

ANALYSIS OF USABILITY OF WEB SITES IN HOSPITALS IN DIYARBAKIR, TURKEY

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Abstract

The aim of this study is to determine online services, which has been rendered by public and private health institutions in Diyarbakir, Turkey. As this study was implemented only in center and districts of Diyarbakir, all health institutions were included. Web sites of these institutions were searched between 01.01.2016-01.04.2016 and data were compiled. Among 38 institutions, 21 (56%) of them were public and 17 (44%) of them were private. 27(72%) of health institutions were general hospitals and 11(28%) of them were medical specialty centers. These web sites were investigated according to four dimensions such as, institution information, facilitating online services, relations with community, shareholders and target groups and social media integration by 23 measures.

As a result, we have seen that, public health institutions are more efficient in utilization of online services. Nearly all measures were performed in these institutions. On the other hand, in private institutions there is a lack of information and service. A big absence of public institutions is providing service only in Turkish. It is seen that private health institutions, which are members of big trademarks, are more efficient. Local health institutions in Diyarbakir don't have web pages or have insufficient online services.

We can say that, public health institutions and university hospitals are more successful in providing online services in Turkey. Staff and location changes often prevent continuity of web pages of private health institutions. So it is imperative to update these web pages by professionals continually. As e-commerce is very important for every branch of business and internet is very widespread among all individuals, it is compulsory for health institutions to develop their online services.

Keywords: Hospital, Web Site, Internet, E-commerce, Turkey

1 INTRODUCTION

Recent advances in web technologies and user interfaces have greatly changed the web applications and in many cases transformed the way users interact with them. The new generation of Internet devices and services can be very useful in facilitating participation and information sharing across a vast number of users, thus supporting personal involvement in hospital activities (Maifredi et al.,2010). What we are seeing today is a continuation in trends that kicked into gear during the last couple of years. Digital channels are overtaking traditional marketing channels. This is actually true for all marketing sectors, including provider-to-consumer marketing (Locklard, 2016). As web Technologies cover a wide range of our lives lately, traditional trade is being replaced by e-commerce.

Electronic commerce, commonly written as e-commerce, is the trading or facilitation of trading in products or services using computer networks, such as the Internet. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle, although it may also use other technologies such as e-mail.

E-commerce businesses may employ some or all of the following:

- Online shopping web sites for retail sales direct to consumers
- Providing or participating in online marketplaces, which process third-party business-to-consumer or consumer-to-consumer sales
- Business-to-business buying and selling
- Gathering and using demographic data through web contacts and social media
- Business-to-business electronic data interchange
- Marketing to prospective and established customers by e-mail or fax (for example, with newsletters)
- Engaging in pretail for launching new products and services (Wikipedia, 2014).

As e-commerce is valid for all trade fields, it was compulsory for health providers to use digital tools in order to develop their health services and reach more customers/patients. Then came the e-health concept. E-Health is the use of information and communication technologies (ICT) for health. Examples include treating patients, conducting research, educating the health workforce, tracking diseases and monitoring public health (WHO, 2010).

E-Health emerged early in the 21st century and is an all-encompassing term for the combined use of electronic information and communication technology in the health sector. This term refers to that technology used for clinical, educational, research, and administrative purposes, both at the local site and across wide geographic regions. The use of e-Health has enhanced networking, facilitated global thinking, and improved health care on local, regional, and national levels (Harrison, 2006).

The goals of e-Health can be summarized to include increased efficiency in health care, improved quality of care, increased commitment to evidence-based medicine, empowerment of patients and consumers, and the development of new relationships between patients and health professionals. From a global perspective, e-Health can be used to disseminate health information as well as ensure that the most current information is used to improve people's health. Rural areas may be the greatest benefactors of e-Health by having easier access to information and access to telemedicine services. The use of e-Health in rural areas is important because 95% of respondents have used the Internet and many have access to scanners, digital cameras, and videoconferencing. E-Health networks can remove time and distance barriers to the flow of health information and can help to ensure that collective knowledge is brought to bear effectively on health problems throughout the world (Harrison, 2006).

As such, the "e" in e-health does not only stand for "electronic," but implies a number of other "e's," which together perhaps best characterize what e-health is all about: Efficiency - to increase efficiency in health care, Enhancing quality of care, Evidence based - e-health interventions, Empowerment of consumers and patients, Encouragement of relationships between the patient and health Professional, Education of physicians, Enabling information, Extending the scope of health, Ethics, Equity—for all patients (Eysenbach, 2001).

According to The Pew Research Center, 97 percent of web users search online for healthcare information, 30 million search online for a physician each month, and 80 percent of clicks are on the top three searches (Pew, 2011). With 80 percent of internet users looking for health information online, 66 percent of those users are looking for information on diseases or current conditions. Individuals ages 18-24 trust information found on social media - a large consumer segment that has potential to become a lifetime patient (Geonetric, 2012).

As internet provides a wide range of opportunities that enable hospitals to communicate with their patients, health professionals and other shareholders, it is imperative for them to take part in internet by creating web sites or social media integration.

2 METHODOLOGY

The aim of this study is to determine online services, which has been rendered by public and private health institutions in Diyarbakir, Turkey. As this study was implemented only in center and districts of Diyarbakir, all health institutions were included. Web sites of these institutions were searched between 01.01.2016-01.04.2016 and data were compiled. Among 38 institutions, 21 (56%) of them were public and 17 (44%) of them were private. 27 (72%) of health institutions were general hospitals and 11 (28%) of them were medical specialty centers. These web sites were investigated according to four dimensions such as, institution information, facilitating online services, relations with community, shareholders and target groups, social media integration by 23 measures.

3 RESULTS

Results of analyses of web pages of 38 hospitals can be seen in Table 1.

Table 1. Features of web sites of hospitals in Diyarbakir.

Web site features	Total (N= 38)	%	Public (N=21)	%	Private (N=17)	%
Institute information						
Website ownership	38	100	21	100	7	41.17
Contact information	38	100	21	100	7	41.17
Institute logo-amblem	38	100	21	100	7	41.17
Locations and directions	38	100	21	100	7	41.17
Parking/Dining /transportation	38	100	0	0	0	41.17
Visiting hours	38	100	0	0	0	0
Notice board	38	100	21	55.2	7	41.17
Headlines in media	38	100	0	0	0	0
Multi-language obtion	38	100	0	0	3	17.6
Facilitating online services						
General health information	38	100	21	100	7	41.17
Online consultation desk	38	100	10	47.6	2	11.7
Products and services information	38	100	21	100	5	29.4
Online appointment	38	100	21	100	5	29.4
Online Laboratory Results	38	100	21	100	5	29.4
Finding doctor	38	100	21	100	7	41.17
Choosing doctor	38	100	21	100	5	29.4
Relations with Community, Shareholders and Target Groups						
Patient Satisfaction Survey	38	100	0	0	4	23.5
Information about Patients' Rights	38	100	4	19.0	1	5.8
Advertisement Links	38	100	0	0	7	41.17
Electronic newspaper	38	100	21	100	7	41.17
Job opportunities	38	100	0	0	4	23.5
Complains/Requests/Suggestions Form	38	100	21	100	7	41.17
Social Media Integration						
Facebook, Twitter, Instagram Accounts	38	100	0	0	6	35.2

CONCLUSION

As a result, we have seen that, public health institutions are more efficient in utilization of online services. Nearly all measures were performed in these institutions. On the other hand, in private institutions there is a lack of information and service. A big absence of public institutions is providing service only in Turkish. It is

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REFERENCE LIST

Wikipedia, e-commerce, Available at: <https://en.wikipedia.org/wiki/E-commerce>, (Accessed 2.2.2016)

WHO, The Fifty-eighth World Health Assembly, Available at: <http://www.who.int/topics/ehealth/en/> (Accessed 1.1.2016)

Lockard P., (2016) 5 Healthcare Marketing Trends to Watch in 2016, Available at: <https://www.dmn3.com/dmn3-blog/5-healthcare-marketing-trends-you-should-know-about>, (Accessed 3.4.2014)

Maifredi G., Orizio G., (2010) Italian hospitals on the web: a cross-sectional analysis of official websites, BMC Medical Informatics and Decision Making BMC, 17: 1-13 doi :10.1186/1472-6947-10-17

Harrison J., Lee A., The Role of E-Health in the Changing Health Care Environment, Nurs Econ. 2006;24(6):283-288.

Eysenbach G. (2001) What is e-health? Journal of Medical Internet Research. 3(2):e20. doi:10.2196/jmir.3.2.e20.

Pew Internet (2011) Pew Research Center, The Social Life of Health Information, Available at: http://pewinternet.org/~media/files/reports/2011/pip_social_life_of_health_info.pdf

(Accessed 4.3.2016)

Geonetric (2012) Infographic: How Health Consumers Engage Online, Available at: <http://geovoices.geonetric.com/2012/11/infographic-how-health-consumers-engage-online/> (Accessed 2.2.2016)