

A Survey Study of E-Commerce and Online Security

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ABSTRACT

This paper presents a survey study of e-commerce and online security. Paper introduces study of e-commerce and online security. The authentication done by user and authorization done by administrator. Services, infrastructure and legal component make e-commerce more efficient and accurate. Encryption and decryption make transactions more secure. The survey results show that the proposed study better perform.

Keywords: Web site, component, e-commerce and online security.

I INTRODUCTION

E-commerce component Infrastructure have telecommunications or network technologies, Multimedia applications, Internet, web page development, web page browser, Simulation, data mining, security of information, EDI, database management, client, web server maintenance, Internet Service Provider, Human Computer Interface, Smart card devices.

E-commerce component legal have government policy, government regulation, privacy, Intellectual Property / Copyright, Contractual and Legal Settlements, Ethics / Computer Crime.

E-commerce component services have Internet Payment Systems, e-publishing, Procurement, types of services (business-to-business, customer-to-business, intra-business), Information kiosks (library, airline, and weather forecast), On-line Shopping, On-line Education, Other Internet Commerce activities

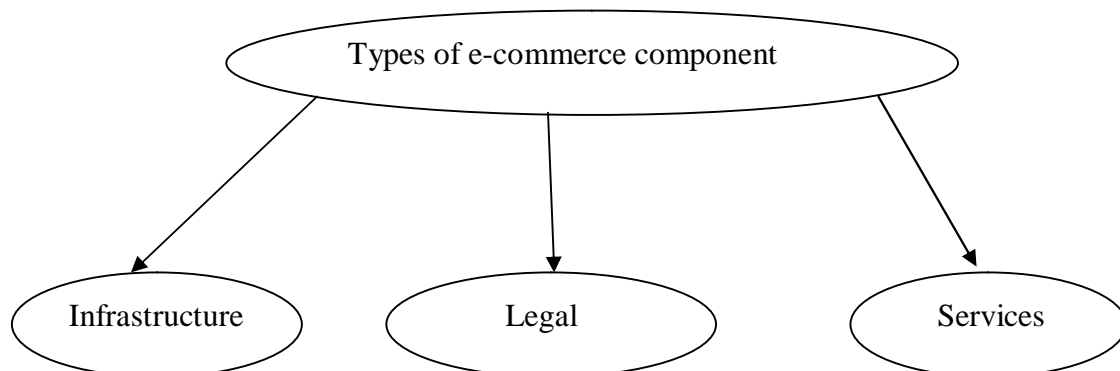


Fig 1: Types of e-commerce component

In 1996 Zwass, V. gave structures and online issues of electronic commerce [8], In 1999 Chan, E. & Swatman, P.M.C. gave explanation of component of e-commerce [1], In 1996 Swatman, P.M.C. gave explanation origins and future directions of e-commerce [5], In 1999 Adam, N. R., Dogramaci, O. Gangopadhyay, A. and Yesha, Y gave explanation technical, business, and legal Issues of e commerce [2].

In 1997 Wigand, R. gave explanation definition, theory and context of electronic commerce [7], In 2006 X. Li, gave explanation on the Implementation of IMAGO System or how new system generated from old system [9], In 1998 Poon, S. gave explanation small business internet commerce [4].

In 2009 Humid R. Nemati ; Thomas Van Dyke. gave explanation on privacy or online security issue works in e-commerce [10], In 1996 Kalakota, R. and Whinston, A. B. gave explanation on boundaries or limitations of electronic commerce [3].

In 2007 P.L. Hellwell, T.W. van der Horst, K.E. Seamons, gave explanation on authentication protocols with verification of senders messages [11], In 1995 Wigand, R. gave explanation on The information super highway and its effects on electronic markets [6], In 1995 Eamonn O'Raghallaigh gave explanation on major security issues in electronic commerce [12].

Our objectives are we want to make electronic commerce system more users friendly and safe. We use authentication and authorization system for make our online security more efficient and accurate. These strong way safe our transactions system from cyber crime.

II PROBLEMS /CHALLENGES OF E-COMMERCE

- (a) **Privacy-** Privacy has become a major concern for consumers with the rise of identity theft and impersonation, and any concern for consumers must be treated as a major concern for ecommerce providers [12].
- (b) **Integrity, Authentication & Non Repudiation-** In any e-commerce system the factors of data integrity, customer & client authentication and non-repudiation are critical to the success of any online business [12].
- (c) **Technical Attacks-** Technical attacks are one of the most challenging types of security compromise an e-commerce provider must face [12].
- (d) **Denial of Service Attacks-** Denial of Service (DoS) attacks consists of overwhelming a server, a network or a website in order to paralyze its normal activity. Defending against DoS attacks is one of the most challenging security problems on the Internet today.
- (e) **ICMP Flood (Smurf Attack)** –where perpetrators will send large numbers of IP packets with the source address faked to appear to be the address of the victim.
- (f) **Phlashing-**Also known as a Permanent denial-of-service (PDoS) is an attack that damages a system so badly that it requires replacement or reinstallation of hardware
- (g) **Distributed Denial-of-Service Attacks-** Distributed Denial of Service (DDoS) attacks are the greatest security fear for IT managers.
- (h) **Brute Force Attacks-** A brute force attack is a method of defeating a cryptographic scheme by trying a large number of possibilities.
- (i) **Nontechnical Attacks-**
 - (i) **Phishing Attacks-** Phishing is the criminally fraudulent process of attempting to acquire sensitive information such as usernames, passwords and credit card details, by masquerading as a trustworthy entity in an electronic communication [12].
 - (ii) **Social Engineering-** Social engineering is the art of manipulating people into performing actions or divulging confidential information.
 - (iii) **Analysis and Interpretation-** Here we have an analysis and interpretation to five top most e-commerce companies: Flipkart.com, Jabong.com, Myntra.com, Snapdeal .com and Amazon.in with infrastructure, legal, services.

**Table1:
Analysis and Interpretation [12]**

Company Infrastructure → ↓	Flipkart.com	Jabong.com	Myntra.com	Snapdeal.com	Amazon.in
Telecommunications	Best	Better	Very Good	Good	Average
Multimedia applications	Best	Better	Very Good	Good	Average
Internet	Best	Best	Best	Best	Best
Webpage development	Best	Best	Best	Best	Best
Web page browser	Best	Best	Best	Best	Best
Simulation	Best	Better	Very Good	Good	Average
Data mining	Best	Best	Best	Best	Best
Security of information	Best	Better	Very Good	Good	Average
EDI	Best	Better	Very Good	Good	Average
Database management	Best	Best	Best	Best	Best
Client	Best	Better	Very Good	Good	Average
Web server maintenance	Best	Better	Very Good	Good	Average
Internet Service Provider	Best	Best	Best	Best	Best
Human Computer Interface	Best	Better	Very Good	Good	Average
Smart card devices	Best	Best	Best	Best	Best
Company Legal ↓ →	Flipkart.com	Jabong.com	Myntra.com	Snapdeal.com	Amazon.in
government policy	Average	Average	Average	Average	Average
government regulation	Average	Average	Average	Average	Average
privacy	Best	Best	Best	Best	Best
Intellectual Property / Copyright	Best	Better	Very Good	Good	Average
Contractual and Legal Settlements	Best	Better	Very Good	Good	Average
Ethics / Computer Crime	lowest	lower	low	Very low	Very lower
Company Services ↓ →	Flipkart.com	Jabong.com	Myntra.com	Snapdeal.com	Amazon.in
Internet Payment Systems	Best	Best	Best	Best	Best
e-publishing	Best	Better	Very Good	Good	Average
Procurement	Average	Average	Average	Average	Average
Types of services	Average	Average	Average	Average	Average
Information kiosks	Best	Better	Very Good	Good	Average
On-line Shopping	Best	Best	Best	Best	Best
On-line Education	Best	Best	Best	Best	Best
Other Internet Commerce activities	Best	Better	Very Good	Good	Average

Table1 shows analysis and interpretation of five top most e-commerce companies: Flipkart.com, Jabong.com, Myntra.com, Snapdeal.com and Amazon.in with infrastructure just like telecommunications or network technologies, multimedia applications, Internet, web page development, web page browser, simulation, data mining, security of information, EDI, database management, client, web server maintenance, Internet Service Provider, Human Computer Interface, smart card devices.

Table1 shows analysis and interpretation of five top most e-commerce companies: Flipkart.com, Jabong.com, Myntra.com, Snapdeal.com and Amazon.in with legal just like Government

policy, government regulation, privacy, intellectual Property / Copyright, contractual and legal settlements, ethics / computer crime.

Table1 shows analysis and interpretation of five top most e-commerce companies: Flipkart.com, Jabong.com, Myntra.com, Snapdeal.com and Amazon.in with services just like internet Payment systems, e-publishing, procurement, types of services (business-to-business, customer-to-business, intra-business), Information kiosks (library, airline, and weather forecast), On-line Shopping, on-line Education, Other Internet Commerce activities

III CONCLUSION

This paper an analysis and interpretation of e-commerce system services. The analysis and interpretation of e-commerce are most efficient and accurate outcomes. By this analysis we can easily understand the various conditions and responsible for e-transactions used by the consumer. This analysis we show in future works in security that is fuzzy cryptography method works efficiently, for large text data.

In this future works we proposed a new approach for network security based fuzzy cryptography. Fuzzy cryptography based network security aims to improving the network security and developed efficient and accurate new fuzzy encryption algorithm and fuzzy decryption algorithm for network security the experimental results show that our proposed new approach for network security is best performs. The accuracy of security is efficient and accurate.

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