

# Technology on the Banking Industry Operations & Its Impact



K S L N S Subrahmanyam, A V N Murthy

**Abstract:** *The aim of the present research is to know the impact of use of technology on the regular operations of the banking industry. The purpose of the banking industry is to assess the emerging trends of the application of the technology in providing services in the bank branches all over the country and the world. The large percentage of various sectors like financial markets, capital markets, money market and financial institutions undertake huge transactions of transfer of money to the various corners by providing movability of money transfer from one sector to another sector and from one bank and another bank and finally from one country to another country. Last couple of years have seen heavy use of technology in reducing the crowd and floating population in the bank branches so as to enable the branch to concentrate more on development activities like sanction of loans and advances, other customer services and facilities needed to improve the banking system. It goes without saying that without the use of technology the banking industry faces stalemate.*

**Keywords:** *Technology, consumer, operations and services.*

## I. INTRODUCTION

Banking industry is backbone of the economic growth, development and sustainability of any country as well the world. The banking industry is an ancient concept of mobilization of money of the people and to provide easy trade between the merchants with the country and traders across the world. Banking industry has seen drastic reforms in its operations after independence till date. The reforms that has taken place is nationalization, modernization and up-gradation of governing rules and regulations. Today banking business is in complete without the use of information and communication technology for the past completion of transactions and making consumers comfortable in having a relationship with the banks. Today it is being observed that every bank has to have their own websites with complete information at the finger strips of the consumers including the operations of the transactions.

### A. Scope of Banking Industry

At present the Globe is shrinking because of advancement in the field of information and communication technology. Today, banks no more manually operate the needs of the customers but it is only the technology which enables quick transactional activities between the banks and the customers.

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Technology also enables the regulating authorities and the Government of the respective countries to be addressed with the policies and the regulations and terms and conditions. Technology increases the banking operations four fold faster than earlier practices.

### B. DEFINITIONS OF BANK

Banking Regulation Act 1949 defines as. "Accepting for the purpose of the lending of investment of deposits of money from public repayable on demand or otherwise and withdraw able by cheques, draft, order or otherwise."

### C. Fin-tech at a glance:

Today, the world is incomplete without the presence of technology. Technology is the essence of advancement of any country. The use and up-gradation of technology is the symbol of prosperity and growth of any country. Today, any field whether it is industry, agriculture, science, management, communication is not feasible without the use of technology. So as to banking industry is no exception. Activities like net banking, mobile banking, ATM banking, payment of loans and advances, on-line purchase and sale of goods and services, buying and selling of shares and stock are only possible because of implications of technology. It will take no time for the collapse of any economy if technology is not used or upgraded or added to the current needs of the world. Technology enables every customer to be happy in easy access in handling their accounts, verification of bank statements, number of transactions undertaken during a particular period time. It is only technology it enables big data management of banking industry and confining certain information only to the respective customers or institutions.

## II. LITERATURE SURVEY

**Marous Jim** "A comparative study on the future of banking: Fin-tech and Tech-fin" August 2018.

The researcher is of the opinion that traditional banks are no more traditional but trying to upgrade themselves with the adoption of technology in the banking business. The objective of any banking industry is to provide best customer services and customer satisfaction. There is a small difference between tech-fin and fin-tech. The objective of fin-tech is to provide efficiency financial services and take the advantage of reducing the cost, increasing revenue and minimizing the customer dis-satisfaction. In future the tech-fin will look into two aspects in the delivery system of banking operations one is on line banking and other one is internet finance which is in use by the outsiders. Collaborative business activities will find best path for long term economic growth of the banking industry.

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Big tech-firms are entering into business tie-ups with the banking industry to create strong business entity. Even digitalization, speed and innovation will lead to better tomorrow. Banking industry needs to have on the broader use of adequate capital, knowledge of regulatory compliances and establishment of distribution network. The researcher is also observe that banks have waste customer base and deep pocket lost customers and it will be difficult to manage without the support of technology. It is further observed that the growing percentage of customer willingness to use financial products offered by non-traditional financial institutions. The future of the banking industry depends upon the ability to leverage the power of customer insight, advanced analytics and digital technology. It provides customer services and manages customer needs.

**Gautam Raghavan**, “A comprehensive study on how a group of white house staffers are empowering the next generation of change makers.” “SG analytics excellence,” September 2018,

The observation need by the researchers in the article is that the financial sector is passing through a transformation phase and adopting the technological change. Today, the author believes the fin-tech start-ups has revolutionized in the financial industry. There are activities like lending, retail banking, by small and medium enterprises are only possible due to adoption of technology. The new technology users and players have created a paradizmship in the financial sector through digital sector due to the use of technology the global investment has gone up to 80%. Main global players Europe and US. Banks needs to partner with the companies providing technology services to the banking industry to meet the change in demand from the customers. Most of the start-ups in the field of customizing the technology for the banking industry try to meet niche and unmet customers need gap. This will enable banks to switch over to low cost of operations with the use of technology.

**Briggs. S Angela**, “A comprehensive study on the role of Fin-tech in the financial services industry” The journal of “tech bullion” May 2017.

The financial services are willing to adopt new technologies to streamline operations and increase profits but have been held by a multiplicity of factors such as the complexity of financial markets,

legacy systems that are usually expensive to maintain, tight regulation. These sector greatly benefits from extensive distribution, a large and loyal customers base unwilling to switch financial providers, unique product specific expertise and protective regulations. Mc&Kidney Company stated that between IPO and the acquisition of PayPal by eBay there are more than 450 tech startups that attempted to disrupt the financial services sector. With the increase in internet and mobile banking technology globally Fin-tech is playing an important in the financial institutions including payments and remittance sector, online lending, wealth management, Insure-tech etc. Traditional finance institutions either partnering with Fin-tech startups or investing in Fin-tech either through an acquisition of Fin-tech start-ups or on their own. The key advantages of Fin-tech are it is free from strict regulations that affect traditional finance institutions. The significance of Fin-tech in financial services sector are improving modes of customer

acquisition where Fin-tech startups use technology more than the traditional physical shops and as a result customers are widespread and the mode of acquiring the customer base is more difficult, lowering the cost of services i.e., the Fin-tech startups do not need a physical presence in every location

that they operate them to reduce costs-effective services to customer s, advanced analytics i.e., advanced analytics and big data bring a significant advantage to the financial service sector. They enable institutions to redesign their products to meet customer needs and preferences, segment specific offerings; Fin-tech startups have focused on specific segments of the market mainly millennial, the unbanked and the small business, as a result Fin-tech has helped meet the needs of clients that have been otherwise overlooked by the traditional financial institutions.

Chrisos Marianne, “A comprehensive study on the future of Fin-tech and banking” The journal “Tech Funnel” February 2018.

In the current article the author observed that use of technology is increasing day by day in the finance and related sectors. The customers and businesses are expected to use better financial services periodically. Technology is itself looking after issues like personal finance management, loans and advances, investment and banking as a function. There are many customers who make effective use of technology facilities available for transacting with banks and financial institutions. Facilities like debit card and credit card on line payments, online transfers are best way to transfer cash from one end to the other end. Many supporting companies have come forward to have tie-ups with banks for sharing the business responsibilities. Use of technology is also helping marketing, human resource and other sectors for timely completion of the task. Banking industry is no more traditional because technology has made banking industry more vibrant. Sundararajan S “A comprehensive study on top 10 Fintech trends that could influence the banking industry” November 2018. The author of the paper belief that Government has greater amount of role to play towards financial inclusion and creation of cash less society. The Fin-tech companies due to the current advancements, regulatory policies and shaping the customer needs are forcing towards the creation of new technology and adoption of the same. The author further beliefs the change only certain in this uncertain world. And some companies are trying to change the game. Issues like machine learning, understanding regression models and advancement of block chain will further strengthen the use of technology in the financial sector. Fabian Vandenreydt, “A comprehensive study on Fin-tech- January 2018 The researcher in his research feels only adoption of technology in the finance sector itself is not enough but equally needs innovative

strategies to upgrade the technology from time to time. 90% of start-ups suffer because of lack of up gradation of technology. It is equally important that there is better relationship between the uses of technology and banking industry from time to time to meet the changing trends of the market. Dennis Gada, “A comprehensive study on five ways Fin-tech is disrupting the financial services industry.”

March 2018. In the current article the researcher believes the fin-tech is buzzword in the banking industry. The main objective of adopting the technology in the banking services is to make the banking industry paper less industry through the use of software applications. Today, fin-tech is at the center stage by proving that it is indispensable to meet the consumer needs and satisfaction. The use of ATMs and mobile banking keep the customer interactive with the bank wherever they go. Most of the software's provide high account of security through the use of artificial intelligence. This helps in the protection of data not only the customers but the banks also. Frauds are minimizing and alerts are maximizing. It enables the customers and banks to track any transaction from any corner of the world. Further, the use of bi-metric for strong securities to identify vocal patterns, facial recognition and finger prints are adding more fathers to the cap of the banking industry. Use of block chain for digital transactions, crypto currencies is taking the banking world to the next level. Block chain is the strength of trading platform for securities exchanges.

Philippe Gelis "A comprehensive study on the rise of Fin-tech in finance" Posted in the journal "kantom tomorrow's FX today" 2018.

The paper focuses on how fin-tech is reshaping the finance world and how to handle physical money. Fin-tech is believed to be the catalyst needed for change. The term itself gives meaning to the financial services and the firm whose products and services are intensively used across the financial institutions and world. The reason for sudden growth of use of technology and software in the field of finance is to minimize the anger and dissatisfaction of the bankers and customers. It is surprising the largest use of fin-tech technology taking place is silicon valley. The author also observed that almost all the transactions like money transfer, funding, p to p lending, mobile payments and trading platforms are new to the world of finance sector.

### III. RESEARCH METHODOLOGY

Methodology implies more than simply the methods you intend to use collect data. It is often necessary to include a consideration of the concepts and theories which underline the methods. There are many different ways to approach the **research** the fulfills the requirement of a dissertation.

**Objectives of The research:** The objectives of the study are based on the application of technology and use of technology by the banking industry to make customer services easy.

The present study has the following objectives:

1. To study the impact of use of technology on ATM services.
2. To determine the need and essence of technology in internet banking services.
3. To know the benefits of technology in tele banking services.
4. To determine the growing demand of technology for mobile banking services.
5. To know the impact of technology benefits on customer services.

#### A. Hypothesis:

1. **H0:** There is no significant impact of technology on

ATM services.

2. **H0:** There is no significant impact of technology on internet banking services.
3. **H0:** There is no significant impact of technology on tele banking services
4. **H0:** There is no significant impact of technology on mobile banking services
5. **H0:** There is no significant impact of technology on customer services.

#### Model:

To test the hypothesis there is need for using statistical tool to validate the stand taken to justify the matching of respondent's response and use of technology. Since this study is done to know the impact of use of technology in the field of financial transactions by banks one way anova (parametric test) and Kruskal Wallis Test is being conducted by using SPSS package and to find out what is the significance of the study between 0.05% to 1%. The degree of freedom taken is 99%.

#### B. Limitation Of Research

Due to limitation of the time and availability of information the research is confined to a limited period only. However further research can be done with different variables, sample size and sampling techniques.

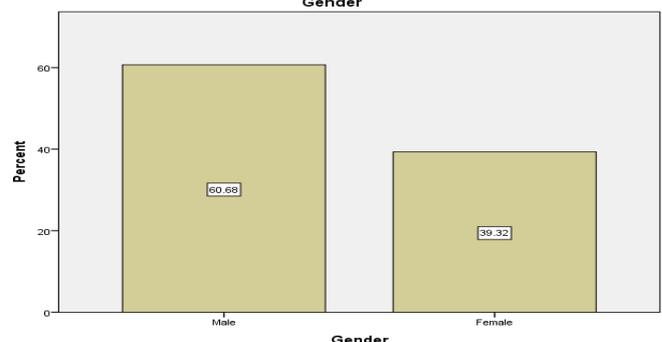
#### C. Future Scope:

There will be more innovations, new financial product, financial software's supporting the rapid growth of banking industry.

### IV. ANALYSIS AND INTERPRETATIONS OF THE RESULTS

#### a) Descriptive analysis: Table -1(Gender)

		(a) Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	71	60.7	60.7	60.7
	Female	46	39.3	39.3	100.0
Total		117	100.0	100.0	

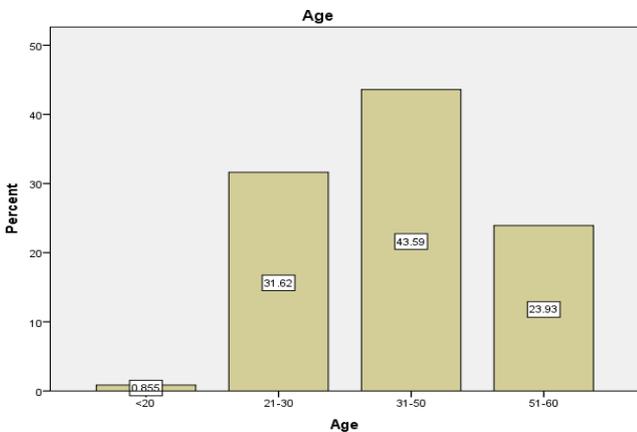


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It is interpreted that, 71 male respondents have participated and 46 female respondents have participated in the survey out of 117 respondents.

## A. Table -2 (Age):

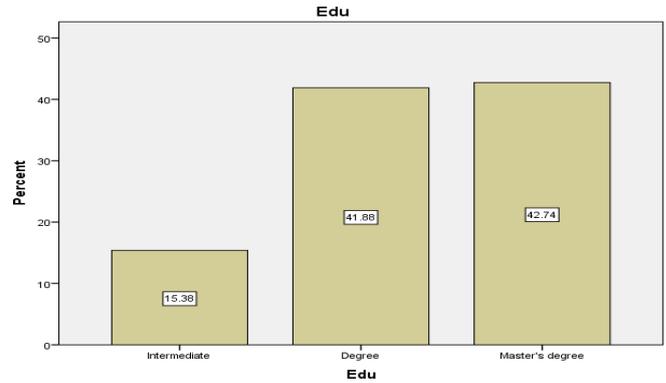
	Age			
	Frequency	Percent	Valid Percent	Cumulative Percent
<20	1	.9	.9	.9
21-30	37	31.6	31.6	32.5
Valid 31-50	51	43.6	43.6	76.1
51-60	28	23.9	23.9	100.0
Total	117	100.0	100.0	



It is interpreted that, 51 respondents are in the age group of 31-50 have participated, 37 respondents are in the age group of 21-30 have participated, 28 respondents are in the age group of 51-60 have participated, only 1 respondent is in the age group of <20 in the survey out of 117 respondents.

**Table -3 (Education) Edu**

	Frequency	Percent	Valid Percent	Cumulative Percent
Intermediate	18	15.4	15.4	15.4
Degree	49	41.9	41.9	57.3
Valid Master's degree	50	42.7	42.7	100.0
Total	117	100.0	100.0	

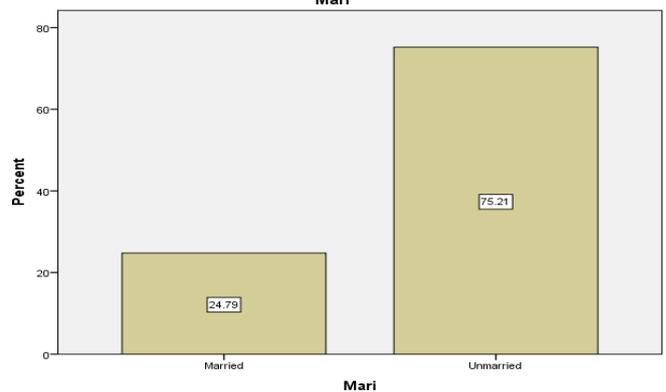


It is interpreted that, 50 respondents have studied Master's degree, 49 respondents have studied Degree and 18 respondents have studied Intermediate who have participated in the survey out of 117 respondents.

**Table -4 (Marital Status)**

## A. Marital Status

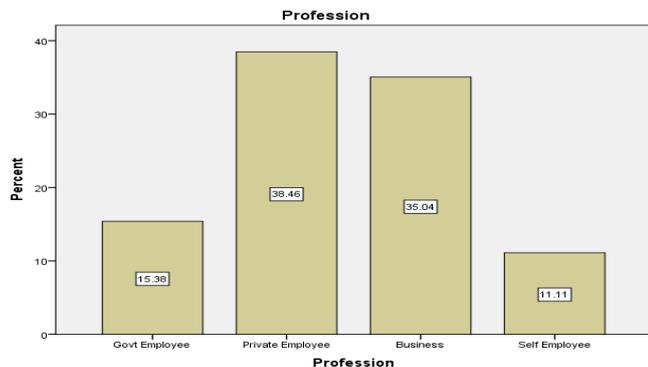
	Frequency	Percent	Valid Percent	Cumulative Percent
Married	29	24.8	24.8	24.8
Valid Unmarried	88	75.2	75.2	100.0
Total	117	100.0	100.0	



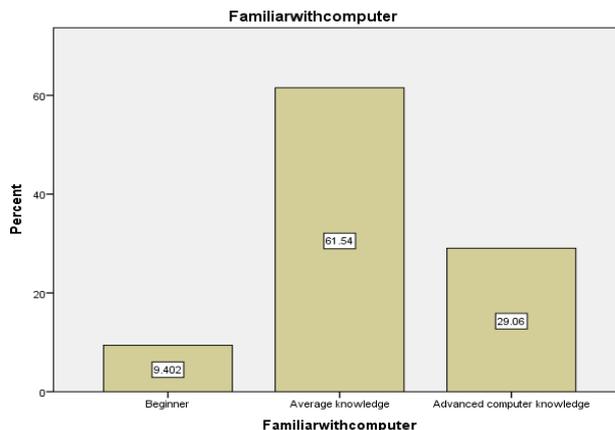
It is interpreted that, 88 respondents are Unmarried have participated and 29 respondents are Married have participated in the survey out of 117 respondents.

## A. Table -5 (Profession) Profession

	Frequency	Percent	Valid Percent	Cumulative Percent
Govt Employee	18	15.4	15.4	15.4
Private Employee	45	38.5	38.5	53.8
Valid Business	41	35.0	35.0	88.9
Self-Employee	13	11.1	11.1	100.0
Total	117	100.0	100.0	



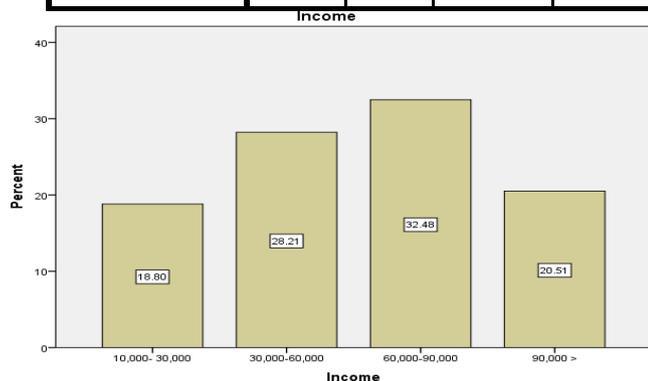
It is interpreted that, 45 respondents are private employees have participated, 41 respondents are Business have participated, 18 respondents are Govt employees have participated and 13 respondents are Self-employed have participated in the survey out of 117 respondents.



It is interpreted that, 72 respondents have average knowledge on computer, 34 respondents have advancedknowledgeoncomputer, 11 respondentsaretheBeginnerswho have participated, in the survey out of 117 respondents.

A. Table -6 (Income) Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10,000-30,000	22	18.8	18.8
	30,000-60,000	33	28.2	47.0
	60,000-90,000	38	32.5	79.5
	90,000 >	24	20.5	100.0
Total	117	100.0	100.0	



It is interpreted that, 38 respondents are earning between 60,000-90,000, 33 respondents are earning 30,000-60,000, 24 respondents are earning more than 90,000 and 22 respondents are earning 10,000-30,000 have participated in the survey out of 117 respondents.

A. Table -7 (Familiarity with Computer)

Familiar with computer

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Beginner	11	9.4	9.4
	Average knowledge	72	61.5	70.9
	Advanced computer knowledge	34	29.1	100.0
	Total	117	100.0	100.0

V. CONCLUSION

The Fin-tech is playing very important role and its contribution in banking sector is also very high. It is still upgrading its technology use day by day. But the people are not much aware of the contribution of technology and its services. They are familiar with the usage but not the application. So, the present study clearly says that technology has no impact on the services provided by the banking industry.

Suggestions:

Fin-tech is a trending word in present scenario where many of us do not know the services provided by it i.e., people know the use but not the application of the services. So it is suggested that the awareness activities should be carried out by the banks.

- Apps must be designed in a pictorial way so that an illiterate can be able to understand.
- There should be multi-layered privacy setup for the transparency and to complete the transactional process without any fear of frauds.
- There should be more awareness programs to know about the usage as well as application.

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