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Customer Awareness on Electronic Banking - An Empirical Study

- **R. Sreedevi**, Department of Commerce, Holy Cross College (Autonomous), Nagercoil (Affiliated to Manonmaniam Sundaranar University, Tirunelveli)
- **K.P. Sivakumar**, Librarian, Noorul Islam Centre for Higher Education, Kumaracoil

Abstract:

Banks have a positive role to play in the economic development of the country. The advent of Internet, Electronic commerce, communication technology and user's response to this technology has opened opportunity for many businesses including the financial institution. Adoption of electronic banking, different e-banking channels such as electronic cards, internet banking and mobile banking have been introduced. It has changed the banking industry and made a major impact on banking relationships. Electronic banking offers benefits to both banks and customers. The Indian financial system, and the banking system, in particular, is inherently very strong. The Indian banks with their wide array of products have brought the Indian customer very close to the electronic mode of banking. This research paper attempts to study and understand the level of customer awareness of electronic banking with special reference to the Nagercoil town. This paper is the outcome of a qualitative exploratory research study which covered 770 respondents, after initial screening. The respondents who were bank customers, patronizing one or more banks, were surveyed and the findings of the study have been highlighted.

Keywords : E-Banking, Online Banking, Internet Banking, Bank Electronic Cards, Risk Management.

Introduction

Banks play a key role in fostering and developing the electronic culture amongst its customers. Electronic banking, E-banking in short, is also known in trade circles as virtual banking. Its other synonyms are online banking as also banking without walls. E- Banking Provides 24-hour access to cash. A whole new set of innovative products and features have made Ebanking hassle free, safe, instantaneous and convenient. Debit cards, Credit cards as well as the ATMs are available to every customer, suiting his/ her individual financial tastes and preferences. E-banking refers to the automated delivery of banking products or services, both traditional and new, directly to customers via electronic, interactive communication modes. This comprehensive system includes all those products and services which facilitate the banks, customer, individuals and corporate to easily and conveniently monitor their accounts, undertake business transactions or make inquiries, on a real time basis, through a network which includes the World Wide Web and well as the Internet. Online is primarily used by customers for these five basic services: Keep a tab on account balances and past transactions, Payment of bills, Transfer of money, makes advance requests from credit cards, Request cheque books. The major advantage is that the per unit service operating cost for the bank is much lower than any other mode. Customers enjoy self-service, freedom from time and place constraint, and reduced stress of queuing in banking hall. Therefore, time and cost savings and freedom from place have been found the main reasons underlying online banking acceptance. It was indicated that electronic banking services delivery are the cheapest, the most profitable and wealthiest delivery channel for banking products. The introduction of Internet banking was aimed as a medium of information presentation through which the entire product line of the bank, in terms of its breadth and

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width, can be beautifully promoted. Over the years, this evolved itself to allow customers perform a whole array of tasks electronically and through its web site. Today, writing cheques, paying bills, transfer of funds, printing out statements and carrying out inquiries on account status has become common and easy. Today, E-commerce is being practiced in a very big way. Throughout the globe. E-banking delivery is facilitated mainly through debit cards, credit cards and automated teller machines ATMs. The debit and credit cards provide electronic access to customer bank accounts. Debit cards come in the form of online debit cards, offline debit cards, electronic purses and prepaid cards. Credit cards enable the holder to buy goods and services and are, nowadays, quite secure. With its all pervasive nature, Ebanking presents a huge challenge for the legal experts to put in place a comprehensive infrastructure and architecture.

E-Banking -Indian Scenario

The Indian customer is yet to awaken to the entire spectrum of activities that can be performed by electronic means. Technology has come to play a significant role in the realm of development of newer modes of payment and settlement .Towards this end, innovative products such as e-banking and e-payments have been introduced-Banking is the process of banking with the use of electronic tools and facilities. The service –based areas of activity of banks have perhaps been the largest beneficiaries of e-banking. Internet banking has been the predominant mode of e-banking in India with the Internet offering itself as a new delivery mechanism for the banks in reaching the customer. Commencing with simple transactions such as enquiry facilities, today messages sent through the Internet to banks perform tasks such as funds transfer and account opening. Internet banking, however, necessitates that banks have a secure web server and a centralized database of their customers to facilitate information flow from customers to

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the bank and vice versa. A term that is closely associated with e-banking is e-payments. Effecting payments through electronic means constitute epayments. Various forms of e-payment such as e-cheque, card based payments (Credit, debit and smart cards) and EFT are in existence. All these are available in the country and the large-scale usage of these is dependent on the levels of technology available at banks and their ready acceptance by the constituents of banks. The Indian banks are fortifying their web servers, databases and fire walls to stay abreast in the highly dynamic, changing times. Customers have also made a foray into E-payments using electronic clearance systems. E-banking, like any other financial transaction, is not without its attendant risks. The major risks present are the transaction risk, credit risk, compliance/ legal risks and reputation risks. The customer has to obtain a thorough understanding of these hazards and become fully aware of the ways and means of eliminating these risks.

Importance of the study

The role of banking assumes much importance especially in a developing country like India, which faces the problems of acute shortage of capital, depressed industrial development, bad means of transport and communication, etc. Indian software industry has impacted the Indian banking sector. E-banking is the technology that holds the key to the future success of Indian banking. The impact of Information Technology is greatly felt in he financial sector in view of the competitive advantage for banks resulting in efficient customer service. The challenges facing the banking and financial community emanate from high growth in volumes of financial transactions, the effects of globalization and the integration of many hitherto distinct markets. E-banking service is one of the prominent and attractive services offered by both private and public sector banks. It is completely technology oriented which needs proper awareness, experience and expertise

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in operating computer and electronic devices.In India the customers are highly heterogeneous natured which includes illiterate, semi-illiterate and highly literate. Especially in Nagercoil the usage of internet is increasing day by day by means of internet in house and other places. In these circumstances it is essential to know the Customer Awareness on Electronic Banking in Nagercoil Town.

Review of Literature

Bulominne Regi and Eugine Franco (2016) highlighted that the emergence of innovative banking services has intensified the need of innovative banking services. Dr.B.Maheswari (2016) pointed out the percertions of the customers towards banking habits and analyzed the influence of demographics of an individual towards their banking habits. Malik Ali (2015) states that customer satisfaction is the sum of total of customer expression of the service quality. Alsoufi and Ali (2014) pointed out that the intention to adopt internet banking was affected by specific factors such as perceived usefulness and ease of use.

Objectives of the Study

- Identify the awareness level of the respondents in using the electronic cards.
- Identify the relationship between the age of the respondents and usage of e-banking
- Identify the association between the occupation and satisfaction level of using electronic cards
- Identify the convenience level in using the cards.
- Identify the preferable ranking of various factors in using the cards like payment convenience, reliability, user friendliness, and risk in hidden charges etc.
- Identify the satisfaction level of renewal of the card from the banks.
- Offer relevant suggestions.

Research Methodology

This study is carried out on the basis of both primary and secondary sources. These collections of data were presented in the following sections.

Primary Data

Primary data were collected by means of systematically prepared questionnaire. In order to carryout statistical enquires a questionnaire was prepared.

Seconadary Data

Secondary data has been collected from various Books, Journals, Thesis and Websites.

Sampling Design

The study is descriptive and analytical. It is descriptive in the sense it exist at present and it includes facts and findings. It is analytical in the sense it involves analysis of the collected data and information. The Sample sizes are 770 samples selected in Nagercoil town. The relevant data were collected through Questionnaire. The researcher used the method of convenience sampling technique. Convenience sampling comes under the nonprobability sampling method, which means, it does not provide equal opportunity to the entire bank customer in Nagercoil town. It is planned to collect data from 770 respondents to justify the unknown population of bank customers.

Statistical Tools

To make the present study more effective and fruitful, the following statistical tools were used for analysis and interpretation of data. The data were analysed through Percentage analysis Method, Tables, Chi-square test, Garret ranking method, and ANOVA

Limitation of the Study

This stop leaves some loopholes.

- This study is restricted to Nagercoil town only.
- Some of the respondents are reluctant while giving the information.
- This finding may not be remaining in the future

Analysis and Interpretation:

Gender wise classification

Gender is one of the important determinants which decide the capacity of the people having relationship with the bank. The following table gives the gender wise classification of the sample respondents

| Gender | No of Respondents | Percentage |
|--------|-------------------|------------|
| Male | 517 | 67.14 |
| Female | 253 | 32.85 |
| Total | 770 | 100 |

Table: 1 Gender wise Classification

The above table shows that 67.14% of the respondents are male and 32.85% are female. It shows that majority of the respondents are male.

Distribution of savings account

The respondents of the study area cover more than five banks. The details are shown below

| Banks | No of Respondents | Percentage |
|--------|-------------------|------------|
| I.O.B | 281 | 36.49 |
| I.B | 241 | 31.29 |
| S.B.I | 162 | 21.04 |
| ICICI | 51 | 6.62 |
| P.N.B | 18 | 2.34 |
| Others | 17 | 2.24 |
| Total | 770 | 100 |

Table: 2 Distribution of Savings account

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The above table reveals that 36.49% of the respondents are having account in Indian overseas bank, 31.29% Of the respondents are having account in Indian bank,21.04% of the respondents are having account in State bank of India,6.62% of the respondents are having account in ICICI bank,2% of the respondents are having account in Punjab national bank and 2.34% of the respondents are having account in other banks.

Distribution of type of card

The concept of banking was developed in the recent years. Nowadays the bank customers are using various cards for banking transactions. The following table shows the distribution of type of card.

| Type of Card | No of Respondents | percentage |
|--------------|-------------------|------------|
| Debit Card | 540 | 70.13 |
| Credit Card | 132 | 17.14 |
| Both | 73 | 9.48 |
| Others | 25 | 3.25 |
| Total | 770 | 100 |

 Table: 3 Distribution of type of card

The above table shows that 70.13% of the respondents are using debit card, 17.14% of the respondents are using credit card ,9% of the respondents are using both debit and credit card and 3.25% of the respondents are using other cards.

Distribution of convenience in using the card

The following table shows the opinions of the respondents about the convenience in using the card.

| Rating | No of Respondents | Percentage |
|---------------------|-------------------|------------|
| Strongly Agree | 187 | 24.29 |
| Agree | 253 | 32.86 |
| Neutral | 211 | 27.40 |
| Dissatisfied | 80 | 10.39 |
| Highly dissatisfied | 39 | 5.06 |
| Total | 770 | 100 |

Table: 4 Distribution of convenience in using the card

The above table shows, that 32.86% of the respondents agree with electronic card payment is convenient and only 5.06% of the respondents strongly dissatisfied with electronic card payment.

Satisfaction level of renewal of the card from the banks

The following table shows the satisfaction level of renewal of the card from the banks..

| Rating | No of Respondents | Percentage |
|---------------------|-------------------|------------|
| Highly Satisfied | 191 | 24.81 |
| Satisfied | 328 | 42.59 |
| Neutral | 196 | 25.45 |
| Dissatisfied | 32 | 4.16 |
| Highly dissatisfied | 23 | 2.99 |
| Total | 770 | 100 |

Table: 5 Satisfaction level of renewal of the card

The above table shows that maximum 42.59% of the respondents are satisfied with the renewal of card, from their banks and only 2.99% of the respondents are highly dissatisfied.

Ranking of various factors in Electronic card usage

The following table shows preferable ranking of various factors in using the cards as per the Garrett Ranking Techniques

| Factors | Garrett Means | Ranks |
|---------------------------------|---------------|-------|
| Payment convenience | 56.77 | Ι |
| Reliability | 55.87 | II |
| User friendliness | 53.91 | III |
| Nominal charge for card usage | 51.44 | IV |
| Keeping PIN no. in mind possess | 45.65 | V |
| Risk in follow up the accounts | 44.07 | VI |

Table: 6 Ranking of various factors in Electronic card usage

As per Garrett ranking techniques, the ranking factors regarding the Electronic card usage, the factor payment convenience ranks 1st and the factor reliability occupies 2nd Rank. The Factor user friendliness possesses 3rd rank. The factor nominal charges for card usage possess 4th rank .The factor keeping PIN no. in mind possess 5th rank. The factor risk in follow up the accounts possesses 6th rank. Thus the study shows that the following up of the bank accounts in these electronic world is considered as least botheration among the respondents, which in other means also taken as that the customers showing improved trust worthiness among their banks.

Relationship between Age and Usage of E-banking

Null hypothesis: There is no significant relationship between Age and usage of e-banking

| | | Satisfaction level on usage of E-banking | | | |
|----------------|---------------------|--|-----------------|--------------|------------------------|
| Age | Highly Satisfied | Satisfied | Neither/ Nor | Dissatisfied | Highly Dissatisfied |
| Below 30 Years | 283 | 163 | 39 | 28 | 513 |
| 30 to 50 years | 83 | 75 | 40 | 21 | 219 |
| Above 50 years | 5 | 16 | 10 | 7 | 38 |
| Total | 371 | 254 | 89 | 56 | 770 |

Table: 7 Relationship between Age and Usage of E-banking

It is inferred from the above table that 37% of the respondents are highly satisfied & belongs to the age group of below 30 years & another 21% are satisfied & belongs to below 30 years of age.

| Frequency Observed (O) | Frequency Expected (E) | (O – E) | $(\mathbf{O}-\mathbf{E})^2$ | $(O-E)^2/E$ |
|---------------------------|---------------------------|---------|-----------------------------|-------------|
| 283 | 247 | 36 | 1296 | 5.247 |
| 83 | 106 | -23 | 529 | 4.991 |
| 5 | 18 | -13 | 169 | 9.388 |
| 163 | 169 | -6 | 36 | 0.213 |
| 75 | 72 | 3 | 9 | 0.125 |
| 16 | 13 | 3 | 9 | 0.692 |
| 39 | 59 | -20 | 400 | 6.779 |
| 40 | 25 | 15 | 225 | 9 |
| 10 | 4 | 6 | 36 | 9 |
| 28 | 37 | -9 | 81 | 2.189 |
| 21 | 15 | 6 | 36 | 2.4 |
| 7 | 2 | 5 | 25 | 12.5 |
| Total | | | 62 | .524 |

Calculated value is 62.524, at 5% significance and 6 degrees of freedom. Table value is 12.5916.

The above table depicts that the calculated value is higher than the table value at 5% significant level. Hence the null hypothesis is rejected and it can thus be inferred that Age and usage of e-banking of the respondents are significantly related.

Association between Occupation and satisfaction level of using Electronic cards

Null hypothesis: There is no significant relationship between Occupation and satisfaction level of using Electronic cards

| Occupation | satisfaction level of using Electronic cards | | | | | |
|------------------|--|-------|---------|--------|--------------|-------|
| | Strongly | Agree | Neutral | Dissat | Strongly | Total |
| | Agree | | | isfied | dissatisfied | |
| Govt Employee | 38 | 49 | 45 | 9 | 7 | 148 |
| Private Employee | 29 | 94 | 99 | 31 | 16 | 269 |
| Own Business | 56 | 27 | 30 | 19 | 11 | 163 |
| Others | 64 | 63 | 37 | 21 | 5 | 190 |
| Total | 187 | 253 | 211 | 80 | 39 | 770 |

 Table: 8 - Association between Occupation and satisfaction level of using Electronic cards

It is inferred from the above table that 13% of the respondents are neutral in the satisfaction level of using Electronic cards & belongs to private employees and another 12% are agree in the satisfaction level of using Electronic cards & belongs to private employees in their occupation.

| Frequency | Frequency | (O – E) | $(\mathbf{O}-\mathbf{E})^2$ | $(O-E)^{2}/E$ |
|--------------|--------------|---------|-----------------------------|---------------|
| Observed (O) | Expected (E) | | | |
| 38 | 36 | 2 | 4 | 0.111 |
| 29 | 65 | -36 | 1296 | 19.93 |
| 56 | 40 | 16 | 256 | 6.4 |
| 64 | 46 | 18 | 324 | 7.043 |
| 49 | 49 | 0 | 0 | 0 |
| 94 | 88 | 6 | 36 | 0.409 |
| 47 | 54 | -7 | 49 | 0.907 |
| 63 | 62 | 1 | 1 | 0.016 |
| 45 | 41 | 4 | 16 | 0.390 |
| 99 | 74 | 25 | 625 | 8.446 |
| 30 | 45 | -15 | 225 | 5 |
| 37 | 52 | -15 | 225 | 4.327 |
| 9 | 15 | -6 | 36 | 2.4 |
| 31 | 28 | 3 | 9 | 0.321 |
| 19 | 17 | 2 | 4 | 0.235 |
| 21 | 20 | 1 | 1 | 0.05 |
| 7 | 7 | 0 | 0 | 0 |
| 16 | 14 | 2 | 4 | 0.286 |
| 11 | 8 | 3 | 9 | 1.125 |
| 5 | 10 | -5 | 25 | 2.5 |
| | Total | | 59 | .896 |

Calculated value is 59.896

Table value is 21.0261

The calculated value of 59.896 (12 degrees of freedom at 5% significance) is greater than table value of 21.0261, Hence the null hypothesis is rejected and it can thus be inferred that occupation and satisfaction level of using Electronic cards of the respondents are significantly related.

Analysis of Variance

There is a significant variation between the variables that the respondent's frequency of using the cards, their feeling that the card is secured and they prefer to use the cards for shopping. The following table shows the one way ANOVA calculations for the analysis of variance between the respondent's frequency of using the cards, feeling that the card is secured and they prefer to use the cards for shopping.

Null hypothesis -There is no significant variation between the variables that the respondents' frequency of using the cards, feeling that the card is secured and they prefer to use the cards for shopping.

| Frequency | Secure | Preferable |
|-----------|--------|------------|
| 391 | 256 | 268 |
| 125 | 327 | 313 |
| 216 | 157 | 152 |

Table: 9 Analysis of Variance

Variance within Samples:

Frequency

| Frequency | Frequency - Secured | $(Frequency - Secured)^2$ |
|-----------|---------------------|---------------------------|
| 391 | 147 | 21,609 |
| 125 | -119 | 14,161 |
| 216 | -28 | 784 |
| 732 | | 36,554 |

Average =732/3 =244

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Secured

| Frequency | Frequency - Secured | $(Frequency - Secured)^2$ | |
|-----------|---------------------|---------------------------|--|
| 256 | 9 | 81 | |
| 327 | 80 | 6400 | |
| 157 | -90 | 8100 | |
| 740 | | 14,581 | |

Average =740/3 =247

Preferable

| Frequency | Frequency - Secured | $(Frequency - Secured)^2$ | |
|-----------|---------------------|---------------------------|--|
| 268 | 24 | 576 | |
| 313 | 69 | 4761 | |
| 152 | -92 | 8464 | |
| 733 | | 13,801 | |

Average =732/3 =244

Sum of square within the samples:

36,554+14,581+13,801 = 64,936.

Variance between the samples:

n1+n2+n3 = 3

Grand average = (244+247+244)/3 = 245

Sum of squares between samples:

$$=3(244-245)^{2}+3(247-245)^{2}+3(244-245)^{2}$$
$$=3+12+3$$
$$=18$$

| Square of | Sum of | Degrees of | Mean Squares | Variance |
|-----------------|--------------|------------|--------------|---|
| Variation | Squares (SS) | Freedom | (MS) | Ratio (F) |
| Between samples | 18 | 2 | 9 | 10.822/0 |
| Within samples | 64,936 | 6 | 10,823 | $ \begin{array}{r} 10,823/9 \\ =1202.55 \end{array} $ |
| Total | 64,954 | 8 | 8119 | |

Calculated value=1202.55, Table value =19.3 @0.05 significance level

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Since the Calculated value greater than the table value (1202.55 > 19.3), Hence the null hypothesis is rejected and there is a significant variation between the variables that the respondents frequency of using the cards, feeling that the card is secured and they prefer to use the cards for shopping.

Findings

- 67.14% of the respondents are male and 32.85% are female. It shows that majority of the respondents are male.
- 36.49% of the respondents are having account in Indian overseas bank, 31.29% Of the respondents are having account in Indian bank,21.04% of the respondents are having account in State bank of India,6.62% of the respondents are having account in ICICI bank,2% of the respondents are having account in Punjab national bank and 2.34% of the respondents are having account in other banks.
- 70.13% of the respondents are using debit card, 17.14% of the respondents are using credit card ,9% of the respondents are using both debit and credit card and 3.25% of the respondents are using other cards.
- 32.86% of the respondents agree with electronic card payment is convenient and only 5.06% of the respondents strongly dissatisfied with electronic card payment.
- Maximum 42.59% of the respondents are satisfied with the renewal of card, from their banks and only 2.99% of the respondents are highly dissatisfied.
- As per Garrett ranking techniques, the ranking factors regarding the Electronic card usage, the factor payment convenience ranks 1st and the factor reliability occupies 2nd Rank. The Factor user friendliness possesses 3rd rank. The factor nominal charges for card usage possess 4th rank .The factor keeping PIN no. in mind possess 5th rank. The factor risk in follow up the accounts possesses 6th rank.

- Age and usage of e-banking of the respondents are significantly related.
- Occupation and satisfaction level of using Electronic cards of the respondents are significantly related.
- There is a significant variation between the variables that the respondents frequency of using the cards, feeling that the card is secured and they prefer to use the cards for shopping.

Suggestions:

From the study-the customer's awareness regarding the credit/debit cards in Nagercoil, the following suggestions are recommended for the banking industry. The credit card expenses may be minimized, since majority of the respondents considered the debit card as an economic one. Still the usage of these electronic cards doesn't have much awareness among the respondents, the banking industry can promote the awareness through demonstrating or supporting the usage near ATM centers regarding the user friendliness & convenience in using these cards. The banking industry can promote their business customers or current savings account holder to have card money receivables facility at their point-of sale terminals, So that shopping through cards can be further facilitated. Though nominal charges are collected for the card usage due to intensive competition in banking industry, further it can be reduced or those charges can be totally removed and it can be provided as an absolute free provision for the account holders. Now-a-days the Electronic cards are provided to every account holders of the nationalized banks and that's become as mandatory for the customers transactions by these banks. By these banks, in these environments, it is very essential to further make it as very secure and reliable. The bank can install the ATM centers with camera and registering all the face of those who are doing the transaction, since duplicate magnetic chips embedded cards are

created by the pirates, some new advanced like biometric system can be followed for the account holders in the ATM transaction instead of only using cards and the pin number, it can further facilitate not to remember always the pin number

Conclusion

The study shows the way of electronic cards usage among the respondents in Nagercoil. This is an absolute benefit of information and communication technology innovative as we well known that these types of advanced innovation also have their own by products (i.e, own merits and demerits), though we are having an unimaginable speed in our transaction and information processing, still the people are partial doubtful and partial confidence in following up their accounts whether they are secure and reliable, and how it can be approached in a better user friendly manner, etc., Though the internet core banking and mobile SMS, facilitate this parameters, still the people in semi urban and rural areas are unaware, so it is the responsibility of the banking industry to further promote these parameters on the local dialects to reach them, though it is executed at present by all the banks and their branches, it needs consistency in their promotion of the card usage, its user friendliness, reliability and security. Since advanced pirates are there, advanced secured systems also need of the hour, so that the banks can get credit worthiness among their customers. Internet based core banking, ATM's and electronic cards are the break through Childs of information and communication technology revolution, though it is a milestone in these era, it is simultaneously a stepping stone for further break through advancements especially in banking industry it can be projected and implemented only by the time period in future.

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