

## **AN INVESTIGATION INTO THE AWARENESS OF E-BANKING SERVICES AMONG RESIDENTS OF AURANGABAD CITY**

**Suman Kumari Varma**

MCA, Ph.D, Department of Management Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

**Kamli Arun Pawale**

MCA, M.Phil Appeared for Ph.D, Research Scholar, Department of Management Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

---

### **ABSTRACT**

Internet banking is a very popular term in this digital global world. Currently typically all the banks provides web banking services in each town. E-banking has become an essential banking service that, if properly implemented, can enhance customer satisfaction and give banks competitive advantage. Earlier, banking customers had to visit the bank to transact their account but now with the help of e-banking customers do not need to visit the bank and with the help of internet customers can transact their accounts easily from anywhere. There is no geographical limitation for internet banking services. But the usefulness of internet banking depends on its awareness about internet banking services and information about internet banking services.

Aurangabad is an urban area many people know internet banking services and they are also using internet banking services and few people know Internet banking services but they avoid using internet banking services. But not all customers are applied this knowledge in practical manner. Hence there is the requirement to understand the awareness level of customers residing in Aurangabad city.

The purpose of this study was to examine the awareness of e-banking services and the customer satisfaction in Aurangabad city.

**KEYWORDS:** Internet Banking, Awareness, Cyber crime,

### **INTRODUCTION**

A bank is generally understood as an organization that provides basic banking services such as accepting deposits and plays a vital role in various financial services consumer social affairs.

In this competitive world, it is important for every bank to provide modern facilities for customers to retain their bank customers. Due to the development of technology and different communication networks it is possible for the bank to provide internet banking services to its customers. [11]

### **STATEMENT OF PROBLEM**

In the present scenario, the banking sector has seen tremendous progress and popularity with respect to internet banking services and their products. This development has led to a large number of internet banking transactions for bank customers, which are a faster and more convenient form of transactions. The banking industry is one of those businesses that have harnessed the full potential of IT to aid in banking transactions and enhance banking services

and opportunities for customers. These facilities have helped millions of customers to complete their transactions easily, quickly and easily anywhere anytime. However, to carry out banking transactions through the Internet, one need to have some basic knowledge about computers and the Internet, which to some extent limits the number of people willing to avail this facility. Many people who are not comfortable with computers and internet find it difficult to use this service.

### **OBJECTIVE OF STUDY**

1. To identify the level of awareness of customers regarding e-banking services.
2. To measure the satisfaction level of e-banking users.
3. To study the motives of people to use the e-banking services.

### **HYPOTHESIS**

1. Customers are Aware about e-banking services.

### **RESEARCH METHODOLOGY**

#### **SOURCE OF DATA**

#### **PRIMARY DATA**

For this study data is collected from primary as well as secondary sources. Primary data is collected using survey method. The Questionnaire was circulated through the online method and sent to different customers through email. In order to get unbiased reply, the questionnaires were circulated as internet survey through different areas of Aurangabad city. The study covered bank customers from different areas of the Aurangabad city.

#### **SECONDARY DATA**

Secondary data was collected from books, Journals, Newspapers and internet.

#### **SAMPLING METHOD**

In this research Simple random sampling method is used to select sample. It is a subtype of Random sampling. The data collected 153 respondents in Aurangabad city.

#### **STATISTICAL TOOL**

Data collected will be statistically analyzed in SPSS and Excel using Statistical Tools and Techniques. The study also uses other suitable statistical tools such as mean, median, standard deviation with co-efficient of variation, correlation and regression, factor analysis etc. Data from the questionnaire was compiled, investigated for integrity analyzed and presented in useful output for the purpose of Analysis. Those analyzed data was used to draw conclusion and to make recommendation regarding the study on consumer awareness and usage of E-banking.

### **REVIEW OF THE LITERATURE**

**Haq, S., & Khan, M et al. (2013) E-banking challenges and opportunities in the Indian banking sector:** The work in this paper is focusing on cyber Banking, population vital statistics, an attempt has been made to know the objections faced by banks and to find out the effect of important statistics like education, age, occupation and income on the population. How they are influencing to accept of cyber banking in India. This research shows that internet banking users are increasing as their income and education level is increasing as the

number of users is improving depending on the educational level of internet banking users with income. [12]

**Amutha, D et al. (2016) A study of consumer awareness towards e-banking:** The work in this paper is focusing on Electronic banking, Internet banking: Credit/debit card, Transparency, Accuracy, Cost saving, Customer's awareness and Satisfaction. A customer's meeting time with bank officials may increase and a friendly approach is also required. It will definitely help in retaining existing customers and attracting new customers. This will automatically improve the banking services and development of banks in India and abroad. This research paper is helpful to know about the customer awareness about e-banking and what kind of risk is there in e-banking system. [10]

**Singhal, S et al.(2017) Demonetisation and E-banking in India:** The work in this paper is focusing on E-banking, Rural India, Demonetization, public and private sector banks. India is now in the list of countries with the largest population transacting online. Smart phones and mobiles were introduced application usage rate has increased. But there is still a long way to go as the rural population of India is still waiting for some program from the banks that will facilitate their access to e-banking services. [13]

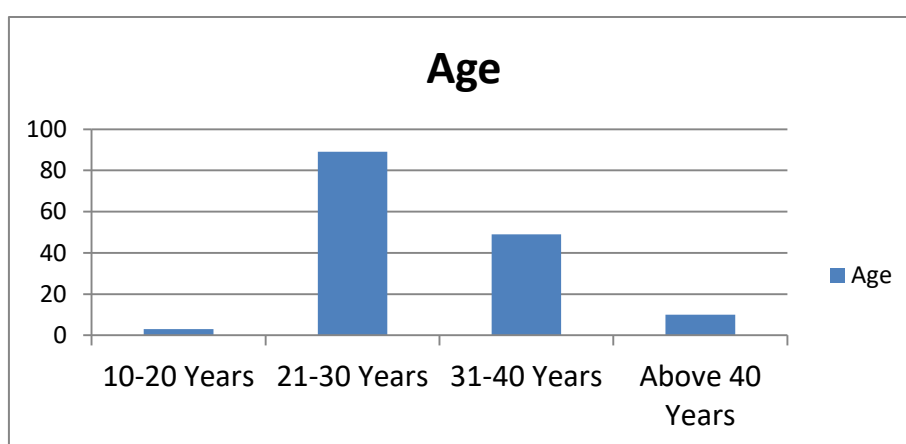
## DATA ANALYSIS AND INTERPRETATION

### AGE OF RESPONDENTS

Age	Frequency	Percent	Valid Percent	Cumulative Percent
10-20 years old	3	2	2	2
21-30 years old	89	58.9	58.9	60.9
31-40 years old	49	32.5	32.5	93.4
above 40 years old	10	6.6	6.6	100
<b>Total</b>	151	100	100	

**TABLE 1.0 AGE OF RESPONDENTS**

The 58.9% of the respondents belongs to age group 21-30 years. 32.5% of respondents are 31- 40 years.



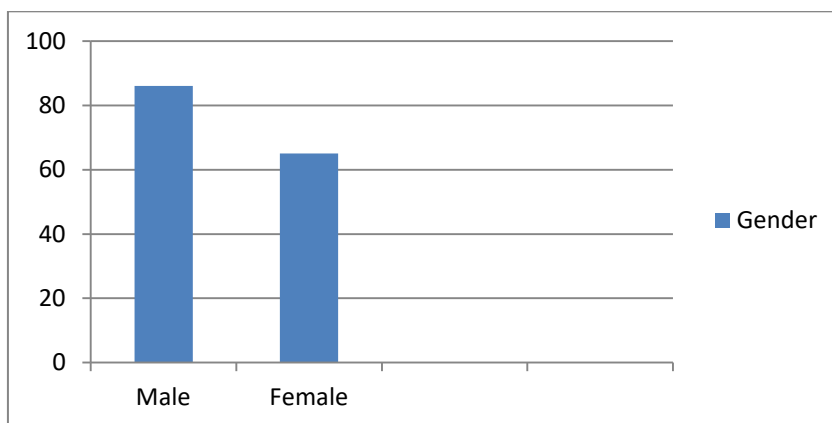
**GRAPH 1.0 AGE**

**GENDERS**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Female</b>	65	43	43	43
<b>Male</b>	86	57	57	100
<b>Total</b>	151	100	100	

**TABLE 1.1 DEMOGRAPHIC DISTRIBUTIONS**

The 57% of the respondents are Male and the 43% of respondents are Female.



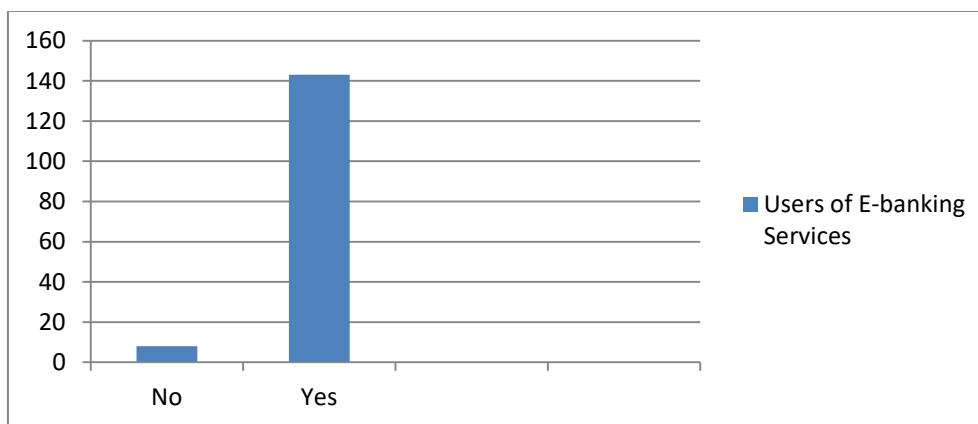
**GRAPH 1.1 DEMOGRAPHIC DISTRIBUTIONS**

**USERS OF E-BANKING SERVICES (Q1)**

E-Banking Services Use	Frequency	Percent	Valid Percent	Cumulative Percent
<b>No</b>	8	5.3	5.3	5.3
<b>Yes</b>	143	94.7	94.7	100
<b>Total</b>	151	100	100	

**TABLE 1.2 USERS OF E-BANKING SERVICES**

94.7% people use the E- banking services. Even 5.3% people do not use the e-banking services.



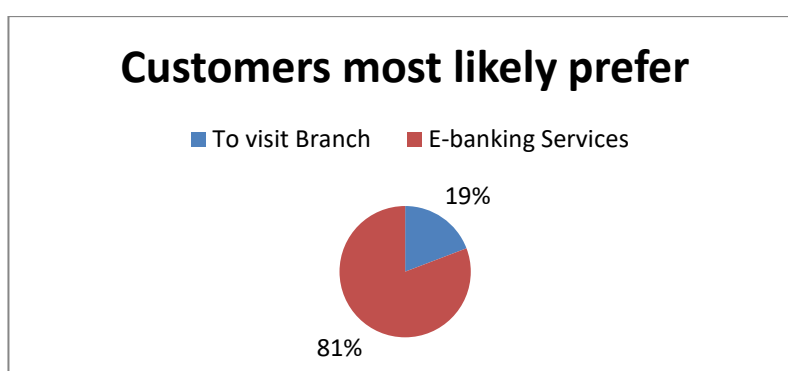
**GRAPH 1.2 USERS OF E-BANKING SERVICES**

**CUSTOMERS MOST LIKELY PREFER (Q2)**

Customers Most likely Prefer	Frequency	Percent	Valid Percent	Cumulative Percent
To Visit Branch	29	19.2	19.2	19.2
E-Banking	122	80.8	80.8	100.0
Total	151	100.0	100.0	

**TABLE 1.3 CUSTOMERS MOST LIKELY PREFER**

80.8% of customers prefer to use E-banking services, only 19.2% customers prefer to visit bank branch.

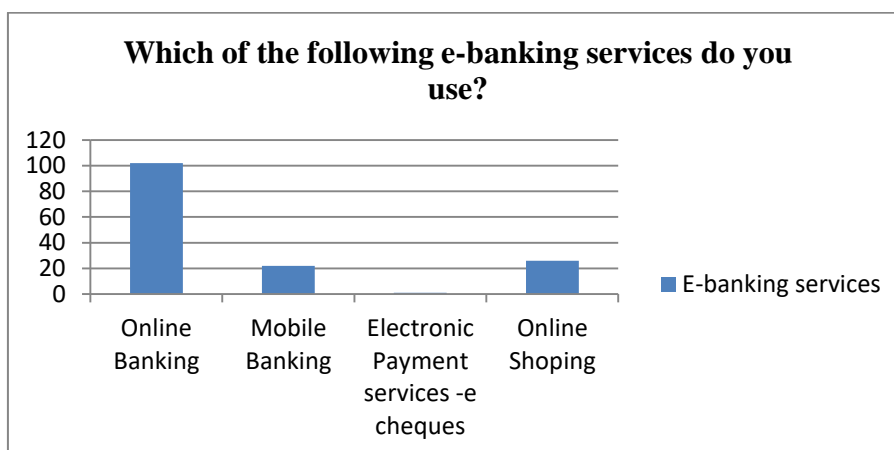


**GRAPH 1.3 CUSTOMERS MOST LIKELY PREFER**

**E-BANKING SERVICES (Q3)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Online banking	102	67.5	67.5	67.5
Mobile banking	22	14.6	14.6	82.1
Electronic payment services-E cheques	1	0.7	0.7	82.8
Online shopping	26	17.2	17.2	100.0
Total	151	100.0	100.0	

**TABLE 1.4 E-BANKING SERVICES**



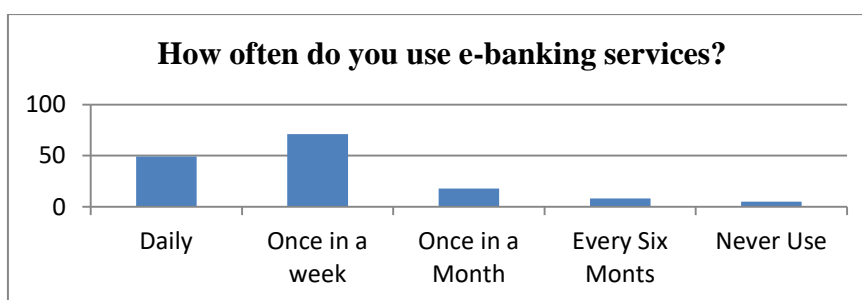
**GRAPH 1.4 E-BANKING SERVICES**

The above graph analyses the different services that are used more often in comparison to the other services. Most of the respondents use the online banking services.

**HOW OFTEN RESPONDENTS CAN USE THE E-BANKING SERVICES (Q4)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Never Use	5	3.3	3.3	3.3
Once in a month	18	11.9	11.9	15.2
Daily	49	32.5	32.5	47.7
Once in a week	71	47.0	47.0	94.7
Every six months	8	5.3	5.3	100.0
<b>Total</b>	<b>151</b>	<b>100.0</b>	<b>100.0</b>	

**TABLE 1.5 HOW OFTEN RESPONDENTS CAN USE THE E- BANKING SERVICES**

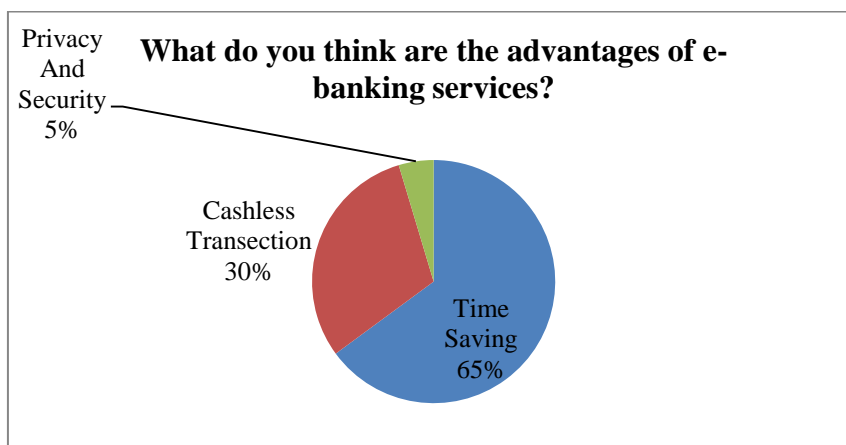


**GRAPH 1.5 USE OF E-BANKING SERVICES**

**ADVANTAGES OF E-BANKING SERVICES (Q5)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Time saving	98	64.9	64.9	64.9
Cashless Transaction	46	30.5	30.5	95.4
Privacy and security	7	4.6	4.6	100.0
<b>Total</b>	<b>151</b>	<b>100.0</b>	<b>100.0</b>	

**TABLE 1.6 ADVANTAGES OF E-BANKING SERVICES**



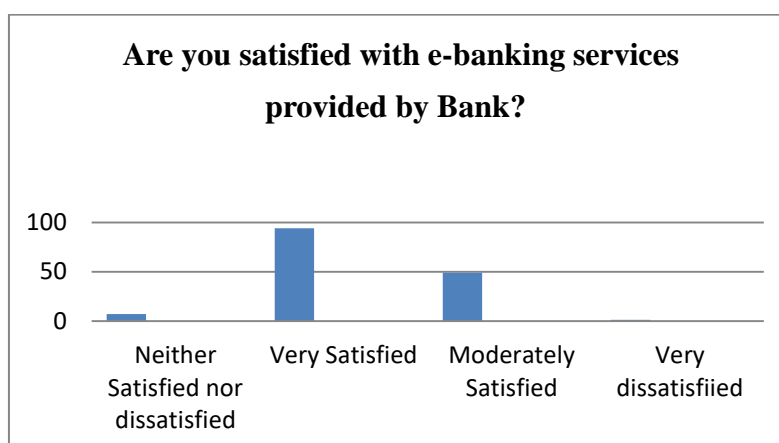
**GRAPH 1.6 ADVANTAGE OF E-BANKING SERVICES**

As shown in graph 65% people responded the time saving is the advantage of e-banking services. 30% people responded as cashless transaction is the advantage of e banking services, and only 5% people responded that privacy and security is the advantage of e banking.

**SATISFACTION LEVEL OF RESPONDENT (Q6)**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Neither Satisfied nor dissatisfied</b>	7	4.6	4.6	4.6
<b>Very Satisfied</b>	94	62.3	62.3	66.9
<b>Moderately Satisfied</b>	49	32.5	32.5	99.3
<b>Very Dissatisfied</b>	1	0.7	0.7	100.0
<b>Total</b>	151	100.0	100.0	

**TABLE 1.7 SATISFACTION LEVEL OF RESPONDENT**



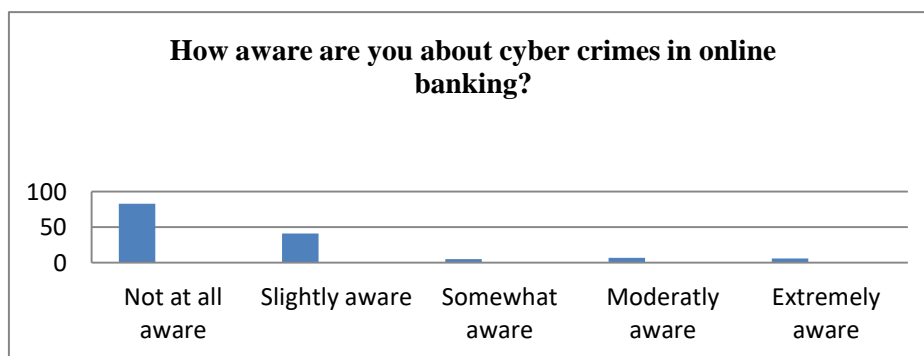
**GRAPH 1.7 SATISFACTION LEVEL OF RESPONDENT**

As shown in graph 94% respondents are satisfied with the e-banking services provided by the bank.

**AWARENESS OF CYBER CRIME (Q7)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all aware	83	55	55	55
Slightly Aware	41	27.2	27.2	82.1
Extremely aware	6	4	4	86.1
Somewhat aware	5	3.3	3.3	89.4
Moderately aware	7	4.6	4.6	97.4
<b>Total</b>	<b>151</b>	<b>100</b>	<b>100</b>	

**TABLE 1.8 AWARENESS OF CYBER CRIME**



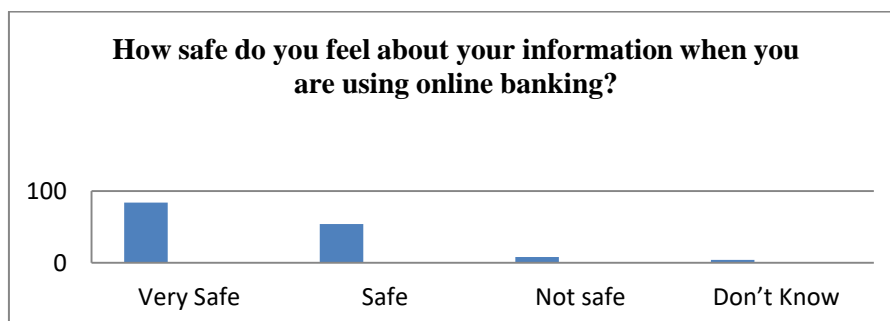
**GRAPH 1.8 AWARENESS ABOUT CYBER CRIMES**

As shown in graph 83% of respondents are unaware about the cyber crimes in online banking.

**E-BANKING SAFETY AND SECURITY (Q8)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Not Safe	8	5.3	5.3	5.3
Safe	54	35.8	35.8	41.1
Very Safe	84	55.6	55.6	96.7
Don't know	4	2.6	2.6	99.3
<b>Total</b>	<b>151</b>	<b>100.0</b>	<b>100.0</b>	

**TABLE 1.9 E-BANKING SAFETY AND SECURITY**



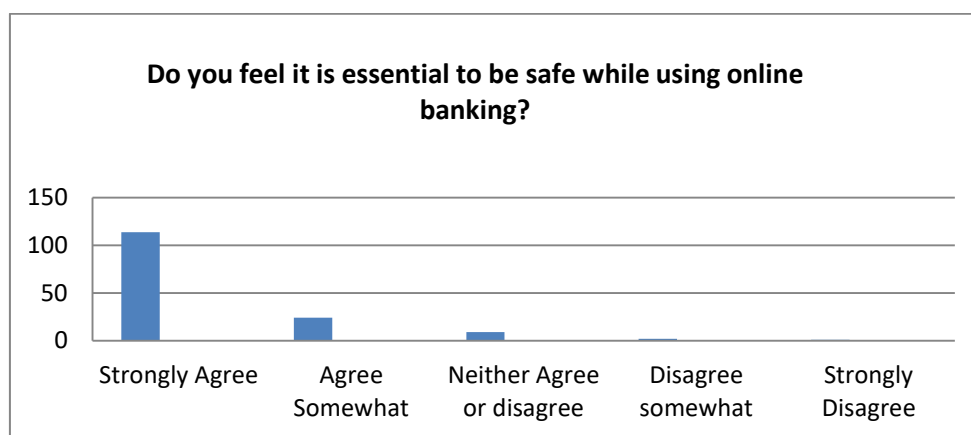
**GRAPH 1.9 E-BANKING SAFETY AND SECURITY**

As shown in graph 84% of respondents are feel very safe while using online internet banking services.

**E-BANKING SAFETY IS ESSENTIAL (Q9)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Neither agree or disagree	9	6.0	6.0	6.0
Strongly Agree	114	75.5	76.0	82.0
Agree Somewhat	24	15.9	16.0	98.0
Disagree somewhat	2	1.3	1.3	99.3
Strongly Disagree	1	0.7	0.7	100.0
<b>Total</b>	<b>151</b>	<b>99.3</b>	<b>100.0</b>	

**TABLE 1.10 E-BANKING SAFETY IS ESSENTIAL**



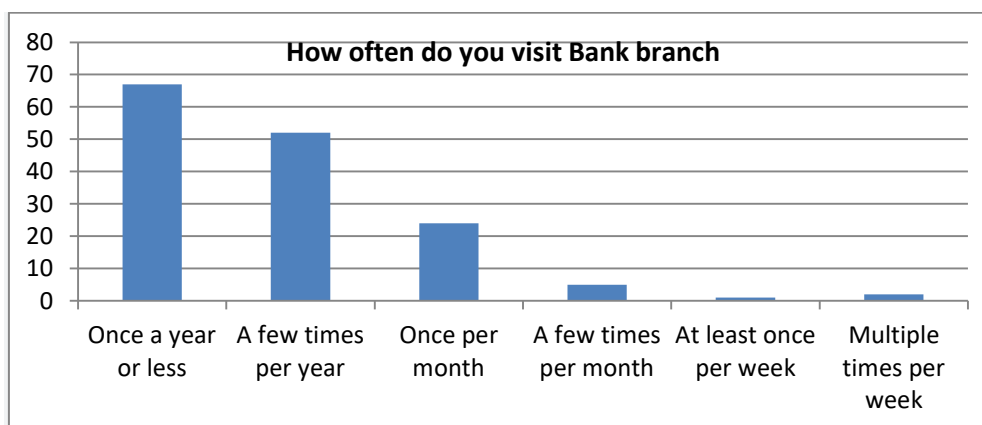
**GRAPH 1.10 E-BANKING SAFETY IS ESSENTIAL**

As shown in graph 114% of respondents feel that e-banking safety is very essential.

**RESPONDENT VISIT BANK BRANCH (10)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Once a year or less	67	44.4	44.4	44.4
A few times per year	52	34.4	34.4	78.8
Once per month	24	15.9	15.9	94.7
A few times per month	5	3.3	3.3	98.0
At least once per week	1	0.7	0.7	98.7
Multiple times per week	2	1.3	1.3	100.0
<b>Total</b>	<b>151</b>	<b>100.0</b>	<b>100.0</b>	

**TABLE 1.11 RESPONDENT VISIT BANK BRANCH**



**GRAPH 1.11 RESPONDENT VISIT BANK BRANCH**

As shown in graph 67% of respondents are visit bank branch once a year or less.

**TESTING OF HYPOTHESIS**

**Null Hypothesis H0: Customers are Aware about e-banking services.**

**Alternate Hypothesis H1: Customers are not aware about e-banking services.**

The relation between the Q1 and Q2 are same there is the correlation between them, it is a two way relation if the value of Q1 is increased then the value of Q2 is also increased.

The strength of these two variables is 0.335 it is positive it means that there is positive relation between Q1 and Q2, and the relation is significant at P<0.05.

P=0.00, r=0.335

P<0.05 then the null hypothesis is accepted and the alternate hypothesis is rejected.

Correlations									
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Q1	<b>Pearson Correlation</b>	1	.335*	0.142	.372**	-0.042	0.070	-0.042	-0.062
	<b>Sig. (2-tailed)</b>		0.000	0.082	0.000	0.608	0.390	0.609	0.451
	<b>N</b>	151	151	151	151	151	151	151	151
Q2	<b>Pearson Correlation</b>	.335**	1	0.143	-0.013	-.247**	0.014	0.013	-0.108
	<b>Sig. (2-tailed)</b>	0.000		0.079	0.877	0.002	0.869	0.871	0.185
	<b>N</b>	151	151	151	151	151	151	151	151
Q3	<b>Pearson Correlation</b>	0.142	0.143	1	0.034	-0.118	-0.018	0.097	-0.042
	<b>Sig. (2-tailed)</b>	0.082	0.079		0.676	0.150	0.825	0.235	0.607
	<b>N</b>	151	151	151	151	151	151	151	151
Q4	<b>Pearson Correlation</b>	.372**	-.013	0.034	1	0.046	.306**	0.008	-0.113
	<b>Sig. (2-tailed)</b>	0.000	0.013	0.034		0.046	0.000	0.008	0.113
	<b>N</b>	151	151	151	151	151	151	151	151

	<b>Sig. (2-tailed)</b>	0.000	0.877	0.676		0.573	0.000	0.927	0.169
	<b>N</b>	151	151	151	151	151	151	151	151
<b>Q5</b>	<b>Pearson Correlation</b>	-0.042	-0.247*	-0.118	0.046	1	0.072	0.026	0.042
	<b>Sig. (2-tailed)</b>	0.608	0.002	0.150	0.573		0.378	0.747	0.609
	<b>N</b>	151	151	151	151	151	151	151	151
<b>Q6</b>	<b>Pearson Correlation</b>	0.070	0.014	-0.018	.306**	0.072	1	-0.037	-.309**
	<b>Sig. (2-tailed)</b>	0.390	0.869	0.825	0.000	0.378		0.654	0.000
	<b>N</b>	151	151	151	151	151	151	151	151
<b>Q7</b>	<b>Pearson Correlation</b>	-0.042	0.013	0.097	0.008	0.026	-0.037	1	-.215**
	<b>Sig. (2-tailed)</b>	0.609	0.871	0.235	0.927	0.747	0.654		0.008
	<b>N</b>	151	151	151	151	151	151	151	151
<b>Q8</b>	<b>Pearson Correlation</b>	-0.062	-0.108	-0.042	-0.113	0.042	-.309**	-.215**	1
	<b>Sig. (2-tailed)</b>	0.451	0.185	0.607	0.169	0.609	0.000	0.008	
	<b>N</b>	151	151	151	151	151	151	151	151
**.	Correlation is significant at the 0.01 level (2-tailed).								

**TABLE 1.12 CORRELATIONS**

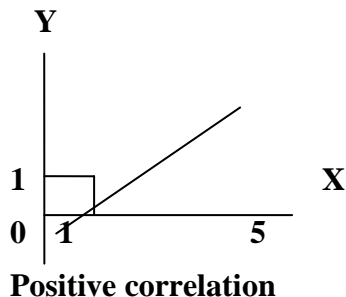
## CORRELATION

Correlations are the statistical test which gives us strength of relationship between two variables.[9]

Value varies from -1 to +1.

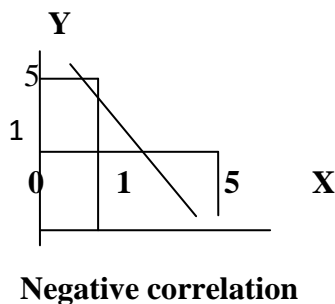
### CORRELATION COEFFICIENT

#### POSITIVE CORRELATION



The value of X is 1 then the value of Y is also 1, it means that the value of X is increasing then the value of Y is also increasing it means that there is a positive correlation between them.  $r=+1$ . [9]

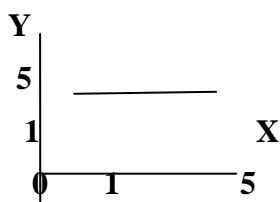
#### NEGATIVE CORRELATION



The value of X is 1 then the value of Y is 5 it means that both the values are different X is increasing then the value of Y is decreasing there is negative correlation between them. [9]

$$r = -1$$

#### NO CORRELATION



There is no correlation between X and Y.

$$r=0$$

In the above table 1.12 correlations shows that the \*\* it means that the relationship is significant, \*\*. Correlation is significant at the 0.01 level (2- tailed). \*. Correlation is significant at the 0.05 level (2- tailed). The relationship of the Q1 with Q1 itself value is 1 we cannot calculate the value of itself correlation.

The Q1 and Q2 have the positive relationship with the value of .335 this is the strength of relationship  $r=.335$  and relation is significant at the p value is less than 0.05 ( $p<0.05$ ).

The Q1 and Q5 have the negative relationship with the value of -0.042 this is the strength of relationship  $r=-0.042$  and the relation is not significant at the  $p=0.608$  value is greater than the 0.05 ( $p>0.05$ ).

## FINDINGS

The study shows that the most of the respondents are aware about the e-banking services provided by the bank and they are satisfied with the e-banking services, most of the respondents are avail online E- banking services provided by the bank because it saves time.

## CONCLUSION

We concluded that majority of the respondents are aware and response of them is satisfactory with E-banking service provided by Bank, while rest of respondents are not aware due to lack of technical knowledge. As per the study respondents are unaware about the cyber crimes in E-banking. According to the study it is very important to create public awareness about cyber crime because nowadays cyber crimes increasing in a very high rate.

Arun, 1. A. (2019). A study on Awareness of Internet Banking Services in college students of Lucknow city. *International Journal of Scientific Development and Research*, 4(7),451-455.

## REFERENCES

1. [https://drive.google.com/file/d/1gjaFg8KrWpw0beWN\\_irv8VB7OVgLulSn/view](https://drive.google.com/file/d/1gjaFg8KrWpw0beWN_irv8VB7OVgLulSn/view)
2. <https://en.wikipedia.org/wiki/Cybercrime>
3. <https://en.wikipedia.org/wiki/Computer>
4. <https://www.techtarget.com/searchsecurity/definition/cybercrime>
5. [https://en.wikipedia.org/wiki/IT\\_law](https://en.wikipedia.org/wiki/IT_law)
6. <https://en.wikipedia.org/wiki/Internet>
7. [https://en.wikipedia.org/wiki/National\\_Science\\_Foundation\\_Network](https://en.wikipedia.org/wiki/National_Science_Foundation_Network)
8. <https://en.wikipedia.org/wiki/CSNET>
9. <https://www.investopedia.com/terms/c/correlationcoefficient.asp>
10. Amutha, D. (2016). A study of consumer awareness towards e- banking. *International journal of economics and management sciences* , 5(4), 350-353.
11. Arun, A. (2019). A study on Awareness of Internet Banking Services in college students of Lucknow city. *International Journal of Scientific Development and Research* , 4(7), 451-455.
12. Haq, S., & Khan, M. (2013). E-banking challenges and opportunities in the Indian banking sectors. *Innovative Journal of Business and Management* , 2(4), 56-59.
13. Singhal, S. (2017). Demonetisation and E-banking in India. *International Journal of New Technology and Research*. , 3(1), 20-25.