E-Skincare Advisor

Ashwini Birse M., Ashwita Perdoor, Heenanaj Sanadi, Vaishnavi Bagodi

Abstract - E-Health is an application of information and communication technologies across the whole range of functions that affect health. E-SkinCare Advisor is a mediator in bringing various health services to your door step. Skin advisor will help you in e-treatment of illnesses in time so that you are saved from distress. The currently available health care systems contain the information in the scattered form which makes it difficult for the user to acquire the accurate and relevant information about healthcare for a particular disease. It also creates a state of confusion for the users about the kind of treatment he should undergo. The proposed system of E-Skincare advisor provides an easy diagnosis of the disease by asking certain questions to the user. It also provides the initial care and treatment in three different fields of medicine, case studies and expert advices at fingertips like a smart system.

Keywords - E-Health, e-treatment, diagnosis, smart system

1. Introduction

E-Health is an emerging field at the intersection of medical informatics, public health, and business, and refers to health services and information delivered or enhanced through the internet or other related technologies. Different e-Health applications have been used across countries corresponding to their health needs and priorities. The main objective of this project is to implement a computer based Healthcare Information System. This system will help the users to identify certain diseases by answering certain questions asked by the system. Based on the diagnosis received the user will be getting some suggestions of the medicines that are available at the local chemist without prescription with an advice to visit the doctor.

2. Literature Survey

With the rapid development of smart phones and mobile devices, it becomes very popular that people more prefer to access the information through this flexible way. So the requirement of proper interface according to different devices becomes a hot topic and the goal will motivate the use of RWD (Responsive Web Design). It aims at crafting sites to provide an optimal viewing experience in easy reading and navigation with a minimum of resizing, panning, and scrolling across a wide range of devices such as from desktop computer monitors to mobile phones. What’s more, now a days E-Health has gradually aroused great attention all over the world. And the modern day healthcare needs and delivery is complex, and the use of ICT has made some positive impact in attending to such needs that e-health applications require. The project is about E-health web application framework and responsive web design. This idea comes from instructor Dr. Eric Chen’s project proposal. Though there are some existing researches in above fields, there is less or almost none related work which combines these fields to provide a basic frame specifically focussing on e-health.

To identify and synthesize influential factors to health care providers’ acceptance of various e-Health systems. This systematic literature review was conducted in four steps. The first two steps facilitated the location and identification of relevant articles. The third step extracted key information from those articles including the studies’ characteristics and results. In the last step, identified factors were analysed and grouped in accordance with the Unified Theory of Acceptance and Use of Technology (UTAUT). This study included 93 papers that have studied health care providers’ acceptance of e-Health. From these papers, 40 factors were identified and grouped into 7 clusters [1]:

1. Health care provider characteristics
2. Medical practice characteristics
3. Voluntariness of use
4. Performance expectancy
5. Effort expectancy
6. Social influence and
7. Facilitating or inhibiting conditions.

The grouping results demonstrated that the UTAUT model is useful for organizing the literature but has its limitations. Due to the complex contextual dynamics of health care settings, our work suggested that there would be potential to extend theories on information technology adoption, which is of great benefit to readers.
interested in learning more on the topic. Practically, these findings may help health care decision makers proactively introduce interventions to encourage acceptance of e-Health and may also assist health policy makers refine relevant policies to promote the e-Health innovation. The fieldwork done in this project is visiting the doctors and collecting information related to various skin diseases in different fields of medicine. The world healthcare market is witnessing an increasing shift towards e-health services, which negates the need for patients to physically visit their healthcare representatives. This reduces the strain on an already overstretched healthcare system while increasing convenience for patients. Telemedicine is set to become a major part of the healthcare system, notes Koncept Analytics.[3]. Telemedicine involves the use of multimedia devices and telecommunications technology in the provision of healthcare services. The advantages of telemedicine include its geographic scope, reaching even remote rural locations; its reduced costs; and its help in easing the problem of healthcare staff shortages.

E-healthcare enlists electronic processes and communications to provide quality healthcare services to patients, covering all locations. Medical devices that have integrated connectivity are especially useful for remote sleep therapy treatment, cardiac rhythm management and cardiac event monitoring. Wireless connectivity and mobile technology are boosting demand for personal health applications and services, notes. Market growth is fuelled by commitment from technology providers, insurers and caregivers alike. Moving forward it will be necessary for health bodies to set in place specific policies and encourage overall transparency. Investing in web-driven healthcare systems, or providing e-healthcare, would require substantial capital investment.

3. Problem Definition

To make the essentials of good health practices accessible to everyone, individually **E-SkinCare Advisor** functions as a mediator in bringing various health services to your doorstep. Health advisor for you will help you in e- treatment of illnesses in time so that you are saved from the distress in the very first place. We follow ‘Prevention is better than cure’. Our core strength and expertise is in providing efficient health care services.

4. Proposed System

E-SkinCare Advisor is a user-friendly application that allows the user to access the information in a constructive manner. It is very smart in giving options for treatment. It provides images, home remedies and investigations for each disease.

5. System Architecture Design

The above system architecture design shows the interaction of a user with different interfaces and the activities he performs (example: registration, login, select symptoms, select health record) wherein the validations are done by fetching the records from the databases maintained.

6. Applications

Recent developments in the Internet, especially web related technologies, have brought great change to many industries. Financial services institutes, for example, from banking to investment, almost all provide online transaction capabilities for their customers. To some, providing the convenience of online access has become a competitive necessity, and to others, online capability has extended the reach of their normal businesses to areas and consumers they were not able to reach before. The existence of eBay and distance learning courses offered by many universities today are good examples of the latter. Not all industries, however, have incorporated the Web in their business strategies. The health care industry, for example, is behind many sectors in terms of harnessing web power and is slowly catching up. Many seem to agree that healthcare providers will need to jump on the web bandwagon soon in order to compete in the health care of the future.

7. Conclusion

**E-SkinCare Advisor** provides a user-friendly interface to detect a disease based on a set of symptoms selected...
as input by the end-user. It provides the investigations in order to have a confirmation about the disease detected, and provides the home remedies which provides the initial care to be taken about the disease detected and also the treatment in three different systems of medicine for a particular disease detected. It also allows the user to give the feedback about the information he found. Further the use of the application can be widened for different domains of diseases.

The future scope for this project is that it can be extended to increase the number of diseases considered. It can further be used to detect diseases in various domains other than skin diseases. It can be enhanced by adding features such as expert advice which can help the user in getting a detailed explanation about the disease online. Various other health records related to the patient can be maintained in the database.

Acknowledgement

We would like to acknowledge with deep gratitude our guide Prof. Sangeeta Sangani for her invaluable guidance and constant encouragement. We would also like to acknowledge our Head of the Department Dr. V.S. Rajpurohit for their valuable suggestions. We would also like to thank our beloved principal Dr. A. S. Deshpande for his constant encouragement and appreciation.

References

[10] Srikanthwaran, A. Need an appointment? It’s as easy as going online. Pittsburgh Post-Gazette.11/2/05.