It is similar to SPSS output 4 only difference being it is calculated after rotation. Few things need to be considered: Firstly, factor loading less than 0.1 has been suppressed. Secondly, the variables are sorted on the basis of the size of the factors.



**Figure 1:** SPSS output 5 shows The column of Extraction shows the commonalities which have common variance in the data structure

**Interpretation:** The table above shows the rotated solution and is easier to interpret. Factor 1 (Banking Credit and Transaction) is strongly associated with Variables 4, 5, 6. Factor 2 (Financial Inclusion) is strongly associated with Variable 3 and 10. Factor 3 (Government Finances and Transactions) is strongly associated with Variable 7, 12, 13 Factor 4 (Black Money) is strongly associated with Variable 1. Factor 5 (Card Variables), strongly associated with Variable 9. Factor 6 (Digitalization), strongly associated with Variable 11. Factor 7 (Credit Card Variables), strongly associated with Variable 8.

**Table 6:** SPSS Output 6 shows the Rotated component matrix is a matrix of component loading for each variable onto each factor

	Component						
	1	2	3	4	5	6	7
Black Money	-.144	.308	-.144	.277	.165	.537	-.111
Fake Currency	.508	-.135				-.137	
Financial Inclusion		.482		.157		.179	-.511
E Transaction	.676		-.311			.269	
Availability of Credit	.590						
Savings	.757	.132	.223		-.309		
Government Finances	-.213		.622	.308	.102		-.155
Usage of Credit Card Variables	.167	.511		.389	.331		.123
Usage of Debit Card Variables	.407		-.197	-.219	.468		-.234
Digitalization			.138	-.165		.826	
BHIM and Other App		.172	.772			.127	
Knowledge and interaction of Bank executives	.461	-.418	-.144	.359	.260		
Terms and Conditions		.788		-.118			

The variables marked in Yellow are the part of factor and thereby combined together leads to seven factors namely: Factor 1: Banking Credit and Transactions, Factor 2: Financial Inclusion  
 Factor 3: Govt. Finances and Transactions, Factor 4: Black Money, Factor 5: Debit Card Variables, Factor 6: Digitalization and  
 Factor 7: Credit Card Variables.

## RESULTS AND DISCUSSION

From the above analysis and interpretation, it is observed that the KMO value and the Reliability statistics fall in the acceptable regions. With the analysis, we have found seven factors which have clubbed all the rest thirteen variables in them are named

as:

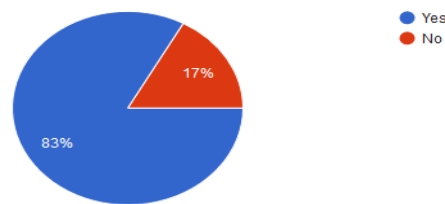
1. Factor 1: Banking Credit and Transactions
2. Factor 2: Financial Inclusion
3. Factor 3: Government Finances and Transactions
4. Factor 4: Black Money
5. Factor 5: Card Variables
6. Factor 6: Digitalization
7. Factor 7: Credit Card Variables

**Table 7:** SPSS Output 7 shows reliability statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
0.769	13

### Analysis of Data from Financial Institutions/Insurance/Non-Banking Finance Companies (NBFCs)

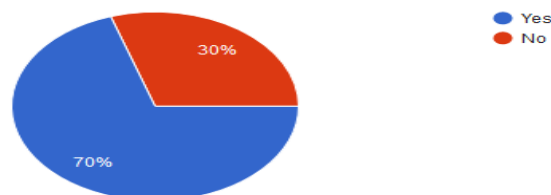
Q.1 Did demonetization affect the Banking/Insurance companies/NBFCs operation or business?



**Figure 2:** shows the percentage of demonetization affect the Banking/Insurance companies/NBFCs operation or business

**Interpretation:** From the above figure we can conclude that 83% of the respondents say that YES demonetization affects the banking/insurance/NBFC operation business, whereas 17% of the respondents say NO demonetization doesn't affect the banking/insurance/NBFC operation business.

Q.2. Does Post demonetization ease the mode of transaction done by the customers?

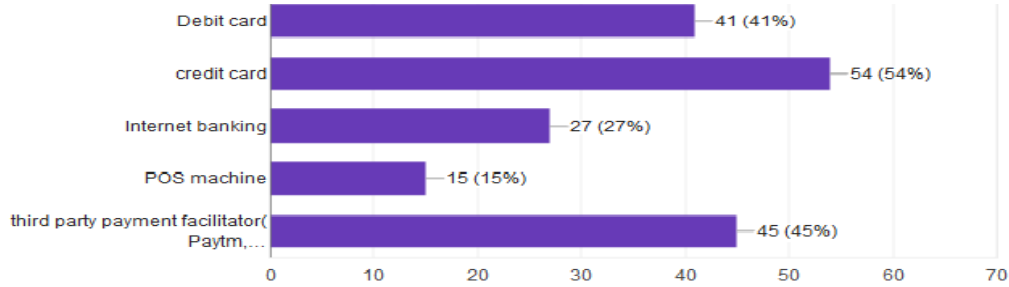


**Figure 3:** shows the percentage of demonetization ease the mode of transaction done by the customers

**Interpretation:** From the above figure we conclude that 70% of the respondents think that YES post demonetization eased the mode of transaction done by the customer, whereas 30% of respondents think that demonetization hasn't impacted the mode of transaction done by the customer.

Q.3. Which is the preferred option used by the customers for financial transactions post demonetization?

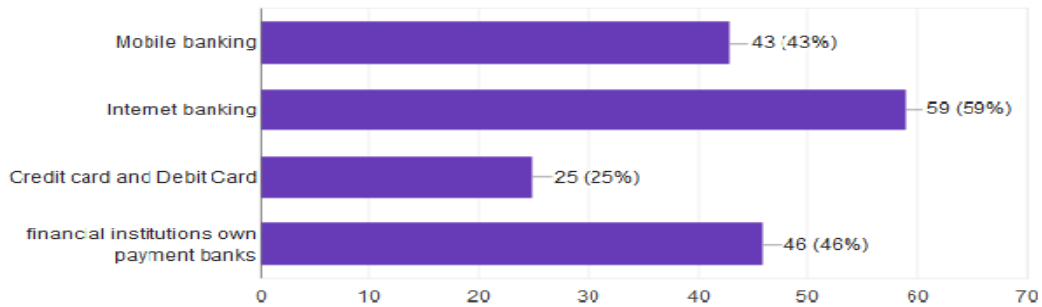




**Figure 4:** shows the percentage of the preferred option used by the customers for financial transactions post demonetization

**Interpretation:** From the above figure we conclude that majority of the respondents 54% of the customer are using credit cards, the second-best option is third party payment facilitators with 45% respondents, third being the debit card usage with 41% respondents opting for it, fourth being internet banking with 27% respondents and lastly it is the POS machine-based payment facility with only 15% respondents opting it.

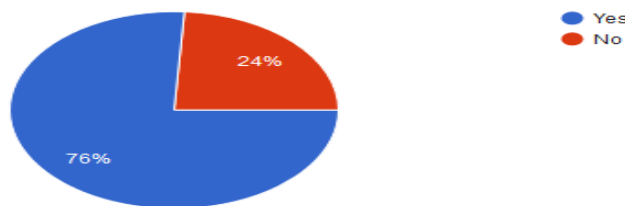
Q.4. What are the different modes of payment the banks/insurance companies/NBFCs are offering?



**Figure 5:** shows the percentage of the different modes of payment the banks/insurance companies/NBFCs are offering

**Interpretation:** From the above figure we conclude that the majority of the users use internet banking as a preferred mode of payment the banks/insurance/NBFC's are offering with 59% respondents, the second medium is Financial institutions own payment banks app with 46% of the respondents, the third medium is mobile banking with 43% respondents, the last is the credit and debit card being used with 25% respondents opting for it.

Q.5. Did NBFCs/Banks/Insurance Companies launch any new platform after demonetization?

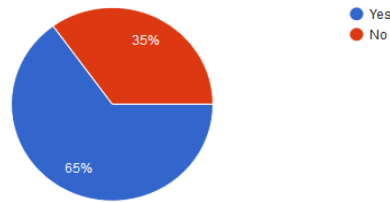


**Figure 6:** shows the percentage of NBFCs/Banks/Insurance Companies launch any new platform after demonetization

**Interpretation:** From the above graph, we conclude that 76% of the respondents say YES financial institutions launched a new platform after demonetization whereas 24% of them think that these institutions had launched no new platform.

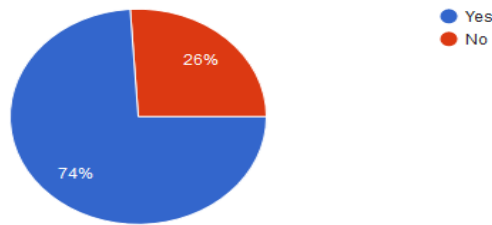
Q.6. Did you see any increase in customer base post demonetization for doing financial transactions using digital mode?

**Interpretation:** From the above figure we conclude that 65% of the respondents think that YES post demonetization there has been an increase in the customer base while the other 35% of the respondents don't see any change in the trend while using the different payment applications.



**Figure 7:** shows the percentage of increase in customer base post demonetization for doing financial transactions using digital mode

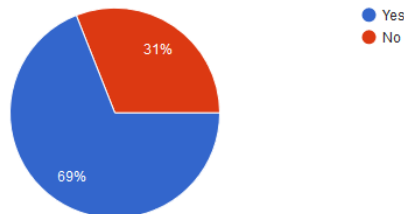
Q.7. Did you see any increase in any plastic money during the post-demonetization period?



**Figure 8:** shows the percentage of increase in any plastic money during the post-demonetization period

**Interpretation:** From the above figure, we conclude that 74% of respondents think that there has been an increase in plastic money during the post-demonetization period while 26% of respondents think that No change happened when it comes to using plastic money instead of cash.

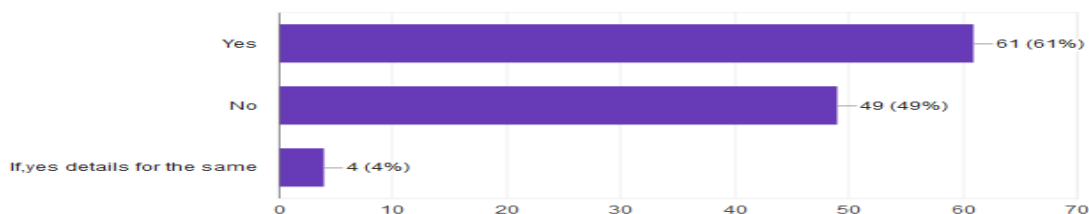
Q.8. Are you providing any training to the customers opting for the cashless facilities?



**Figure 9:** shows the percentage of the customers opting for the cashless facilities

**Interpretation:** From the above figure we conclude that 69% of the respondents think that YES the customers are being provided the required training when it comes to using the less cash facility whereas 31% of the respondents think that customer is not being trained for cashless facility.

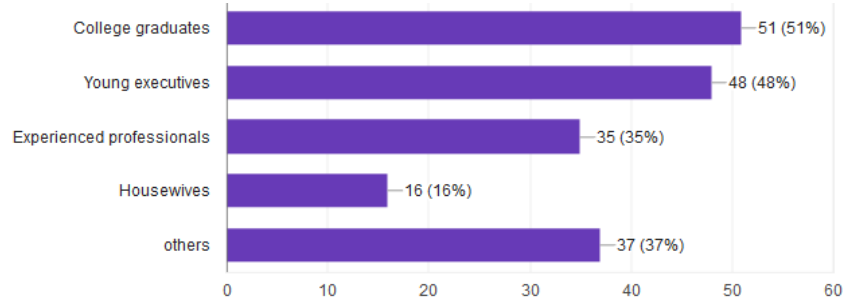
Q.9. Have you conducted or are planning to conduct the financial awareness programs post demonetization for making the different customers use the less cash medium for transactions?



**Figure 10:** shows the percentage of the financial awareness programs post demonetization for making the different customers use the less cash medium for transactions

**Interpretation:** From the above figure we conclude that 61% of respondents agree that Yes they conducted different Financial awareness programs for making the customers know how they should use the cashless medium for doing the transactions whereas closely 49% of the respondents say No they haven't conducted any Financial awareness programs for making the customers know how they should use the cashless medium for doing the transactions.

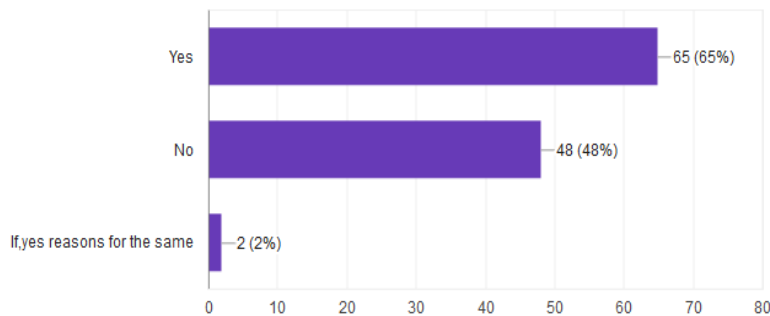
Q.10. During the post-demonetization the different categories of users opting for the digital platforms?



**Figure 11:** shows the percentage of the different categories of users opting for the digital platforms during the post-demonetization

**Interpretation:** From the above figure we conclude that majority of the respondents 51% are college graduates who are using different digital platforms for doing the financial transactions, second to use the digital platforms are young executives with 48% respondents, third with 37% respondents are the others who may be retired or senior executives or school-going children, fourth with 35% respondents are experienced professionals and lastly comes the housewives with 16% respondents opting for different digital payment platforms.

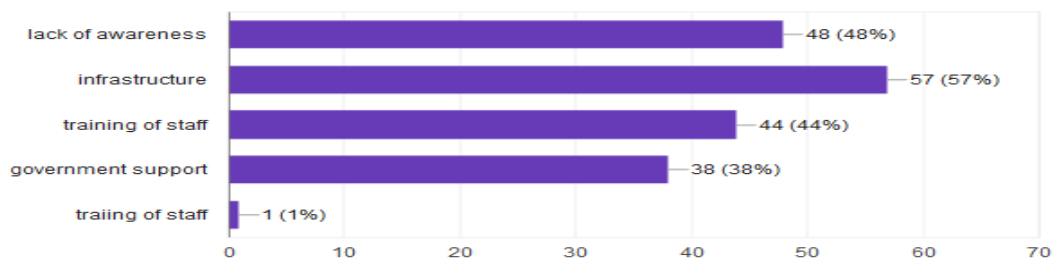
Q.11. Did you get any help from the GOI in promoting the Digital Payment applications for customers?



**Figure 22:** shows show the percentage of any help from the GOI in promoting the Digital Payment applications for customers

**Interpretation:** From the above figure we conclude that YES 65% of the respondents say Govt. of India is helping in promoting the digital payment application for the customers whereas 48% of the respondents don't think Govt. of India is helping in promoting the payment applications.

Q.12. What are the challenges faced by the Financial Institutions in implementing e-banking facilities?



**Figure 33:** shows the percentage of challenges faced by the Financial Institutions in implementing e-banking facilities



**Interpretation:** From the above figure we conclude that majority respondents (57%) see infrastructure as a major challenge faced by different financial institutions in implementing the e-payment facility, the second comes is lack of awareness with (48%) respondents, third being training of staff with (44%) respondents, fourth being lack of Govt. support with (38%) respondents are some of the challenges faced by financial institutions in implementing the e-payment facility.

## CONCLUSION

The Indian retail market has been nurtured by the cash dealings. The move of the government was supported by the majority of citizens and retailers. The demonetization forced people to use the other form of digital payment options. The trade in the market was impacted and the retail sales witnessed a dip for the short term. After a short period, the retail market recovered. After almost 2 years' time, it can be said that demonetization was a historical step. The cashless economy is need of the hour but still after many initiatives and the education programs run by the government the ground reality is that still majority of the respondents (57%) think infrastructure as a major hurdle in between a successful implementation of a less-cash economy with lack of awareness (48%) respondents think it a major challenge when it comes to implementing the e-payment facility. In spite of Government. Promoting extensively to use the digital platforms of payment still (48%) feels that still lot more needs to be done from the Govt. of India by helping the customers in using the digital applications. The majority of the respondents in an era of WhatsApp, Facebook, and YouTube are opting for the digital medium of payments are college graduates and young executives with 51% and 48% respondents respectively. Along with Government. of India, regulator Reserve Bank of India (RBI), financial institutions, insurance companies, mutual fund, NBFC's are conducting different Financial awareness programs from time to time when it comes to using the digital payment applications with 61% respondents replied that they are being trained for the same. 74% respondents agree to the fact that YES the usage of plastic money increased post demonetization with the increase in the launch of the respective payment based applications by different financial institutions with 76% respondents agree to the above statement along with an increase in the establishment of third party payment facilitator like Paytm, PayPal, etc. with 45% of respondents prefer in addition to the usage of debit & credit card (51%) with internet banking. There are many reasons for using the less cash facility and they are it saves time, energy, it is convenient, easy to use once you understand, economical with the implementation of cashback facility, reward points, discounts using a particular debit or credit card. Post demonetization changes the working pattern in the economy. It majorly impacts and targets the cash retail sector of the market, as they tolerated the main shock of this initiative. It becomes harder for them to work effectively in such massive market conditions. It directly impacts their earning and consumption pattern because they are cash dependents i.e. both the buyer and the retailer are involved in cash-based transactions which cause the major downfall in the cash retail sector of India.

Demonetization goes optimistically as well as pessimistically in the Indian Market. It provides a constructive impact to the cash retail sector as it makes them aware of the digitalized world but initially being cashless make them feel uncomfortable and insecure about such digital payment gateways and platforms which results into the trust issues by the middle class who aren't much aware of all these platforms but it enforced them to open and use their bank accounts under different schemes provided by the Government of India and utilize them to bring stability in the market.

Pessimistically it brings forward various day to day difficulties for the middle class and cash using retailers such as purchasing their households item with a limited amount of money, changing old currency notes with new currency notes without having bank accounts, difficulties in accepting payments from customers by a digital platform, etc.

**Suggestions and recommendations:** At last we can say that the less cash facility will have to cover a long journey with the citizens, the financial institutions, Govt. taking interest in implementing it in full swing but still we need the basic infrastructure, proper training, more awareness about the pros and cons of digital payment providers and digital payment applications and various incentives provided both for the providers and customers along with the safety and security of financial transactions and systems to be used at large.

**Scope for Further studies:** The analysis could be expanded further to cover the statewide awareness and impact of Demonetization. In addition, the study could be conducted to know how demonetization activity has influenced the various sectors of the economy and life of the people.

**Limitations of Study:** The study is mainly focused on Uttarakhand so the result could differ in different states of India and could give a different result when we draw an overall conclusion.

**The implication of Study:** The aim of demonetization is to create a visible digital economy and to curb the black and fake currency in the economy. The degree of inconvenience is the short-term pain and it will pave the way for long-term gains. Its position in India is a remarkable place in international affairs and makes the entire foreign countries to watch India and make their plan according to the Indian economy. It is therefore essential to have a study on post demonetization impact on cash retailing.

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