

The Contribution of Infrastructure to Economic Growth: A Focus on Telecommunication Technology in India's Banking Sector

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Abstract: *Telecommunication technology increase and play a vital role in the development of every sector including banking sector Telecommunications, also known as telecom, is the exchange of information over significant distances by electronic means and refers to all types of voice, data and video transmission. This paper present how the telecommunication technology play a significant role in banking sector. It is related to the development of the country and their economy. A dynamic panel of data approach is general people who use telecommunication in their daily life and contact to banking transaction and they well known about the change or transmission of telecommunication in banking sector so therefore, the researcher followed research methodology and through primary data collected their experience and suggestion related to telecommunication technology contribute a major role in banking sector and economic development.*

Keywords: Telecommunication, Technologies, Banking Sectors Development Economy

I. INTRODUCTION

Due to the Globalisation, Telecommunication role increasing and it is a broad term that includes a wide range of information-transmitting technologies and communications infrastructures. Telecommunications technology refers to distance communications, such as radio, telephone, television, satellite, microwave, data communication, etc. Businesses also need telecommunication to maintain effective and efficient operations. With telecommunications technology, business owners can provide the best possible services or products for consumers. In the banking sector all the online transaction is efficiently possible because of telecommunication and technology. But many demerits also with use in technology in banking such as hacking, ethical problem, server problems. Communication with a bank can liberalisation of Indian telecommunication in industry started in 1981 when Prime Minister Indira Gandhi signed contracts with Alcatel CIT of France to merge with the state owned Telecom Company (ITI), in an effort to set up 5,000,000 lines per year. But soon the policy was let down because of political opposition. Attempts to liberalise the telecommunication industry were continued by the following government under the prime-minister-ship of Rajiv Gandhi. He invited Sam Pitroda, a US-based Non-resident Indian NRI and a former Rockwell International executive to set up a Centre for Development of Telematics (C-DOT) which manufactured electronic telephone exchanges in India for the first time. Sam Pitroda had a significant role as a consultant and adviser in the development of telecommunication in India. In 1985, the Department of Telecom (DoT) was separated from Indian Post & Telecommunication Department. DoT was responsible for telecom services in entire country until 1986 when Mahanagar Telephone Nigam Limited (MTNL) and Bharat Sanchar Nigam Limited (BSNL) were carved out of DoT to run the telecom services of metro cities (Delhi and Mumbai) and international long-distance operations respectively.

II. RESEARCH METHODOLOGY

2.1 Scope of the study .

An attempt has to be made to study to understand the basic role of telecommunication technologies in banking sectors and development of banks in India.

2.2 Objectives of the study

The main objective of this thesis work is to research into the role of telecommunication on banking services. The objective of research study is to understand that present how the telecommunication technologies developing in banking sector and how the peoples take a benefit of increasing technologies in banking sector in India. The research paper objective to find that Is increasing technologies in banking sector increase economic growth and development?

2.3 Literature Review

Government and public agencies in most countries, both developed and less developed, spend large sum of money in infrastructure. The purpose of infrastructure investment is to positively influence economic activity in terms of employment, value added, productivity, capital formation and income. Infrastructure investments also were help with the social and political integration of a region. investments in physical infrastructure generally falls into four broad categories; communications; transportation; and land development. Most of these investments have certain characteristics in common. They tend to have some attributes of public goods in that they require a high initial investment with a relatively low marginal cost once the investment is in place. The provision Of service from these industries also provides benefits to a large percentage of Business and households of a region and typically has some form of external economies.

2.4 Hypothesis of the study

Telecommunication technologies is significantly contribution the growth of banking sector
Telecommunication technologies improved the banking related services

2.4 Data collection

A study is based secondary as well as primary data. In Secondary data, the books, website, etc where referred to understand the terminology of telecommunication technology and their role to developing banking services in India. In primary data, it was collected through prepared the questionnaire and conducting the interview in Feb 2024 with selected people who take a use of Banking Services.

2.5 Limitation of the study

The limitation of the study in conducting the survey that people are not much known about the telecommunication technology in banking sector, they take the advantage of banking service but they are not actively known about the advancement about the technologies in banking sector. The another limitation is that there are the shortage of secondary data as well. This study is based on collection of 95 samples of aesthetic judgement.

III. RECENT TREND OF TELECOMMUNICATION TECHNOLOGY IN BANKING SECTOR

The recent development in telecommunication technology that help to build banking sector more efficient in India. As we known, that India is one of the developing countries that needs new telecommunication technology to grow their all sector. In this all sectors one sector is banking sectors where 5G technology recently developing that will become their services more faster and easier. The main server problem challenges that faced by banking sector during transaction that will able to decline. Another is Cloud computing is a rapidly growing trend in the telecom industry, primarily driven by the widespread use of IoT devices and the deployment of advanced ML algorithms, both of which generate a substantial demand for computing power. The many major advancement in telecommunication networks and devices help to grow banking sectors in India, It offers significantly higher speeds compared to previous cellular broadband standards.

IV. ROLE OF TELECOMMUNICATION TECHNOLOGY IN BANKING SECTOR IN INDIA

Telecommunications over the years in India has been seen as one of the economic back bone of the country's development Over the years the Government of India has been in forefront of the information and communications revolution in the last decades. India introduce Telecommunication service after 1985 Communication skills in banking

is a must for every customer. Methods of communication with a bank, offering customers flexibility based on their preferences and the nature of their inquiries.

4.1 Increase Innovation:- Communication is crucial for fostering a culture of innovation within banks. Open communication channels encourage the sharing of ideas, enabling the implementation of new technologies, banking products, and services. This adaptability is vital in a rapidly changing financial landscape.

4.2 Operational Efficiency:- Technology increase efficiency and make easy operational activities. Its make easier and fastest transaction that help in economic as well as infrastructural development Clear communication channels streamline day-to-day operations in banks.

4.3 Decrease Overburden Works and Provide ATM Services: Communication directly influences the customer. Because of technologies bank provide ATM service which is needful for the developing countries and its also decreased the overload work from the employees. Through ATM, customer able to do small transaction without visiting the bank

4.4 Fraud Prevention: Effective communication and technology prevent from the fraud because all the documentation are verified by computer and all transaction are digitalized.

4.5 Increased Customers Service with efficiency and effectively: Technology and digitalization is very important to increase customer and customer base services. When any banking sector banks are efficient and able to provide fastest customer related services without giving any hurdles to their customer then customers or the people approach banks for taking essential banking services such as deposits, loans etc

4.6 Crisis Management:- In crises like economic downturns or unforeseen events, communication is essential for managing customer expectations, addressing concerns, and providing reassurance. Transparent communication helps mitigate panic and builds confidence in the bank's stability.

4.7 Clear communication of rules and policies:- Any industry needs clear communication of rules and policies to resolve any conflicts and effectively run the institution. A transparent communication strategy will help explain the industry's regulations and policies to the employees.

V. IMPACT OF TELECOMMUNICATION TECHNOLOGIES IN BANKING SECTORS

The telecommunication technologies have their own Pros and Cons. As a one side it developing the banking services and make that more advance another side telecommunication technologies impact the socio economic life of the people also. Some Impact are as discussed below.

Increasing Unemployment:- In the banking sector, there is labour based work more that are increased the employment in the economy but the performance and efficiency was affected. With motive of increasing the efficiency in the banking services, the uses of telecommunication technologies are increasing which harmed the employment in the economy. Hence the unemployment is increasing in the economy that is the biggest issue of such developing and populated country like. India

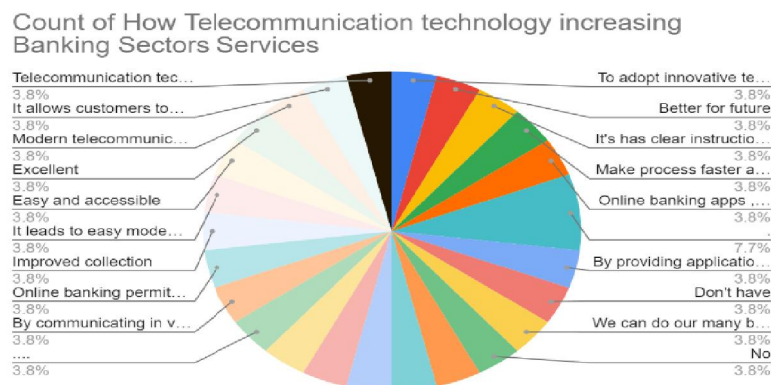
Increasing Fraud and Cyber related problem:- With increasing the Telecommunication technologies the cyber related problem arose that bring uncertainty in the banking Sector. Many Fraud Cases increased in the transaction due to the telecommunication and technologies.

Network Issues:- In the Transaction with bank, customer faced network related problems not only in rural area but also in urban area. During the Transaction, many of the technical issues created that decreased the worthiness of the people.

Lack of Information:- Customers who using the banking services in daily bases they are not fully known about the telecommunication technologies such as senior citizen, rural peoples, household, small scale business people have asymmetric information about the technologies there affect the transparency in banking services to the customers. Even the bank employees not respond queries to the customers who not know about the how to use technologies properly.

Data Analysis

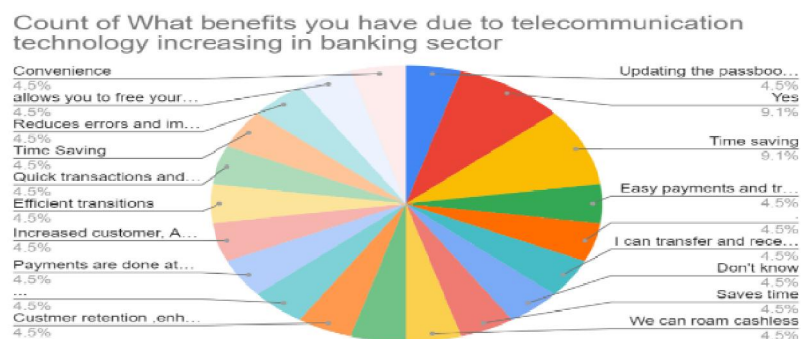
FIGURE 6.1 Data of Telecommunication technology in Banking Sector



(Data Souce:- SURVEY)

The above figure 6.1 data collected through Survey shown that all the factors 3.8% influenced the telecommunication technology increasing in banking Sectors. And 7.7% people are agree that telecommunication technology increaseing banking services by providing many applications and platforms.Such as providing network ,online transction platfrom etc. Therefore ,the telecommunication technology increased in bank.

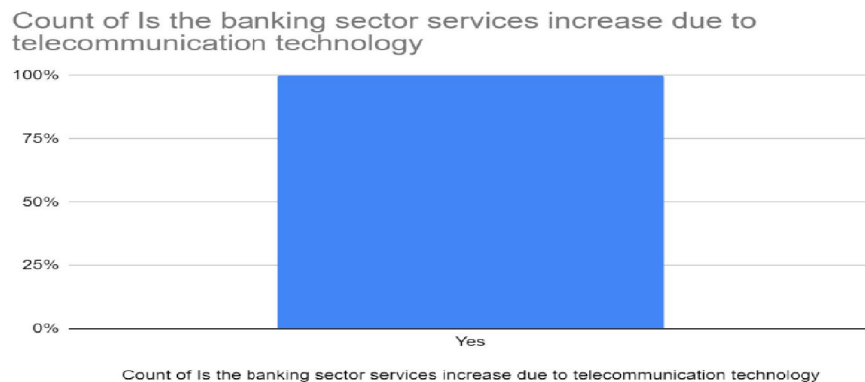
FIGURE 6.2 Data of benefits from telecommunication technology in Banking Sector



(Data Source :- SURVEY)

The figure 6.2 shown that 4.5% samples agree to take the benefits of telecommunication technology in banking sector such as convenience, reduce error, manage time, efficient transaction, customer retention etc. The maximum people 9.1% agree that due to telecommunication technology they saving their huge time in the transaction with banks During the collection of data, I observed that there are many people which are appreciate telecommunication technology increasing because it is capital intensive and time efficient. However, much of people who are less educated they facing difficulties in operating there account and that is the biggest challenges facing by banking sectors in India.

FIGURE 6.3 Data of increasing Telecommunication technology in Banking Sector



The above Figure 6.3 is clearly shown that all the people are agree that telecommunication technology are play a vital role to increasing the banking sector

Interpretation of Data

In this research study, the first hypothesis is proved by figure 1.3 and Figure 1.4 simultaneously it is proved that Telecommunication technologies is significantly contribution the growth of banking sector.

In this research study, the above second hypothesis is also proved by Figure 1.1 and simultaneously proved that telecommunication technologies improved the banking related services.

VI. FINDING FROM THE RESEARCH

Through the research Paper, I found that Telecommunication sector play a significant role in the development of Indian economy. It allow customer to use several platform of banking sector through telecommunication and are able to connect and do the transaction at international level also. Through this, there are clear and transparent internal communication between banks and the customer. It is so reliable and less time consuming. In the Globalised Era, Indian economy growing where the telecommunication play a significant role and the government as well as private sector influencing telecommunication. During the present time, In the market there are tough competition between countries, international trade, industries, Agricultural sector etc. and without telecommunication developing countries like India, development is impossible. Therefore, I found From the Survey of my Research are that it increase High Efficiency:- In the Banks, customers facing several problem because of huge population they also not able to performed there work on time. Because of this customer related problem increasing, customers hesitating to open their bank account in the bank. After the telecommunication technology increasing, that

VII. CONCLUSION

Telecommunication sector play a significant role in the development of Indian economy. It can be a conclusion that telecom industry in India has witness a phenomenal change and has a multitude growth over the recent years. It has gone through several transformation. It provided a facility for long-distance communication leading increased participation in business, education and research . Telecommunication sector has a way in which we communicate and work. It has almost covered all parts of our life. It is one of the fastest growing industries in the world and has proved to be successful at international level. According to the reports, India is the second world largest telecom market. As much it is advantageous it also has its own disadvantages. The Introduction of new technology and devices has brought changes that are complex and dynamic. For instances, the impact of telecommunication has on socialization that most meeting and important discussion held over business or project orientation held online and do not allow for socialization . The main remote area might not able to afford the necessary equipment.

REFERENCES

- [1]. Dr. B. Akila & Dr. S. Sakthi Technology Information in Banking New Delhi Publication [Page No:- 45.to 49]
- [2]. Dr. R. Sangeetha Technology in Banking (Charulatha Publication) [Page No:-136-151]
- [3]. Kothari RC. (2008) research methodology methods and techniques, new age International Publisher, India
- [4]. P. L Bhandarkar, T. S. Wilkinson, “ Methodology and Techniques of Social Research” Himalaya Publishing House, publication 2023, ISBN-978-93-5097-472-8
- [5]. Research Paper:- For organization of research Study, I take help from my research Guide research paper:- DR. Mukta Anil Pote (case Study: Mahalaxmi Saras 2015-2016)
- [6]. Sonali Jain. (2014), Banking Industry in India, New century publication, India