**CHAPTER II**

**REVIEW OF RELATED LITERATURE, STUDIES AND SYSTEM**

This chapter presents the related literatures discussing specific concepts, features, functionalities, and characteristics concerning e-commerce. We use of different reading materials related to the online system. These materials are books, blogs, thesis and other web articles are essential in broadening the knowledge of the researchers. We provided ideas and useful data for the development of the proposed system.

The information we gathered on the development of e-commerce or online marketing and its advantages to the economy, consumers and businesses. Point of sale (POS) can help business to become competitive.

**Benefits of Ecommerce System**

Purchase something. Your customers expect you to be available and this presence allows you to keep up with the competition. Otherwise, your audience will be gathering toward your competitors to make an online purchase. Also Ashton studies that shopping online can save more time. Moreover, have a better product selection and can see price of the product and save money for transportation.

In the study by Wills (2014) Nowadays, E Commerce has transformed the way companies are doing business. Today, consumers can get an ultimate shopping experience and purchase almost anything online 24/7 a day. If you are running a physical store, it will be limited by the location of area that you can service, but with an E Commerce website, you can sell your products and services across the world where you can sell your complete range of products without any limits of location. However, in 2014, Khurana study that there are many products that customers want to feel, touch, taste, hear, smell and experience the product before they purchase. Ecommerce takes away that luxury. While, transaction on ecommerce websites can only access on any device such as a smartphone or a computer with the help of an internet access. In the situation of physical retail consumers are usually want to travel to the physical store to replace/return goods. But receiving goods back is a more terrible for an ecommerce business. This will affect the growth of reverse logistics function.

In one development study Roesler (2015), business owners and marketers should be clear that old models of retail have changed and it's essential to change their strategy in accordance with the new reality. Ecommerce websites will become an important factor of any business around the world.

**Trends in Ecommerce website**

In the study by Verleur J. (2015) that 66% of user spent all time on ecommerce websites is done through mobile devices, and 61% customers leave a site if it is not mobile-friendly. But, the rate of change in response is huge. Those rate of changes explain why raising the user experience for smartphones and tablets and not just smaller screens, but multiple devices with different screens and browsers are more of a priority now Several studies (Singh ,2015; Verleur, 2015) study that the future of web designing is responsive web design. It will continue to be more popular to those ecommerce website owners in long future. Websites that are adopting this trend will eventually have advantages ahead in competition with other similar businesses. Choosing responsive web design have proven benefits to e commerce website development. It makes the website more flexible and high user friendly.

In 2015, Verleur’s study of video will grow about 69% of all consumer internet traffic according to Cisco by 2017. As customer grow more responsive to visual presentation and find responsive layouts, video will become the asset to express product details. Video is one of great way to deliver high quality content and it benefits ecommerce website by leading to higher average order and driving conversions. While, in the development of Smale T. (2015) study that video builds a lot of trust with the future customers. Moreover, videos that tell story are really the starting point it must be entertaining and educating and informative about the product. Live streaming is now being looked as important strategies.

In the study by Smale T. (2015) that data is the best resource in helping you to determine how your business doing. However, in traditional analytics recognizing the trends or problems facing the business was a time consuming process. It also slowed things down because business owner couldn’t provide instant help to the customers before they left the site. Therefore, Real-time analytics could be a solution to the business. As business owner monitor the shopping behavior of the customer it can provide the problem of the sales of the business. Problem could be an issue with coupon code or checkout. Many of sales can be lost in that way. But when business owner fixes the problem and can interact with a customer before they leave that shopping cart. Business will be able to increase the rate of sales. Real-time tracking will allow online seller to offer a more reliable shopping experience*.*

**Technologies in ecommerce system**

Nowadays, there are several websites that offers an e-commerce platforms such as Shopify, Bigcommerce, Volusion, Big Cartel, 3dcart, Magento and etc. In 2016, Zorzini’s study of e-commerce platforms that both Shopify and Magento Community are equally powerful ecommerce hosting platforms, Shopify provides greater ease of use because it is a hosted and fully managed service. While Magento, requires users to purchase hosting and carry out all the software or system setup and installation procedures by yourselves. Shopify is the best ecommerce platform for building online stores with maximum ease of use and powerful capabilities. However, in the study by Pavelka (2015) having a customized e-commerce platform can benefit the company’s business in many ways. Customization allows the users to greatly increase their customer’s experience which will lead to more conversions and repeat customers. A customized platform also enables to present information clearly and make it easy for customers to find exactly what they are searching for on your e-commerce site, which helps reduce the bounce rate as well as increase the conversion rate.

**Applications of analytics in E-commerce**

In one developmental study (Holmes, 2013), Google analytics is an excellent, free service provided by Google. It provides wide ranging statistics for all types of websites, including online stores. Several features make it particularly useful for ecommerce merchants: E-commerce tracking, Goal Tracking and funnel visualization and dashboards. In 2014, Holloway’s study of google analytics, it is compose of four key reporting areas which are: Audience, Acquisition, Behavior and Conversions, each of which is useful for difference purposes.

E-commerce tracking is one of the features of Google Analytics which discussed in the study of Holmes (2013). Furthermore, in 2015, Barker’s study of e-commerce tracking, it allows to track online transactions in e-commerce websites. It also provides detailed analytical data to help establish the right path to maximum ROI (Returns on Investment). Setting up e-commerce tracking will give the client valuable insight into the effectiveness of the clients marketing efforts. For instance, if the revenue produced from each sale is less than the clients have been expecting, this could lead in introducing discounts or set a minimum purchase clause.

In addition, the study by Berry (n.d.), sales forcasting is much easier than you think, and much more suitable than you imagine. It’s not about guessing the future appropriately. We’re human; we don’t do that well. Instead, it’s about expectations, prospects, drivers, tracking, and management. You review and revise your forecast regularly. Since sales are familiar with costs and expenses, the forecast supports your budget and manage.  You measure the value of a sales forecast like you do anything in business, by its determinate business results. First find the right level of detail the data you have acquired, second, break it into pieces and lastly educated guesses.

**Effective features of e-commerce system**

In the study by Geary (2014), ecommerce should not be only attractive and impressive designs, it should also consider the visitors with an excellent shopping experience. There are many effective and innovative features that can help e-commerce sites deliver a great user experience such as search, Filter & Sort, product zoom, excellent video, content, comparing options, gift registry, a swift checkout process, product recommendations and product reviews; In 2011, Puwatti’s study of effective features of e-commerce system, that the web site designers should also include some essential features into any commercial web site they design like: users tracking, catalog development, payment processing, online fulfillment, privacy, business-business sales models, web site security and business-customer sales models. And in the study by Gramigna (2015), ecommerce sites must include features, secure a piece of that sizable opportunity and functionality that consumers to consider essential features as follows: ease of use, fast load times, accurate product descriptions, clear policies and seamless checkout experience.

In 2013, Honigman’s study of live chat, the services helps to add some human factors to a website, solve customer issues all at once; and adding a functionality to a website it will allows the customers to chat with the staff of the company in real-time to ask questions and get some advice, build confidence during the customers shopping experience, while improving conversion rates for the business. However in 2013, Layendecker’s study of live chat for a website that it can be very difficult to convey emotions and tone over chat, must be careful with the phrasing to ensure the words are not misinterpreted and time-zone is necessary.

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