

4th International Conference on Global Optimization
and Its Applications, August 10th – 11th 2015. (ICoGOIA2015)
UMP , Kuantan , Pahang , Malaysia .



Ebtehal Atta Elsayed Sayed Ahmed¹, Abdullah Bin Ibrahim², Azlina Binti Azizan³
e.atta20055@gmail.com¹
Faculty of Engineering Technology^{1,2}, Faculty of Industrial Management³

Wireless Technology to handle marketing risks

Abstract

Wireless market is the selling and buying of goods or services over the Internet, Therefore E-commerce is a modern business methodology that addresses the needs of organizations, merchants, and consumers to cut costs while improving the quality of goods and services and increasing the speed of service delivery. The technology, the business models, and the value chain relationships are new and in many ways different from traditional business environments. The uncertainty concerns the character and degree of those differences. In this paper we will address these risks and address based on three points: first, types of risks which are presented in e-commerce. Second, similarities and differences between e-commerce risks and the risks in other business environments. Finally, methodologies that can be used to control these risks. The proposed framework provides an overview of what is happening in the wireless domain to provide marketers, managers and market researchers with a realistic view of using and predicting the wireless technology market. The proposed methodology can develop a security and risk management policy, which identifies and analyses risks, and the potential impact that they will have on the operations.

Keywords:- e-commerce, technology, wireless, risk and security

Introduction:

In This study we will discuss Using wireless Technology in marketing. Wireless is no longer a novelty. Wireless is everywhere and it is here to stay. It has evolved from the bulky, over-priced cellular phone of years past into small handheld devices with multiple complex functionalities that complement nearly every lifestyle. Today's, business people are accessing their email, placing orders and logging on to the company networks from the road.

In the past, Marketing was communicating the value of a product, service or brand to customers, for the purpose of promoting or selling that product, service, or brand. The main purpose was to increase sales of the product and the profits of the company.

Now wireless market is the selling and buying of goods or services over the Internet, Therefore E-commerce (EC) is “a modern business methodology that addresses the needs of organizations, merchants, and consumers to cut costs while improving the quality of goods and services and increasing the speed of service delivery. The term also applies to the use of computer networks to search and retrieve information in support of human and corporate decision Although EC offers various business opportunities, EC development is plagued by various kinds of risk and risk management is necessary to avoid these problems. Indeed, a task that is critical to the proper management of EC development is the assessment of risk.

You use the Internet as a research tool. Every time you log on, you are exposed to risks from cyberspace. Most familiar to you is the risk of viruses. But there are many additional risk exposures from electronic business, both to you as an individual and to businesses. Businesses with a Web presence are those that offer professional services online and/or online purchasing

Regardless of the nature of the use of the Internet, cyber attacks have become more frequent and have resulted in large financial losses. According to the 2002 Computer Security Institute/Federal Bureau of Investigation (CSI/FBI) Computer Crime and Security Survey, Internet-related losses increased from \$100 million in 1997 to \$456 million in 2002. Richard Power, “Computer Security Issues & Trends,” The 6th Annual Cyber Source fraud survey indicated a \$700 million increase (37 percent) in lost revenue in 2004, from an estimated \$2.6 billion in 2003. Small and medium businesses were hit the hardest. These losses are in line with fast revenue growth from e-commerce. The 6th Annual Cyber Source Fraud Survey was sponsored by Cyber Source Corporation and undertaken by Mind wave Research. The survey

was fielded September 17 through October 1, 2004, and yielded 348 qualified and complete responses (versus 333 the year before). The sample was drawn from a database of companies involved in electronic commerce activities.

Businesses today are becoming aware of their e-commerce risk exposures. In every forum of insurers' meetings and in every insurance media, e-risk exposure is discussed as one of the major "less understood" risk exposures. For example, see Lee McDonald, "Insurer Points out Risks of E-Commerce," *Best's Review*, February 2000; Ron Lent, "Electronic Risk Gives Insurers Pause," *National Underwriter*, Property & Casualty/Risk & Benefits Management Edition, May 7, 2001; Caroline Saucer, "Technological Advances: Web Site Design Provides Clues to Underwriting Online Risks," *Best's Review*, December 2000.

Causes of Loss in E-Commerce

We have many categories of the causes of losses in the computer/electronic systems area. By frequency, the causes of losses were: virus (78 percent); insider abuse of net access (59 percent); laptop/mobile thefts (49 percent); unauthorized access to information (39 percent); system penetration (37 percent); denial of service (17 percent); theft of proprietary information (10 percent); and sabotage, financial fraud, and telecom fraud (less than 10 percent). This list does not account for the severity of losses in 2004.

As you see. We can group these risks into five broad categories:

- Hardware and software thief (information asset losses and corruption due to hackers, vandalism, and viruses)
- Technological changes
- Regulatory and legal changes
- Trademark infringements
- Internet-based telephony crimes
- **E-Commerce risk for Customers :**

- **Privacy and security.** Before making instant transactions online, be sure to check the sites certificates of security.
- **Quality.** While e-commerce makes everything easily accessible, a consumer cannot actually touch products until they are delivered to the door.
- **Hidden costs.** When making purchases, the consumer is aware of the product cost, shipping, handling and possible taxes. Be advised: there may be hidden fees that won't show up on your purchasing bill but will show up on your form of payment.
- **Delay in receiving the goods.** Although delivery of products is often quicker than expected, be prepared for delays. A snow storm in one place may throw off the shipping system across the board. There is also a chance that your product may be lost or delivered to the wrong address.
- **Need access to internet.** Internet access is not free, and if you are using free wi fi, there is the chance of information theft over an unsecure site.
- **Lack of personal interaction.** While the rules and regulations of each e-commerce business is laid out for you to read, there is a lot to read and it may be confusing when it comes to the legalities. With large or important orders, there is no one you can talk to face to face when you have questions and concerns.

Businesses today, buy electronic security systems and develop many steps to reduce the risk of data and hardware losses. Firms conduct regular system audits to test for breaches in network security. Auditors attempt to break into various components of the company computer system, including the operating systems, networks, databases, servers, Web servers, and business processes in general, to simulate attacks and discover weaknesses. Kevin Coleman, "How E-Tailers and Online Shoppers Can Protect Themselves," KPMG. Managed security services provide an option for virus protection. They include both antivirus protection and firewall installation.

Problem Statement

When we are discussing e-commerce. The technology, the business models, and the value chain relationships are new and in many ways different from traditional business

environments. The uncertainty concerns the character and degree of those differences. Nowhere is this truer than when discussing risks in e commerce environments. In this paper, we will address these risks and address three questions:

- There are many types of risks in wireless technology, such as; security, Scalability of System, Integrity on Data and System, hackers, Customer Service and Relation Problem
- At the current time, marketing and communicating value of a product was not sufficient for service or customers to approach their needs.
- The present work is aimed to offer a best service product with high quality, including, safety, low price in the online marketing.

Objectives:

This paper provides an overview of what is happening in the wireless domain to provide marketers, managers and market researchers with a realistic view of using and predicting the wireless technology market. To the non-technologists wireless technology can be an alphabet soup.

And, how we can solve E commerce risk? Such as :

1. What are the risk exposures of e-commerce?
2. How should the property risk of e-commerce be managed?
3. Describe the parts of an e-commerce endorsement.
4. What are some of the potential e-commerce property losses that businesses face?

Significance of study :

Different wireless market segments are emerging at different growth rates across countries with different emphasis on different mobile technologies. Any discussion about wireless has to begin with cellular phones. Nearly, 600 million were sold worldwide in 2001 their popularity continues to rise

The latest cellular phones provide full data functionality, including internet access, text messaging and video. These web-enabled phones typically consist of a LCD screen, a numeric key pad, navigational controls, camera and all the software needed to view web sites, transmit text messages, store names and phone numbers and perform basic organizational and productivity tasks.

Today, customers want to track their order via their handheld devices and eagerly await their product arrival. The marketer has access to wireless smart phones by Palm, These new innovative products and services can cause major shifts in consumer spending. Therefore, the size and structure of the market as well as the growth rates are difficult to predict.

1. Security

2. Scalability of System

3. Integrity on Data and System

4. Products People

5. Customer Service and Relation Problem

Methodology: -

Our methodology, *E-commerce Risk Management (ECRM)*, is based on scenario analysis and decision analysis, but differs from these techniques in several ways. First, by integrating business, operations, and systems managers into the risk analysis process, ECRM increases non-technical managers' ownership of the process and of the information-based risk issues. Second, ECRM is flexible enough to address issues specific to unique processing, geographic and organizational environments. Third, ECRM can be implemented at relatively low cost.

Expected Result : -

Operating an online business involves risks and challenges .The framework outlines the various methods or steps businesses can take to minimise these risks. It recommends that

businesses should adopt a disciplined approach in risk management and bear in mind that risk management is not a one-time effort. It is a continuous process that requires organisation-wide commitment and well-documented procedures, processes and practices to manage security, payment and fulfilment risks. You can develop a security and risk management policy, which identifies and analyses risks, and the potential impact that they will have on your operations. This policy should be promoted widely among staff to raise the level of awareness. You can also invest in various technologies to authenticate customers' identities to minimise payment risks, and technologies to monitor purchasing patterns to reduce fulfilment risks.

Risk Management of E-Commerce Exposures

Businesses can take loss-control steps to reduce the e-commerce property and business interruption risks by using the following:

- Security products and processes
- System audits
- Antivirus protection
- Backup systems and redundancies
- Data protection and security
- Passwords
- Digital signatures
- Encryption
- Firewalls
- Virtual private network (VPN)

We should be build confidence amongst businesses and consumers to spur e-commerce growth. Its first initiative was the nationwide trust mark programme – TrustSg. TrustSg is an approved accreditation scheme that recognises, accredits and promotes local e-businesses with sound business practices. The TrustSg Core Principles cover various areas, from accurate and adequate communication to consumers, to integrity in the management of consumer data and putting in place proper dispute resolution procedures.

The growing importance of e-commerce in business requires controlling the associated risks. Many of the requisite controls are extensions of controls for managing information systems risks.

Although one always hesitates to forecast too far into the future, if the past is any guide, many of the risks encountered in e-commerce environments will be people-based. It is management's ongoing responsibility to keep abreast to this situation and monitor, assess, and control risk in the burgeoning e-commerce environment.

References :

Y. Bassok, R. Anupindi, R. Akella, "Optimal Ordering and Allocation Policies for the N-Product Inventory Problem with Substitutability," *Operations Research*, Vol. 47, No. 4, pp. 632-642, July-August 1999.

- H. Germany, R. Akella, J.P. Lehoczky, "Supply Management in Assembly Systems with Random Yield and Random Demand," *IIE Transactions*, August, 2000.

Dunbar W., Desa, S., "Distributed Model Predictive Control for Dynamic Supply Chain Management," *Proceedings of the International Workshop on Assessment and Future Directions of NMPC*, Freudenstadt-Lauterbad, Germany, August 2005.

- C. Heitz, G. Ryder and K. Ross, "Knowledge Management in Call centers: How routing rules influence expertise and service quality" *MSOM 2008, Manufacturing and Services Operations Management Conference*.

Codding, Sandy (November 9, 1998); Web growth creates new liability risks, *National Underwriter*, 102:33; p 10+

De Covney, Sherree (November/December 1998); E-commerce comes of age, *Journal of Business Strategy*

Goldstein, Linda A. Goldstein and Wood, Douglas J. Wood (December 1997); Marketing in cyberspace: Identifying and evaluating the Legal Risks, *Telecommunications*, 31, p48-53

Hibbard, Justin (December 7, 1998); Mega web sites *InformationWeek*, p. 75+

Kaufman, Leslie (January 18, 1999); Holiday use sours a few consumers on web shopping, *New York Times*

McCartney, Laton (April 21, 1997); A safety net, *IW: The Management Magazine*; 246; p74-6+

Miller, Holmes E. and Engelmann, Kurt J. (1996); A methodology for managing information-based risk; *Information Resources Management Journal*; 9:2; 17-24

Parker, Donn (1998); *Fighting Computer Crime*; New York: John Wiley & Sons, Inc.