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Access to Digital Means of Financial Inclusion by the Scheduled Castes and Scheduled Tribes

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Abstract

Indian financial services landscape is undergoing a technology driven change. Government has accelerated its approach to achieve financial inclusion with the help of digital technology in banking services. This shift from Brick and motor business to digital platforms will help to deliver the services in remote regions, at a low cost, and subsequently increase digital financial access to provide high quality, affordable financial services. In India, as part of the Digital financial inclusion there are several initiatives have been commenced to shape the public infrastructure into the digital ecosystem space which includes the available technologies such as Immediate Payment Service (IMPS), Unified Payment Interface (UPI), Internet banking and e-banking etc. The current study aims at assessing the access and usage of digital means of financial inclusion by the scheduled casts and scheduled tribes.

Keywords: *Cashless Economy, Digital Financial Inclusion, Digital India, DFI, Digital Innovations*

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Introduction:

Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost (Reserve bank of India, 2017), it is the formal definition given by the central bank to the process of financial inclusion. Financial Inclusion, generally defined, as universal access to a varied range of financial services at a reasonable cost. These contain not only banking products but also other financial services such as insurance and equity products. Importance of financial inclusion rises from the problem of financial exclusion; the recent statistics of world bank shows that nearly 3 billion peoples are excluded from the formal financial services across the world. Over the years, several definitions of financial inclusion/exclusion have evolved. Financial Inclusion is significant not only from the viewpoint of the benefit it provides to the poor but also from the perspective of overall steadiness of the social and economic system of the country. Former President (Mukarje, 2010) said that "financial inclusion was a key determinant of sustainable and inclusive growth which could unlock the vast hidden potential of savings consumption and investment propensities of the poorer sections of society", Financial Inclusion of the underprivileged section has a multiplier effect on the economy as a whole, through higher savings pooled from the massive sections of the population present at the bottom of the pyramid. There is a potential for transforming the lives of these omitted groups by providing access to formal savings arrangements and extension of credit by banks for emergency and entrepreneurial activities, thereby enabling the poor to create assets,

generate stable revenue, build resilience to meet macro-economic and livelihood shocks and bring about an enhancement in their financial situation and living standards.

The Government of India and the Reserve Bank of India have been taking intensive efforts to promote financial inclusion as one of the vital national objectives of the country. Some of the main efforts made in the last five decades include - nationalization of banks, construction up of robust branch network of scheduled commercial banks, co-operatives and regional rural banks, introduction of mandated priority area advancing targets, lead bank scheme, formation of self-help groups, allowing BCs/BFs to be appointed by banks to provide door step delivery of banking services, zero balance BSBD accounts, etc. The central objective of all these initiatives is to reach the large sections of the financially excluded Indian population. In India, several initiatives have been commenced to shape the public infrastructure in the digital ecosystem space. Today, there are several openly available technologies such as Immediate Payment Service (IMPS), Unified Payment Interface (UPI) and National Unified USSD Platform etc.…can empower digital transactions both online and offline to banks. NPCI, a key stakeholder in the payments industry has played an active role in strengthening the retail payments ecosystem through offerings such as RuPay cards, UPI, as well as the newly launched the BHIM (Bharat Interface for Money) application which permits users to make transactions through UPI on their smart phones. The digital ecosystem has also seen a development in aggregators, both at the front-end and back-end such as Oxygen, Its Cash, m-PESA, PaySe etc. which focus on providing financial services to the poor. Further, the beginning of India Stack - a set of Application Program Interface (API) allows governments, businesses, startups and developers to handle digitally using a unique digital Infrastructure that enables presence-less, paperless, and cashless service delivery.

Review of Literature

The concept of financial inclusion is considered to be important from the past days for a nation because successful financial inclusion in all sections of the society is a pre-request for successful economic growth, as both are correlated **(Joseph& Varghese, 2014)**. lack of proper awareness regarding concpets of financial litercy leads to many financial problems **(Banthia & Mangaraj, 2017)**. Even if India is in a technological era, it's a fact that majority of the population is still out of the preview of proper financial inclusion **(Bhuvana&Vasantha,2013)** The major cause for this under inclusion is lack of proper knowledge and awareness regarding the related aspects of financial literacy **(Dev,2006)**. Cost of technological equipment's and unavailability is also two major reasons **(Baza&Rao,2017)**. The various literatures say that, the lack of proper knowledge, the accessibility and affordability of various financial services has always been a problem for the success of financial inclusion in India **(Iqbal & Sami, 2017), (Aalurl et.al, 2016), (Dbillon, 2014)**. It's also a proved thing that the increased level of financial knowledge will help the individuals in achieving financial freedom **(Banthia & Mangaraj, 2017)**. The concept of Digital Financial Inclusion is of a recent development in India (Deb & Aarti Agrawal, 2017)**.** It gets its significance after the development of digital means and know-hows as a part of the Digital India Initiatives**. (Mas & Porteous, 2017)** The initiatives taken by the central government such as Digital India initiative, Aadhar card, Direct benefit transfer, Retail banking, PMJBY, Mudra Bank, PMBY etc. also played an effective role in attainment of digital financial inclusion objectives **(Srinivas, 2017)**. Along with the initiatives of Government, the banks, being the actual implementors, played a better role in the achievement of financial inclusion with the help of digital technologies **(Atroley, et al., 2015)** they are taking as such many initiatives and programmes for the popularization of digital financial inclusion**.(Aalurl et al., 2016)** These digital financial innovations and developments are capable of making transformation in economy as well as among the citizens in the country **(Thorat,2008).** The transformation arisen to the citizens as a result of the development of digital financial technologies is an unexplored research area **(Rastogi & Ragabiruntha E, 2018).**

Research Problem

The government has taken several initiatives, including digital India initiatives, to accelerate the financial inclusion rate with the help of digital innovations in banking services. The recent measures taken by RBI for financial inclusion include the use of digital technologies to reach the unbanked population on the realization that the economy can only be empowered when the country is able to achieve a holistic development of all segments of

society, which would unfold huge opportunities for financial services. digital platforms are likely to deliver financial services to people who do not bank and the underbanked, especially in rural areas. The use of digital channels helps to reduce transaction costs than traditional channels. The development and availability of digital innovations have made changes in the lifestyle of Indian citizens. The government through financial machinery is always trying to motivate the people to depend digital innovations to avail banking and financial services so as to overcome the difficulties in traditional system for financial inclusion. A new concept of digital financial inclusion has been brought to light in order to transform people, especially those who marginalized economically and socially. The success of any initiative depends upon the exact use of such technology. But it is question whether these digital updates actually reach the bottom level and whether they use it in county like India. As India is a country with diverse class structure. There are still economically and socially marginalized groups like SC, ST, OBC and OEC. In this context, this study raises a research question about the extent to which digital means reaches and are accessed by the SCs and STs.

Methodology

The main objectives of this research are to assess the extent of access to digital innovations among SCs and STs. A descriptive design has been adopted to address the research problem. The required sample for the study is taken from a population of 1,75,881 (SC:53909, ST: 21972) Scheduled Castes and Scheduled Tribes in Kottayam district of Kerala (Census 2011). A pilot study was conducted with a sample of 50 respondents prior to the data collection for the purpose of identifying the nature of data, checking reliability of the scales, validity of the data collection instrument and for determining the sample size. Multi-stage random sampling technique has been employed for the selection of final destinations from which the samples are to be drawn. Snowball sampling technique is used to find the required numbers respondents from the selected destinations. The sample size of 235 for the study was determined by using standard statistical formula.

$$\text{Sample size} = \left(\frac{\sigma * 1.96}{\mu * 0.05}\right) 2$$

Primary data were collected using a pretested structured interview schedule. Descriptive and inferential statistics were used to test the data.

Empirical Findings and Discussions

This study basically evaluates the access and use of major means of digital financial inclusion such as Immediate Payment Service (IMPS), Unified Payments Interface (UPI), Bank PoS, ATM's, Mobile banking, Internet banking and Banking applications.

Immediate Payment Service is a digital innovation that allows the customers to transfer funds to accounts instantly using mobile phones. Majority of the respondents do not have much access and knowledge regarding IMPS only around 13 percent of the respondents have proper knowledge, access, availability. More than 80 percent of the respondents do not have any opinion regarding this which shows their lack of knowledge and access. Among the respondents using IMPS majority are using it for fund transfer. In case of Unified Payments Interface (UPI) is a real-time fund transfer mechanism developed by National Payments Corporation of India. Only around 12 percent of the respondents have proper knowledge regarding UPI. Around 85 percent of the respondents do not have any opinion regarding the UPI which shows their lack of knowledge, availability to it and access. Among the respondents using UPI majority are using it for banking and fund transfer. With regard to the Bank PoS, the swiping machine used at the point of sale. Majority of the respondents do not have much access and knowledge regarding Bank POS. Only around 14 percent of the respondents have proper knowledge, only 8.1 percent of the respondents consider Bank PoS as convenient. Around 90 percent of the respondents do not have any opinion regarding Bank PoS which shows their lack of knowledge and access. Among the respondents using Bank PoS majority are using it for shopping. ATM's are the most commonly used means of digital financial inclusion. Among the total respondents' 86 percent of the respondents have the knowledge and sufficient information regarding ATM's. 95.3 percent of the respondents have the accessibility to it. Which means majority

of them have ATM cards. 87 percent found it to be convenient. And 63.4 percent have the information regarding redressal mechanism. Regarding the usage 60 percent of the respondents are yet to use the ATM cards. even if they have ATM Cards, they are not using it. ATM's are mainly used for Banking.

In case of M-Banking, out of the total respondents' 34.9 percent of the respondents have sufficient knowledge relating to this initiative. 33.1 percent found it as accessible, among total respondents' 31.9 percent are of the opinion that this is convenient and only 24.2 percent have knowledge about redressal mechanism. Around 70 percent of responded have no opinion which means their lack of knowledge. Among the respondents using M-Banking it is mainly used for Banking activities. Internet banking is one another most commonly used means of digital financial inclusion. Out of the total respondents' 49.4 percent of the respondents have sufficient knowledge relating to this initiative. 49.4 percent found it as accessible, among total respondents' 44.7 percent are of the opinion that this is convenient and only 28.5 percent have knowledge about redressal mechanism. Around 50 percent of responded have no opinion which means their lack of knowledge regarding internet banking. Among the respondents using Internet-Banking it is mainly used for banking and fund transfer. Banking Apps means using various application developed by the banks for banking activities. Out of the total respondents 37.4 percent of the respondents have sufficient knowledge relating to banking apps an equal number of respondents found it as accessible, among total respondents' 34 percent are of the opinion that this is convenient and only 31.9 percent have knowledge about redressal mechanism. Around 60 percent of responded have no opinion which means their lack of knowledge regarding banking apps and it usage. Among the respondents using apps, it is mainly used for fund transfer.

Hypothesis Testing – Caste and Accessibility to Digital Innovations

1 Access to IMPS and Caste

Ho: There is no significance difference in the access of IMPS between Scheduled castes and Scheduled Tribes

Table No: 1

Mann-Whitney Result of access to IMPS and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
IMPS	Sufficient information	SC	194	120.10	3569	-1.68	.091	H0 upheld
		ST	41	108.05				
	Approachability/	SC	194	119.69	3649	-1.39	.164	H0 upheld
		ST	41	110				
	Devices required	SC	194	117.71	3920	-.239	.811	H0 upheld
		ST	41	119.39				
	Availability from other side	SC	194	119.59	3669.5	-1.04	.160	H0 upheld
		ST	41	110.50				
	Convenience	SC	194	119.28	3729.5	-1.11	.266	H0 upheld
		ST	41	111.96				
	Access to service providers	SC	194	117.81	3940	-.153	.878	H0 upheld
		ST	41	118.90				
	Redressal mechanism	SC	194	119.06	3770.5	-.928	.353	H0 upheld
		ST	41	112.96				

Source: Primary Data

The above table shows the test result of test result of Man-Whitney U test conducted to measure the difference between the SC's and ST's regarding access to digital innovations. While comparing the mean ranks, we can see that For Scheduled Caste's the variables such as Knowledge, Accessibility, Availability from other side, Convenience and Redressal mechanism has mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more access regarding those variables. On the other hand, regarding the variable's devices required and access to service providers ST's have more mean rank which means they have more access regarding that variable.

From the above table it can be seen that regarding the knowledge of IMPS the M/U value is 3569 with z value of -1.688 and a P value of .091 which shows a non-significant result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's. Regarding the accessibility to IMPS the M/U value is 3649 with z value of -1.392 with a P value of .164 which shows also significant result. The next variable is the availability of devices required.it has a M/U value is 3920 with z value of -.239 with a P value of .811 which shows a non-significant result, which means the null hypothesis is accepted. the variable availability of service from other side also shows a non-significant result with M/U value of 3669.5 with z value of -.1.045 with a P value of .160. regarding the convenience of IMPS, it has a M/U value 3729.5 with z value -1.113 and P value of .266 in this case also the hypothesis stands accepted. Regarding the access to service providers related with IMPS the statistical test shows a non-significant result with M/U value 3940 with z value -.153 and P value of .878. The access to redressal mechanism shows a M/U value is 3770.5 with z value of -.928 with a P value of .353 which also shows a non-significant result. While checking the statistical test results of Man-Whitney u test among the variable', it can see that in every case the null hypothesis is upheld which means that the null hypothesis is accepted in every case i.e. there is no significant difference in the access between SC's and ST's.

2 Access to UPI and Caste

Ho: There is no significance difference in the access of UPI between Scheduled castes and Scheduled Tribes

Table No: 2

Mann-Whitney Result of access to UPI and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
UPI	Sufficient information	SC	194	117.58	3896	-.339	.734	H_0 upheld
		ST	41	119.98				
	Approachability/	SC	194	119.01	3782	-.957	.339	H_0 upheld
		ST	41	113.24				
	Devices required	SC	194	116.91	3765	-.966	.334	H_0 upheld
		ST	41	123.16				
	Availability from other side	SC	194	116.78	3740	-1.10	.271	H_0 upheld
		ST	41	123.78				
	Convenience	SC	194	116.65	3714	-1.28	.198	H_0 upheld
		ST	41	124.40				
	Access to service providers	SC	194	116.35	3657	-1.56	.117	H_0 upheld
		ST	41	125.79				
	Redressal mechanism	SC	194	116.55	3696	-1.35	.177	H_0 upheld
		ST	41	124.84				

Source: Primary Data

The test result of Man-Whitney U test conducted to measure the difference between the SC's and ST's regarding access to UPI. While comparing the mean ranks, we can see that For Scheduled Caste's the Accessibility has only a mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more accessibility than that of ST's. On the other hand, regarding the other variables such as Knowledge, Devices required Availability from other side, Convenience and Redressal mechanism etc. ST's have more mean rank which means they have more access regarding that variable.

From the above table it can be seen that regarding the knowledge of UPI the M/U value is 3896 with z value of -.339 and a P value of .734 which shows a non- significant result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's. Regarding the accessibility to UPI the M/U value is 3782 with z value of -.957 with a P value of .339 which shows also non-significant result. The next variable is the availability of devices required, it has a M/U value is 3765 with z value of -.966 with a P value of .334 which also shows a non-significant result, which means the null hypothesis is accepted. the variable

availability of service from other side also shows a non-significant result with 3740 with z value of -1.101 with a P value of .271. regarding the convenience of UPI, it has a M/U value 3714 with z value -1.288 and P value of .198 in this case also the hypothesis stands accepted. Regarding the access to service providers related with UPI the statistical test shows a significant result with M/U value 3696 with z value -1.350 and P value of -.117 The access to redressal mechanism shows a M/U value is 3696 with z value of -1.350 with a P value of .177 which also shows a non- significant result.

3 Access to Bank POS and Caste

Ho: There is no significance difference in the access of Bank POS between Scheduled castes and Scheduled Tribes.

It can be seen that regarding the knowledge of bank PoS the M/U value is 3901.5 with z value of -.309 and a P value of .758 which shows a non-significant result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's. Regarding the accessibility to bank PoS the M/U value is 3762 with z value of -1.076 with a P value of .282 which shows also non-significant result. The next variable is the availability of devices required, it has a M/U value is 3891 with z value of -.385 with a P value of .700 which also shows a non-significant result, which means the null hypothesis is accepted.

Table No: 3
Mann-Whitney Result of access to Bank POS and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
Bank POS	Sufficient information	SC	194	118.39	3901.5	-.309	.758	H_0 upheld
		ST	41	116.16				
	Approachability/	SC	194	119.11	3762	-1.07	.282	H_0 upheld
		ST	41	112.76				
	Devices required	SC	194	117.56	3891	-.385	.700	H_0 upheld
		ST	41	120.09				
	Availability from other side	SC	194	117.14	3809.5	-.807	.420	H_0 upheld
		ST	41	122.09				
	Convenience	SC	194	116.94	3771	-.992	.321	H_0 upheld
		ST	41	123.02				
	Access to service providers	SC	194	116.83	3750	-1.11	.266	H_0 upheld
		ST	41	123.52				
	Redressal mechanism	SC	194	116.92	3767	-.990	.322	H_0 upheld
		ST	41	123.11				

Source: Primary Data

The variable availability of service from other side also shows a significant result with 3809.5 with z value of -.807 with a P value of .420. regarding the convenience of bank PoS, it has a M/U value 3771 with z value -0992 and P value of .321 in this case also the hypothesis stands accepted. Regarding the access to service providers related with bank PoS the statistical test shows a significant result with M/U value 3750 with z value -1.112 and P value of .266. The access to redressal mechanism shows a M/U value is 3767 with z value of -.990 with a P value of .322 which also shows a non-significant result.

The result of Man-Whitney U test conducted to measure the difference between the SC's and ST's regarding access to Bank Pos. While comparing the mean ranks, we can see that For Scheduled Caste's the variables such as Knowledge, Accessibility has a mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more accessibility than that of ST's. On the other hand, regarding the other variables such as Devices required Availability from other side, Convenience and Redressal mechanism etc. ST's have more mean rank which means they have more access regarding that variable.

4 Access to ATM and Caste

Ho: There is no significance difference in the access of ATM between Scheduled castes and Scheduled Tribes

Table No: 4

Mann-Whitney Result of access to ATM and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
ATM	Sufficient information	SC	194	120.28	3535	-1.233	.218	H_0 upheld
		ST	41	107.22				
	Approachability/	SC	194	119.83	3622	-1.019	.308	H_0 upheld
		ST	41	109.35				
	Devices required	SC	194	119.64	3659	-.866	.387	H_0 upheld
		ST	41	110.26				
	Availability from other side	SC	194	121.14	3314.5	-1.773	.076	H_0 upheld
		ST	41	101.84				
	Convenience	SC	194	117.35	3850	-.349	.727	H_0 upheld
		ST	41	121.10				
	Access to service providers	SC	194	118.25	3929	-.128	.898	H_0 upheld
		ST	41	116.83				
	Redressal mechanism	SC	194	119.62	3662	-.833	.405	H_0 upheld
		ST	41	110.32				

Source: Primary Data

While comparing the mean ranks, we can see that For Scheduled Caste's the variables such as Knowledge, Accessibility, Devices required, Availability from other side, Access to service providers and Redressal mechanism has mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more accessibility than that of ST's in that variables. On the other hand, regarding the variable Convenience ST's have more mean rank which means they have more convenience in access to ATM.

From the table it can be seen that regarding the knowledge of ATM the M/U value is 3535 with z value of -1.233 and a P value of .218 which shows a non-significant result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's. Regarding the accessibility to ATM the M/U value is 3622 with z value of -1.019 with a P value of .308 which shows also significant result. The next variable is the availability of devices required, it has a M/U value is 3659 with z value of -.866 with a P value of .387 which also shows a non-significant result, which means the null hypothesis is accepted. the variable availability of service from other side also shows a significant result with 3314 with z value of -1.773 with a P value of .076. regarding the convenience of ATM, it has a M/U value 3850 with z value -0.349 and P value of .727 in this case also the hypothesis stands significant. Regarding the access to service providers related with UPI the statistical test shows a significant result with M/U value 3929 with z value -.128 and P value of -.898 The access to redressal mechanism shows a M/U value is 3662 with z value of -.833 with a P value of .405 which also shows a non-significant result.

6.5 Access to M-Banking and Caste

Ho: There is no significance difference in the access of M-Banking between Scheduled castes and Scheduled Tribes

The results show the test result of Man-Whitney U test conducted to measure the difference between the SC's and ST's regarding access to M-Banking. While comparing the mean ranks, we can see that For Scheduled Caste's the variables such as Knowledge, Accessibility, Devices required, Convenience, Access to service providers has mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more accessibility than that of ST's in that variables. On the other hand, regarding variable convenience ST's have more mean rank which means they have more access to such aspects of DBT. From the table 6.32 it can be seen that regarding the knowledge of M-Banking the M/U value is 3596.5 with z value of -1.112 and a P value of .262 which shows a non-significant

result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's.

Table No: 5

Mann-Whitney Result of access to M-Banking and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
M-Banking	Sufficient information	SC	194	119.96	3596.5	-1.11	.262	H_0 upheld
		ST	41	108.72				
	Approachability/	SC	194	119.34	3717.5	-.773	.439	H_0 upheld
		ST	41	111.67				
	Devices required	SC	194	119.28	3728	-.781	.435	H_0 upheld
		ST	41	111.93				
	Availability from other side	SC	194	119.44	3698	-.903	.367	H_0 upheld
		ST	41	111.20				
	Convenience	SC	194	119.36	3713.5	-.800	.424	H_0 upheld
		ST	41	111.57				
	Access to service providers	SC	194	118.04	3970	-.022	.982	H_0 upheld
		ST	41	117.83				
	Redressal mechanism	SC	194	117.88	3953	-.077	.939	H_0 upheld
		ST	41	118.59				

Source: Primary Data

Regarding the accessibility to M-Banking the M/U value is 3717.5 with z value of -.773 with a P value of .439 which shows also non-significant result. The next variable is the availability of devices required, it has a M/U value 3728 with z value of -.781 with a P value of .435 which also shows a non-significant result, which means the null hypothesis is accepted. the variable availability of service from other side also shows a non-significant result with 3698 with z value of -.903 with a P value of .367. regarding the convenience of M-Banking, it has a M/U value 3713.5 with z value -.800 and P value of .424 in this case also the hypothesis stands accepted. Regarding the access to service providers related with M-Banking the statistical test shows a non-significant result with M/U value 3970 with z value -.022 and P value of -.982 The access to redressal mechanism shows a M/U value is 3953 with z value of -.077 with a P value of .939 which also shows a non-significant result.

6 Access to Internet Banking and Caste

Ho: There is no significance difference in the access of Internet Banking between Scheduled castes and Scheduled Tribes

Table No: 6

Mann-Whitney Result of access to Internet Banking and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
Internet Banking	Sufficient information	SC	194	121.50	3297.5	-1.85	.063	H_0 upheld
		ST	41	101.43				
	Approachability/	SC	194	121.33	3331.5	-1.77	.076	H_0 upheld
		ST	41	102.26				
	Devices required	SC	194	121.26	3344	-1.75	.079	H_0 upheld
		ST	41	102.56				
	Availability from other side	SC	194	121.27	3343	-1.78	.075	H_0 upheld
		ST	41	102.55				
	Convenience	SC	194	120.10	3569.5	-1.13	.255	H_0 upheld
		ST	41	108.06				
	Access to service providers	SC	194	119.50	3685.5	-.882	.378	H_0 upheld
		ST	41	110.89				
	Redressal mechanism	SC	194	118.88	3807	-.536	.592	H_0 upheld
		ST	41	113.85				

Source: Primary Data

The table shows the test result of test result of Man-Whitney U test conducted to measure the difference between the SC's and ST's regarding access to Internet Banking. While comparing the mean ranks, we can see that For Scheduled Caste's all the variables such as Knowledge, Accessibility, Devices required, Convenience, Access to service providers has mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more accessibility than that of ST's in that variables. From the table 6.33, it can be seen that regarding the knowledge of Internet Banking the M/U value is 3297.5 with z value of -1.856 and a P value of .063 which shows a non-significant result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's. Regarding the accessibility to Internet Banking the M/U value is 3331.5 with z value of -1.777 with a P value of .076 which shows also non-significant result. The next variable is the availability of devices required, it has a M/U value 3344 with z value of -1.756 with a P value of .079 which also shows a non-significant result, which means the null hypothesis is accepted. the variable availability of service from other side also shows a non-significant result with 3343 with z value of -1.780 with a P value of .075. regarding the convenience of Internet Banking, it has a M/U value 3569.5 with z value -1.139 and P value of .255 in this case also the hypothesis stands accepted. Regarding the access to service providers related with Internet Banking the statistical test shows a non-significant result with M/U value 3685.5 with z value -.882 and P value of -.378 The access to redressal mechanism shows a M/U value is 3807 with z value of -.536 with a P value of .592 which also shows a non-significant result.

7 Access to Banking Apps and Caste

Ho: There is no significance difference in the access of Banking Apps between Scheduled castes and Scheduled Tribes

Table No: 7
Mann-Whitney Result of access to Banking Apps and Caste

DI		Caste	N	Mean Rank	M/U Value	Z value	P value	Decision
Banking Apps	Sufficient information	SC	194	120.43	3506.5	-1.43	.171	H_0 upheld
		ST	41	106.52				
	Approachability/	SC	194	120.55	3482.5	-1.43	.151	H_0 upheld
		ST	41	105.94				
	Devices required	SC	194	120.22	3546.5	-1.26	.206	H_0 upheld
		ST	41	107.50				
	Availability from other side	SC	194	120.86	3421.5	-1.70	.088	H_0 upheld
		ST	41	104.45				
	Convenience	SC	194	119.95	3599	-1.12	.261	H_0 upheld
		ST	41	108.78				
	Access to service providers	SC	194	118.89	3805	-.522	.601	H_0 upheld
		ST	41	113.80				
	Redressal mechanism	SC	194	118.86	3809.5	-.505	.614	H_0 upheld
		ST	41	113.91				

Source: Primary Data

The results show Man-Whitney U test conducted to measure the difference between the SC's and ST's regarding access to Banking Apps. While comparing the mean ranks, we can see that For Scheduled Caste's all the variables such as Knowledge, Accessibility, Devices required, Convenience, Access to service providers has mean rank higher than that of Scheduled Tribes. Which means that Scheduled castes has more accessibility than that of ST's in that variables. From the table 6.34 it can be seen that regarding the knowledge of Banking Apps the M/U value is 3506.5 with z value of -1.437 and a P value of 1.71 which shows a non-significant result, which means that there is no significant difference in the availability of information and knowledge between the SC's and ST's. Regarding the accessibility to Banking Apps the M/U value is 3482.5 with z value of -1.437 with a P value of .151 which shows also non-significant result. The next variable is the availability of devices required, it has a M/U value

3546.5 with z value of -1.266 with a P value of .206 which also shows a non-significant result, which means the null hypothesis is accepted. the variable availability of service from other side also shows a non-significant result with 3421 with z value of -1.706 with a P value of .088. regarding the convenience of Banking Apps, it has a M/U value 3599 with z value -1.124 and P value of .261 in this case also the hypothesis stands accepted. Regarding the access to service providers related with Banking Apps the statistical test shows a non-significant result with M/U value 3805 with z value -.522 and P value of -.601 The access to redressal mechanism shows a M/U value is 3809 with z value of -.505 with a P value of .614 which also shows a non-significant result.

Conclusion

The objective of the study was to assess the accessibility and usage by Scheduled castes and scheduled tribes towards various digital innovations for digital financial inclusion. Digital innovations are the measures or mediums/ channels through which the digital services are delivered. Mere knowledge doesn't mean that they are using it. The success of digital financial inclusion depends upon the usage of these digital innovations by the respondents. in this study access is measured in terms of its knowledge, approachability, devices required, availability form other side, convenience, access to service providers and redressal mechanism.

The analysis showed that M-Banking and banking apps have the main popularity among the given digital innovations, around 80% of the respondents are having the basic banking account, 50% of the respondents are having access to internet banking, 30 % of respondents have access to M-Banking, and a 40 % of respondents are using ATM cards and Banking Apps too. The respondents are having the least access to Bank PoS. only 10 percent having the access to these digital innovations. Regarding the other medium of digital innovations such as IMPS, UPI, e-wallet, AEPS, Rupay Card, BHIM App, DBT, Payment banks etc. around only 80% of the respondents are not having proper access to those measures. A statistical test is also conducted to test the hypothesis that do there is any significant difference in the access to various digital innovations between the scheduled castes and scheduled tribes. The results proved that there is no difference in the access to various digital innovations between the scheduled castes and scheduled tribes.

Reference

Aaluri, S., Naratana, S. & Kumar, V., 2016. A study on financial Inclusion initiatives and progress with reference to Indian banking industry in digital era. International Journal of Research in Finance and Marketing, October, 6(10), pp. 125-134.

Atroley, N., Shah, M. & Pande, K., 2015. *Role of digital banking in further financial inclusion,* New Delhi: KPMG.

Bamoriya, P. S. & Singh, P., 2011. Issues & Challenges in Mobile Banking in India: A customers Prespective. *Research Journal of Finance and Accounting,* November, 2(2), pp. 1-12.

Banthia, D. & Mangaraj, S., 2017. A Lietrature review on financial literacy- A pathway for achieving financial freedom. *Siddgant,* Januvary, 17(1), pp. 98-102.

Baza, A. U. & Rao, S., 2017. Financial Inclusion in Ethiopia. *International Journal of Economics and Finance,* 9(4), pp. 191-201.

Bhuvana, M. & Vasantha, S., 2017. A structural Equation Modeling (SEM) Approach for Mobile Banking Adoption- A strategy for Achieving Financial Inclusion. *Indian Journal of Public Health Research and Development,* April, 8(2), pp. 175-182.

Bindra, P. K. & Chauhan, A., 2016. Financial incluison initiatives taken by Government of India. *International Journal of Management , IT and Engineering,* August, 6(8), pp. 44-53.

Caruna, J., 2015. Digital Financial Inclusion: Implication for customers. *CGAP Journals,* Februvary.pp. 1-6..

Dalal, K. K., 2016. A review of financial literacy and gender issues in India. *International Journal of Research in Social Sciences,* July, 6(7), pp. 644-658.

Dev, S. M., 2006. Financial Incusion : Issues and challenges. *Economic and political weekly,* October, 41(41), pp. 4310-4313.

Dhillon, R., 2014. Mobile Banking in Rural India : Roadamap to Financial Inclusion. *Indian Journal of Research- PARIPEX,* January, 3(1), pp. 29-32.

Dutta, P., 2017. Measuring financial inclusion in west bengal : Policy framework for inclusive growth. *Great Lakes Herald,* March, 11(1), pp. 39-59.

Gandhi, R., 2010. Calling on Mobile Banking : Financial Inclusion in Rural India. *South asia monitor,* July.Issue 143.

Goyal, V., Pandey, U. S. & Batra, S., 2012. Mobile Banking in India : Practices, Challenges and Security issues. *International Journal of Advanced Trends in Computer Science and Engineering,* May, 1(2), pp. 56-66.

Hameedu, M. S., 2014. Financial Inclusion- Issues in measurement and analysis. *International journal of current research and academic review,* Februvary, 2(2), pp. 116-124.

Iqbal, B. A. & Sami, S., 2017. Role of banks in financial inclusion in India. *contaduria,* Issue 62, pp. 644-656.

Joseph, J. & Varghese, T., 2014. Role of Financial Inclusion in the Development of Indian Economy. *Journal of Economics and Sustainable Development,* 5(11), pp. 6-13.

Kamel, S., 2005. The use of information technology to transform the banking in developing nations. *Routledge- Information Technology for Development,* 11(4), pp. 305-313.

Kumar, A., 2017. Transformation through digital India. *Indian Journals,* pp. 1-10.

Manjula, K. & Srinivas, 2017. Financial Incluison: Issues and Challenges in India. *ITIHAS The Journal of Indian Management,* Januvary.pp. 37-43.

Mas, I. & Porteous, D., 2017. Pathways to smarter financial inclusion. *The Capco Institute Journal of Financial Transformation,* pp. 47-62.

Safeena, R., Hema & Kammani, A., 2011. Internet Banking Adoption in an emerging economy: Indian consumers perspective. *International Arab Journal of e-Technology,* January, 2(1), pp. 56-64.

Shaik, H., 2015. A study on the recent measures of RBI on financial inclusion plan of banks. *international journal of advance research in computer science and management studies,* October, 3(10), pp. 82-89.

Shrivastava, K., 2016. Payaments Banks: A new dimension to boost financial inclusion. *IIMS Journal of manangement science,* September, 7(3), pp. 340-346.

Srinivas, G. S., 2017. Financial Inclusion- Role of Payment Banks in India. *IRA- International Journal of Management & Social Sciences,* Januvary, 06(01), pp. 91-96.

Thatte, L. R., 2010. *Financial inclusion through mobile phone technology: opportunities, challenges and policy options for India.* Mumbai, s.n.

Thorat, U., 2008. *Financial Inclusion and Information Technology.* Mumbai, WIPRO-NDTV : Convergence conference on vision 2020.

Vakrange, 2014. Financial Inclsuion- A brief on its evolution and future expectations. *Indian Journals,* pp. 1-7.