

## **Privacy Awareness in E-Commerce**

**Cagaoan, Kristian Angelo A. ,Buenaobra, Mary Jovy Anne V., Martin, Azie Trina M.  
Paurillo, Jonathan C.**

### **ABSTRACT**

The consumers nowadays use technology in their everyday life because it helps them to make an easy lifestyle and it also helps them save time in their everyday life. Shopping is one of their activities in which a customer browses the available goods or services presented by one or more retailers with the intent to purchase a suitable selection of them, so they develop a new trend in shopping in which is E-Commerce. Electronic Commerce has an important impact on the lives of modern people here in the Philippines. Electronic Commerce helps the people to make an easy and convenient shopping to save the cost of transportation and time, but there are problems with their own privacy and personal information. In order for E-Commerce to become popular, consumers must be aware in today's situation like; fraud, cheating and stolen card identities or even poor quality goods and services. The researcher's recommend that, the online shoppers should have their own initiative to take care of their personal information, they must also consider sites that are popular not just in their promotions like sales, products offered and discount, they must also check the sites integrity. The E-Commerce must have a broad study to develop their security for the protection of their customer as well to increase their laws and policies to increase their sales, customers and for them to prioritized by the people, it will also make the customer feel safe in this kind of commerce. This will be the first step for the online sellers and shoppers to build a trust and relationship with each other.

---

### **I. THE PROBLEM AND ITS BACKGROUND**

In this chapter, it tackles the difference of E-Commerce from the traditional method of selling product to the public, the buying and selling of products and services by businesses and consumers through an electronic medium, without using any paper documents. E-Commerce is widely considered the buying and selling of products over the internet, but any transaction that is completed only through electronic measures can be considered E-Commerce. Even though that this is the newest trend in buying and selling of the product, the relationship between the seller and the buyer is not personal because they didn't have the chance to see each other. There is no

interpersonal relationship and the seller and the buyer will only transact the business through the computer.

This chapter also tackles about the security of their client because there is some information that needed to share for transacting their business. Therefore, the privacy of their client is at stake. During E-Commerce process, companies have many opportunities to collect and use personal information to differentiate themselves through improved customer relationships, one-to-one communication and personalized services.

The problem that the researcher aims to answer is the different parameters to measure the security on E-commerce and the

level of security of different online shopping sites in terms of different security measures.

The theory of this research is that the owner of E-Commerce will surpass some problems in terms of privacy. The formulated research model by the researchers is that for the Input, they use the data gathering procedure, distribution of questionnaire and journal references. For the Process, they utilized the analyzation, collecting of data and sorting the answers of the respondents, and for the Output, the researchers utilizes the interpreting the data to find out the privacy in E-Commerce transaction.

This study is important to the company owners, researchers and to the future researchers who decides to conduct a study with a related topic.

The researcher delimits its scope to the different information asked by online shopping sites, the different parameters to measure the security in E-Commerce, cover the level of security of different online shopping sites.

## **II. REVIEW OF RELATED LITERATURES AND STUDIES**

This chapter tackles the related literature, both from foreign and local authors who had conducted their study regarding the privacy awareness in E-Commerce to the company's client.

The internet enables companies to engage in E-Commerce activities such as to collect, store and exchange personal information obtained from visitors to their websites. In response to customer concerns, E-Commerce companies are paying increased attention to privacy. Their main challenge is to balance the competitive advantages provides by their use of personal information with the risk of alienating

customers who are concerned about potential abuse of their personal information. The internet is revolutionizing how we do out shopping. It has been developed into a dynamic virtual medium for selling and buying, either for information services or products. Online shopping is activities of buying and selling the products or services through Internet. Users are able to do online shopping by browsing the online shopping website. System enhancements addressing security issues-still the biggest threat to e-commerce-are also persistently being pursued and have led to significant improvements. Studies have shown that individuals' growing privacy concerns put pressure on companies to develop customer-focused privacy practices. E-Commerce privacy is one of the information privacy issues that should be on the agenda of the management information systems (MIS) and accounting information systems (AIS) researchers. One ever-emerging new technology is the area of E-Commerce; although the area has existed for several years it is a technology that is undoubtedly yet to reach its full potential.

Privacy is a serious issue in electronic commerce, no matter what source on examines. Internet privacy concerns represent individuals' perceptions of what happens with the information they provide via the Internet. Information privacy refers to the concept of controlling how one's personal information is acquired and used. One precondition for the growth of E-Commerce is that the consumers use online channels. These channels are chosen to each stage in the purchase process: requirements determination, vendor selection, purchase, and after-sales service. E-Commerce has become a dynamic force, changing all kind of business operations world-wide. E-Commerce is conducted on global network

i.e. Internet which is entrusted. So confidentiality is required during transmission and it must be kept secure against all type of threats. In several ways, information technology is essentially implicated in this relentless gathering of information. In the first place, computerized databases have provided for it the right kind of home. Information that is drawn from the physical world is harboured in electronic databases, which give these records the permanence, malleability and transportability that has become the trademark of information technology. Trust in business-to-consumer (B2C) E-Commerce is established very differently than in business-to-business (B2B) E-Commerce environments because relationships are often shorter in term and more transaction-oriented.

### **III. METHODOLOGY**

This chapter tackles about the methods and procedures on how this research study was conducted.

The researcher decided to use a descriptive research and had employed 50 respondents who are living in the cities of Manila, Valenzuela, Caloocan, Malinta, from random personalities like students, businessmen's, etc.

The tool used by the researcher is gathering data by means on interviewing some people and through observation. The research also distributes the formulated questionnaires to analyse their different perception regarding the privacy of E-Commerce.

In the demographic profile of the respondents, there are equal distribution in the three cities namely Malinta, Valenzuela and Caloocan, while there are 20 respondents from Manila.

### **IV. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

This chapter tackles the tabulated answered sheets and are being computed and graph by the researchers.

There are 90% of the respondents who stated that there are some websites who had asked their named and there are 10% of online website companies who didn't ask their names. There are majority of the respondents, 82% of them required their email address when signing up while 18% of them don't require email address. While there are 94% of the respondents had stated that they are being asked their telephone/cell phone number while 6% of the respondents don't ask their telephone/cell phone number. There are 32% of them asked their credit/debit card number and password when paying for the item they bought while 68% of them don't asked their debit/credit card number and password when paying for the item they bought. Among 50 respondents, 60% of them ask for their suggestions while 40% of them don't ask for suggestions. There are 80% of the respondents encounter validation notifications while 20% of them don't encounter validation notifications before they proceed. Out of 50 respondents, 48% of them encounter secret question when signing up while 52% of them don't encounter secret question when signing up. There are 70% of them encounter End User License Agreement (EULA) before proceeding to sign-up page while 30% of them don't encounter End User License Agreement (EULA) before proceeding to sign-up page. There are 90% of them admitted that they use password when making an account while 10% of them don't user password when making an account. There are 70% of the respondents admitted that they encounter letters, pictures randomly generated by computer like CAPTCHA while 30% of them don't

encounter letters, pictures randomly generated by computer like CAPTCHA. Out of 50 respondents, 82% of them give their real address when signing up while 18% of them don't give their real address while signing up. There are 94% of them give their valid email address when signing up while 6% of them don't give their valid email address when signing up. 64% of the respondents present a valid ID or voucher upon delivery of the item they bought while 36% of them don't present a valid ID or voucher upon delivery of the item they bought. There is 92% of them consider sites that are popular when buying in an online shop while 8% of them don't consider sites that are popular when buying in an online shop. While there are 70% of them receive a confirmation call from the site of they already receive the product they bought while 30% of them don't receive a confirmation call from the site if they already receive the product they bought.

## V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

The questionnaires given by the researchers are answered mostly by the students. The problem is Privacy Awareness in E-Commerce. The questions are categorized by Personal Information, Level of Security used by different online shopping sites and other different security parameters used by online shopping websites. Some and most of the users also encounter secret question, randomly generated letters like CAPTCHA, and most important the End User License Agreement, 70% of them allot minutes of their time to read it but 30% of them are just approving without even reading while 36% of the online shopping sites gives voucher or ask for a valid ID upon the delivery of the item while 64% of them doesn't require either voucher or valid ID upon the delivery, and 70% of the

respondents receives a confirmation call to verify that the item has arrived while 30% of them just accept the item they bought. Lastly, when it comes to popularity of the site/s 92% of the respondents consider sites that are popular and only 8% of the respondents don't consider sites that are popular and making transactions in any unpopular websites.

The continuous growth of our society's technology has led to many ways of convenient shopping; but these ways led customers to become lazy and careless with their personal information. We, therefore conclude that E-Commerce businesses must conduct a broad study, development of security features, and increase their awareness about E-Commerce law, privacy policies to build trust to users.

The researchers recommend that, the online shoppers should have their own initiative to take care of their own personal information and the online shoppers must also be aware of the hackers. Never log in your account in a pop-up window and be aware of scams that are being sent in your email.

## REFERENCES

- [1] Bortiz, J.E., No, W.G. & Sundarraj, R.P, 2008. *Internet Privacy in E-Commerce: Framework, Review and Opportunities of Future Research*. Retrieved August 17, 2012, from <http://accounting.uwaterloo.ca/uwcisa/resources/eprivacy/HICSS%202007-09-13.pdf>
- [2] Ghani, N.A, & Sidek, Z.M. 2009. *Personal Information Privacy in E-Commerce*. Retrieved August 3, 2012, from <http://www.wseas.us/e-library/transactions/information/2009/28-863.pdf>

- [3] Pasadilla, G.O., & Lacson, A. 2006. *E-Commerce in the Philippines: A Preliminary Stocktaking*. Retrieved August 15, 2012, from <http://publication.pids.gov.ph/details.php?pid=3922>
- [4] Bortiz, J.E., & No, W.G. 2011. *E-Commerce and Privacy: Exploring what we know and opportunities in future discovery*. Retrieved August 25, 2012, from <http://accounting.uwaterloo.ca/uwcisa/resources/eprivacy/documents/JIS2010-10-11final.docx>
- [5] Smith, H.J., Dinev, T., & Xu, H. 2011. *Information Privacy Research: An interdisciplinary review*. Retrieved August 15, 2012, from <http://www.misq.org/skin/frontend/default/misq/pdf/appendices/2011/SmithDinevXuAppendices.pdf>
- [6] Smith, R., & Shao, J. 2007. *Privacy and E-Commerce: A consumer-centric perspective*. Retrieved August 15, 2012, from <http://www.its.ohiou.edu/bernt/ITS351/privacy%20and%20ecommerce.pdf>
- [7] Ackerman, M.S., & David, D.T. 2009. *Privacy and Security issues in E-Commerce*. Retrieved August 15, 2012, from <http://econ.ucsb.edu/~doug/245a/Papers/ECommerce%20Privacy.pdf>
- [8] Belanger, F., & Crossler, R.E. 2011. *Privacy in the Digital Age: A review of information privacy research in information systems*. Retrieved August 15, 2012, from <http://www.misq.org/skin/frontend/default/misq/pdf/appendices/2011/BelangerCrosslerAppendices.pdf>
- [9] Pennanen, K. 2009. *Consumers initial e-Trust building process development of an integrative model and research propositions*. Retrieved August 16, 2012, from [http://www.acrwebsite.org/volumes/ap08/ap\\_2009\\_vol8\\_3.pdf](http://www.acrwebsite.org/volumes/ap08/ap_2009_vol8_3.pdf)
- [10] Head, M., & DeGroot, Y.Y.M.G. 2001. *Privacy protection in electronic commerce- a theoretical framework*. Retrieved August 16, 2012, from [http://www.business.mcmaster.ca/IS/head/Articles/Privacy%20Protection%20in%20Electronic%20Commerce\\_A%20Theoretical%20Framework.pdf](http://www.business.mcmaster.ca/IS/head/Articles/Privacy%20Protection%20in%20Electronic%20Commerce_A%20Theoretical%20Framework.pdf)
- [11] Pavlou, P.A. 2001. *State of the information privacy literature- where are we now and where should we go?* Retrieved August 20, 2012, from <http://aisel.aisnet.org/misq/vol35/iss4/10/>
- [12] Whisler, E. 2007. *Protecting privacy and fostering continued e-commerce growth*. Retrieved August 16, 2012, from <http://www.peterswire.net/behavioralpapers/whisler-retailers.pdf>
- [13] Faja, S. 2005. *Privacy in E-Commerce: Understanding user trade-offs*. Retrieved: August 16, 2012, from <ftp://163.25.117.117/gyliao/TODylan/PRIVACY%20IN%20E-COMMERCE%20UNDERSTANDING%20USER%20TRADE-OFFS.pdf>
- [14] Kaapu, T. & Tiainen, T. 2009. *Consumers views on privacy in e-commerce*. Retrieved August 16, 2012, from [http://iris.cs.aau.dk/tl\\_files/volumes/Volume21/no1/21-1%20KaapuTiainen.pdf](http://iris.cs.aau.dk/tl_files/volumes/Volume21/no1/21-1%20KaapuTiainen.pdf)
- [15] Haseeb, K. Arshad, M., Ali, S., & Yasin, S. 2011. *Secure e-commerce protocol*. Retrieved: August 16, 2012, from <http://cscjournals.org/csc/manuscript/Journals/IJCSS/volume5/Issue1/IJCSS-429.pdf>
- [16] Belanger, F., Hiller, J.S., & Smith, W.J. 2002. *Trustworthiness in electronic commerce: the role of privacy, security, and sites attributes*. Retrieved: August 20, 2012, from [http://onemvweb.com/sources/sources/trustworthiness\\_ecommerce\\_role.pdf](http://onemvweb.com/sources/sources/trustworthiness_ecommerce_role.pdf)
- [17] Xiaoming, L., & Sejdini, V. 2004. *Privacy in e-commerce: A General Perspective*



Retrieved August 19, 2012, from  
[http://web2.uwindsor.ca/courses/cs/aggarwal/  
cs60564/Assignments/XiaomingSejdiniChow  
dhury\\_Privacy.pdf](http://web2.uwindsor.ca/courses/cs/aggarwal/cs60564/Assignments/XiaomingSejdiniChowdhury_Privacy.pdf)

[18] Nissenbaum, H. 2000. *Protecting Privacy  
in an Information Age: The problem of privacy  
in public.*

Retrieved August 28, 2012, from  
[http://www.nyu.edu/projects/nissenbaum/pap  
ers/privacy.pdf](http://www.nyu.edu/projects/nissenbaum/papers/privacy.pdf)

[19] Head, M.M., & Hassanein, K. 2002. *Trust  
in E-Commerce: Evaluating the Impact of  
third-party seals.*

Retrieved August 30, 2012, from  
[http://phamtrung.wikispaces.com/file/view/TR  
UST+IN+E-COMMERCE.pdf](http://phamtrung.wikispaces.com/file/view/TRUST+IN+E-COMMERCE.pdf)

[20] Pitzek, S. 2001. *Security- Privacy in the  
internet.*

Retrieved August 31, 2012, from  
[http://www.vmars.tuwien.ac.at/courses/akti12/  
journal/01ws/article\\_01ws\\_Pitzek.pdf](http://www.vmars.tuwien.ac.at/courses/akti12/journal/01ws/article_01ws_Pitzek.pdf)