Building and Developing E-commerce Website

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Abstract: *Recently the e-commerce platform is playing an important role in some areas; its activities are a subset of e-business activities. The aim of this paper is to build and develop a reliable website based on the e-commerce theories, developing effective well designed web pages. This website will sell computer products include (hardware and software). For implement the selling online website, it needs to use current technologies to achieve this goal. As a first stage, it should setting up online ecommerce store with easy-to-use. Then improve the customer experience, and lastly implement the Direct Online Sale between business to consumer by implement electronic payment methods. All these techniques should be based on deliberated plan according to strategy of electronic commerce with implement the current technology to ensure a good revenue to the company.*

Keywords: Ecommerce, B2C, Payment Gateway, customer, vendor, LAN.

1. Introduction

With the massive success of commerce with the internet which refers to buying and selling of products or services through the net and other computer networks are all described as Electronic Commerce [1]. In our website we will build and develop reliable website by using Electronic Trading/ Commerce System which helps to maintain the internet communication among the company and its major clients and to make it has on-line selling service. This website will introduce anything and everything relating to computer products. The proposed website services are: advertising for Marketing (Software and Hardware). Our mission is to build and develop up full reliable website with IT solutions, online retail (hardware and software). Many stages will apply on Livecomp.com involving: setting up online Ecommerce store, understand the customer experience, and implement the Direct Online Sale between business to consumer (B2C).

1.1 Website Aim and Functionalities

This website proposed to build and develop the reliable website to provide the advertising and selling computer products online. On the other words, the proposed website approved businesses will meet knowledge and computer products, exchange information; it means anything and everything relating to software and hardware.

It has a big number of businesses on its database involving: Software like software design, software multimedia, software operating system, software maintenance, and software security. Also hardware products like: View Sonic LCD, IBM CDROM Drive, Laptop Charger, Seagate Hard Drive, and Atech Mouse. Additionally, this website capable to approve those products.

The primary benefit of building and developing this website is to gain more revenue via the online selling service. This will be occurred by implement online retail.

1.2 Get a Domain Name (web address) For The Online Store

The first step is the website having the domain name, (web address); the owner will establish own identity on the internet. This will provide the website the surfers with an address. Customers will enable come to this website after typing its domain name [2].

1.3 Sign up with a Web Hosting Company to Host the Online Store

The owner will sign up with a web hosting company in order to the owner will capable to display his new ecommerce store on the internet and enable to use his domain name. These hosting companies can provide the ecommerce website with space of storage on their servers for products as the same case with Livecom.com.

2. Setting up an Online Ecommerce Store

To insure a good display to Livecomp website products, the online store should design according to many requirements should take into account during Setting up this online ecommerce store[3]. And it should put pictures of products and the ability to scan them and a digital camera. Livecomp.com should put clear images to view their products to interest a customer to buy them; and should display the prices of items and discounts [4]. Finally it should note the ability to input information for the website database that involves: Product ID, Item Number, Description, Price, and Size. The online e-commerce store as well will need to provide cart of shopping for its consumers, therefore they enable can place their orders of products [5]. Shopping cart can be defined is the software that gives the website clients the ability to place an order for its products. They can buy what they want, about the quantity, price, shipping amount and any applicable taxes and they can option the pay way, such as, credit cards, check or money order. On the other word, the Livecom.com should provide the customer with full details on products. The Shopping Cart also enables the owner to enter the products through registration in an administrative area that is provided by the Shopping Cart [6].

2.1 Advertise the Online Store

It is an important step that to advertising on the website to attract customers, there are different ways for that, such as, Magazine, newspaper, radio, TV, flyers, media, i.e. also it is important to register the web site with search engine companies. For instance, the popular search engine sites include Yahoo, Google, Bing and AOL; furthermore exchange links with other sites. Moreover there are PPC (Pay per Click Program) [8].

2.2 Understanding the Customer

The customer is a successful key to any market; therefore Livecomp website should interest and understand customer behaviours through complete buying cycle and the Customer centric organisations should take into account that the look real to things should taken from the customer's perspective. There are many points that the company should be used them for build up detailed informed customer profile: communication via e-mail, Purchases through credit or debit card, surveys, Web site usage, feedback and comments, interactions with online marketing, vouchers and promotions redeemed forums, product review and ratings. To gain real customer insight, Livecomp website should look at individual profile of customer and add behavioural and attitudinal data within marketing [7].

3. Accepting Credit Card Transactions via the Internet

To ensure that the customer's information remains safe, the shopping cart will be integrated with a Payment Gateway service which connects the software of the shopping cart with a financial institution, therefore it must choose the shopping cart to be compatible with the Payment Gateway Service that you use. This process does not cost much money to website. On the other words when implement the service online selling, there is essentially, to process online payment. There are some technologies supplied by third parties available to support this processing. Currently, most sellers use commercially providing credit card or debit cards processing services today is PayPal. It makes online payment simple, easy to use, fast and security. Livecomp website should implement this processing in new development plan.

4. Security Management and Technology Decisions

Recently, one of most risk threats to the e-commerce security is the spread of viruses. A virus is a program invades the computing environment without the user's awareness to cause problems. It spread through the network and quickly affects thousands of computer, costing, businesses time and money. For obtain a good reputation and to returning the customer to web site for purchasing online, it is essentially, the customers have the confidence that their information remain safe when they purchase online, but some people are still having worriers from make online purchases to avoid theft of their information from hackers [11].

This internet considers of insecurity from these two stages:

- From customer side, the customer may be able to be impersonated through the stolen credit card details, also from vendor side, when the rang from customer details are stolen from the retailer files to bogus traders who enter online and target to take money without any intention of supplying the advertised goods or services.
- The insecurity risk comes from online shopping, such as ID theft, phishing, loss of personal information; therefore it is essentially the website use a good technology to avoid this risk which may threats the customer integrity and vendor. The web site should sure provide security to customers who should feel integrity their details when they use the online retail channel for the first time.

Livecomp website should prepare a development a security plan to insure information integrity to both parties (customer and vendor) by using the following techniques:

- **Encryption:** For protecting the data and to ensure the safe arrival, data converts into the code by the sender and then decoded by their receiver.
- **Digital Signature:** a digital signature is used to identify of Authenticates sender of the message and to check that don't occur any modify in the message, insure that the message in safe.
- **Trusted Third Parties:** an authentication, confidentiality, integrity.
- **Network Security:** prevent the entry of outsiders to the local network (LAN), and do not allow entering the prohibited data to local network.

5. Implementation Tools

In this website, PHP and MySQL combination was used to be an easy yet powerful way to create dynamic website web pages that actually interact with the visitors. also HTML was used to create useful and well formatted web pages of the website.

PhpMyAdmin was used to handle the administration of MySQL over the World Wide Web. it supported the website a wide range of operations with MySQL. The most frequently used operations which are supported by the user(accounts) interface in the website (managing databases, tables, fields, relations, indexes, user, etc.), and it still have the ability to directly execute any SQL statement [9].In addition Java script was used in Livecomp.com which is scripting language, to add functionality, validate forms, communicate with the server [10]. It is an open language that anyone can use without purchasing a license. It is supported by recent browsers from Netscape and Microsoft, though Internet Explorer supports only a subset, which Microsoft calls Jscript. Also CSS was used in this website, to control the style and layout of multiple Web pages of the website all at once.

Website Interfaces and Results This section shows the Website interfaces that have been obtained through the implementation of Livecomp.com as following:

1. When the customers have access to the Livecomp.com the home page of this website will appear as shown in figure 6.1.

Figure 6.1: Homepage

2.When the customer choose the software store option, the interface as shown in figure 6.2 will appear which involves the software products.

Figure 6.2: Software Products

3. When the customer choose the security software, the interface as shown in figure 6.3 will appear.

Figure 6.3: Security software

4. When the customer choose the multimedia software, the interface as shown in figure 6.4 will appear.
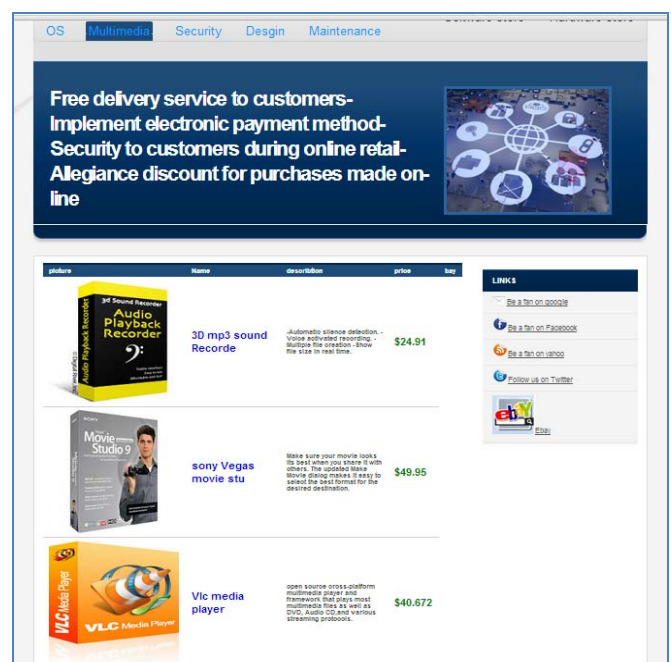
Figure 6.4: Multimedia software

5. When the customer choose the design software, the interface as shown in figure 6.5 will appear.

Figure 6.4: Design software

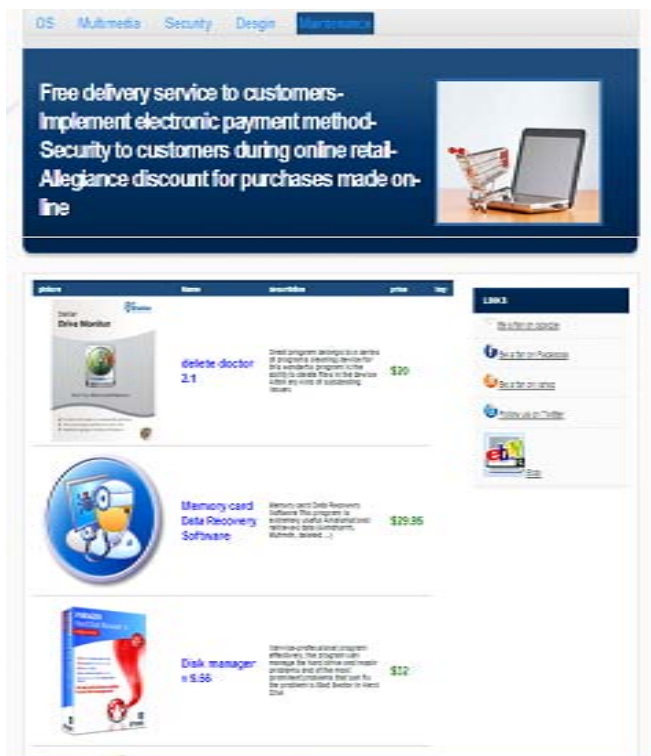6. When the customer choose the maintenance software, the interface as shown in figure 6.6 will appear.

Figure 6.6: Maintenance Software

7. When the customer choose the hardware option, the interface as shown in figure 6.7will appear which involves the hardware products.

Figure 6.7: Hardware Products

8. When the customers want to buy online, they should register first on the Livecomp.com. So they should press on sign up option; then the registration page will appear as shown in figure 6.8.

Figure 6.8: Registration page

9. After completing the registration process, the interface as shown in figure 6.9 will appear which indicates that the registration process was successful.
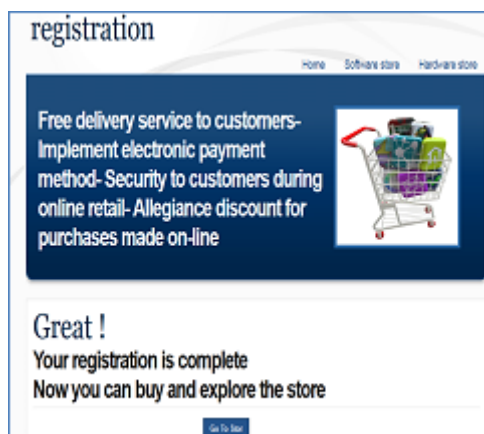

Figure 6.9: Success of registration process

10. Login interface: This page for enter the user name and password for the customer who already to registered before to this website as shown in figure 6.10.
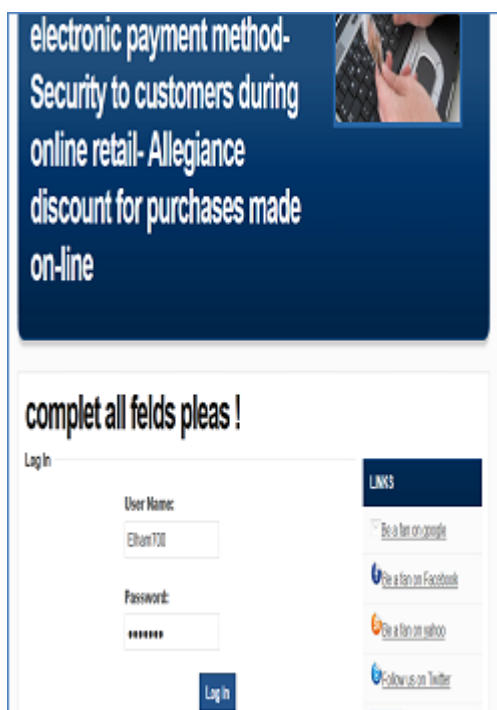

Figure 6.10: Login interface Page

11. When the customers want to buy online "clean disk security" from software products, they should press on "Add to Basket" as shown in figure 6.11 to add this product to the basket as shown in figure 6.12.
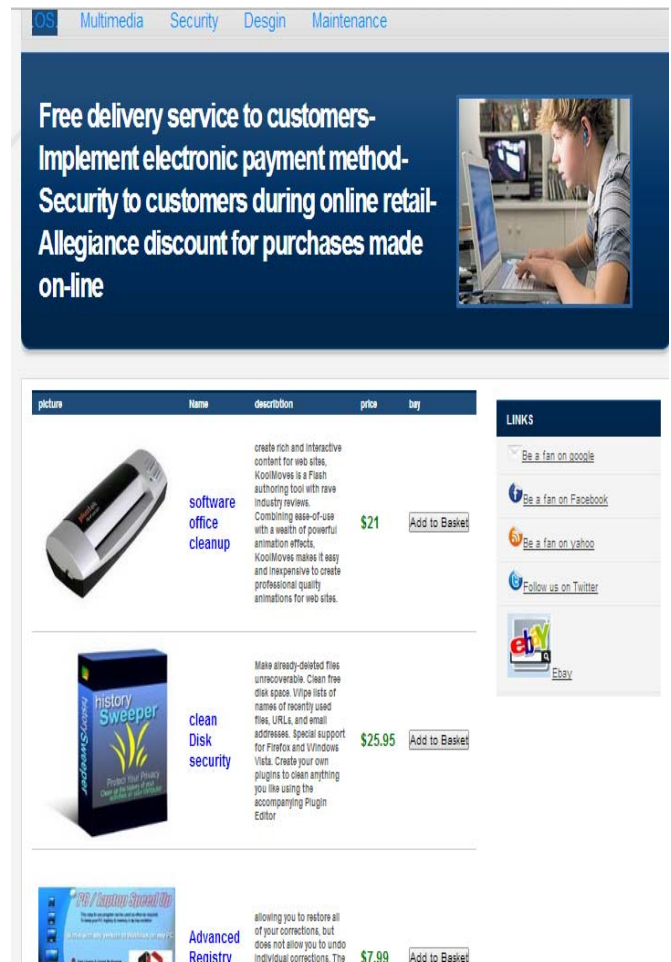

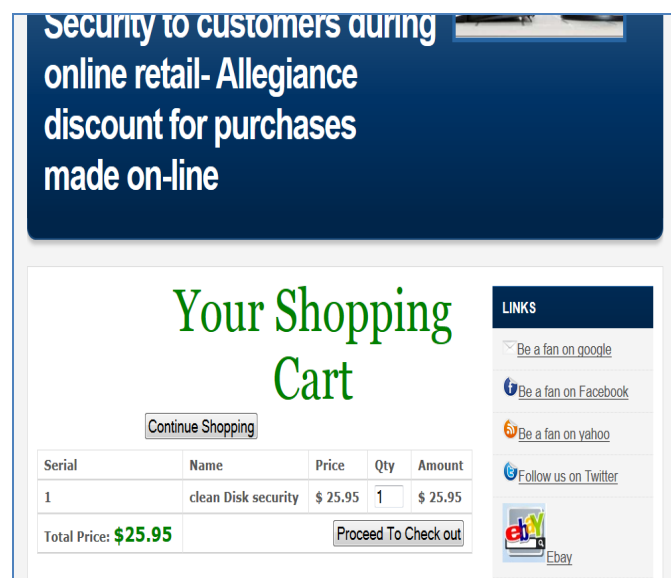**Figure 6.11:** Software products Page

Figure 6.12: Shopping Cart Page

12. When the customers want to shop another software products like "Advanced Registry Cleaner", they will press on continue shopping for returning to the software products to select this item. Then they will press on "Add Basket" to add this new item to basket as shown in figure 6.13.

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Figure 6.13: Shopping Cart Page

Figure 6.15: Shopping Cart Page

13. When the customers want to buy another type of computer products, the hardware products like "A tech Mouse", they should press on "Add to Basket" as shown in figure 6.14 to add this item to the basket as shown in figure 6.15.

14. To complete the shopping online, the customer should press on "Proceed to Check out" in Shopping Cart Page; so the interface as shown in figure 6.16 will appear to fill the required information relating to customer's information and their account details. Then after pressing on Place order bottom; the interface as shown in figure 6.17 will appear to ensure that completing the purchase online and limit the delivery date.
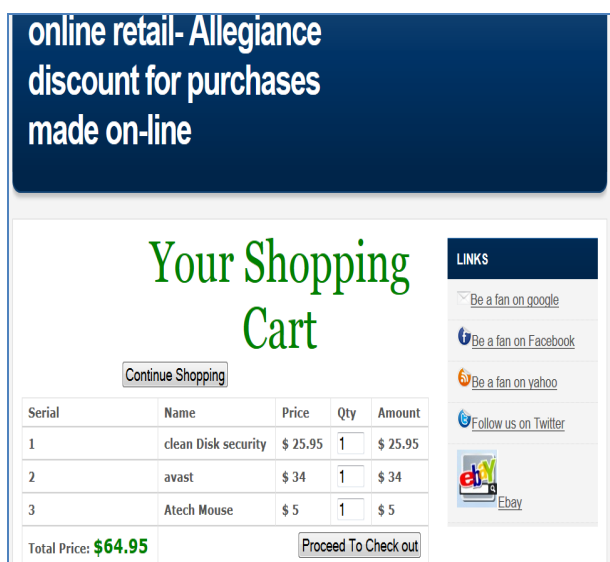

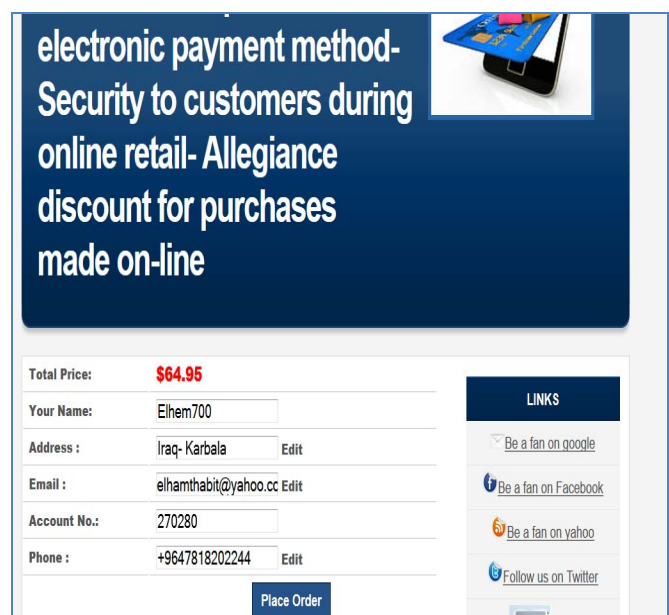**Figure 6.14:** Hardware Products Page

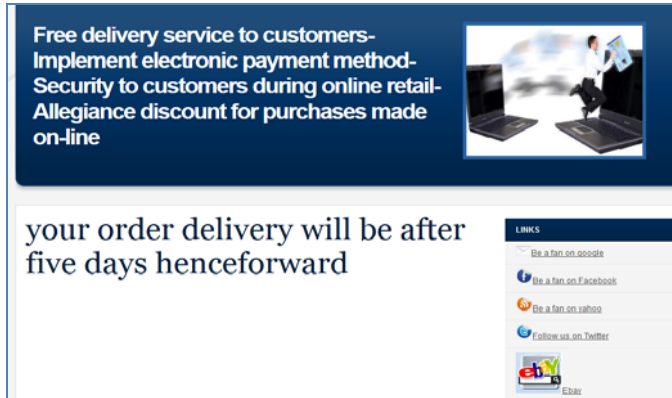**Figure 6.16:** Billing Information Page

Figure 6.17: Delivery date

6. Conclusions

This document suggested to build and develop up full reliable website with IT solutions, online retail computer products (hardware and software) based on the theories and using the current technology. As a first stage was setting up online ecommerce store with easy-to-use. Then the second stage was to improve the customer experience. While the last stage was to implement the Direct Online Sale between business to consumer by using electronic payment methods. Livecomp website must to provide a rich product content to get a good revenue to the company; so when its content is rich, this will be better to attract customers. As long as the customer is key to the success of any market, so the Livecomp website should interest and understand customer behaviours through completing of buying cycle. In addition, multi channels should be available for this website and should have perfect information about its products that customer needs them after researching in store.

Livecomp.com will be capable of achieving the following:

1) Optimizing of Search engine and increasing the traffic to the website to achieve more sales.
2) Increasing brand and marketing awareness.
3) Setting up an Online Ecommerce Store.
4) Implementing direct selling online beside its service.
5) Increasing number of customers and their engagement.
6) Increasing number of purchase by customers.

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