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Technology as a Decision Maker for Banking Sector

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Abstract : *With the introduction of millennia 2000 many developing countries in the world came to understand the role of Information Communication Technology (ICT) in the countries growth and development. India also understood the need of the hour and created a draft of policy in 2011 launched finally launched the policy in 2012. Financial inclusion on the other hand ensures the access of appropriate financial products and services needed by lower groups of society at an affordable cost and in fair and transparent manner by mainstream institutional players. Financial inclusion has been accorded high importance by Reserve Bank of India. For this purpose the help of questionnaire was taken in order to understand the usage of ICT by people of different age groups, difficulties they face and remedial changes are offered. This paper will also give us an idea that whether ICT has helped in achieving the desired targets of financial inclusion.*

Keywords: *ICT, financial inclusion, banking sector, Technology*

I. Introduction

India is a developing country and for a developing country to come into the category of developed one a sturdy banking system is one among the prior requisites. It should have a banking system which looks into the financial needs of individuals belonging to both urban and rural areas as well as various developing corporate. With the changing scenario of world banking system necessary reforms there is a requirement of up-to-date banking in congruence with necessary calibrated banking regulation. For a developing country it is very important to have a literate society having knowledge of financial systems which in turn could enhance financial literacy in the nation. Development can be achieved by having a high level of financial inclusion and high penetration of education system to support it. This economic growth is further enhanced when this support system is further given an added base of increasing financial coverage of investment in various sectors of society

Financial inclusion can basically be described as a process of ensuring access to appropriate financial service and financial products which are used and needed by all the sections of society like ATM facility, fund transfers at real time, electronic fund transfers, payment to various services and for various products without being physically present in the bank branches etc and particularly at an affordable cost and in a fair and transparent manner by mainstream institutional players. This system basically reduces the footfall of customers at the branch thereby reducing the workload of banking officers.

II. Literature Review

For India Financial inclusion is of utmost importance but it still remains a distant dream. Leyshon and Thrift (1995) defined financial exclusion as those processes which prevent certain individuals and social groups a formal financial system access. According to Sinclair (2001), financial exclusion meant the inability to access necessary financial services in an appropriate form. In fact Government of India's Committee on Financial Inclusion in India‟ begins its report by defining financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost‟ (Rangarajan Committee 2008). Although various programs and policies are being developed by Reserve Bank of India in order to achieve high financial Inclusion in both urban and rural areas up to 2016. A study done by Rupambara (2010) stated that more than 40 percent of urban population still financially excluded and has no access to bank accounts which in turn deprives them from basic facilities like saving and using various financial services like credit and loans from the formal financial system.

Out of the total urban population which is financially included in the system inefficiently uses the present communication technology to access their accounts and related services. Although a lot of work has been done in relation to financial inclusion in various sectors and areas of the country but little is done in relation to specify the role of ICT in relation to financial inclusion. Not only India but various other countries are working on financial inclusion. Among all the developed nations it was UK who realized financial inclusion as the need of the hour (kempson2004, Collard et al. 2001). The UK government in 2005 constituted a 'Financial Inclusion task force' in order to evaluate the penetration of financial inclusion. Infact in 2004 South Africa started a low

cost banking account facility called 'Mzansi'. Even RBI also laid the foundation of 'No frills account' policy and 'General Credit Card' facility to increase the level of financial inclusion in rural areas. (Thorat, 2007). Along with that with a view to provide hassle free banking and credit facility to customers Indian banks were allowed to issue general credit cards which were similar to kisan credit cards. Also it was the time when banks were encouraged to adopt and increase IT infrastructure so as to increase financial inclusion and also improve the banking service and quality so that it could support large rural population (Mohan, 2006).
A multi dimensional index of financial inclusion has been proposed by Sarma (2008) which carries information on financial inclusion by measuring it in various dimensions using single digit lying between 0 and 1. It captures and tells about the banking system, its usage and availability to its users.

III. Research Objective

The following are the research objective:
To study the degree of financial inclusion and up to what is the impact of technology over financial inclusion using ICT as a tool to operate advance facilities related to financial inclusion; to extract the underlying factors of financial inclusion and determine the important factors which have a major effect on it.

Data Methodology

Sample

The Sample consisted of an urban population ranging from 22 years to 65 years both male and female in order to find out the nature of their financial inclusion is ICT based or they still rely on the old school method of physical presence. An attempt has been made to cover all the age brackets, diverse educational background people and all income levels in order to draw an unbiased conclusion from the sample data.
Following are the sample questions which were the part of questionnaire:

- *I rarely visit the bank in person nor I access it on internet.*
- *If needed I prefer to go to bank for accessing my account rather than using internet*
- *I use internet banking only for checking balance*
- *I use mobile banking facility through apps*
- *I use ATM only to draw money from bank.*
- *I use internet banking for creating FD/Policies and submitting installments*

Procedure

With the research objective, final data was collected by survey method involving filling up of questionnaire in both online and offline format. After all the responses being received the incomplete and redundant questionnaires were left and usable questionnaires were used to extract information. A coding sheet in excel was prepared before transferring data for statistical analysis. SPSS was used to tabulate and analyze data. Over the questionnaire data a reliability test was carried out on the likert scale questions using cronbach alpha method and the value came out to be 0.754 which is considered to be satisfactory.
The technique of factor analysis was conducted by computing mean factor score of all the possible factors and their standard deviation

IV. Empirical results and discussion

Apart from chronbach's alpha KMO measure of sampling adequacy and Barlett's test of sphereity were also used and applied over all the likert scale statements asked by respondents in questionnaire in sample. The value of KMO measure of sampling adequacy was found to be 0.839 which is greater than 0.5 and so satisfactory. Factor analysis was used in the questions to deduce the inference from the collected sample.
Hypothesis Formulated
The following two Null hypothesis were formulated and tested over the sample

H_{01}: $H_{Alt\ 01}$:	There is no significant effect of Technology over ICT for Banking/ financial purposes There is significant effect of Technology over ICT for Banking/ financial purposes

In order to check the effect of Technology level over ICT usage (i.e. factor 1) 1 WAY ANOVA test was applied and the following results were obtained:

Factors	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Result**
Between Groups	2.649	3	.883	3.671	.016	**Rejected**
Within Groups	19.239	80	.240			
Total	21.888	83				

Since the value of Sig. =0.016 and the value of F =3.671which is greater than the tabled value we can conclude that our NULL Hypothesis is rejected
Thereby proving that Technology has the significant effect over financial inclusion/ICT for Banking as people use the technology in order to access the financial resource options provided by banking systems.

V. Conclusions

In the upcoming advancement era ICT plays a very important role in our daily routine. From the above tests we have seen that ICT is a tool used by urban population to access the financial systems. Activities like creating FD, policies online, fund transfers online have created awareness among people and provided a hassle free platform to get work done from home. With the help of this paper a genuine attempt has been made to bring out the effect of technology over financial inclusion in urban population moreover its usage by people in daily life.

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