Role of Technology in Financial Services of Commercial Banks in Visakhapatnam

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Abstract: Liberalization and data generation has attracted many overseas banks to India, thereby establishing supermarkets, new merchandise and green transport channels for the banking industry, within the improvement of Indian financial system. Banking sector performs a completely essential and vital position. With the usage of era there have been an boom in penetration, productivity and performance. It has no longer only multiplied the value effectiveness however additionally has helped in making small cost transactions feasible. It additionally complements alternatives, creates new markets, and improves productivity and performance, it has been observed that monetary markets have changed into a purchaser’s markets in India.

Industrial Banks in India at the moment are turning into a one-forestall grocery store. the point of interest is transferring from mass banking to magnificence banking with the advent of fee added and custom designed products. generation allows banks to create what looks like a branch in a business constructing’s foyer while not having to lease manpower for manual operations. The branches are walking ion the concept of 24 X 7 operating, made feasible by using the usage of Tele banking, ATMs, internet banking, cell banking and E-banking, those technology pushed shipping channels are getting used to attain out to the greatest number of customers at decrease fee and in maximum green manner. The splendor of those banking improvements is that it places both banker and customer in a win- win state of affairs, effective use of era has a multiplier impact ion increase and development.

For the reason that technological improvements in the banking area in industrialized nations were proven to boom productivity of this enterprise around the sector, then why did India pull away from adopting this technology until the Nineteen Nineties. Why has India been a overdue adopter of generation in the banking enterprise while it could have reaped the advantages from the existing R&D information developed by way of innovators and early adopters. this newsletter charts out the direction of technological innovation in the Indian banking enterprise submit-economic liberalization (1991-2) and identifies initial conditions in phrases of competitive environment and regulatory pressures that have contributed to the diffusion of those improvements. the thing highlights the function of labor unions in public quarter banks and their preliminary competition to technological adoption. The empirical evaluation demonstrates the superior overall performance of the early adopters of technology (private area and foreign banks) as measured with the aid of productivity, returns on equity, and marketplace proportion, in comparison to the late or passive adopters (public sector banks).

Keywords: vital position completely.

I. INTRODUCTION

FinTech and Financial Market disruptions:
The term ‘FinTech’ is a contraction of the phrase’s “finance” and “technology”. It refers back to the technological begin-united states of America which can be rising to assignment conventional banking and monetary players and covers an array of services, from crowd funding systems and cellular price answers to on-line portfolio control gear and international cash transfers. Some of the principal FinTech services and products presently used in the market location are Peer to look (P2P) lending systems, crowd investment, block chain technology, allotted ledgers technology, huge facts, el ever contracts, Robo advisors, E-aggregators, and so on. those FinTech merchandise are currently used in international finance, which bring collectively the Lenders and borrowers, seekers and carriers of statistics, with or without a nodal intermediation organization. Fintech’s are attracting hobby each from customers of banking offerings and investment funds, which see them as the destiny of the financial area. Even retail corporations and telecom operators are seeking out methods to offer economic services thru their present net works. This flurry of activities raises questions over what form of financial panorama will emerge within the wake of the virtual transformation.

Economic institutions are seeking to growth their expertise on the subject of technological innovation, each via partnerships with tech agencies and by making an investment in or obtaining such agencies. in spite of this, there are wide differences within the preparedness of marketplace members for those modifications in exercise.

Objectives of the study: Without a valid and powerful banking machine in India it cannot have a healthful economic system. The banking system of India need not only be hassle free however it should be able to meet new demanding situations posed with the aid of the era and any other external and internal elements. The records gadget is paramount difficulty to the banks in today’s commercial enterprise surroundings. The business of cooperative financial institution has improved phenomenally in latest years because of the sharp growth in numbers of urban co-operative banks. This exponential increase of Co-operative Banks in India is attributed specifically to a wholelot better neighborhood attain, personal interaction with customers, and their capability to seize the nerve of the neighbourhood shoppers.

A software
Role of Technology in Financial Services of Commercial Banks in Visakhapatnam

program improvement technique refers to the framework that is used to structure, plan, and control the technique of developing a statistics device. Each of the available methodologies and strategies are excellent acceptable to unique kinds of projects, primarily based on various technical, organizational and to be had sources, as regards to above relevant statistics the principle goal is to study the induction of IT gear in city cooperative bank in light of software program engineering idea. With the help of this initial statistics the followings are some of the objective of the this study:

To study the (IT) Information technology in view of this research study:

- To study the use of Information-technological (IT) means in the organization
- To study the feedback of the past operation structure
- To study the existing and past transactional system
- To study the all dependent parameters which effect the working of the banking system in India
- To study the work culture, ethics, loyalty of customer, employee and management who are the key stake holders of the banking system.
- To study the service provided by the banks regarding customer relation and retention
- To study the view of top management, employee and customers review for the services which are rendered by the banks
- To study the Software Engineering tools and techniques which are implemented in view of research work

- To study the feedback of implemented technology which cater to the needs of the customers in banks
- To study on collected data and information by applying various methods of statistics and other data science

II. RESEARCH METHODOLOGY

Research Methodology is the way in which researchers specify how they're going to retrieve the all-important facts and data in order to be required to make essential choices. research technique usually entails a full breakdown of all the options which have been selected by a organization so as to investigate something, this will consist of the strategies and strategies used to carry out the research; as well as any of the terminology and causes of ways those techniques can be applied efficaciously.

Sampling Technique used:

Stratified Random Sampling: Stratified random sampling is a method used to avoid the possibility of samples which are “least extreme” by confirming that all parts of the data are embodied in the sample in order to “rise the productivity” (that is to decrease the error in the estimate). In “stratified sampling” the population of N units is initially divided into disjoint sets of N1, N2, ____, NH, ____, NL units respectively. These types of subgroups called ‘strata’ they compromise the entire population so that N1+N2+N3+ ... NL=N

Data Analysis and Hypothesis testing:

Type of Banks

| Bank Type    | 25 | 37.84% |
|--------------|----|--------|
| Nationalized | 25 | 37.84% |
| Private      | 19 | 28.82% |
| Cooperative  | 16 | 20.30% |
| Foreign      | 9  | 13.04% |

Category A Services Provided by the Banks

Which of the following services are offered by the bank

| Service         | Banks | % of Banks |
|-----------------|-------|------------|
| ATM             | 50    | 21%        |
| Debit Card      | 87    | 35%        |
| ATM cum Debit Card | 48    | 20%        |
| Credit Card     | 60    | 25%        |
Category B Services Provided by the Banks

Which of the following services are offered by the Bank?

| Service                        | Banks | % of Banks |
|--------------------------------|-------|------------|
| Internet Banking               | 32    | 15%        |
| Electronic Funds Transfer      | 63    | 30%        |
| Electronic Clearance System    | 41    | 19%        |
| Electronic Bill Payments       | 76    | 36%        |

Category C Services Provided by the Banks

Which of the following services are offered by the bank? (Category C)

| Services                        | Banks | % of Banks |
|---------------------------------|-------|------------|
| Phone Banking or Mobile Banking | 65    | 26%        |
| Core Banking                    | 63    | 25%        |
| Wealth Management               | 50    | 20%        |
| Real Time Gross Settlement      | 72    | 29%        |

Category D Services Provided by the Banks

Which of the Following Services are Provided by the Bank? (Category D)

| Services                                     | Banks | % of Banks |
|----------------------------------------------|-------|------------|
| DEMAT Services                               | 62    | 26.72%     |
| Trading Account                              | 73    | 31.47%     |
| Forex Services                               | 41    | 17.67%     |
| Multi-City Pay at Par cheque facility        | 56    | 24.14%     |

Hypothesis Testing

Hypothesis:
H1: Use of technology in financial services is same across all type of the banks.
H2: Use of Technology in financial services increases Consistency and Reliability in operations of Banks.
H3: Use of Technology in Banks results in Increased Employee Productivity, Governance, and Improvement in Security and Reduced cost of operations.
H4: Technology in financial services increases convenience and efficiency in banks.
H5: Use of Technology in Financial Services of Banks Contributes to Globalization.
H6: Use of Technology in Financial Services of Banks leads to increase in Baking Products.

Hypothesis Testing Tables

H1: Use of technology in financial services is same across all type of the banks.

| Chi-Square Tests | Value | DF | Asymp. Sig. (2-sided) |
|------------------|-------|----|-----------------------|
| Pearson Chi-Square | 6.262* | 3  | .100                  |
| Likelihood Ratio  | 6.288 | 3  | .098                  |
| Linear-by-Linear Association | 6.075 | 1  | .014                  |
| N of Valid Cases  | 788   |    |                       |

Since the calculated value of chi-square (0.100) is greater than the alpha (0.005) of level of significance 3 degrees of freedom. The Null hypothesis: Use of technology in financial services is same across all type of the banks is accepted.
Role of Technology in Financial Services of Commercial Banks in Visakhapatnam

H2: Use of Technology in financial services increases Consistency and Reliability in operations of Banks.

| Chi-Square Tests                  | Value | df | Asymp. Sig. (2-sided) |
|-----------------------------------|-------|----|-----------------------|
| Pearson Chi-Square                | 451.717<sup>a</sup> | 12 | .000                  |
| Likelihood Ratio                  | 337.454| 12 | .000                  |
| Linear-by-Linear Association      | 203.508| 1  | .000                  |
| N of Valid Cases                  | 788   |    |                       |

Since the calculated value of chi-square (0.000) is less than 0.005 level of significance with 12 degrees of freedom. The Null hypothesis is rejected. So, the H2: Use of Technology in financial services increases Consistency and Reliability in operations of Banks is rejected.

H3: Use of Technology in Banks results in Increased Employee Productivity, Governance, and Improvement in Security and Reduced cost of operations.

| Chi-Square Tests                  | Value | df | Asymp. Sig. (2-sided) |
|-----------------------------------|-------|----|-----------------------|
| Pearson Chi-Square                | 37.056<sup>a</sup> | 9  | .000                  |
| Likelihood Ratio                  | 36.509| 9  | .000                  |
| Linear-by-Linear Association      | 17.251| 1  | .000                  |
| N of Valid Cases                  | 788   |    |                       |

Since the calculated value of chi-square (0.000) is less than 0.005 level of significant with 9 degree of freedom. The hypothesis: Use of Technology in Banks results in Increased Employee Productivity, Governance, and Improvement in Security and Reduced cost of operations is rejected.

H4: Technology in financial services increases convenience and efficiency in banks.

| Chi-Square Tests                  | Value | df | Asymp. Sig. (2-sided) |
|-----------------------------------|-------|----|-----------------------|
| Pearson Chi-Square                | 152.030<sup>a</sup> | 9  | .000                  |
| Likelihood Ratio                  | 133.752| 9  | .000                  |
| Linear-by-Linear Association      | 59.247 | 1  | .000                  |
| N of Valid Cases                  | 788   |    |                       |

Since the calculated value of chi-square (0.000) is less than 0.005 level of significant with 9 degree of freedom. The hypothesis: Technology in financial services increases convenience and efficiency in banks is rejected.

H5: Use of Technology in Financial Services of Banks Contributes to Globalization.
Chi-Square Tests

|                        | Value | Df | Asymp. Sig. (2-sided) |
|------------------------|-------|----|-----------------------|
| Pearson Chi-Square     | 252.239 | 12 | .000                  |
| Likelihood Ratio       | 214.174 | 12 | .000                  |
| Linear-by-Linear       | 60.924  | 1  | .000                  |
| Association            |        |    |                       |
| N of Valid Cases       | 788    |    |                       |

Since the calculated value of chi-square (0.000) is less than 0.005 level of significant with 12 degrees of freedom. The hypothesis: Use of Technology in Financial Services of Banks Contributes to Globalization is rejected.

Chi-Square Tests

|                        | Value | df | Asymp. Sig. (2-sided) |
|------------------------|-------|----|-----------------------|
| Pearson Chi-Square     | 57.541 | 4  | .000                  |
| Likelihood Ratio       | 58.654 | 4  | .000                  |
| Linear-by-Linear       | 52.783 | 1  | .000                  |
| Association            |        |    |                       |
| N of Valid Cases       | 788    |    |                       |

Since the Calculated value of chi-square (0.000) is less than 0.005 level of Significance with 4 degree of freedom. The hypothesis: Use of Technology in Financial Services of Banks leads to increase in Baking Products is rejected.

III. FINDINGS

1. ATM facility is provided by banks nearly 82%
2. 65% banks are providing debt and credit facility to their customers
3. 67% banks are providing ATM cum Debit card Facility
4. 70% banks provide credit card facility to their clients
5. 96% banks provide Internet banking facility to all the customers in all branches
6. Electronic funds transfer like RTGS and NEFT are provided by the banks nearly 98%
7. 94% banks are providing Electronic clearing to their account holders instead of traditional methods
8. 85% provide Electronic Bill payments and allied services like UPI (Unified payment interface) etc
9. Mobile banking and internet banking facility is provided by the banks nearly 98%
10. 93% banks provide core banking facilities like Deposits and loans etc
11. 54% Banks provide Wealth Management services like Investment advisory, Financial Planning and allied services
12. 91% provide RTGS Facility

IV. CONCLUSIONS

1. To provide technology based/ oriented services to customers banks are more inclined.
2. The use age of technology and its implementation in the branches of all banks has improved consistently and reliability in the banking operations
3. Employee engagement and productivity, governance and security in banking transactions got improved because of technology implementation in banks
4. Implementation of technology in banks has helped in reducing the cost of operations and maintenance.
5. Efficiency, convenience and effectiveness are yet to be achieved
6. The ATM cards which are provided by the Indian banks are not up to optimum use even though they are issued as global cards
7. Innovative services for their customers are introduced by the banks due to technology implementation.
8. There is a growth in
Role of Technology in Financial Services of Commercial Banks in Visakhapatnam

financial products by the banks

V. RECOMMENDATIONS:
1. All the banking services which are provided by banks are to be technology-based services.
2. The banks should take measures and steps to promote and educate all its customers to transact all the financial transactions by using technology.
3. The customers of all retails as well as commercial banks should be trained of using alternative channels for banking and financial channels.
4. The banks in India should come with attractive incentive plan to attract and habituate customers on all banking transactions.
5. The banks should expand their marketing strategies by increasing their linkages with various business enterprises, companies, shopping malls, ticketing sites, travel sites, tax paying websites, E commerce websites etc. to increase the use of technology based banking and financial services.
6. The government of India should come with a concept of cashless society.

LIMITATIONS:
There are numerous innovative financial services given by means of unique banks (e.g. virtual playing cards) which are not considered in the observe. The look at is done for sixteen generation primarily based financial offerings which might be usually recognized and used. some banks have additionally begun doorstep offerings, which might be provided the usage of hand-held terminals (using cellular generation or maybe satellite tv for pc era) which aren't inside the scope of examine.

SUMMARY:
This study assists in information the role of technology in monetary offerings in commercial banks in India. It additionally mentions about the advantages that the banks have achieved after enforcing generation for his or her monetary offerings. It will also assist in studying the services that can be required inside the future and whether era can clear up the same. The studies paper mentions about the parameters with the help of which we will analyze the professionals and cons of the services furnished through the bank, the value advantage analysis, efficiency, safety, governance in transactions, reduced cost, worker productiveness, consistency in operations and many others. This research paper additionally mentions about the prevailing services provided with the aid of diverse banks; the improvements completed by a few banks in imparting the generation-based services. It will also assist human’s knowledge the use of existing generation-based offerings which many humans aren’t aware to.

REFERENCES
1. Arora, Kalpana.—Indian banking managing transformation through IT, Indian Banking Association Bulletin, Vol. 25(3), pp. 134-38, March 2003.
2. Avasthi, G. P. and Sharma , M. —Information technology in banking: challenges for regulations, Prajna Vol.29(4), pp.17-22, 2001.
3. Janki, — Unleasing employee productivity: need for a paradigm shift. Indian Banking Association Bulletin, Vol. 24(3), pp.7-9, 2002.
4. Bhasin, T. M. —E-Commerce in Indian banking, Indian Banking Association Bulletin, Vol. 23(4&5), 2001
5. Rao, V. N. — Changing Indian banking scenario: A paradigm shift. Indian Banking Association Bulletin, Vol. 24(1) pp.12-20, 2002.
6. Shapiro, C. —Will E-Commerce erode liberty, Harvar Business Review, May-June 2000.
7. Sabnani, P. —Universal Banking, IBA Bulletin, Vol. 22(7) July 2000, pp34-36
8. Uppal, R.K. and Jatana, Rimpi - Indian banking moving towards information technology. New Delhi : Mahamaya,254p, 2008.
9. Vageesh, N.S. — New private banks: new kids on the Block, Business line, March 2000.
10. Verma, “ Banking on change I CFAI Reader, May 2000, pp.69-72.