SECURITY ENHANCEMENT OF BUSINESS TO CONSUMER ELECTRONIC COMMERCE

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ABSTRACT

E-Commerce is a economic activity which involves trade through internet. There are several internet based retailers those who are providing business-to-consumer(B2C) electronic commerce. The traditional textile industries depends on distributors and retailers to reach the customer and product cost is fixed by including several overhead costs. E-Commerce reduces the intermediate cost and benefits the customers in online shopping. Though there are several advantages in employing e-commerce in textile industry, e-commerce is also having some security threats since online payment transactions involves confidential information of the customer such as credit card, debit card, ATM card details etc. This first section of the paper explains the role of e-commerce in textile industry, how it helps to boost the indian traditional textiles worldwide. The second section of the paper describes the security issues in e-commerce and provides guidelines for secure online shopping.

Keywords: E-Commerce, Textiles, Online Shopping, Security Threats, Authentication, Data Confidentiality, Cryptography

I. INTRODUCTION

A textile business involves design, development, production and marketing which affiliates several enterprises for its running. That's why textile production cycle takes long duration. No convenient way is available for transmitting information to each other, this leads to very slow growth. Electronic commerce changes this by enabling the sharing of information in parallel manner, thereby reducing the delayed information. Internet based textile e-commerce increases business opportunities as it is not limited by time and space constraints. The information about the textiles can be spread very fast at low cost and can easily be updated.

Traditional textile industry operates on certain things such as shop decoration, shop assistants salary, shop rent, electricity bill, telephone bill, excise duty, transport, carrying cost and so on. But the virtual enterprises established with e-commerce requires a very little infrastructure. Here the transactions run between the merchant and the customers directly which allow us to save the intermediate costs involved. This cost saving profits both the merchant and the customer, as the merchant is able to reduce the 50% of intermediate cost from the product cost and remaining 50% is used for their business.

There are some constraints in e-commerce such as legal security of e-commerce, network security, online credit problems and professional problems. E-Commerce improves the relationship with the customer because it is easy to check the demands of service, to reduce the response time for the customer service. The textile industry is concerned with two primary activities 'production' and 'distribution'. Among these two activities 'distribution' is the complex task which can be made simple by employing electronic commerce.

II. E-COMMERCE REDUCES APPAREL COST

The retail prices charged at the shops are higher than the wholesale prices because it involves some extra charges such as excise duty, carrying cost, shop rent, shop decoration, employee salary etc. The actual cost of the product includes raw material cost, machinery cost, cost on labour and time, other overheads such as place rent, electricity, water etc.
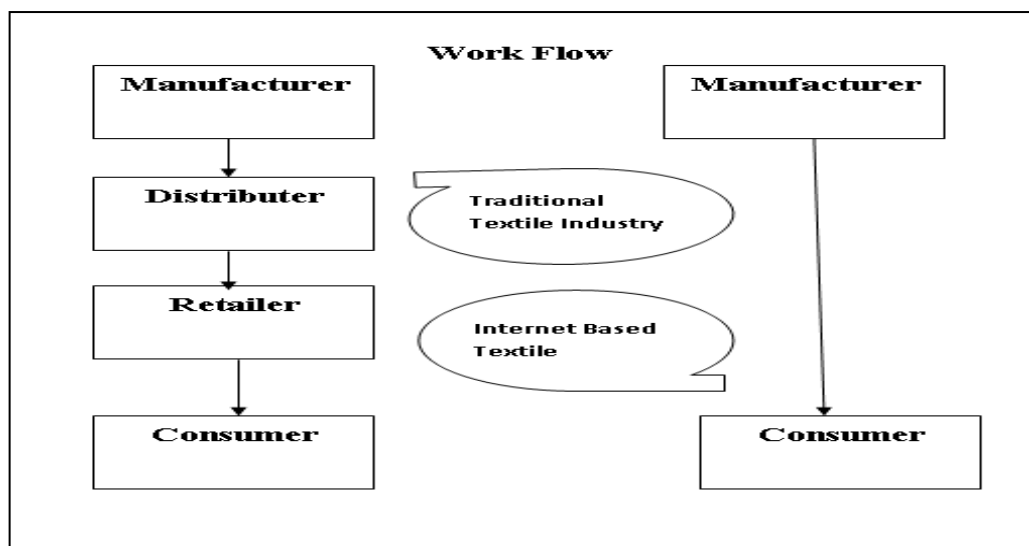
This cost is fixed as the cost price of the product, it can be assumed as x. The trade or wholesale Price is the charge fixed for trade buyers. It include actual cost price of the product + profit margin This cost will be 2X (Recommended) Retail price is the price charged from the retailers i.e consumers of general public. This cost will be around 3X because it includes shop owners overheads such as shop rent, taxes business rates and staff. For example if product cost is Rs. 15 then the whole sale cost will be around Rs.30 and the retail price will be then be around Rs.75 to Rs,90. Whole sale price is made up of four parts, direct cost of making product a % overhead associated with selling the product, recompense for the time spent, labour in making the product and straight up profit. Since the overhead costs of distributor and retailer is avoided in online shopping, the product cost is extensively reduced by the merchant which benefits the customers.

III. DIMENSIONS OF E-COMMERCE SECURITY

The main aim of e-commerce is reduced cost, shorter production cycle speed up customer response and improve service quality. The two important key aspects of electronic commerce are (i) electronic data interchange (EDI) i.e. a fast way to delivery electronic transactions through internet (ii) electronic mail (E-mail) i.e. as fast way to deliver messages.

Elements of E commerce since the payment is made through electronic data interchange in online shopping, security becomes an important issue. The payment transactions involves confidential data of customers such as credit card number, net banking username, password, obtaining the privacy of these sensitive information is very important. Protecting confidential customers data against security threats is necessary for smooth functioning of electronic commerce. The security concern of electronic commerce can be classified into two broad categories client-server security and data &Transaction security.

Security Concern	Description	Control Mechanisms
Client-Server security	Authorization - valid users have access to resources	Password protection, biometrics, fire walls
Data and Transaction security	Confidentiality - ensure privacy of email and online payments	Data encryption using various cryptographic methods

Table 1. Security Threats in E-Commerce

The lack of data security on the internet becomes a major problem today as the number of merchants trading through the global network is increasing. A growing security threat in today's public network is the theft of passwords and credit card number while the transactions and payments are done on time. Hackers are capable of manipulating sensitive information from remote sites through eaves dropping using several tools. Sensitive information that passes via public channels can be defended by encrypting it.

IV. SECURE ONLINE SHOPPING GUIDELINES

In order to avail the benefits such as fast response, reduced cost provided by online shopping certain key aspects to be kept in mind.

The following 12 points to be taken into account for secure online shopping to protect the sensitive information from the hackers.

1. Shop secure websites secure sites use encryption technology to transfer information via internet.

2. check the trustworthy of the companies before you order-if you decide to by textiles from a unknown company then start with an inexpensive order.

3. Read the websites privacy and security policies through to know how it process your order.

4. Be aware of cookies. i.e the small programs got attached to the browser when certain sites are visited that will perform "behaviour marketing",

5. The safest way to perform online shopping is with a credit card compared to debit cards, ATM card, cash or cheques.

6. Never give out the social security number such as Adhar card number which will lead to steal the identity it is not an requirement for placing order at online shopping.

7. Only the bare facts like wise name address to be given about the user to the web merchant.

8. When some online shopping websites creates an account for you to place order, then keep the password private that is used for logging in.

9. Users should not respond to "Phishing" message which asks for updating account information.

10. Always save the copies of your orders placed through online shopping which has details a about product, cost, customers information and confirmation number.

11. "virtual Credit Cards", are very safe for online shopping since it has single use credit card numbers like onetime passwords.

12. Be caution with electronic signatures.

V. INDIAN TRADITIONAL TEXTILES

From the ancient times, man has invested in textiles to secure his body from the weather and wild animals. But the centuries passed, the idea of wearing dresses is also changed from securing the body to decorating the body. India has a wide range of textiles manufactured with variety of design by applying several techniques compared to other countries in the world, because India is full of rich and varied heritage and culture. Though it is divided into several states based on the language spoken, each state has its own way of dressing, food and festivals. Hence the style of the textiles depends on the location of the place, climatic conditions, culture and trade contacts.

Location	Textile Texture	Colour	Patterns
Lushly green land	cotton	White	Scalar patterns
Desert area	Embroidery & mirror work	Sun-burnt colours	Strong linear patterns
Rich river plains	Softer texture	Milder colours	Linear patterns with well defined borders
Deccan region	Polyester	Dark maroon, bottle green, turquoise blue	Floral Patterns
Dry and hot climate	silk	Luminous coloured	Geometric patterns
Mountain Area	Woollen weaves	Primary colours	Graphical patterns

Table 2. Indian Traditional Textiles Based on Location

Indian textile industry can be divided into the following segments, cotton textiles, silk textiles, woollen textiles, readymade textiles, hand-crafted textiles, jute and coir textiles.

VI. ROLE OF E-COMMERCE IN APPAREL FASHION

The concept of e-commerce have revolution the textile industry, not only in the way it allows to shop at home but also ensures the favoured brands in the ward robe. B2C growth analysis report of India states that internet has influenced the purchase and sales significantly and promotes textile industry. In India e-commerce portals have increased the sales of traditional apparels.

on-line shopping boosts the India's handicraft heritage in the height. There are many traditional textiles in India whose sales are limited to the geographical location where the weavers are located. Now - days these traditional textiles are popularised worldwide due to the e-commerce portal which brings out larger audience for the products. The rise of e-commerce is the prime reason for traditional textiles becoming trendy.

The customer is doing online shopping using the devices such as personal computer, telephone, telivision or mobile device along with the internet connection to connect to the website of the manufacturer. For example, Bhagal puri silk saree was a nice variety which belongs are limited to bihar before, but now it it popularised across the globe as it is marketed on e-commerce portal. the young audiences between the age group 15 - 35 are targeted by the e-commerce portals because there are exploiting different kinds of styles. The next level of e-commerce audience is collegians who go far frequent parties, social gatherings and social gathering and special occasions, hence they always look for trendy & traditional clothes. Then comes the working men and women who have the potential for purchasing textiles as the tertiary target.

VII. CONCLUSION

The new business methodology of this century that satisfies the needs of both merchants and consumers by improving the quality of goods and service increasing the speed of delivery is known electronic commerce. Textile industry websites displays apparel images, cloth description, cost, offer, comparative prices and customer feedback. This helps the customers to select their apparels based on the information given in the website. Customers can happily shop the textiles to their taste and fashion. Apart from this they have follow the guidelines given for doing secure online shopping. In order to protect the sensitive information of the customer, the data should be disguised using some cryptographic methods and several security threats can be avoided and confidential data can be secured form the hackers.

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