E-HEALTHCARE ONLINE CONSULTATION AND MEDICAL SUBSCRIPTION

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Abstract:
The healthcare industry has witnessed a significant transformation with the advent of technology, and one of the prominent changes is the emergence of E-Health platforms. These platforms have revolutionized the way healthcare services are accessed and delivered, making healthcare more accessible, efficient, and convenient. This paper presents the development of an E-Health online consultation and medical subscription platform, highlighting the key components and technologies used in its creation.

The E-Health platform discussed in this paper is designed to provide online medical consultations and facilitate medical subscription services through web development. The primary objectives of this platform are to enhance patient-doctor interactions, streamline the appointment scheduling process, and offer subscription-based healthcare services for individuals and families.

In conclusion, the development of an E-Health online consultation and medical subscription platform through web development is a vital step towards modernizing healthcare delivery. This

platform not only enhances accessibility to healthcare services but also contributes to the overall well-being of individuals and families by promoting proactive healthcare
management in an increasingly digital world.

Keywords: Front-end Development, Back-end Development, Database Management, Telemedicine Integration, Payment Gateway Integration, Security Measures.

By combining these technologies and methodologies professionals, offering convenient and affordable healthcare services while maintaining the highest standards of security and privacy. The platform's subscription model enables patients to access a range of medical services on a regular basis, promoting proactive healthcare management.

the E-Health platform aims to bridge the gap between patients and healthcare.

1. INTRODUCTION

e-Health is a cutting-edge method of delivering healthcare that makes use of the internet to make medical processes including remote treatment, recovery, and

healthcare more convenient [1, 2]. E- health dates back to the 1990s, but with the rise in Internet usage in recent years, it has become a vital ICT tool.

Numerous scholars from several disciplines, such as medicine, information technology, psychology, and behavioural science, have generated a substantial body of research on e-Health. Early information systems research focused on improving artefacts, addressing such including "user engagement," "IT adoption," and "technology acceptance." As healthcare services have become more sophisticated, a variety of platforms for e-health services that cover a variety of subjects have been developed. As a result, in recent years, research that is unique and diverse has taken centre stage. This review aims to give information systems researchers studying e-Health a bibliographic viewpoint.

work examines pertinent research, evaluates how earlier studies developed, presents the situation as it is, and offers a useful roadmap for further investigation.

2. STUDY DATA AND METHOD

In order to gather data, we created a successful information retrieval approach. Numerous terms, including "online medical," "mobile health," and "remote healthcare," can be used interchangeably with the phrase "e-Health." The research associated with these terms are quite similar to "e-Health." Therefore, the literature search in this data only used the keyword "e-Health" in order to avoid repetition.

Additionally, we have limited the article's topic Since. The study of e-Health is an interdisciplinary field with many academic

fields are represented in connected papers. Only three closely linked information systems domains were selected to narrow search results for this study. Any study methodology evaluation of information technology's impact on e-Health was included in our survey of studies for review. We excluded research articles released before 2004 because to the substantial changes in technology applicability and the availability of other reviews [3, 4]. Consequently, Only computer science, information science, and library science were covered in the paper. by searching for "e-Health" on the "Web of Science" central repository for the platform from 2004 until 2021.

3. Interaction. 1344 objects were located during searches in March 2022. Each paper has a citations for the author, title, abstract, and bibliography.

Using Cite Space, we mapped the visualisation and looked at these articles' citation networks. A few typical research emerged from the citation networks. In order to give a current summary of the study areas of interest, we conducted a statistical analysis of the pertinent literature and compiled a list of the most widely cited publications.

3. ANALYSES

3.1. Time Distribution

Figure 1 displays the order of precedence of pertinent works. There has been a noticeable increase in the quantity of research articles on e-Health. The development of information technology in the mid-1990s gave rise to the research.

Prior to 2010, research was dispersed and

healthcare-related applications were not yet common, which resulted in an underwhelming research phenomenon. But From 2010, as advancements in Internet technology have persisted and mobile devices have become more widely used, the quantity of e-Health publications has gradually expanded.

3.2. High-Level Analysis

We looked at the Cite Space network of citations. Eleven high Centrality pieces of literature are listed in Table 1. In this context, the term "technology acceptance

model" (TAM) is most often employed. citation study [5] indicates that the sector. e-Health attracted a lot of attention from academics as a novel kind of information system, and extensive research has been conducted to facilitate its adoption.

Previous research has frequently shown that it is challenging to categorise consumers' responses to health information technology. For example, Holden and Karsh [5] discovered that certain While some links between Technology Acceptance Modes (TAMs) were regularly shown to be significant, others were not. However, other research, based on TAM, discovered that patients' everyday duties and obligations need to be redistributed with more care [6].

Furthermore, reports rank as the most significant category of publications [7]. These publications have received a lot of citations, which suggests that The state of e-Health nowadays is of more importance to the author, who seeks to combine business and academia. For instance, Kummervold and Chronaki [7] looked at trends and patterns in 18 months of Internet use in Europe connected to health and found that the Internet is starting to take the

place of other traditional sources as a major source of health information. Furthermore, more and more users are utilising interactive e-Health services in addition to

reading medical information. according to their research. Kontos and Blake [1] concentrate on resolving persisting inequities in health and communication inequalities.The use of eHealth by sociodemographic variables, including age, sex, socioeconomic status (SES), and race/ethnicity, was statistically examined in their study. According to certain research, Meta-Analysis can be especially useful when addressing e-Health research questions [8–9].Since e-health often involves a lot of data, researchers can easily solve research questions by using meta-analysis.

Table 1. High centrality studies.

The meta-analysis conducted by Andersson and Cuijpers [8] led them to the conclusion that computerised treatments, including those offered online, have potential as depression treatments supported by research. In addition, a meta-analysis was carried out by Andrews and Cuijpers [10]. of the data to determine whether or not patients find computerised cognitive behavioural therapy (CBT) useful for treating anxiety and depressive disorders over the long and short terms.

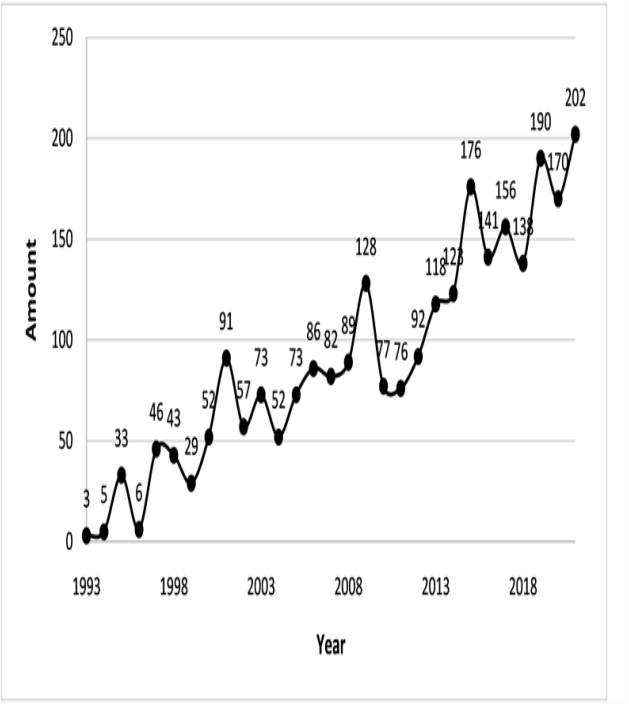

Figure 1. A timeline showing the amount of relevant publications over time. It comes from the Web of Science Core Database.

3.3. Prior to 2017, the Most Cited Research

Articles lacking any necessary data were not included. Following a thorough review of the content of the articles, we determined which 10 most frequently mentioned pieces appeared to be relevant. They represent the study themes and are Up to 2017 [11, 12], "IT adoption" and "Technology Acceptance" were the subjects that were studied the most. Improving the e-Health platforms' user experience is the research's primary objective.

Thus, research that focuses on "Patients' experiences" and this set of studies could both be classified as "e-Health promoting" research. For instance, in a qualitative field study, [12] examined and characterised the factors that influence how older people use various types of technology. Similar research goals are also described in [13],

where the goals of the "e-Health" study are to enhance individual health, increase patient participation, and accomplish systemic changes in the health care delivery system.

During the course of this inquiry, several innovations have been created. Randomised controlled trials, for instance, have grown in popularity in addition to qualitative and quantitative techniques [14]. Certain emerging technologies have also drawn some attention, such as cloud computing [15], wearable sensors [14], and minority issues [16]. All in all, the research conducted during this era set the groundwork for e-Health and indicated future direction for its advancement.

3.4. The Five Years' Most Cited Research

The past five years have seen significant advancements and development in the field of e-Health research. The top eight publications that have been mentioned are shown in Table.

3. The most popular study topics are still highly favoured [17]. TAM is still a pathway for studies on e-Health uptake,

which can help explain patients' decision-making processes when it comes to exchanging healthcare data. The five most mentioned studies in recent memory.

However, even while technology and IT adoption continue to lead the way, hitherto uncommon

research subjects such as the growing popularity of digital inequality. For instance, systematic Bol and Helberger [18] discovered disparities between mobile health app users and non-users. Specifically, those that use mobile health apps tend to be younger, better educated, and more e-literate than those who do not.

[19] demonstrated concern for racial inequities. They observed that Patients of African American descent used the e-Health portal.

Table 2. Prior to 2017, the most cited study

at a lower rate than White patients, and they proposed that further intervention might be required to bridge the gap in digital technology. The COVID-19 pandemic that has been common recently is another rising issue. which has raised serious concerns among academics because to its potential effects on psychology and social structures [20]. Their study also looks at mental health, which is another area of e-Health research that is becoming more and more popular.

Table 3. The most cited research in Recent 5 years.

4. CONCLUSIONS

Three insightful conclusions are reached from this thorough analysis of relevant e-Health literature.

1)The adoption of IT is the most significant area of study in this discipline. The most extensively utilised study paradigm the theory of action matrix (TAM), upon which a great deal of study has been done. It is anticipated that this subject will continue to be relevant as long as technology keeps evolving.

2)There is an increasing diversity in research approaches. The discipline is dominated by quantitative research, but as more academics adopt interpretivism, exploratory qualitative research is beginning to gain traction.

These two represent the principal e-Health research approaches; however, depending on the research issue, instruments techniques like machine learning and randomised controlled trials offer more flexibility in the research process.

3) Research subjects are divided into appropriate categories. Numerous online health groups with diverse interests are proliferating. The development of an interdisciplinary scientific community for e-Health research is hampered by the different disciplines involved in the field and the information gaps that exist between research projects.

FUNDING

The Graduate Research Innovation Fund of the University of International Business and Economics is providing funding for this project.

Conflicts of Interest by Nature

According to the authors, there are no conflicts of interest associated with this work's publication.

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