Internet Browsing and Protection of An Individual's Personal Identifiers: A Study of Awareness among IT Students

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Abstract: *We are as of now living in an era driven by data so much so some said the data is the new oil. Every aspect of human life is influenced by information technology. The networked nature of our society ensures that there is an increasing level of interconnectedness. Internet facilitates this interconnectedness. However this also bring to fore the issues of privacy of the data that is shared during our interaction with the World Wide Web. As India is turning into one of the biggest marketplace networked using internet it is extremely important to understand the awareness of the security and privacy of the personal data that are shared online during every one of the transactions individuals are engaged in. hence there is a heightened need to understand the young Indians mind set and awareness regarding the data privacy. Data is collected from 112IT students and analyzed using descriptive statistics. A major observation has been though there is an increased awareness regarding the security of data very few seemed to be serious about the privacy of the data shared during their online activities.*

Keywords: Internet Browsing, Protection, World Wide Web, WWW, Internet

1. Introduction

Data is known as the most important part for an Individual (Banisar, D., & Davies, S., 1999). Due to the development and use of technology the processing and sharing of data is also increased (Terzo et.al, 2013). Nowadays, technology has been changed to an extent where it is used to perform even a simple task. People are so dependent on technology that they are not aware of the amount of data that is shared and used by this technology. This technology requires large amount of data to provide the efficient services to the customer (Katal A et.al, 2013)

The data that is used by this technology sometimes identifies the Individual which is critical in nature. Hence the Individual must be aware of all the data is collected by the website or application that they are dealing with. The technology needs large amount of data to provide efficient services to the customer (Katal A et.al, 2013). As there is an increase of processing of personal data, companies must provide adequate amount of protection to the data while dealing with it or transmitting it to provide services to the Individual (Kosar et.al, 2019).

Data that is collected while the individual is surfing on the internet are in large amount. This data consists of online activities, personal data that identifies the person and gives the hacker a chance to gain access to data if not handled properly. The online activities are analyzed by the companies to provide services and also sometimes shared with third parties which are then used for enhancing the business (Urbinati et.al, 2018). Every Individual has the right to know the data that is collected from them. If any company denies sharing the information details that is collected can face legal consequences.

Emerging technology forces the government to introduce legislation on data protection. But it is not clear how much contribution is done by the government to protect the personal data. Many legislation for protecting the privacy has been introduced but there is no proper implementation of the same (Walters et.al, 2019). Penalties are declared in the legislation which can be considered as a way to block unauthorized user to process the data in illegal way. The processing of personal data must be known to the data subject and proper consent must be obtained from them. Increasing quantities of private information from other nations flow into and from India as it becomes a leader in outsourcing business process. The role of Indian companies' capacity to properly safeguard the data generated must be understood. Organization deal with data of many countries so it is difficult to comply with all the regulation stated. The only way to protect the data in this case is to bring adequate level of data protection regulation that will satisfy all the requirements.

The research will assist to comprehend the notion of data privacy in human mindset. Human mindset plays an important role. People should be aware of all the data that is processed and the importance of privacy (Schiffner et.al, 2018). This research will help to understand the future of privacy and related issues.The data protection legislation controls the processing of data. While the organization is dealing with the traders, there will be requirement for sharing the data that is personally identifiable. But this sharing is not possible because of the restrictions given in the legislation. This will lead to reduction in trading which in turn will reduce the revenue (Isaak et.al, 2018).

2. Objectives

The main purpose of conducting this research is to understand the mindset of Individuals regarding the data that is collected (Kim et.al, 2018). The data collected sometimes act as an identifier which represents the person. Organization uses these data to provide services to the customer. Third party analytical companies also use the data to provide customized services. Individuals must be aware about the data collected and the sharing of this data because the data can be used in an unauthorized way. Data loss can affect individual immensely. Financial data is also shared on websites and applications which will consist of sensitive information such as bank details, card details (Kapczynski et.al, 2019). These data once leaked can be used in an

inappropriate manner. Hence it is necessary to manage the data in a correct manner. Humans must be aware about the consequences of the data shared. The organization must disclose all details of the processing of such data and build a trust among customers. Awareness among the customers must be encouraged by experts in this field by conducting sessions, seminars.

3. Literature Review

Lack of awareness among the Individuals
Kumaranguru and Cranor (2005) carried out an exploratory survey to obtain an Initial understanding the attitudes of the Individual about privacy. The finding show an general absence of knowledge of privacy issues and less concern about privacy in India than comparable research in the United States have discovered. Esma Aimeur et.al (2013) stated that because of the long verbose format, most internet users do not read privacy policies, although they are still the primary source of user information about how their data is gathered and used.

Steven A. (1994) did research on Individuals awareness about the data privacy and quoted that Individuals are not aware about the personal data that is used by the organization because of which someone with free access to this information could piece together all of them and use it in unauthorized way by altering or selling the data. So the Individual must be aware of the data that is shared through the contract and used by the organization to provide the services.

Potzsch, S. (2008) stated that in the current world, people are more dependent on computers as they can handle many work simultaneously and has a very good memory capabilities. Hence people store all the personal data in the computer system and are unaware of the privacy issues related to it. It has been noticed that people are aware of privacy in general but they do not take measures against it.

There is an discrepancies between the stated attitudes of people and their actual behaviour regarding handling of personal data. Hence people should have more knowledge about the importance of handling this data properly and also must be aware of the possible consequences if this data is not handled properly. The solutions should also consider cognitive and behavioural aspects by supporting the privacy awareness of people in all online situations.

Meltzer & Lovelock (2018) stated thatevery sector, including manufacturing, services, agriculture, and retail, relies on information and on that data's worldwide flow. With the help of cloud computing, worldwide connectivity has allowed cross-border financial activity to involve people, start-ups and any other companies in worldwide markets. As the data is flowed from one place to another freely this in turn reduces the transaction costs and the constraints of distance, and increases organizational efficiencies. Hence it's necessary for an Individual to understand all the details about the data collected and processed.

Inability of organization to protect the data
According to the analysis done by Robinson et.al (2009), the Directive that is available for protecting the data will not be able to suffice in the long term as we move towards a worldwide networked culture. It has been understood that the Directive's commonly used principles will stay a helpful front-end, a harm-based back-end will need to support them to meet the increasing challenge of globalization and global information flows. However, it has also been commonly acknowledged that the present arrangements can still extract more value. The study done to explore how e-investors are affected collectively with traditional TAM constructs by perceived confidence, safety, and privacy.The study examines the behavioural intention of e-investors to use the facilities of internet retailers and stockbrokers. The model indicates that perceived confidence and perceived usefulness are significant antecedents of intentions.

The findings of this research indicate that perceived confidence, usefulness and ease of use in online trading systems are significant problems. The online financial merchants and stockbrokers need to enhance the safety of the online system, as e-investors shape perceptions of its perceived safety and when these perceptions are verified, their confidence is improved and they are therefore more likely to use these online facilities, especially if the economic data is helpful for their purposes.

Weber, R.H. (2010) stated that an appropriate legal framework must take into account the underlying technology and would be best developed by an global legislator, supplemented by the private sector in accordance with particular requirements and thus readily adjustable. The right to information, provisions prohibiting or restricting the use of mechanisms of the Internet of Things must be encompasses in the legislation which will help the organization to be compliant with the laws and rules for processing the personal data. Scassa, T. (2018) saidbalancing privacy and transparency of the data will involve training and resources, and governments' commitment to providing these resources will have an important effect on how the balance is achieved.With the help of cloud computing, worldwide connectivity has allowed cross-border financial activity to involve people, start-ups and any other companies in worldwide markets.

As the data is flowed from one place to another freely this in turn reduces the transaction costs and the constraints of distance, and increases organizational efficiencies.

Lack of Due-diligence
Wang, H. et.al (1998) stated that the main problem of Internet marketplace privacy is that people's privacy rights should be balanced with the advantages of free information flow. Privacy issues are not restricted to the more well-known instances of junk mailing or illegal distribution of web cookies, but have extended to some methods that have become the cornerstones of the income streams of internet merchants, such as the sale of customer databases for direct marketing purposes. Other problem related to the topic is that the people's privacy rights should be balanced with the advantages of free information flow. Consumers in the Marketplace have the right to know the details of the

personal data collected i.e. what personal data is collected, reason for collecting the personal data, and with whom the data is shared but they are not aware of these rights.

Gap analysis
The research papers available are focused on the current aspect related to the processing of personal data and not on future aspect of this privacy. Research papers currently available are not featuring the human knowledge regarding the protection of data. Smartphones are leading the student life to a different prospect hence it's necessary to understand the importance of data privacy and human mindset related to this. Concern related to processing of data that is generated from online activities are not raised in paper which can be explored from this research. People are not aware the data that is generated from their online surfing can be shared to any third party and can be used in an unauthorized manner.

4. Data Analysis and Discussion

71.4% of the Individuals in total survey share their personal details on website or application for using the services efficiently but are not aware how these collected data is processed. The details shared on website can be personal or financial data. All the websites or application has terms and condition listed on their website which is compulsory to maintain as it will have details of which all data is collected and how are they processing these data. But 54.5% of the Individual does not read these terms and conditions and agree with it.

Internet has become part of the human life. While surfing the Internet many data is collected and processed such as the Individual's likes, dislikes, location details and all the other activities. 43.8% of the people are not aware that data is collected when they browse on internet. These data are then shared with the third party for analytical purpose. Many companies use the data to understand the customer's requirements and then provide services according to the requirements. They process the data to provide customized services to the customer. A social media analytical company plays an important role to analyze all these data and provide conclusion to the companies. Increase in technology leads to increase in processing and sharing of personal data. According to the survey conducted, 57.1 % thinks that this increase in technology will increase the processing of data. 86.6% of the total survey does not know where to report if any data leakage happens.
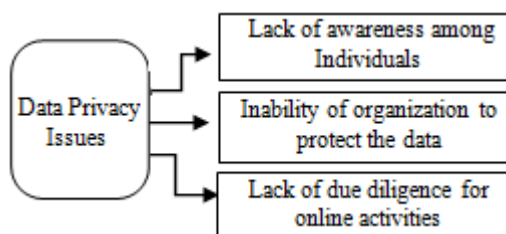
As there are no proper knowledge sessions conducted for IT students related to importance of protecting the personal data it can lead to worst consequences where data can be leaked and used in an unauthorized way and Individuals must be unaware of it. Data is generated whenever Individual is interacted with website or application hence it is necessary to protect this data.

The organization has inadequate level of facility to protect the data that is collected and hence it gives an opportunity to the hacker to use the data for their benefits. All the processing of data have legal consequences if not handled properly. Hence proper training must be provided to the employees working for organization on how to handle the personal data identifiers. Organization must have a framework built for handling the data and all the employees should be given a hands-on experience on that framework. Government is taking measures to manage the data collected. There are many laws that an organization has to follow which is enacted by the government especially to handle the personal data collected. If the organization shares the data with the third party then they must be sure that it will be processed in authorized way and avoid data leakage.

As Individuals are unaware of data collected while surfing on Internet it is very necessary for them to understand the data collected while they browse on any online platform. The data can identify the person or its location which can lead to some bad consequences. People don't read the terms and conditions that is available on internet. All the details about how the company will use the data collected are stated in that terms and conditions. Privacy notices are available on websites and applications which Individuals are unaware of. Hence they should be given sessions on how to use the website and what all data should be shared on public. Public data that is available on Internet must be protected by the respected authority so that it does not leak any critical data. Lack of due diligence can lead to loss of critical and sensitive data.

5. Methodology

Literature survey was conducted, where many research papers and literatures were studied and used as a reference. Survey form was floated among the IT students and 112 responses were analyzed for the research purpose. Direct Interviews was the other way to understand the mindset of the Individual. Average ages of the respondents are in mid 20s.

6. Conclusion

According to the survey conducted it has been understood that the Individuals are not aware what all data is collected, processed and shared. Hence it's necessary to increase the awareness among the Individual so that they can protect the data. It is also seen that organization provide inadequate level of protection and hence the data is used in an unauthorized way. Analytical companies collect the data that is shared by the organization and perform the analysis using the algorithm. IT students are aware of the term privacy but they don't know how it works and where to report if any data leakage happens. Data collected from online activities are processed without informing an Individual which can be used in an unauthorized way. Hence proper training and session provided to an Individual and organization can lead to data protection.

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