

# OmMart

## Oman Market E-Commerce Web Application

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### iii.LITERATURE REVIEW

**Abstract**—A trade plays an important role in the development of the economies worldwide and people are constantly purchasing and selling, and since ancient time's traders from different places of the world import and export of goods, which allows the possession of all people. At present, business owners are selling through the Internet. E-commerce websites have been deployed since 1994 with different uses and different goods offered. There are sites that display their own merchandise such as the site of Walmart and sites that allow traders to display their goods on their site such as Amazon.

Although there are many e-commerce sites on the Internet, however yet there is no such a site in Oman that allows local companies and merchants to offer their goods to people in the local market. Therefore, the main objective of this project is to establish a website and application that allows all merchants in Oman to display their goods through it, allows customers to easily search and access their requirements from the inland markets of the country, and get their goods anywhere in Oman.

### i. INTRODUCTION

The online shopping is the famous way that uses by most people in the world at this time because it allows them to buy things or get services directly from any seller over the world. The online shopping started from 1994 with the first sales of Sting album 'Ten Summoner's Tales' in the US with sales reached \$12.48. The research shows that most people are using online shopping to buy their different products like accessories, clothes, books, electronics, and others.

The percentage of purchase of products between customers may vary, as a study showed for Rebecca Borison in her Article titled "Top 10 Things People Bought on Amazon in February" as the follow: 20% physical books, 19.9% electronic under 50\$,

16.1% CDs, DVDs, or Blu-ray discs, 14% Toys, 14% Kindle app, 13.4% electronic above 50\$, 13.3% video games, 12.1% Personal care products, 12% Vitamins or food supplements, 10% Cosmetics and fragrances.

### ii.AIM

The aim of this project is to create a website and an application that allows all merchants in Oman to display their goods through it and allows customers to easily search and reach their requirements from the internal markets in the country, and receive their goods anywhere in Oman.

Literature review will review several web applications that in the same filed for this project. Five projects that choosing about e-commerce system and will dissect it individual and in the final will analysis the result. The main points that will be displayed are a brief statement of the site with the presentation of the features that characterize it, and will be mentioned the criteria for success and some views of people around it, in final, will be presented some statistics for 6 months between 17 Oct 2016 and 17 Mar 2017 from similarweb.com website "the website provides market intelligence solutions to understand, monitor the market" with a conclusion from my opinion on the site.

#### • Amazon.com

Amazon is electronic commerce and cloud computing company and it founded on 1994 by Jeff Bezos. It is beginning was as an online bookstore and as Sonny Mehta said "There is such a very large quantity of books clamouring for a buyer's attention that publishers have relied more and more on support such as blurbs as a way of getting an independent recommendation from a familiar name, much in the same way that Amazon.com will send an e-mail recommending Book A to a customer who's already purchased Book B." then amazon going to sell media tools like (DVDs, CDs, Blu-rays, MP3 downloads/streaming, video downloads/streaming, audiobook downloads/streaming) and software, furniture, electronics, apparel, video games, toys, food, and jewellery. Also, amazon considered as the world's largest provider of cloud infrastructure services (IaaS and PaaS). Amazon has individual websites, software development centres, and customer service centres. Jeff Bezos said "Amazon.com strives to be the e-commerce destination where consumers can find and discover anything they want to buy online." for that, there are several features of amazon.com will mention some of it as follows: Amazon Prime, it is a customer acquisition tool. "Frequently Bought Together" and "Bought together", it is where are given product suggestions to the customer based on what they are interested in. Large product catalog, it to display everything on amazon to the customers, and it is the largest catalog on the Internet. Search, it is a tool that allows the customer to search what they want without view all catalogs. Product Reviews by customers, it is a service that allows customers to make decisions before they bought the product. Amazon is one of the most successful selling e-commerce websites in the world and the main reasons for their success are a focus for

some countries that have good internet penetration like UK, France, Germany, China, Japan, and the US. And although, Amazon's reach is actually more than those countries via their export business they ship over than 100 countries around the world and that allow them to generate a good customers base for future expansion. Amazon also has one platform and it's very consistent worldwide and has separate services allow them to roll each piece of it out incrementally and that help to launched any program in one geography and tested and learned before launched in another place. The total visit for amazon.com for 6 months is 2.3 billion with Avg. visit duration 6:20 minutes and number of page per visit 9.82 pages. Some data will be displayed in graphs as follow.

- *Ebay.com*

EBay.com is e-commerce website that manages by eBay Inc. that founded in 1995. The website is an online auction and shopping website in which customers and companies buy and sell goods and services worldwide. Also, eBay has other services auction-style sales, like Buy It Now, online event ticket trading, online classified advertisements, and other services. Use of the site is free of charge to customers, but there is charged for the sellers for adding products and product sold. EBay have many features the user understand the basics like front page and of the own page "My eBay", no need to master every page of the website. The user can use the search function with the advanced query to narrow down the search to a specific thing like items, location, price or more. The search result can save it for future if the user is login. The new home page on eBay call the feed and it provides the recommendations, daily deals and others. Also, the user will find in the feed the following, categories buttons in the top and a space user can create a collection, follow other member's collection or follow other members. There are several of factors that can be attributed to the success of eBay. Feedback is the important part of eBay success where it is help user to post comments and give ratings for the sellers and products, and that help to know the honest seller from dishonest. The other factor of eBay success is buyer protection by use safe payment services such as PayPal. In the months, eBay registered 1 billion visitors with an average of 9.6 pages per visit and an average visit time of 6:49 minutes. In following graphs will show some statistic of eBay.

iv.IMPLEMENTATION AND TESTING

The project implemented and tested at every stage. The developer will use all requirements that need for the project to reach the end of the project. To develop any website there will be tools and program that should be used. MS visual studio 2013 is the tool that used for developing this project where used asp.net with HTML and CSS for the front end design and C# language to deal with the backend. Also, the database built using MS SQL server 2013 and this tools integrated with MS visual studio 2013. In additional to, JQuery also used in some pages in the project like image zooming. In this project used some tools that help for development Zeta Resource Editor and vertabelo.com. Also,

the project tested by using several testing methods such as unit testing, Integration testing, white box testing and black box testing. The project database contains 32 tables, and it divided into group's Master tables and details tables, the master table start with tb\_m\_name the details tables start with tb\_name. And there are 8 views on this project start with vw\_name and it's. Also, there are 14 store procedures starting with pro\_name. The website contains up to 50 web form for different functions and different users, some pages will be displayed from the website in following.

Figure 1 shows the homepage of the website where it divided into several divisions to display different values like last product added most view and top sales. The order of product in each list will change every time when page refresh to show a different product in the first slide every time. There are some parts in the page will fax for all pages in the website such as website header and footer, search box and "join our list" box.

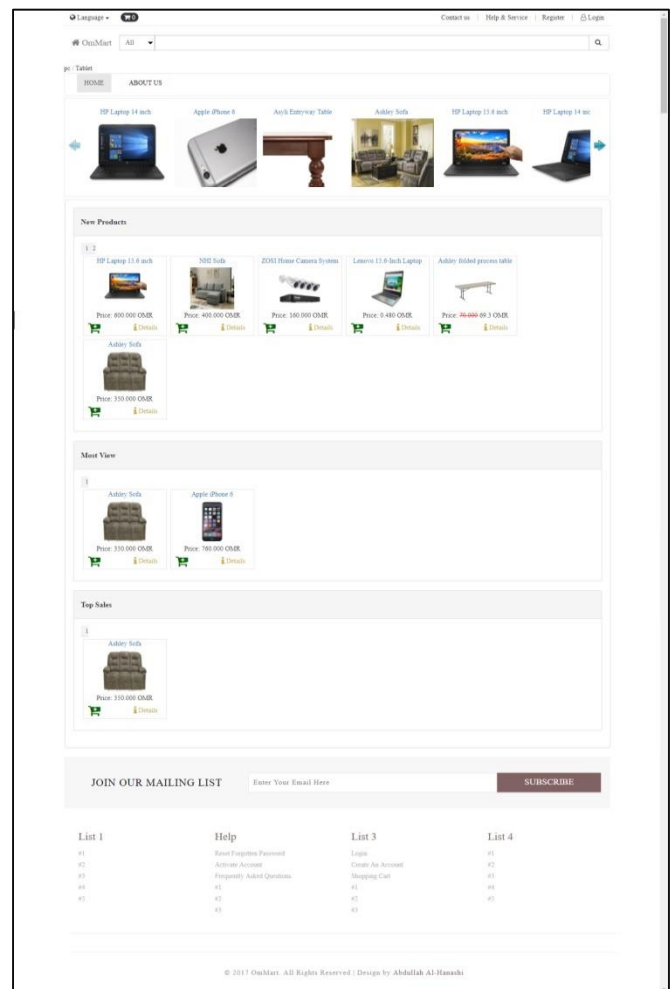


Figure 1 Home Page

Because the targeted geographic area is Oman, the website designed in two languages "Arabic and English". Figure 2 show Arabic home page where the customer can freely and easily shopping.

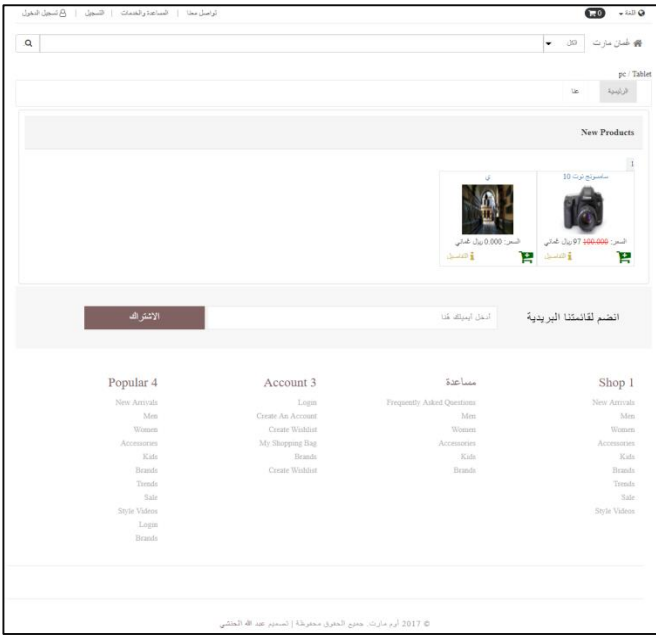


Figure 2 Arabic HomePage

Figure 3 shows the checkout page where the customer can finish the shopping process by fill up the form and select the shipment plan from drop-down-list. There is a formula that used to calculate the price of shipment plan as the customer requests. The result in drop-down-list will display like this "Company name: Plan Description (Shipment price)". The formula is as follow:

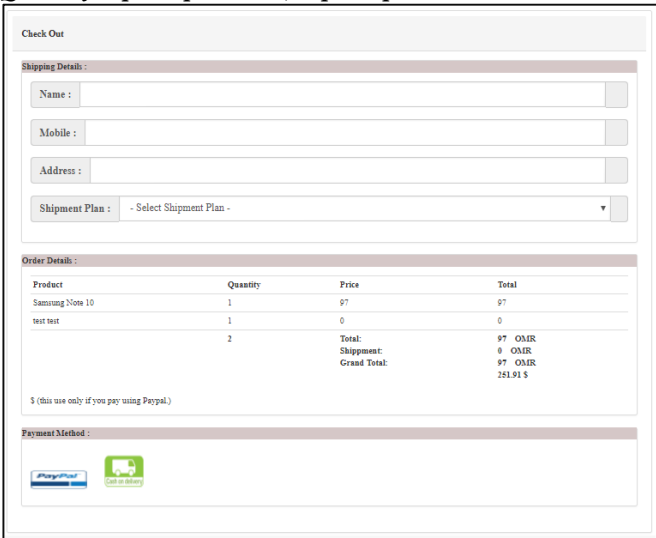
$$price\ per\ order + (total\ weight\ in\ kg \times price\ per\ kg) + (total\ Quantity \times price\ per\ items) + price\ per\ times$$


Figure 3 Checkout page

Figure 4 shows the PayPal page where the website used online payment using PayPal account. This page will come after customer finishes the shopping and fill up the check-out page.

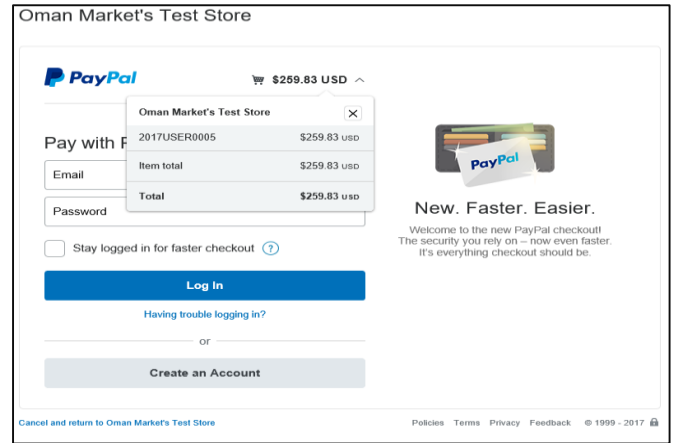


Figure 4 PayPal Payment Page

Figure 5 shows search result page where the user can search for any product on the website. The result of the search will display in "Search Result" page and this page has two sides one will display the products details and the other side will display filter variable (Subcategory, Brands, Units, Variant values and prices) as the search result.

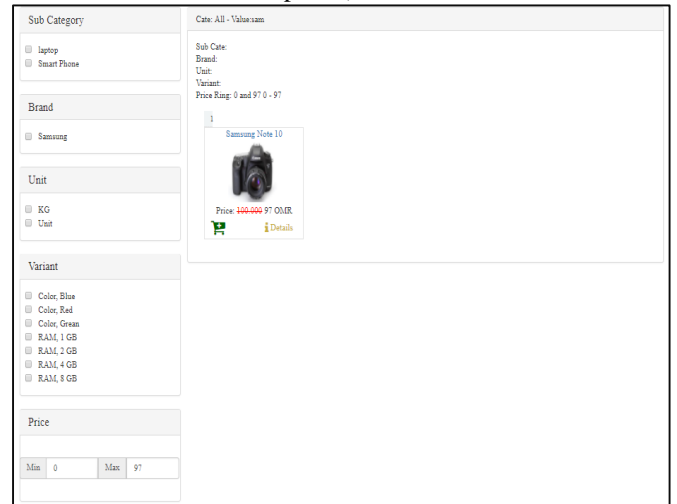


Figure 5 Search Result Page

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