

## E-commerce security

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### Abstract

Nowadays, E-commerce security turn out to be a major part of our life due to its advanced features. It is difficult to avoid such new technologies, while we all know the effect of E-commerce security on our society and also on environment. This paper will address people what is the impact of using E-commerce and make people to be aware about proper handling of such new technologies. In this paper we are going to provide some alternative solutions for proper handling of E-commerce. We are going to focus on the points such as people's health related issues and behaviors etc. There are three major dimensions which are related with impacts of E-commerce: addiction and behavior.

**Keywords-** Digital E-commerce cycle, Specific Absorption Rates, Mobile Phone ,Internet.

### I. INTRODUCTION

E-commerce Security is a part of the Information Security framework and is specifically applied to the components that affect e-commerce that include Computer Security, Data security and other wider realms of the Information Security framework. E-commerce security has its own particular nuances and is one of the highest visible security components that affect the end user through their daily payment interaction with business. Today, privacy and security are a major concern for electronic technologies. M-commerce shares security concerns with other technologies in the field. Privacy concerns steep increase in mobile phone ownership among children, but virtually no relevant studies of human populations at present examine health effects in this population. e- recruitment technology and social networking , and this has directly influenced users. Security is one of the principal and continuing concerns that restrict customers and organizations engaging with ecommerce. Online shopping through shopping websites having certain steps to buy a product with safe and secure. The e-commerce industry is slowly addressing security issues on their internal networks. There are guidelines for securing systems and networks available for the ecommerce systems personnel to read and implement. Educating the consumer on security issues is still in the infancy stage but will prove to be the most critical element of the e-commerce security architecture.

It is therefore possible to network the E-commerce device to a home office or the internet while travelling.

### II.DIGITAL E-COMMERCE CYCLE

Security is very important in online shopping sites. Now days, a huge amount is being purchased on the internet, because it's easier and more convenient. Almost anything can be bought such as music, toys clothing, cars, food and even porn. Even though some of these purchases are illegal we will be focusing on all the item's you can buy legally on the internet. Some of the popular websites are eBay, iTunes, Amazon, HMV, Mercantila, dell, Best Buy and much more.



**Figure: Digital E-commerce cycle**

As shown fig Information security is a burning issue in research community. Pretty good privacy can be used to provide authentication and confidentiality to E-commerce security but it is not a fool proof solution because integrity, Non repudiation and replay threats E-commerce dimensions.

### III.E-COMMERCE SECURITY TOOLS

- 3.1Firewalls – Software and Hardware.
- 3.2Public Key infrastructure.
- 3.3Encryption software.
- 3.4Digital certificates.
- 3.5Digital Signatures.
- 3.6Biometrics – retinal scan, fingerprints, voice ,etc.
- 3.7Passwords
- 3.8Locks and bars – network operations centers

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#### **IV.SECURITY ISSUES**

E-commerce security is the protection of e-commerce assets from unauthorized access, use, alteration, or destruction. While security features do not guarantee a secure system, they are necessary to build a secure system. Security features have

##### **four categories**

##### **4.1 Authentication**

Verifies who you say you are. It enforces that you are the only one allowed to logon to your Internet banking account.

**4.2 Authorization:** Allows only you to manipulate your resources in specific way This prevents you from increasing the balance of your account or deleting a bill.

**4.3 Encryption:** Deals with information hiding. It ensures you cannot spy on others during Internet banking transaction.

jewelry and metal framed glasses you may be particularly affected.

#### **VI. How can you tell if a Web site is secure?**

Secure sites use encryption technology to transfer information from your computer to the online merchant's computer. Encryption scrambles the information you send, such as your credit card number, in order to prevent computer hackers from obtaining it en route. The only people who can unscramble the code are those with legitimate access privileges. Here's how you can tell when you are dealing with a secure site. If you look at the top of your screen where the Web site address is displayed (the "address bar"), you should see https://. The "s" that is displayed after "http" indicates that Web site is secure. Often, you do not see the "s" until you actually move to the order page on the Web site.

5.1 Another way to determine if a Web site is secure is to look for a closed padlock displayed on the address bar of your screen. If that lock is open, you should assume it is not a secure site. Of course, transmitting your data over secure channels is of little value to you if the merchant stores the data unscrambled. You should try to find out if the merchant stores the data in encrypted form. If a hacker is able to intrude, it cannot obtain your credit data and other personal information. Be sure to read the merchant's privacy and security policies to learn how it safeguards your personal data on its computers. protect the future generations

#### **VII.ADVANTAGES E-COMMERCE SECURITY**

##### **6.1. Anytime and Anywhere**

Few years ago to make one call we have to stand in queues, but today we can make call from anywhere and anytime using a E-commerce.

##### **6.2. Emergency**

If we met with any emergency such as online shopping we can make emergency calls to Customer care department.

##### **6.3. Mini PC**

The Mobile phone which are equipped with internet facility and some operating systems are called mini PC. Using Mobile phones we can do anything such purchasing movie ticket, chat, emails, view the latest news. Now-a-days

we can pay the different taxes and bills through this E-commerce security.

#### **VIII.DISADVANTAGES OF MOBILE PHONE**

As there are many uses of mobile phones but there are negative side of this technology also as mentioned below

##### **7.1. Quality of connectivity**

As one of the disadvantages, mobile devices will need either Wi-Fi connectivity or mobile network connectivity such as GPRS and in some countries even

4G connectivity that is why this is a disadvantage because if you are not near any of these connections your access to the internet is very limited.

##### **7.2. Security concerns**

E-commerce Security are unsafe to connect to, and also syncing devices might also lead to security concerns.

Accessing a Wi-Fi network can also be risky because WPA and WEP security can be bypassed easily.

##### **7.3. Internet Consumption**

Due to the use of Internet in these devices, these do not tend to last long, if in a situation where there is no source of power for connection then that will certainly be a letdown.

#### **CONCLUSION**

Research shows that the correct use of modern technologies require a comprehensive understanding to the reality of change that happens to the community. Thus, this requires concerted efforts through full cooperation among all sectors of society, from family to government institutions, along with the presence of useful awareness programs supervised by these institutions and pursued by the family to utilize the modern technologies accurately in order to ensure and Nowadays, people socialize with each other using online-environments such as Face book, MSN and phones instead of face to face interaction on these types of communications. The nature of the human is not programmed for this type of communication yet. People must live and work together to socialize with each other's. In conclusion, it is obvious that modern technologies can be a double-edged weapon. They have their advantages, but with many inventions, they can completely change our lives, for better or worse. As a result, we must work for the interest of social connection to preserve people's feelings towards each other away from the addiction to technology. Finally, this research is simply a little effort towards doing justice to this subject and it could assist future researchers in examining this topic with other groups and in more depth and with more relationships to the present use of modern technologies and their impacts on societies.

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