

**THE ROLES OF INTERNET SECURITY IN
ENHANCING ONLINE PURCHASING DECISION
MAKING AMONGST BUYERS IN MALAYSIA**

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APPROVAL

'I / We* hereby declare that I / We* have read this thesis and in my / our*

Opinion this thesis is sufficient

In terms of scope and quality for the award of the Degree of Technopreneurship'

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**A project report submitted in fulfillment of the requirement for the award of
Bachelor Technopreneurship**

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JUNE 2015

DECLARATION

'I declare that thesis entitle The Roles of Internet Security in Enhancing Online Purchasing Decision Making Amongst Buyers in Malaysia is the result of my own research except as cited in the references'

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DEDICATION

For my beloved father Mr. Kunal Bin Sahkin and my caring mother Mdm. Zurinah Binti Abdullah who is my backbone, and my family that being the great supporter in my lifetime.

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ABSTRACT

This study will focus on the relationship between the roles of internet security in enhancing online purchasing decision making. There are three main objectives for this study which are i) To determine factors that hinder online purchasing, ii) To identify safety issues in online purchasing, and iii) To strategize a more safe online purchasing environment. The data will be collected from 150 respondents between amongst buyer in Malaysia using the survey method. To get all the information required, the method of questionnaire was given to the buyers. The question relates to what extent do buyers trust the safety of online purchasing based on hypotheses that have been built. The data is analyzed by using the descriptive statistics and inferences. The result shows that the roles of internet security in enhancing purchasing decision making amongst buyers in Malaysia.

ABSTRAK

Kajian ini akan memberi tumpuan kepada hubungan antara peranan keselamatan internet dalam meningkatkan keputusan pembelian dalam talian. Terdapat tiga objektif utama kajian ini iaitu i) Untuk menentukan faktor-faktor yang menghalang pembelian dalam talian, ii) Untuk mengenal pasti isu-isu keselamatan dalam pembelian dalam talian, dan iii) Untuk menyusun strategi persekitaran pembelian dalam talian yang lebih selamat. Data ini akan dikumpulkan daripada 150 responden dalam kalangan pembeli di Malaysia dengan menggunakan kaedah tinjauan. Untuk mendapatkan semua maklumat yang diperlukan, kaedah soal selidik telah diberikan kepada pembeli. Soalan ini berkaitan dengan sejauh manakah pembeli mempercayai keselamatan pembelian dalam talian berdasarkan hipotesis yang telah dibina. Data dianalisis dengan menggunakan statistik deskriptif dan kesimpulan. Hasil kajian menunjukkan bahawa peranan keselamatan internet dalam meningkatkan keputusan pembelian dalam talian dalam kalangan pembeli di Malaysia.

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LIST OF ABBREVIATIONS

CPU	=	Central Processing Unit
DV	=	Dependent Variable
F	=	Frequency
GYB	=	Google, Yahoo, and Bing
HTTP	=	HyperText Transfer Protocol
HTTPS	=	HyperText Transfer Protocol Secure
IP	=	Internet Protocol
IV	=	Independent Variable
MAC	=	Management and Administrative Computing
RM	=	Ringgit Malaysia
SEO	=	Search Engine Optimization
SIG.	=	Significant
SLA	=	Service Level Agreements
SSL	=	Secure Socket Layer
URL	=	Uniform Resource Locator
VPA	=	Virtual Payer Authentication

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LIST OF SYMBOLS

B	=	Beta Coefficient
H ₀	=	Null Hypothesis
%	=	Percentage

CHAPTER 1:

INTRODUCTION

1.1 Introduction

The researcher would like to see the relationship between the roles of internet security in enhancing online purchasing decision making. The particular the role of internet security that will be used in the research are Secure Socket Layer Certificate, WebShaper and the partner payment/shipment of online purchasing.

The research will discuss what are the factors that hinder buyers from purchasing online goods. In conjunction with that, the research also includes to what extent do buyers trust the safety of online purchasing and the experienced be made safer. Furthermore, the researcher would like to identify the safety issue in online purchasing. Lastly the research will cover on the strategies a more safety online purchasing environment.

Internet security depends in certain sources and standard because safeguard data that become send over internet. Other aspects safe network preparation including safety device that block unpleasant traffic and anti-malware, anti-spyware and antivirus program that work from specific network or tool monitor Internet traffic for unsafe attachment. Internet security in usually become a top interest for both businesses and government. It also will be a good protect financial items and more what held by waiter and networking hardware of a business or agency. Internet security scarce could threaten

to collapse an e-commerce business or any other operational where data become send on network.

Now we do all online, our computers, laptop computer and smartphone has become one expansion ourselves so ensure us have best internet security is one way know that our identity, document and password not compromised. With internet come false activities choices from identity thief to people who hacking computer and steal private password, document and file. Our fact do all online only open us depend on this fraud and make us sit victim, unless you has taken steps need protection your computer to best your capacity. It still surprising that many people do not disturb with internet security. They as if think that their computers does not appear, but once you begin using your computer to whatever involve logging on your internet easy victim.

People are becoming more aware of the dangers of the internet and using Wi-Fi connections are available throughout the country they are opening themselves up to these unwelcome guests, this is why they are taking their security seriously. By not taking the necessary steps people may find their accounts hacked, the computer wiped clean or even their own bank account emptied, not a situation they want to be in.

This research discovers the issues regarding the roles of internet security in enhancing online purchasing decision making. A survey and a web content analysis will be conducted as the methods to stimulate data. Factors that will be hypothesized are Secure Socket Layer Certificate, WebShaper, and partner payment/shipment. Affecting design elements are identified through previous journals researcher's recommendation and few journals.

1.2 Problem Statement

The Internet is an international information network in the world that allows us to exchange information or data information. 'World without Borders' is a term that is synonymous with the Internet. Whereas according to the Dictionary Second Edition, Internet means the international computer network which allows computer users around the world communicate with each other and access information databases from around the world. It is a network that consists of a small network. Use of the internet is becoming more widespread throughout the world in this modern era. Currently, many facilities have emerged as a result of the development of science and technology. Marketing and sales of goods are marketed and sold on the internet to help consumers save time and money.

Now a day people do not have to bother to get information or to get an item needed. All the needs and requirements can be achieved easily and in a short period. Now everything is at our fingertips. Internet serves to convey information in a more rapid and brief compared with communication devices available, such as mail and telephone. The latest information can be found as constantly renewed from time to time to the needs of the user. However, we often heard of an impending cyber fraud fraudulent online purchases. People will notice how well or how bad of their products (product and service) with their (previous customer) words on articles, blog and most important is Facebook. Consumer will trust Facebook more than everything.

In reality, most consumers do not feel completely safe when buying online, especially when buying from small online merchants that lack a strong and recognized brand, like Walmart or Amazon.com. Buying on the internet, 74% of the population used the internet. 81% of internet users who research products online, 26% of people using the internet have used online auctions, and 66% of users who have purchased an online product. Online consumers now are more security savvy than ever, they look for SSL Certificate, 3rd party logo, and persuasive indicator telling them your store can be trusted.

1.3 Research Question

1. What are the factors that hinder buyers from purchasing online goods?
2. To what extent do buyers trust the safety of online purchasing?
3. How can online purchasing experience be made safer?

1.4 Research Objectives

1. To determine factors that hinder online purchasing.
2. To identify safety issues in online purchasing.
3. To strategize a safer online purchasing environment.

1.5 Scope, Limitation and Key Assumptions of the Study

The research will explain about what are the factors that hinder buyers from purchasing online goods. In conjunction with that, the research also includes to what extent do buyers trust the safety of online purchasing and the experienced be made safer.

The scope and limitation will stand amongst the buyers. The research will take place any areas of buyers in Malaysia.

The key assumption will stand between the Secure Socket Layers certificate, Web Shaper, and Partner Payment/Shipment.

1.6 Importance of the study

Internet security definable as data protection from theft, loss or invalid access, and usage or modification. With nature constantly evolving Internet, it is very important that buyers continuously protect themselves and their information. The issue is so important that many large firms take full-time security experts or analyst maintain network security. Many lies online buying become with sellers untrusted.

Meanwhile internet revolutionized, the facilities and use achieve price in new risk. Without any online defense, you leave yourself open become one fraud victim, theft in fact property damage. Security are very important care in maintaining the seller and consumer safe and this responsibility not only in individual, everyone is a potential target, including governments and private company that can enhancing online purchasing decision making.

1.7 Summary

In conclusion, Chapter 1 elaboration to see the relationship between the roles of internet security in enhancing online purchasing decision making. The particular the role of internet security that will be used in the research are Secure Socket Layer Certificate, WebShaper and the partner payment/shipment of online purchasing. Internet security is importance in enhancing online purchasing decision making where's the researcher create the research questions and research objectives of that hinder buyers from purchasing online goods.

CHAPTER 2:

LITERATURE REVIEW

2.1 Introduction

This chapter is discussing on the past researches which related to the present study. In enhancing the understanding of the roles of internet security theory, the study will explain on the concept of the theory, and then the past researches to track the adaptability of the research that will lead to the general hypothesis for this own research. This chapter will explain on contingency theory as it the basis of the roles of internet security in enhancing online purchasing decision making. Then, the research reviews on the main variables for this study, the roles of internet security in enhancing online purchasing decision making amongst buyers in Malaysia.

2.2 Background Studies

2.2.1 Secure Socket Layer Certificate

Depending on WebShaper's website, SSL is a protocol layer. In every layer, information probably include field to long, description, and satisfied. Data accepted is decrypted, confirm, decompress, and reinstall, thus it will deliver to higher level customers. SSL takes information to be transmitted, data splinter into organized blocks, alternatively compress data, about a MAC, encrypts, and deliver results. The sellers used e-commerce website collecting data of the buyers & certificate SSL can guarantee buyers information security. Online consumers trust mortgage website for safe purchase, Certificate SSL helps seller gets online payment. Buyer will buy when they believe the seller. SSL accumulate the seller that do exchange rate by adding profiting from single store circulation. SSL also capitalize from world branding know again certificate provider defrost and sowing confidence in customer.

1. Interoperability

Free programmers should be developing application use SSL 3.0 that then will get successfully exchange cryptographic parameter without code knowledge each other.

2. Cryptographic security

SSL should be used to establish a secure connection between two parties.

3. Relative efficiency

Cryptographic operations behave very intense on intensive CPU, key that very public operation. For the purpose of this, SSL protocol had combined a caching choice session scheme reduces the need number of contacts to be established from scratch. Furthermore, care were taken reduce network activity.

4. Extensibility

SSL make effort to prepare a framework where new public key and encryption methods bulk can be incorporated as need. This will also achieve two sub goals prevent need create one new protocol (and endanger new weakness possibility introduction) and avoid need implement overall new safety a library.

SSL certificate main objective is for encrypt information so that it only can be read and understood by parties will. Information surrender on the Internet form often through more than one computer before reach destination finally, and more stop area it have to make, that higher opportunity that a third-party can acquire access. SSL certificate includes random characters into original information, cause it incomprehensible to anyone else without encryption key that is suitable. If the information do somehow covered at wrong hands, it will be inscrutable and therefore useless.

Most of the buyers that can be recognized that is "http" protocol replacement with "https". This presentation that a safe page and repressed in another visual signal namely image key any in standard bar or sailor location. Wise online shoppers today know find these things before making any online purchase. These entire elements try together to create belief between a customer and a business. Providing clients with security to all their information and give them way of confirming the security increase confidence and help ensure positive purchase experience. As interest, going through authorization process should acquire SSL certificate believed is worth the effort. Trying to operate without one prevent consumers and make it difficult or impossible take payment. Online shoppers want to know that their sensitive personal information is safe like it agrees cyberspace, and invest in SSL security is best way to give them the peace of mind.

SSL only exists for webShaper bizStore. Each SSL requires a unique IP address which is comprehensive in the SSL pricing. It only cost RM549 per year to enhancement trust and conversion. SSL is important, it only either one way for online merchant to build online trusts. Other aspects like a proper planning (fast loading, customer could easily surf and lead), relationship details availability, slide prevent buyers conduct business and supply their customer and others play a great deal in planting customer's trust.

Information sent through an SSL link is encrypted so that the information is not tampered with while the transfer is taking place. Even if it's being selected by malicious hacker, the info is meaningless since it has been encrypted. When the buyers access a page secured with SSL using Internet Explorer, Firefox or Opera, a lock symbol will appear as shown in Figure 1.



Figure 1: SSL Lock on Internet Explorer