

Significant Factors Impacting on Cyber Security

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ABSTRACT

This article analysis various crucial factors which have some strong impact and which does not have great impact on cyber security related aspects. In present world cyber security knowledge and applications of Internet services is spell bound. Internet has already occupied the entire world business. In this work we have encountered hypothetical research to identify the crux factors. This article has provided a strong opening on certain significant factors which makes larger impact on cyber security.

Keywords: *Cyber security, Significant factors, Internet, Hypothetical*

1. INTRODUCTION

The present information and communication industry has penetrated and occupied the entire business. In particular to say, industries like telecommunication, banking, insurance, human machine interface, medicine has strong foot prints and impact on cyber sciences.

To be very clear these industries cannot function even a day without Internet operations. Technology is always supporting to uplift the business operations but at the same time, issues like cybercrime emerging rapidly and affects the business not only in India but also globally. According to BusinessWeek/Symantec [3] report shows the top 20 cybercrimes cases registered globally. India gets the rank 11 among top 20 countries; it is shown in fig 1. National Crime Records Bureau of India (NCRB) [4] highlights the various types of frauds, among them debit/credit frauds holds the top position as shown in fig 2. According to timesofindia [5] report, cyber crime cases are increasing in India as 44% between 2013 and 2017. The majority of the cyber crime cases are registered for online banking as presented in fig 3. This research study has focused on what are the crucial factors that have direct significance and what are the other factors' which does not reveal significance on cyber security opinion towards their respective bankers.

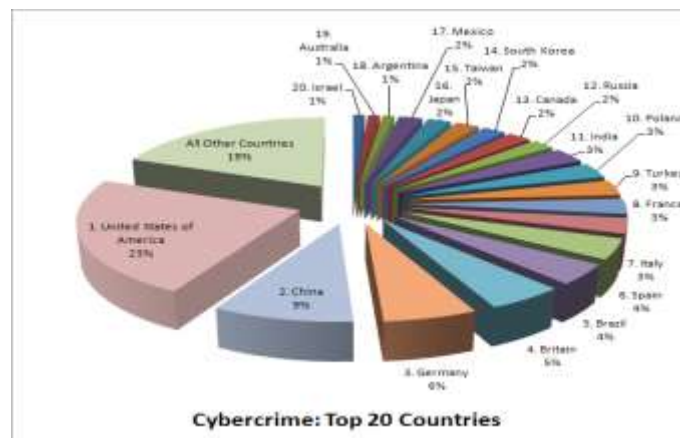


Fig 1: Top 20 Countries: Cybercrime

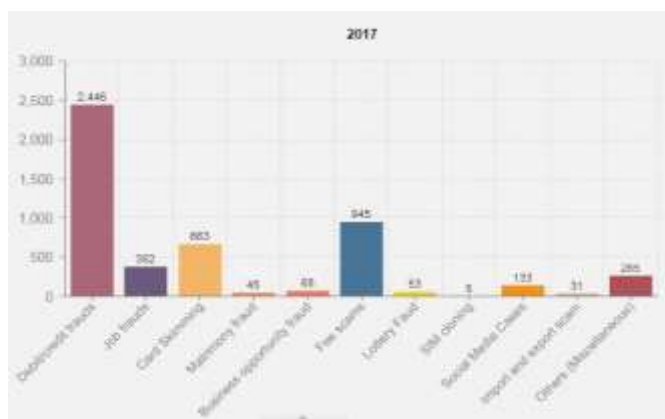


Fig 2: Various types of frauds



Fig 3: Number of cyber crimes reported in India 2017

2. OBJECTIVES OF THE STUDY

- To highlight cybercrime statistics
- To test the significant difference between selected variables with respect to opinion about cybercrimes in digital banking and trust statements towards respective bankers.
- To understand the crux factors.

3. RESULTS AND DISCUSSION

This work is an extension of the previous work [1][2]. We have measured 11 hypothetical statements with respect to their opinion about digital banking and trust statements relevance to cyber security towards their respective bankers. The results are summarized and presented in table 1.

Hypothesis	Result
H1	Rejected
H2	Accepted
H3	Rejected
H4	Accepted

H5	Rejected
H6	Rejected
H7	Rejected
H8	Accepted
H9	Rejected
H10	Rejected
H11	Rejected

Table 1: Hypothetical results

Hypothesis 1:

Ho: No significant difference between gender and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between gender and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is understood that there is significant difference between gender and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is rejected and alternate hypothesis is accepted.

Hypothesis 2:

Ho: No significant difference between age and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between age and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is understood that there is no significant difference between age of the respondents and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is accepted.

Hypothesis 3:

Ho: No significant difference between education qualification and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between education qualification and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is understood that there is significant difference between education qualification of the respondents and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is accepted.

Hypothesis 4:

Ho: No significant difference between income level of the respondents and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between income level of the respondents and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is understood that there is no significant difference between income level of the respondents and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is accepted.

Hypothesis 5:

Ho: No significant difference between occupation of the respondents and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between occupation of the respondents and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is revealed that there is significant difference between occupation category and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is rejected and alternate hypothesis is accepted.

Hypothesis 6:

Ho: No significant difference between account type of the respondents and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between account type of the respondents and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is clear that there is significant difference between account type and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is rejected and alternate hypothesis is accepted.

Hypothesis 7:

Ho: No significant difference between bank type and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between bank type and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is clear that null hypothesis is rejected and alternate hypothesis is accepted.

Hypothesis 8:

Ho: No significant difference between nature of account and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between nature of account and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it shows that there is no significant difference exists between nature of account and opinion about digital banking and trust statements towards respective bankers, hence null hypothesis is accepted.

Hypothesis 9:

Ho: No significant difference between mode of doing digital banking and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between mode of doing digital banking and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is clear that null hypothesis is rejected and alternate hypothesis is accepted.

Hypothesis 10:

Ho: No significant difference between type of digital services availed and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between type of digital services availed and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is observed that null hypothesis is rejected and reveals that there is significant difference between type of digital services availed and opinion about digital banking and trust statements towards respective bankers, hence alternate hypothesis is accepted.

Hypothesis 11:

Ho: No significant difference between purpose of doing digital banking and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

Ha: There is significant difference between purpose of doing digital banking and opinion about digital banking and trust statements towards respective bankers at 5% level of significance.

From the table 1, it is very clear that null hypothesis is rejected and alternate hypothesis is accepted.

4. CONCLUSION

On analyzing the various factors like gender, age, education etc certain well defined results are obtained which is really noteworthy for researchers on this line. In this research article a thorough analysis is done on factors which have greater impact (significant difference) and factors which have lesser impact (no significant difference) have been analyzed under the order of the day with this subject on cyber security.

This research can be further extended to more combination factors which again give us new dimensions in research. This article will definitely be useful for researchers and academicians working under this area.

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