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# Digital Banking in Indian Languages End-to-End Localization of Banking System in Indian Languages

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**ABSTRACT:** The aim of research on language for specific purposes is to explain how particular forms of the language are used in any given context. Nowadays, banks need to offer their services and products via the Internet in order to keep themselves competitive in the current globalized market, as it happens with any other industry or academic field. Therefore, research on specific language is necessary for any professional involved in that given particular area in order to understand and reproduce texts of the same nature. This paper introduces a bibliography review about the features that determine the language used by banks in their websites. This paper begins with the definitions of 'bank' and 'banking' and moves towards the principles of 'Internet banking', specifying some general and specific features of its particular language forms and most common uses. This introduction towards the language used by banks on the Internet is expected to be used as some basic guidelines for professionals interested in the field of banks and linguistics to deal with this variety of language for specific purposes.

**KEYWORDS:** Banking in regions language, regional users, internet penetration, language barrier, digital literacy, Changes in Banking Industry Overtime in India, Banking Evolution in India.

## I. INTRODUCTION

Banks were considered as a backbone to the financial system of the country, and it also played an important role in the economic development of the nation. Banks primary function is to include accepting deposits & using these deposits for binding purposes. It basically acts as a link between people who have surplus capital and the people who are in need of those capitals. In general, the banking system of a nation increases the efficiency of economic transactions. The current global crisis that hit every country raised various issues regarding efficiency and solvency of the banking system in front of policy makers. RBI is making necessary changes in his policy to ensure price stability in the economy. The main objective of these changes is to increase the efficiency of banking as a whole as well as of individual institutions.

India, a nation with over 1600 dialects has 30 languages spoken by more than a million native speakers each. The Indian Constitution recognises 22 official languages. The use of regional languages to engage customers in banking services and reach out to people with no access to formal banking in their regional language. Customers can connect better when communicated in Hindi or other Indian languages. Lack of financial literacy makes people opt for Ponzi schemes and not approach banks to secure and grow their money.

According to the recent master circular by RBI, banks will have to implement a multilingual format in regional languages for all banking communications, such as announcements, display indicators, and scheme details. The rule will also be applicable for account opening forms, passbooks, pay-in slips and other printed materials.



## OBJECTIVE OF THE STUDY

1. To explain the changing scenario of the banking industry in India for regional users.
2. To analyze the problems/challenges faced by Non-English customers of national/commercial banks in India.
3. To identify prospects of the Indian banking sector.

## II. RESEARCH METHODOLOGY

Research methodology refers to the process adopted for conducting research. It explains the nature of study, methods of collection of data and tools used to analyze the data. The nature of the study is descriptive because descriptive study describes the present situations and features of study. It helps in reduction of bias and improves reliability of data in research. Secondary data has been used in this research paper. Data is collected from journals, periodicals, research papers and published data on banks, books, different websites etc.

## CURRENT SCENARIO FOR REGIONAL USERS

By 2010, Indian Banking was generally mature enough in terms of supply and reach. Even though reach in rural India still remains a big challenge for Private Sector and Rural Areas. RBI being an autonomous body faces minimum pressure from the government. By 2013 Indian Banking sector employed approx. 12 lakhs employees and had a total 109,811 branches in all over India and approx. 180 branches abroad and managed an aggregate deposits of Rs.54 billion and bank credit of Rs.52604.59 billion. According to the 2012-13 financial year, net profit of banks operating in India was approx. Rs. 51 billion against a turnover of Rs.9148.59 billion. With the new government in power on 28th August 2014 Prime Minister of India Mr Narendra Modi launched a new scheme for Financial Inclusion, that scheme is Pradhan Mantri Jan DhanYojana . Run by the Department of financial services, the Ministry of finance opens 1.5 crores bank accounts on the inauguration day. By 10th January 2015 11.5 crores accounts were opened with around Rs.8698 crores rupees deposited under the scheme; there was also an option for opening bank accounts with zero balance. Physical as well as virtual expansion of banking through mobile banking, internet banking, tele banking, and biometric and mobile ATMs has been taking place since last decade and has gained momentum in the last few years.

## CHALLENGES FACED BY INDIAN LANGUAGE USERS

The Indian banking sector achieved a new height in pace of development from pre nationalization era to till now. But still some factors that challenge the banking sector and become hindrance in the growth of the banking sector. Some challenges faced by Indian banking system are as follows:

**Lack of Knowledge:** As the banking applications are not available in Indian languages there is little knowledge of banking operations in the rural sector of India. People are not aware about the procedure followed by the banking system. They have a little knowledge about services and facilities provided by banks. Due to this reason mostly people can't avail the services rendered by this sector and this has become a major problem for the rural banking sector.

**Cyber Threats:** In India out of total banking transactions 95% are transacted in cash. With the increased use of information technology, internet, smartphone Cyber Crime becomes the major threat for the Indian banking system. Banking sector should take initiatives to control these Cybercrime.

**Banking Frauds:** Another major challenge faced by the banking sector is fraud transactions in banks. In last five years, banking fraud has advanced by 19.6% to 5064 crore. Banking companies should take strong steps to stop these frauds by verifying proper identities and securities presented for granting loans by the public from banks.

**Inadequate Infrastructure:** In many areas of the rural segment there is no proper infrastructure for banking institutions. There is no proper space for working of banks and any other facilities and resources that are necessary for adequate operations of the banking system. In many villages due to less awareness and banking operations could not take place completely digitally. And these problems become the barriers for banking operations for the rural users.



## REGIONAL USER'S KEY GROWTH DRIVERS TO ADDRESS BY BANKING SECTOR

Despite of Various challenges, there are so many opportunities that empower banking business.

**Internet Penetration:** India has 504 Mn active Internet users who are 5 years & above as of Nov' 19. With the growth of 12% over Mar' 19, 53 Mn new users added in Nov'19 compared to Mar'19. Of the overall Internet population, 433 Mn are 12+ years old & 71 Mn are 5-11 years old<sup>1</sup> who access the Internet on the devices of family members.

**User Growth on Digital Platform:** Even though the Internet penetration in urban areas is higher, Rural penetration is growing at a faster rate at 18% in Nov'19 compared to Mar'19. As of Nov'19, For the first time we see that with close to 227 Mn internet users in rural India, which is approximately 10% more than those in urban India, the digital divide which existed between rural and urban India is no longer there.

**Digital literacy:** Indian government introduced the National Digital Literacy mission with a mission to encourage digital literacy skills in India by 2020. this step will help to educate the rural public to understand the benefits, functions and procedure followed by different banks.

**Competitive advantage:** By adopting e-banking banks can get competitive advantage over other financial competitors. Reductions of operational cost by using e-banking, Access to new areas, strong customer relationships are examples of these benefits.

**Untouched rural market:** In the rural segment about 70% of the population is not aware about banking transactions. This sector can become big opportunities for public or private banks. These banks should introduce their services to rural people and connect with new consumers and can capture a big part of the financial market.

## III.METHODOLOGY

Reserve Bank of India (RBI) has instructed all the banks across India through its circular to make use of Regional Language on the Customer services front with main importance being given to following.

- Display of all information boards in Hindi, English and the concerned Regional Language. Bank Posters at rural and semi-urban branches should also follow this guideline.
- All the booklets provided to the customers should be English, Hindi and the regional language.
- Usage of Hindi and Regional Language when conducting business transactions and communications with customers.
- All the bank documents used for transactions and other purposes such as Account Opening Forms, Passbooks and Pay-in-slips should be in 3 languages including the regional language.
- All cheque books should be in Hindi and English but the customer is free to write the cheque Hindi, English or the Regional Language.
- Dropbox and acknowledgement facilities should be available at all collection counters and bank branches should not refuse to give acknowledgements. This message should be displayed in Hindi, English and the Regional Language.



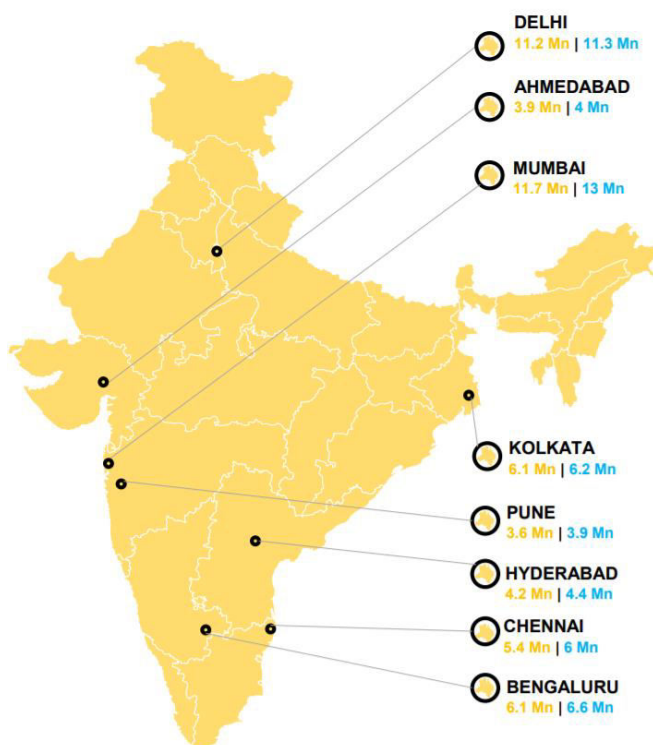
## Localizing Complete Banking Digital Platform

During the pandemic, businesses and government organizations in India saw a huge language gap while reaching out to people on digital platforms. Sectors like banking, healthcare, education, and so on, saw growing needs for engagement, especially during the lockdown. The rural internet usage in India surpassed that of the urban long before the pandemic hit. Covid-19 has accelerated internet adoption among Indian-language users. When banks, insurance, and fintech companies communicate off the internet with this new, previously overlooked Indian-language customer base, they use local languages. However, the buck stops at digital platforms offering services in a language this new customer base couldn't comprehend.

One reason banks and fintech institutions have likely shied away from localizing offerings is the sheer scope of the task. There are numerous points of contact with users across various channels, and it can appear a daunting prospect to translate this huge volume of content manually, in multiple languages at that. With current language technologies, localization of content across various financial channels need not involve a manual workforce that incurs resources, time, cost, and effort.

AI-based localization services can automate most of these processes, doing most of the work over large volumes of text. This is smart localization as opposed to overly complicated manual translation. The need to have large teams and background infrastructure just for localized sites is removed, and human interaction can be limited to quality checks done by specialized translators with domain expertise instead, while all the backend work of creating new localized pages can be handled through automation. The localization process should be end-to-end across channels with no break in user experience, meaning that someone using a site in Gujarati should not receive an OTP SMS in Hindi or a payment gateway page in English. Localized chatbots can prompt users by asking them what it is that they need assistance with through popup chat windows, which users can respond to in their preferred language using built-in Indic input. Depending on the user's preference, such interactions could be either text or voice.

## Internet Size and Penetration



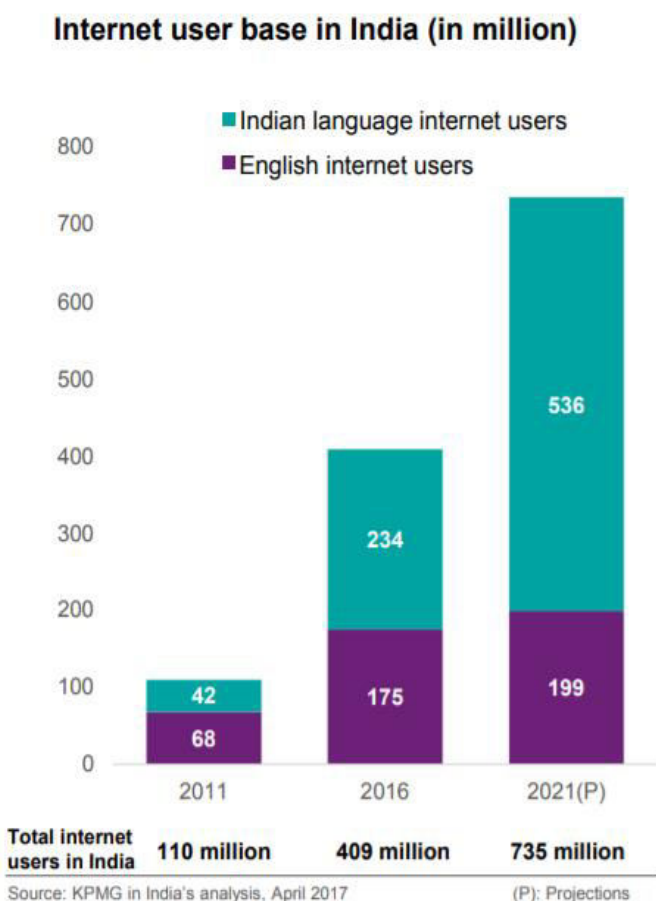
Both urban and rural India has seen healthy growth in the number of active internet users. Of the total population of 1433 million, 485 million individuals reside in urban India and the rest (948 million) reside in rural India. 67% of the urban population i.e., 323 million individuals in Urban India are active internet users while 31% of the rural population i.e., 299 million individuals in Rural India are active internet users. Even though the Internet penetration in urban areas is more than 2X that of rural areas, user ship in rural areas has been growing at a faster rate on a year-on-year basis. While internet users grew by 4% in urban India reaching 323 million users in 2020, digital adoption continues to be propelled by rural India – registering a 13% growth in internet users over the past year. However, the growth rate of AIU has progressively reduced over the years and is the lowest in the last 4 years. With a sizable population not accessing the internet actively in Rural India, there is a huge headroom for growth in the next few years.

## Defining the Indian Language Users

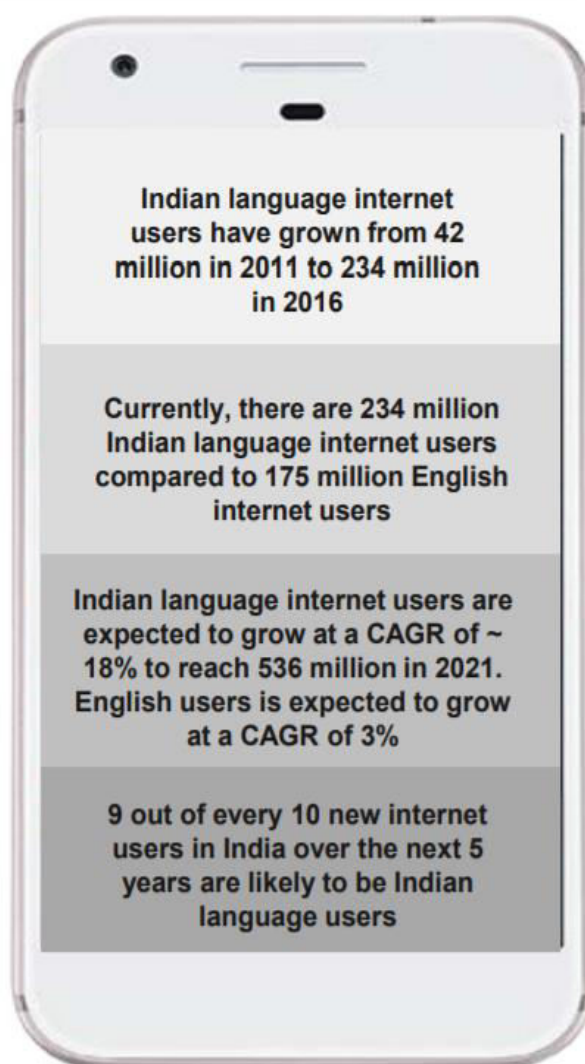
Indian languages*	Hindi	Bengali	Telugu	Marathi	Tamil	Gujarati	Kannada	Malayalam
Speakers (primary languages) in India - (in million)	521	101	91	89	75	56	46	40
Indian language users (in million)	254	53	40	64	40	32	32	22

Indian languages users are Indian language literates who prefer their primary language over English to read, write and converse with each other

## Future New Users are Digital Ready

Indian language internet users are the present and the future<sup>[4]</sup>

1. Census of India, Government of India, 2001  
 2. 8<sup>th</sup> schedule of the Indian Constitution, as on November, 2015  
 3. Investing in Cultural Diversity and Intercultural Dialogue, UNESCO World report, 2009  
 4. KPMG in India's analysis, April 2017





#### IV. EXPERIMENTAL RESULTS

##### Challenges faced by the customer to connect with Banking ecosystem

- 70% Indian language internet users face challenges in using English keyboards
- 60% Indian language internet users stated limited language support and content to be the largest barrier for adoption of online services
- 30% Indian language internet users are aware of the online content but not comfortable using the online medium
- Over 53% bank customers make a physical visit to a bank because they do not comprehend online banking service
- There are 190M Unbanked Indians because of non-availability of services in a language of their choice
- Reach of the bank has increased to the customer but, the customer still does not have complete reach to the Banks
- Over **90%** of Indian language internet users access Chat applications and digital entertainment. New Indian language internet users will contribute to growth in user base over the next five years.
- Social media platforms and digital news are growing with ~ **300 million Indian language users** accessing them. Indian language enabled mobile devices and increased regional language content will result in more users accessing these categories
- Digital write-ups, digital payments, online government services, e- tailing and digital classifieds are emerging categories among Indian language users. The Indian language user base accessing these categories will grow at a CAGR of ~26% to 33% over the next five years. With increased local language support and content, these categories will see increased adoption among users

##### Future trends of Indian language internet

**Rise in user-generated original content online** - Increasing penetration of affordable Indian language enabled smartphones will contribute to rise in user generated original content online

**Faster evolution of Indian language internet users to become active users** - Increasing penetration of internet and internet led businesses accompanied by improving digital literacy will help users make the shift from entertainment to online transactions significantly faster

**Internet platforms to become content aggregators and witness increased timeshare for Indian language internet users** - Indian language users' time spend on internet platforms across categories will converge to transform these platforms as content aggregators

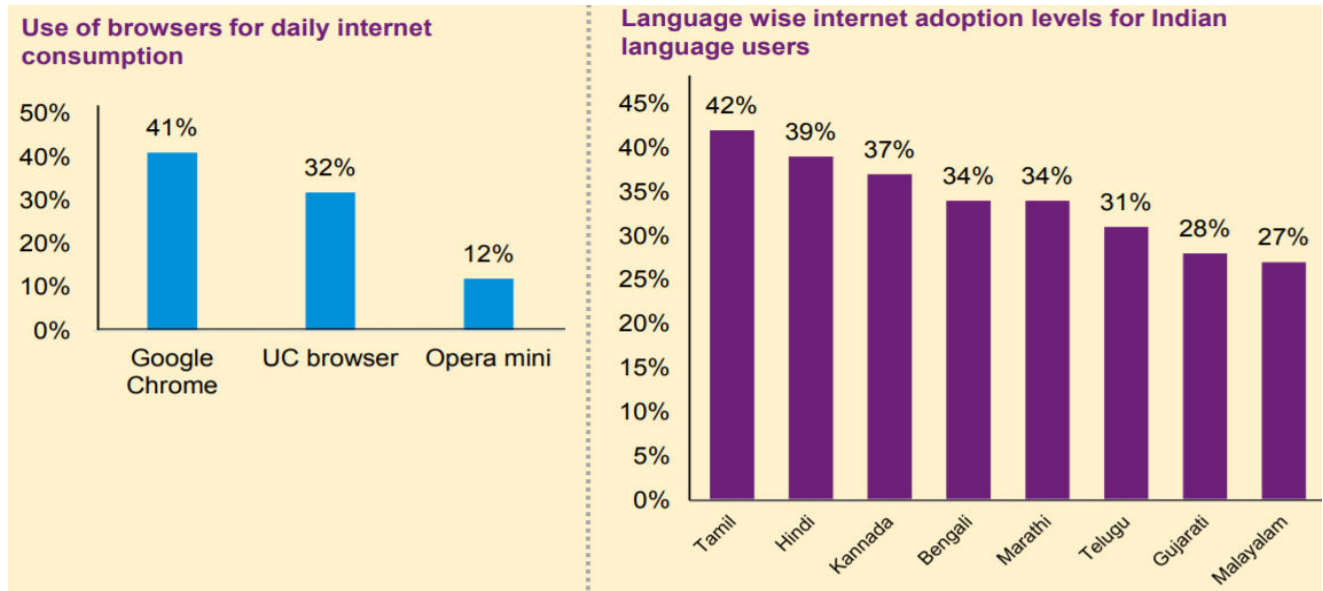
**Advanced technology to bring more Indian language users online** - Advancement in voice recognition and translation technology and the advent of language agnostic internet will drive more Indian language users and accessible content online

**Indian language enablement of platforms, supplemented by mobile compatibility** - Mobile compatible content in Indian language enabled applications and websites to increase adoption of online services among Indian language internet user

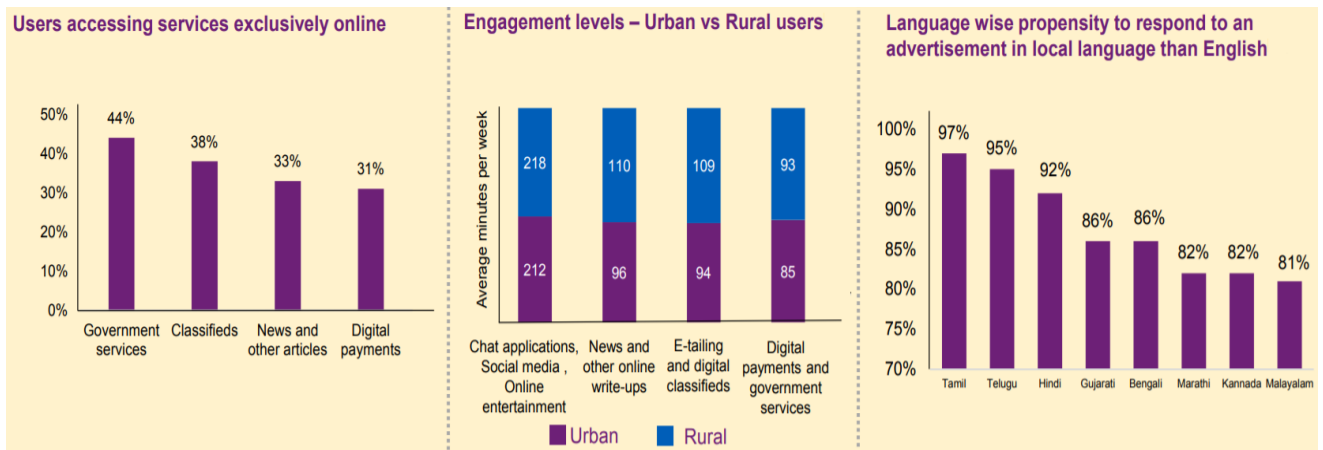
**Rise of digital advertisements in local languages** - Indian language users' higher propensity to respond to a digital advertisement in their local language will increase the share of local language advertisements in the digital medium

**Indian language enablement of digital payment interfaces** - Indian language enabled payment interfaces play a pivotal role in Indian language users transacting online, enhancing internet's role as a revenue generating platform

### Key behavioral aspects of Indian language internet users



- 99% of Indian language users access the internet through their mobile devices. The overall share of internet users in India accessing internet through mobile devices is 78%
- Pre-loaded applications and web browsers see high adoption among new Indian language internet users
- 68% Internet users consider local language digital content to be more reliable than English
- Currently, Tamil (42%) has the highest internet adoption levels followed by Hindi and Kannada among the Indian language users



- Chat applications and Digital entertainment have more than 90% adoption among Indian language users
- Around 35% of Indian language internet users access government services, classifieds, news and payment services exclusively online
- Rural Indian language internet users have higher engagement levels (~ 530 minutes per week) than Urban internet users (~487 minutes per week)
- 88% of Indian language internet users are more likely to respond to a digital advertisement in their local language as compared to English





## V. CONCLUSION

The Indian Banking sector achieved a new height with a changing scenario. Over the years a lot of changes have been witnessed in the banking industry. The Indian banking sector has spread its wings in new areas but still the banking sector has faced many challenges. This paper explains various challenges and prospects presented to the banking sector. Challenges show the major threats and problems whereas opportunities offer new avenues to the banking sector. It will help the banking sector to adjust in a competitive world. There are many innovations like ATM, Debit Cards, net Banking that have changed the direction of banking but still we need some more avenues to solve the problems and to avail the opportunities. The Indian Banking Sector is undergoing a huge transformation to offer better services to their customers whereas these challenges emphasize rethinking policies and strategies.

After analyzing different research papers and collecting information from different sources it can be concluded that there have been enormous changes which took place in different phases. Despite various changes which took place in the banking sector. The introduction of E-Banking services has brought about a major change in the transaction of the banking system, many new methods of E banking have been introduced but we find that with improvement in technology there is also a threat to the data of the customers. Although banks take steps to avoid such problems which may be faced by the customers of the bank. As we know that the only thing permanent in the world is the change therefore there is a vast scope of Indian banking industry in future as in future there will be mostly IoT (Internet of Things) based technology and the AI based technology which will help people process the banking transactions very fast and their own convenience the people can transact at any time and at place of the country.

## VI. ACKNOWLEDGEMENT

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