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Technology And Financial Inclusion

{Indian Banking Sector}

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Abstract:

Financial inclusion is one of the top most policy priorities of the Government of India. Ever since the UPA government has come into power in the center, one of the most visible aspects of the governance has been agenda of social inclusion of which financial inclusion is an integral part. Taking cue from the state prodivity towards inclusive growth agenda, the Reserve Bank of India (RBI) has taken a proactive role in ushering the enabling environment for expediting financial inclusion across length and breadth of the country through bank led model. To reach out at 400 million plus un (der) banked population at pace with profitability is the single most important challenge faced by the multi stakeholders, particularly banks and delivery channels. And here comes in the role play of technology led models and their efficacy over traditional brick and mortar branches.

The paper is broadly divided into two parts, in the first part it takes an overview of the existing technology led branchless models of financial inclusion across the world and highlights how populations at bottom of the pyramid across the spectrum of developing world have gained access to financial services. The paper also highlights role of regulatory environment which has paved path for development of technology led models in the emerging economies of the world. In the second part, the paper vividly describes various technology led models of financial inclusion – particularly branchless, which have mushroomed in India for last few years, the changes in regulatory environment and customer expectations due to multiple options available.

Finally, the paper sums up with an open-ended question what does future hold for millions un(der) served in India and how does technology, banking and public policy could better address the developmental question of financial exclusion.

Financial Inclusion growth is possible only through proper mechanism which channelizes all the resources to all the direction of the customers. it is an innovative concept which makes alternative techniques to promote the banking habits of the rural people. Because India is considered as largest rural populations in the world and belongs to agriculture activities, financial inclusion is aimed at providing banking and financial services to all people in a fair, transparent and equitable manner at affordable cost. Households with low income often lack access to bank account and have to spend time and money for multiple visits to avail the banking services, be it opening a savings bank account or availing a loan, these families find it more difficult to save and to plan financially for the future. This paper is an attempt to discuss the overview of financial inclusion in India.

KEY WORDS: financial inclusion, Technology, reserve bank of India, financial institutions.

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Introduction:

Financial inclusion is the recent concept which helps achieve the sustainable development of the country, through available financial services to the unreached people with the help of financial institutions. Financial inclusion can be defined as easy access to formal financial services or systems and their usage by all members of the economy. The committee on financial inclusion, of government of India, has defined financial inclusion as the process of ensuring timely access to financial services and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost (Rangarajan Committee, 2008).

The process of financial inclusion consists of ensuring bank accounts to each household and offering their inclusion in the banking system (Reddy, 2007). Access to financial services promotes social inclusion, and builds self-confidence and empowerment. In an address Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India at the National Finance Conclave 2010, has mentioned that financial inclusion is no longer a policy choice but it is a policy compulsion today. And banking is a key driver for inclusive growth.

Financial Inclusion in India:

The Reserve Bank of India setup a commission (Khan Commission) in 2004 to look into Financial Inclusion and the recommendations of the commission were incorporated into the Mid-term review of the policy (2005-06). In the report RBI exhorted the banks with a view of achieving greater Financial Inclusion to make available a basic "no-frills" banking account.

In India, Financial Inclusion first featured in 2005, when it was introduced, that, too, from a pilot project in UT of Pondicherry, by Dr. K. C. Chakraborthy, the chairman of Indian Bank. Mangalam Village became the first village in India where all households were provided banking facilities.

Review of Literature:

Michael Chibba (2009) noted that Financial Inclusion is an inclusive development and Poverty Reduction strategy that manifests itself as part of the emerging FI-PR-MDG nexus. However, given the current global crises, the need to scale-up Financial Inclusion is now perhaps more important as a complementary and incremental approach to work towards meeting the MDGs than at any other time in recent history.

Joseph Massey (2010) said that, role of financial institutions in a developing country is vital in promoting financial inclusion. The efforts of the government to promote financial inclusion and deepening can be further enhanced by the pro-activeness on the part of capital market players including financial institutions. Financial institutions have a very crucial and a wider role to play in fostering financial inclusion. National and international forum have recognized this and efforts are seen on domestic and global levels to encourage the financial institutions to take up larger responsibilities in including the financially exclude.

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Technology in Banking Sector:

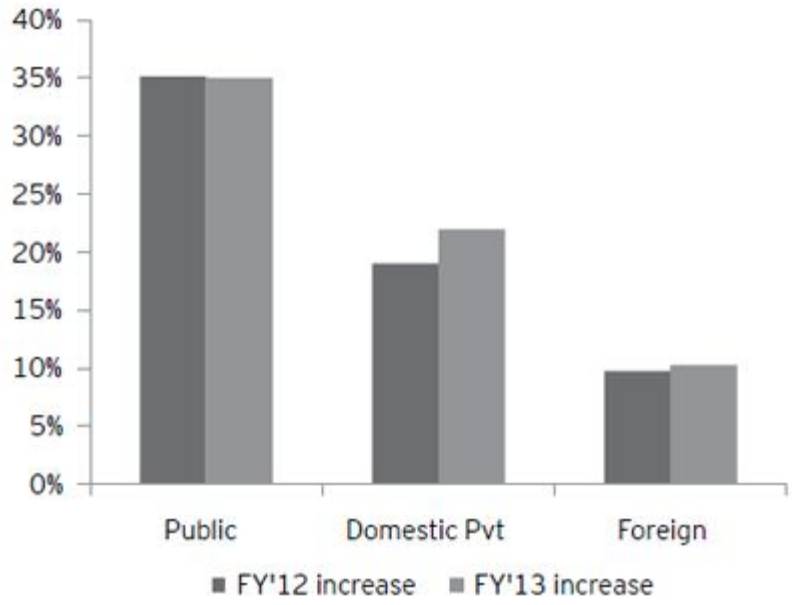
Banking today is a flourishing industry, focused on technological innovation. Internet banking has emerged as the biggest focus area in the "Digital Transformation" agenda of banks.

In 2012-13, Indian banks deployed technology-intensive solutions to increase revenue, enhance customer experience, optimize cost structure and manage enterprise risk. However, there is a wide variation in the technology agendas and implementation capability across different players of the banking industry:

- Enhancing core banking value
- Revamping the digital agenda
- Moving from information to insight
- Dealing with a changing risk regime
- From cash to electronic modes of payment
- Grappling with financial inclusion
- Empowering employees
- Accelerating innovation

Salient features

1. **Internet banking:**



The shift towards internet banking is fuelled by the changing dynamics in India. By 2020 the average age of India will be 29 years and this young consumer base is internet savvy and wants

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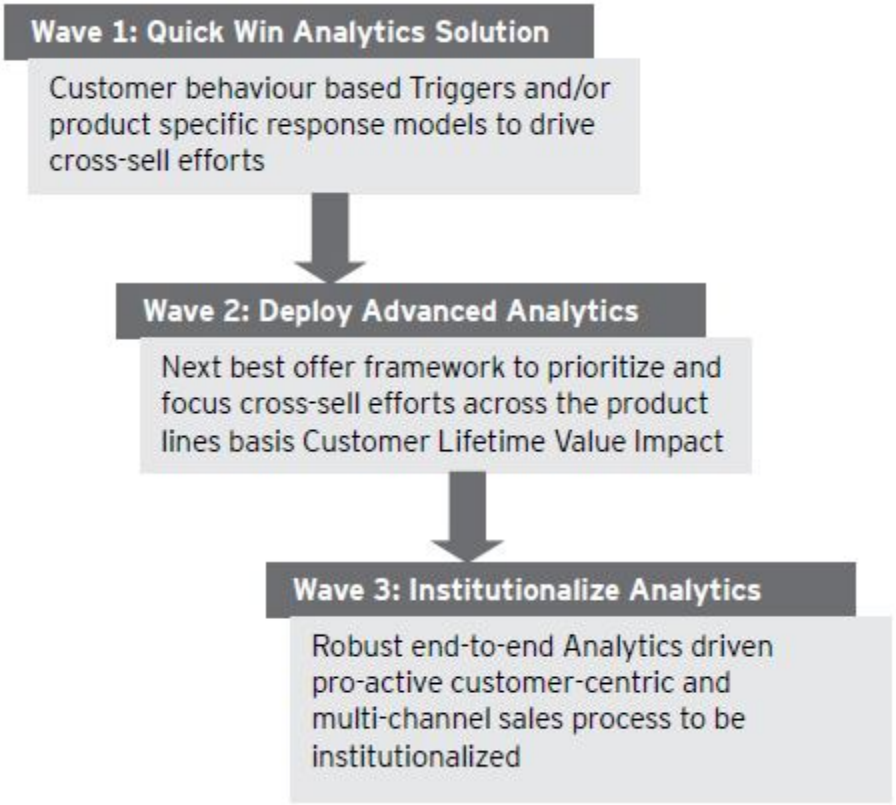
real time online information. Indian banks therefore need to aspire high and move toward implementing a world class internet banking capability.

Urban areas had a total of 205 million internet users in October 2013 that accounts for 40% yoy growth, while rural India have 68 million users and a growth rate of 58% yoy.

2. **Business intelligence**



India's banking industry is on the cusp of a major transformation, with new banking licenses expected to bring in more players in an already competitive environment. In such an environment, banks across India are increasingly adopting business intelligence (BI) and analytics to drive their overall profitability.

RBI has also encouraged banks to adopt BI to increase transparency and control over the banking business. The Automated Data Flow (ADF) initiative has been a strategic step in this direction, seeking to ensure submission of correct and consistent data from banks' systems to the RBI without any manual intervention.

3. **Customer management**

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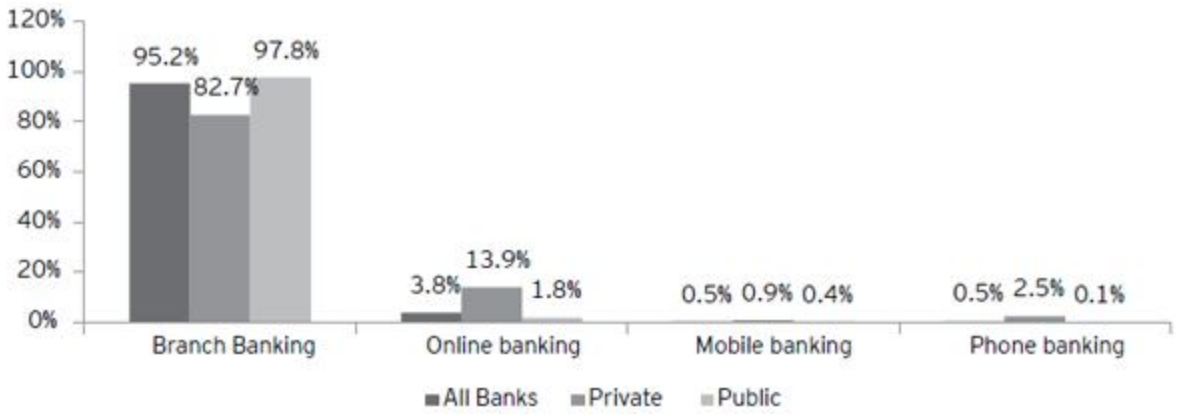

Banks need to clearly articulate and measure the expected benefits from the winning strategies which would be dependent on the value various initiatives provide customers. These include:

- Customer segmentation
- Co-creation
- CRM to customer experience
- Use of alternative channels
- Effective cross and upsell

4. **Risk management and information security**

The Indian Bank's Association (IBA) survey and EY analysis reveals that Core Banking System (CBS) is widely used across the banks for transaction management. However, its integration with risk management and other enterprise level applications is still at preliminary stages.

Some key risk management methods include:

- Credit systems
- Enterprise Risk Management Systems
- Liquidity risk systems

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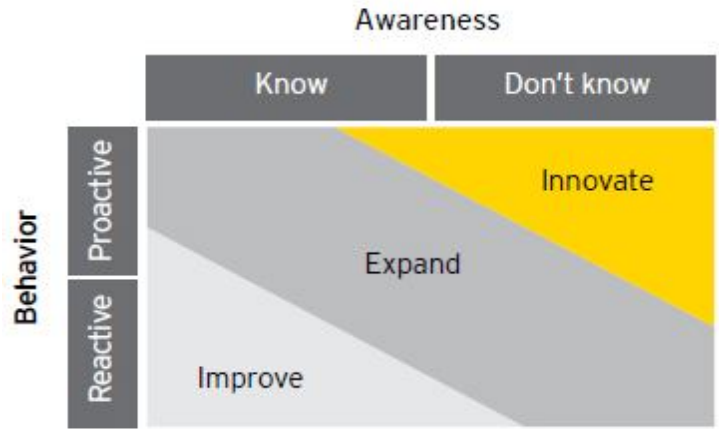

With the advent of mobile computing, social media, cloud computing and increasing sophistication of hackers it is evident that the risk environment is changing. With more and more cases being registered under the IT Act 2000, banks can no longer ignore privacy of customers.

To tackle this challenge, EY suggests a three-pronged approach to improve, expand and innovate information security.

5. Technology in training and e-learning

The last decade, which marks the era of liberalization and reforms in the country, has been an eventful one for the banking sector, changing the face of the industry in a big way. The increase in investment on training and development by banks in India is caused by a variety of motives, which include — new technology adoption, productivity, responding to skills deficiencies, new hire inculcation, and staff performance management.

6. Financial inclusion

The six cornerstones pillars of financial inclusion

The spread of digital connectivity and mobile phones have created attractive opportunities in the Indian financial inclusion landscape. In particular, technology promises to enable hundreds of millions of people to access financial services for the first time due to its wide reach, convenience and low cost of delivery.

India is experimenting with several new ideas in financial inclusion in almost all areas requiring immediate focus — banking and payment channels, technology platforms, regulatory. Significant progress is required in financial inclusion, as indicated clearly by the World Bank Findex Survey 2012.

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7. **Mobile banking**



Mobile banking continues to be a focus area for all banks in India. Our survey indicates that they are not only looking at this channel as a way to increase their customer engagement in urban areas, but also to reach out to new ones in rural regions, and thereby significantly further their financial inclusion agenda.

8. **Payment systems**

In the last decade, India has seen a shift from traditional payment methods, i.e., cash/paper-based payments to modern electronic payment systems. However, 97% of payment transactions for public sector banks are paper based as compared to 60% for private sector banks.

In the recent past, the RBI has taken multiple steps to promote electronification of payment instruments such as:

- Framing the Payment & Settlements Systems Act to provide for the regulation and supervision of payment systems in India
- Providing robust RTGS/NEFT platform, establishing National Payments Corporation of India (NPCI) to act as an umbrella institution for all the retail payment systems
- Regulation and promotion of acceptance channels including ATMs, POS and payment gateway policy
- Issuance guidelines and security measures for all card transactions

Debit cards (43%), credit cards (28%), internet banking (29%) all comprise a substantial percentage of the overall number of electronic transactions for private sector banks.

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Role of Banking Sectors on Financial Inclusion development in India:

The number of commercial Banks in a country provides an opportunity for the people of that country to participate in the formal financial system and to utilize financial services of formal financial system. Larger the number of commercial banks, larger the scope for bringing people in to formal financial system provided if banks provide suitable financial products and services.

Chart-1 – Showing the number of commercial banks in India between (2008 and 2013)

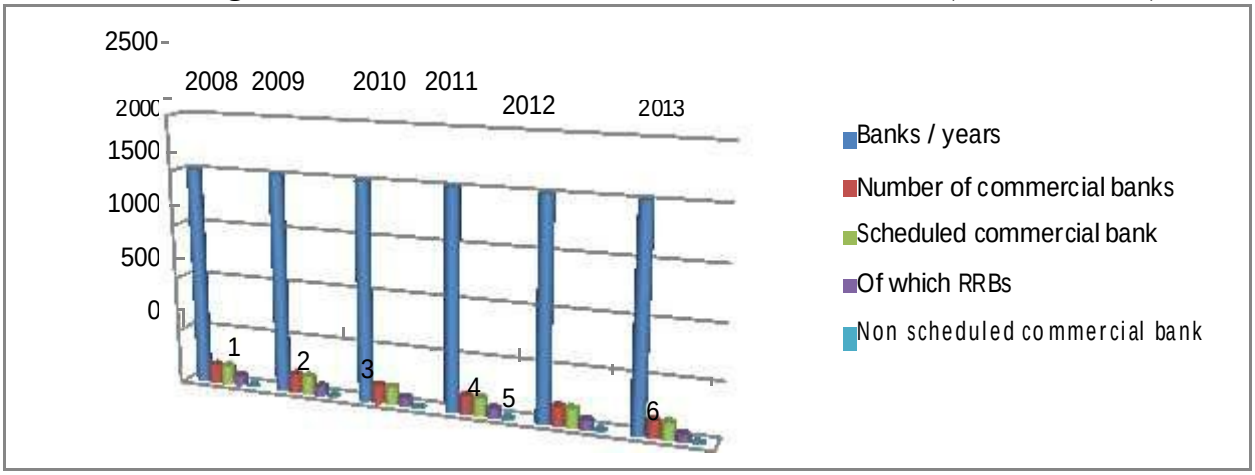

Table -2 Number of bank offices in India:

Areas / years	2008	2009	2010	2011	2012	2013
(a) Rural	30927	31598	32529	33868	36503	39439
(b) Semi-Urban	18027	19337	21022	23299	26144	28691
(c) Urban	15566	16726	18288	19046	20650	21720
(d) Metropolitan	14267	15236	16364	17806	19080	19961
All India level of bank offices	78787	82897	88203	94019	102377	109811
Trend percentage	100.00%	105.20%	111.95%	119.33%	129.94%	139.37%
Actual increasing percentage	Base	5.20%	11.95%	19.33%	29.94%	39.37%

Source: Statistics relating to commercial banks at a glance RBI

Note: Number of bank offices includes Administrative Offices. 2) Classification of bankoffices according to population, for years is based on 2001 census.

Table: 2- explains about the number of bank offices in India from 2008 – 2013, it clear from the above table that the number of bank offices have been increased since 2008 to 2013, the increasing trend is as 5.20 per cent, 11.95 per cent, 19.33 per cent, 29.94 per cent and 39.37 per cent for the years 2009, 2010, 2011, 2012, 2013 respectively

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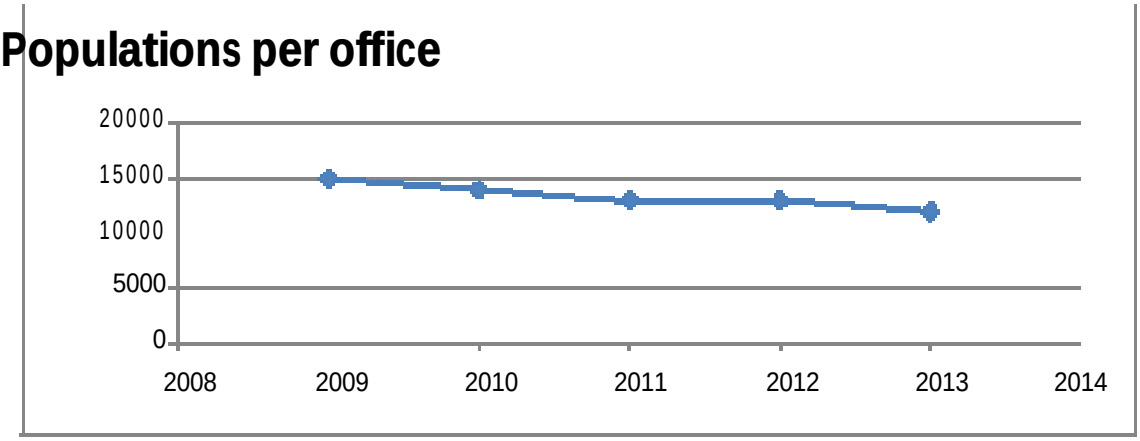
Table: 3 -Population per offices:

Years	2008	2009	2010	2011	2012	2013
Populations per office	15 000	15000	14000	13000	13000	12000

Source: Statistics relating to commercial banks at a glance RBI

The above table -3- shows that the populations per office is decreasing trends year after year continually since 2008 – 2013, It was 15000 population per office in the year 2008,but in the year 2013, it shows that only 12000 populations per office ,

Chart-2- Showing the populations per offices:



The above chart as well is the proof for the decreasing trend of the populations per office

Table: 4- Aggregate deposits and credit level of scheduled commercial bank (Rs. billion)

Deposits and credits /Years	2008	2009	2010	2011	2012	2013
(a) Demand deposits	26726.30	33110.25	38472.16	45662.64	52837.52	60881.55
(b) Time deposits	5243.10	5230.85	6456.10	6417.05	6253.30	6622.99
Aggregate deposits	31969.40	38341.10	44928.26	52079.69	59090.82	67504.54
Bank credit	23619.13	27755.49	32447.88	39420.83	46118.52	52604.59
Per cent of credit allowed	73.88%	72.39%	72.22%	75.69%	78.04%	77.93%

Source: Statistics relating to commercial banks at a glance RBI

Note: Aggregate deposits, bank credit of Scheduled Commercial Banks in India are as per"Form-A" return under Section 42(2) of the Reserve Bank of India Act, 1934

From the above table -4- it is pragmatic that the deposit level and credit level are increasing style for all the years, in case of aggregate deposit level in the year 2008,it was 31969.40 billion rupees where as in 2013 it has mount up to 67504.54 billion rupees as the same style the credit also shows the increasing style in the year 2008 it was 23619.13 billion rupees ,in the year 2013 it has rose up to 52604.59, but in case of the credit allowed through it shows

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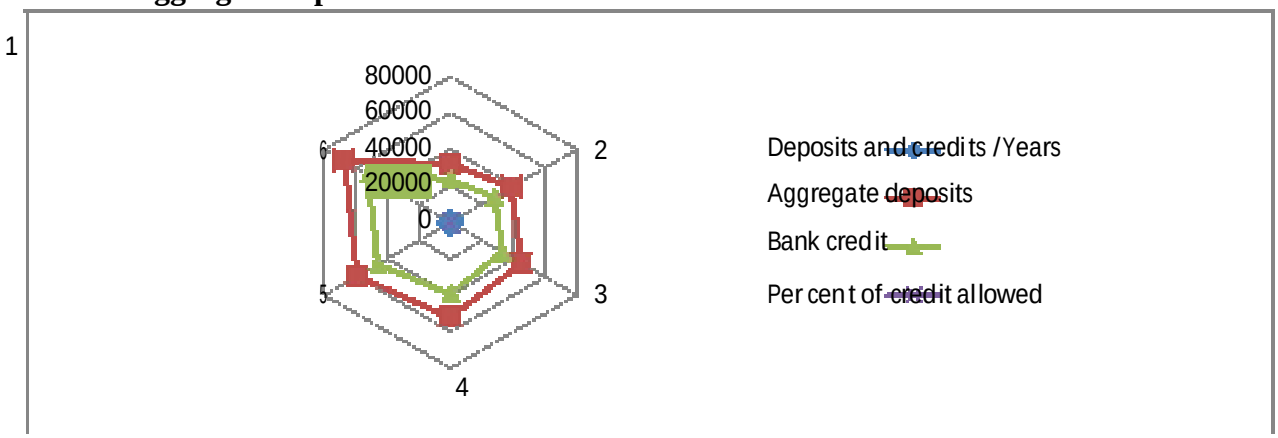
both increasing and decreasing style of all the year but the decreasing level of percentage is very low as the final result it shows as the increasing trends.

Chart-3- Aggregate deposits and credit level of scheduled commercial bank



The above chart is the readymade proof for the deposits and credit level of scheduled commercial banks from the year 2008 – 2013.

Table -5- Total number of ATMs:

Number of ATMs / Years	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Number of ATMs	34789	43651	60153	74505	95686	114014
Trend percentage	100.00%	124.47%	172.91%	214.16%	275.04%	327.73%
Increasing level of ATMs	Base %	24.47%	72.91%	114.16%	175.04%	227.73%

Source: Statistics relating to commercial banks at a glance RBI

The above table -5- be evidence for the total number of ATMs for the study period between 2008 and 2013, it shows that all the year the ATMs numbers are increasing in a good difference, the percentage of the increasing also very high for all the years, it evidence the growth percentage as 24.47 per cent, 72.91 per cent, 114.16 per cent, 175.04 per cent, 227.73 per cent, for the years 2009, 2010,2011,2012,2013, respectively,

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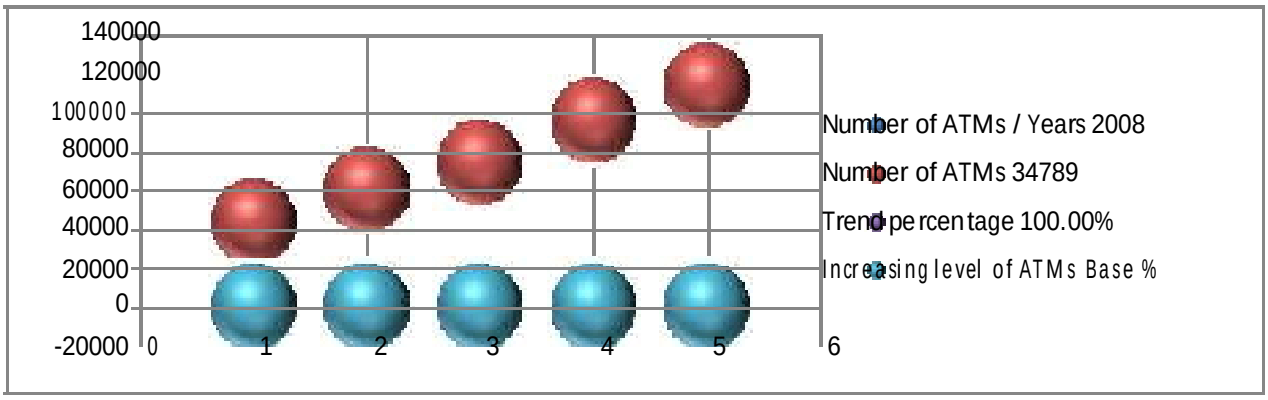
Chart-4- Total Number of ATMs:



The above chart has explained clearly that the number of ATMs is increasing year to year for the use of the customers

Findings:

From the above analysis the following findings have been identified:

- Number of commercial bank, scheduled commercial bank, RRBs and non scheduled commercial banks number are reduced during the period between 2008 and 2013.
- Total number of the bank offices have been increased in almost all the areas (urban, semi-urban, suburban, rural and metropolitan) the increasing trend also shows the high rate of increasing during the study period between 2008 and 2013,
- Population per office is showing all the years from 2008 to 2013 steadily the decreasing trends only,
- Aggregate deposits and credits granted are all the years increasing, the granting credit by the banking sectors shows the increasing trend forever , the per cent rate also very high year to year,
- Numbers of ATMs machine installations are showing that the banking sectors are installing the ATMs in almost all the places on campus and off campus,

Suggestions and recommendations:

Based on the above findings the followings suggestions and recommendations have been suggested for the further improvements of the financial inclusion services of the banking sectors in India,

- Number of commercial bank may be increased in India, though maximum population in India are using the banking services, if the banking sectors opened banks in the remote and rural areas all the people can utilize the services of the banking sectors at the level best for the improvement of the life standard of the themselves,
- The banking sectors have to liberalized the security level of the borrower to borrow money from the bank in an easiest way, they banking sectors have to announce the new schemes offered by them to all the citizen of India for the proper utilization of the fund,

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- Though many of the banks are providing the technical services to the customers, most of the customers are not aware of the services provided by them, hence the banking sectors have to create the awareness to the members and the customers about the services provided by them, hence the banking populations can use all the financial and non-financial services of the all the banks in India ,
- All the banks are installing the ATMs in all the places, but some time the RBI is changing the policies and instructions for the using of the ATMs, many of the ATMs are not in good conditions for immediate use, some time it says that, sorry the operations are failed, many ATMs some time it is giving the receipts rather money, there may be a high technical implementations for the smooth use of the ATMs and proper training to the guardian of the ATMs center and to give the practical knowledge to the rural and remote customers regarding the usages and the services available in the banking sectors,

Conclusion:

For standing out on a global platform, India has to look upon the inclusive growth and financial inclusion is the key for inclusive growth .There is a long way to go for the financial inclusion to reach to the core poor according to K.C.Chakrabarty RBI Deputy Governor "Even today the fact remains that nearly half of the Indian population doesn't have access to formal financial services and are largely dependent on money lenders". Mere opening of no-frill bank accounts is not the purpose or the end of financial inclusion while formal financial institutions must gain the trust and goodwill of the poor through developing strong linkages

with community-based financial ventures and cooperative. Financial Inclusion has not yielded the desired results and there is long road ahead but no doubt it is playing a significant role and is working on the positive side

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