Available at: www.sabauni.net Journal home page: www.sjitn.net



## **Review**

# The impact of the website design on the user acceptance

Dr. Arwa Y. Al-Eryani. Saba University, Faculty of Computer and Information Technology

#### Article info

Article history : Accepted April4, 2013

Keywords: Web design User acceptance

# **Abstract**

The aim of this paper is to review some papers to find out the impact of the website design on the user acceptance. This has been done through address some papers dealing with this aspect. Going through the different studies will give clear view of the importance of the website design on the user acceptance on the interaction with the different organizations website. Many papers arrived to the fact that the users would look for the ease of use when visit free-content and seek the usefulness when visit the services websites. Also the experience of the users with internet and websites would impact on his/her revisit the website. We can arrive to the importance of the website interface and design to improve the user acceptance and motivation.

<sup>\*</sup> Corresponding author: Dr. Arwa Y. Al-Eryani . Tel. +967 1 404077; Fax: +967 1 467919 E-mail address: arwa.aleriani@sabauni.net © 2013 Saba Journal of Information Technology and Networking. Published by Saba University. All Rights Reserved.

#### Introduction

The traditional method of delivering services, from government agencies or private sectors to citizens was done in a face to face contact between the employees and their customers. The quality of the services was measured by the good or bad interaction with the employees providing those services.

Nowadays with the e-government most if not all services have been delivered via the organization's website on the internet.

The services are now provided to customers via the website instead of the employees; in this situation the website plays a vital role in the quality of the services and their success. Moreover, the quality of the website depends on its design.

The customers seek usefulness and ease of use when interacting with these websites.

Many studies have investigated the relationship between website quality and user acceptance and other studies have focused on the relationship between service quality and user acceptance. All aim to address the impact of the website and service quality on user acceptance of online services.

## **Related studies**

Ahn, Ryu, et al.[1] investigated the effect of playfulness on user acceptance of online retailing. Playfulness was defined by authors as "a short-term system-specific trait or state, because an individual can feel more or less playful at various times during his or her visit to an online retailing system".

Authors in this study focused on three terms:

- System quality:that includes design,

navigation, response time and security.

- Information quality:that includes contents, completeness, information reliability and format.
- Service quality: that includes responsiveness, credibility, assurance and follow up service.

They used TAM model as extended by Moon et al.[2]. The elements of the study model are as following:

- 1. System quality
- 2. Information quality
- 3. Service quality
- 4. Playfulness
- 5. Perceived usefulness
- 6. Perceived ease of use
- 7. Attitude
- 8. Behavioral intention to use.

Research methodology was based on an online web-based survey. The surveys were distributed and gathered from 940 responses. After analyzed these surveys the results have been presented and showed that customer' intention to visit an online retailing website depended on its playfulness as well as two other things: perceived ease to use and usefulness.

Ahn, Ryu, et al.[2] address the website design including full view of the service; online and offline. They investigated the impact of the online and offline features on the user acceptance of internet shopping mall.

From their point of view website' user seeks completely work, that means search for the product or service online and then get it offline (delivery and product quality).

Both stages complete each other to find the quality of the website services.

The first aim of this study is to explore the online and offline quality factors of internet shopping mall within electronic commerce (EC). Second aim is to find out the relationship between these quality factors and the user acceptance of the website.

The authors defined the online features as the quality of web system that means system, information and service quality. In the other hand offline means product and delivery service quality.

When they described system quality they indicated the quality of information processing system. The design of a web site effects appearance and technical adequacy. Such as download delay, navigation, security and privacy and hypermedia presentation.

Information quality was measured by the quality of reports, now with the web environment, information quality deals with user presentation. It is likely to help users to navigate the products and make the good decision.

The service quality was described by the authors as an important factor with the lack of fact to face contact on web site. In the web site user has to make the full stages of the ordering the product. Finding the required products, ordering it and finally get it delivered.

In the same time authors defined the offline features of internet shopping mall as the product and delivery service quality. They believe that the product quality along with the delivery quality is likely to encourage the user to revisit the mall website. The authors used TAM model as a research model. They designed questionnaire using a seven-point Likert scale to collect data from 932 responds. They selected six internet shopping malls which were listed as top ten in revenue and awareness during 2002 in Korea.

After analyzed the questionnaires, the results show that TAM yields highly consistent result on acceptance behavior of the user towards internet shopping malls.

Results presented the importance of both online and offline quality and both are playing a vital role for user acceptance on internet shopping mall. That will highlight the importance of the website design to keep users revisiting the mall website along with the final stage of the interact user with the website that is offline, the product and delivery quality.

To conclude this study, we can come up with the fact from this study that the online quality features effect the ease of use in the other hand the offline quality features effects the useful of use. That can be summarized by saying to get the user acceptance of the website, both online and offline quality should be considered to get the ease of use and useful of use of the website will lead to user acceptance.

**Zviran,** et al.[3] studied the impact of user-based design and web site usability on user satisfaction across four type of commercial website: online shopping [3]

- 1. Customer self-service.
- 2. Trading.
- 3. Publish/subscribe.

Their purpose was to investigate the major factors that impact the satisfaction from website; they also addressed the difference among the different types of websites.

The authors investigated the relationship among four constructs; user-satisfaction, usability and user-based design and website type.

User-satisfaction has five measure factors; they are as following:

- 1. End-user trust in the system.
- 2. Presenting accurate information.
- 3. Using a clear presentation format.
- 4. Ensuring timeliness of information.
- 5. Perceived ease of use.

In the other hand user-satisfaction in the electronic environment as electronic commerce has led to an increase effort.

Usability is the extent to which intended users of a product achieve specified goals in an effective, efficient and satisfactory manner. To measure usability is then based on evaluating the experience of the user interacting with the system which involves a focus on the interface.

The paper hypothesis are built on the websites and their relationship with perceived user satisfaction, user based design, usability and perceived user satisfaction, user based design capabilities and perceived user satisfaction.

The findings of this paper indicated that the websites have different, hidden, and subjective factors that stem from the process of user and system interaction and affect overall user satisfaction and that they can serve the development and maintenance phase of website design.

Castafieda, et al.[4] studying the moderating effects of user experience on websites. Many

researchers studied the moderating effects of user experience, on the other hand this study extended its work in three directions. First one testing TAM moderated by experience in a free-content site, second they considered both inexperienced and experienced users. Finally they considered the moderating effect of website experience.

Motivation has been considered in this study. The discussion was arguing about the perceived usefulness and ease of use and their relationship with motivation. Usefulness is more related to extrinsic motivation while ease of use is more linked to intrinsic motivation. In this case the e-commerce websites would be more linked to usefulness but free-content website would be more linked with ease of use.

Also in this study, the user's experience of the websites and internet has been considered as the moderating effect of experience and levels of user experience of internet. Two types of user activities within the websites are Surfing or buying. There are distinguishing between these two categories when talking about user experience.

The study model was the web acceptance model(WAM) to test the predicting the ways in which individuals decide to revisit a website. The paper hypotheses are built on the moderating effect the importance of ease of use and perceived usefulness as determinants of the future intention to use a website. Also the user experience has been added to their hypotheses.

Data was collected by a web survey located on portal. The results showed:

Perceived usefulness is the main determinant of intention to continue visiting website,

without considering the level of experience of the user, its direct influence being greater in the frequent users of the internet. In users with high experience of the internet or a website, the influence of perceived usefulness on the process of forming the attitude to the website is substantially greater than in users with low experience. In users with high experience of the internet or a website, the influence of perceived ease of use on the attitude towards the websites is substantially smaller than in user with low experience.

They discussed the reason of these results behind the fact that different individuals evaluate a website from different perspectives.

### Conclusion

When quality website design is achieved then we can obtain user acceptance and make good interact between the user and the website. This can lead to website success along with the success of the services and products.

From these four papers we can arrive to some critical points when dealing with website design or websites interface; they are

Quality of system, (2) Quality of information, (3) Quality of services, (4) Quality of website design(online & offline), (5) Quality of interface (ease of use with useful of use), (6) User experience and (7) User motivation.

All these points should be considered when designing website. First of all we should believe that the website has two phases or stages online and offline, each of them affect the others. Second, the user experience and motivation can be considered asimportant factors when design the website interface.

The website aim is other important factor where there are some websites deal with important user activities (buying, seeking services), other dealing with searching general information or fun activities.

To summaries that, we should say that when starting design website interface we should ask some questions:-

- (1) What is this website aim to offer?
- (2) Who is going to use it (the user's type)?
- (3) How is their experience level?
- (4) Why the user will use it? (Is this website optional to use or the user must use it to get the service?)
- (5) Is there offline stage after online stage?
- (6) What is the quality of the service offline?

Finally the websites will be the most important windows to the world business activities. That means their design should be the top vital factor in the success of the world activities.

#### References

[1]Ahn, T., Ryu, S. and Han, I "The impact of web quality and playfulness on user acceptance of online retailing" Information & Management 44 (2007) 263-275.

[2]Ahn, T., Ryu, S., Han, I. "The impact of the online and offline features on the user acceptance of Internet shopping mall" Electronic Commerce Research and Application 3 (2004) 405-420.

[3]Zviran, M., Glezer, C. and Avi, I. "User Satisfaction from Commercial Websites: The effect of design and use" Information & Management 43 (2006) 157-178.
[4] Castafieda, J. "Web Acceptance Model(WAM): Moderating effects of user experience" Information & Management 44 (2007) 384-396.