# **Chapter 2 LITERATURE SURVEY**

**2.1 Literature review**

In this chapter, we will provide a theoretical background that will act as a framework and a foundation for our study. This framework is built upon a consolidation of knowledge from two different fields; review of previous research on mobile application development and studies of previously developed tourist systems. By reviewing research of already developed tourist systems we aim to collect and analyze a set of functionalities that these projects implemented.

**2.1 Existing research and related pharmacy e-commerce**

There are many applications that are similar to the electronic commerce for pharmacies. These applications are working to facilitate the process of getting a medical product through the use of the website, e-pharmacies are divided into several types, including the hospital pharmacies and health institutions or independent electronic pharmacy. For example, there are many similar applications to the electronic pharmacy in the Arab and the Western world, such as electronic pharmacy system in Dubai hospitals, Adama pharmacy, Fouda Pharmacy and dowa Kuwait online pharmacy among others. All these websites contain several sections of products, including Hair care, skin care, mother and baby, Medicine Cabinet and many others.

EC allows the creation of new business models such as e-tailing (online selling). (Turban et al. 2012).

The 20th century thus saw the proliferation of e-pharmacies (selling medication over the internet). Globally, e-pharmacies is a US$ billion industry and is forecasted to be about US$51.75 billion by 2030. The US, Europe, and Canada holds the largest market share with the US representing the largest regional market with nearly 50%, and Europe representing the second largest and fastest growing market, growing at a rate of more than 20% annually. ('Global ePharmacies Market' 2011)

The Canadian e-pharmacy industry has grown to US$1billion in sales with over 100 Canadian e-pharmacies. (Farrell and Fearon 2005).

E-pharmacy is an Australian online pharmacy (with a physical store in Calamvale) that was launched in the year 2000. The pharmacy industry in Australia is worth over AUS$10 billion yearly. E-pharmacy experienced sales increase of over 20% monthly since its inception. In one year, the site sold over AUS$500,000 worth of products. E-pharmacy experienced such extensive and rapid growth within Australia that they planned to open a megastore to sell directly to the public and to serve as a warehouse. (Lane & Koronios 2017)

Online Pharmacies associated with a conventional store, were found to be more successful than virtual pharmacies. (Cottrill 2000; Mahesh & Landry 2013; ‘Global ePharmacies Market’ 2011)

In Europe, EC in healthcare began in 1998, but took off in 2004. Denmark, Germany, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom allow prescription-only medication to be dispensed by e-pharmacies. (Dudley 2012)

Alliance Boots, UK, is ahead of the other European pharmacies in its level of online services integrated into its pharmacies especially with its very successful order-online-collect in-store promotions. (Dudley 2012).

In Poland, Doz.pl is said to be the largest online Pharmacy and information site with almost 3 million users placing 100,000 orders monthly in 2011, (Dudley 2012) and since 2004, Internet pharmacies have been licensed to operate in Germany. ‘Pureplay’ pharmacies represent 3.5% of the total pharmacy sales. (Dudley 2012)

The UAE in general is working on the establishment of electronic pharmacies in all the Emirates with medications delivery service to the home. The doctor is also working on a review of medications and the duration of its validity and the quantities consumed largely of products to be provided quickly before stocks last (fouda.com. 2020).

Dubai Health Authority (DHA) applied electronic pharmacy system in Hatta Hospital, which aims to speed up the disbursement of medicines for patients by safety process. It facilitates many processes such as patient record, review as well as providing accuracy in the process of therapeutic description.

Adama pharmacy located in Saudi Arabia system able to develop a new concept in the area of customer service. In addition, it becomes a pioneer in this domain. So far, everyone commends the high-class level service provided. It includes several sections such as Mother& Baby, Skin care, Hair care, and other. Each section contains several products. This pharmacy is characterized by multiple sections and were carrying a large number of products and medicines. The instruction of how to use this website is straightforward by choosing the appropriate language to facilitate the selecting a product or medication. Then, the patient can log in to the site and select the product from the offered list. Or could use the search tool to choose the product and determines the quantity and enter the place of delivery, and paid using the credit card number (Adama pharmacy 2016).

Fouda Pharmacy is the First Electronic Interactive Pharmacy in Egypt. This website requires the customer registration as the first step to enter a user name and Password. Then you can use this site to choose a medical product that you want to, after that selecting the product is inserted into the customer data and the card number then sets address. This pharmacy provides medicines only and it does not provide medical or health products (Skin Care - hair Care - mother and baby products) like most of the e-pharmacies. It has a large number of categories and each category have huge number of medicines (Dowa Kuwait Online Pharmacy 2016).

Dowa Kuwait Online Pharmacy is an integrated service providing customers with pharmaceutical and healthcare products without the need to go to the pharmacy. It is the first online, high quality pharmaceutical service in the Middle East. It provides valuable online healthcare information in addition to specialized delivery services. In this website, simply place your order online through Dowa and it will have delivered to your doorstep wherever you are. To register in this website, you need an e-mail and password. This web site contains online doctor, Special Offers, multiple Categories, Brands and Products. The process of choosing a product or the medicine similar to what happens in the website of Fouda pharmacy (Dowa Kuwait Online Pharmacy 2016).

Each web-based application has specific features that make it the first over other websites regarding saving time and effort.

In conclusion, the many reviewed literature here has provided deeper understanding of the proposed application. Different scholars have written about the enormous advantage of integrating an e-commerce platform into pharmaceutical processes. Review of the related applications will help the researcher come up with an application that will eliminate some of the weaknesses in the related applications and also pick ideas from the strengths of those application to serve as guide in designing an improved application.