

# A Review on User Perception of Desktop and Mobile Service Website Using Webqual and User Experience Approach

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**Abstract** - *As the online media dissemination, website has the advantages that it can be accessed freely, without limits, wherever, whoever, and whenever. However, the advantages of the website is sometimes not in line with its simplicity. So it becomes important that the organization can make an assessment of the quality of the website that they are used, whether its website has fulfilled what is perceived by the user. This paper reviews studies user perception of desktop and mobile service website used qualitative methods adapted to WebQual and User Experience approach. The expected outcome of this research is knowing the user's perception of the services and information available on the website along with the possibility of desktop and mobile gap arising from differences in the two services.*

**Index Terms** – *Perception, desktop website, mobile website, Webqual, User Experience.*

## INTRODUCTION

Since it was first introduced in the mid-90s, electronic services have spread across the world in various forms. The growth of the web has made the need for measurements related to quality, such as usability and accessibility of a web application. As a media, website has the advantages to be accessed freely, without limits, wherever, whoever and whenever. But lately, that advantages are no longer in line with the convenience. (Mich et al, 2003)

Some research on the quality of website service had conducted by Parasuraman, et al, (1985, 1988, 1991, 1994), and Zeithaml, et al, (1988, 1996, 2000). Three main models of service quality that developed in this study are Servqual, ServPerf, and e-Servqual (ESQ). A measurement model to assess the other quality component by DeLone and McLean. (DeLone and McLean, 2003). Furthermore, research on service quality began to lead website. The most widely accepted and validated model is WebQual (Barnes and Vidgen, 2000; Loiacono, Watson, and Goodhue 2002). Most of the research object is a website service, namely: e-commerce, e-banking, education and health, firm websites and mobile portals. This provides a good opportunity to further research on

the service quality of mobile portal website as it occupies the lowest position. (Farida, et al, 2014).

Some of these studies trigger a research that aims to assess user perceptions that arise from user experience to desktop and mobile website. Users are the key of the success or failure of the program. When the user considers the website hamper their work, so they will not use the website. From here, it can be seen how important for us to know the desires and opinions of the users. Therefore, this study was conducted as a qualitative of website research study to explore and examine more deeply about the analysis of user perception toward services desktop and mobile website.

Based on the background, the question to be answered through this research is "How is the user's perception of the desktop and mobile website services?". For more details, formulation of problem in this research are:

1. Is the user's perception of desktop and mobile website services can be assessed from the *WebQual* dimensions and *User Experience* ?
2. Is there an access gap between the desktop and mobile website ?
3. Is the user perception's analysis on the desktop and mobile website can contribute to the previous WebQual models ?

## METHODOLOGY

This study uses a qualitative approach with systems information perspective. Qualitative approach is a process of research and understanding based on a methodology which investigates a social phenomenon and human problems. This qualitative research design refers to the theoretical reference written by John W. Creswell (2014). The problems are identified by using a case study approach aimed to analyze, understand, and explore the quality of the website in desktop and mobile.

Informants were selected based on purposive sampling techniques, meaning that the sample is not intended to represent the population, they represent information. In quantitative research, the samples should be representative on the population and there must also a clear formula of sampling. Then the informants may be limited to essential information that is considered to represent the overall information. (Creswell, 2014). From those qualifications, the selected informants are the website news users

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employed as editor of newspaper "X" who have large interest to get the news and having adequate intensity on visiting website.

TABLE 1. THE DEMOGRAPHICS OF RESEARCH INFORMANTS

Informants = 8	
Age	> 20 years old = 7 < 20 years old = 1
Sex	M = 6      F = 2
Education	S1 = 6      S2 = 2
Length of Employment	> 5 years = 6 ; < 5 years = 2

## RESULTS AND DISCUSSION

All interviews and discussions recorded into an audio recorder and notes. The collected answers then be summarized as a further coding. After doing transcription and organizing the data, the researchers start to do coding. Perception analysis in this study uses qualitative data with the following stages: (1) statements of informants; (2) meaningful statement data; (3) identification of the category; (4) a description of the category; (5) grouping of major categories; (6) minor proposition; (7) major proposition.

Identification and description of the categories described the research categories namely: usability, information quality, service interaction from WebQual instruments 4.0 (Barnes and Vidgen, 2002). There are also categories of desktop services (overall), mobile services (overall), and recommendation (user expectations) that are part of the service quality (Parasuraman, 1985).

Results of analysis can explain the relationship the user experience toward WebQual dimensions which is main categories namely : usability , information quality, and service interaction and it is used to evaluate desktop and mobile website services. It answers the previous research (Barnes and Vidgen, 2002; Cheng and Zheng, 2013) to explore the service quality of the website from particular aspect that has been done. This study aiming the website evaluation from the access device via desktop and mobile. It also address the challenges of previous research (Sue Conger, 2012): the need for evaluation and measurement of service quality are in accordance with the development of the website, namely : media access, the website services and so forth.

## CONCLUSION

Based on the formulation of the problem, the discussion and the results of the study, then the conclusions are as follows:

1. User perception of desktop and mobile website services can be assessed by following WebQual dimensions. Assessment on dimensions of usability including the ease of website operation, learning the website, finding the address, the attractiveness, organized layout information, design and search features. Assessment on dimensions of the information quality covers accuracy, reliability, up to

date, relevance, comprehension of information, information details. Assessment on dimensions of service interaction includes reputation, data security, attractiveness, the contribution of information, the ease to feed back and overall service.

2. Users experience that influence component in each dimension of service quality, namely usability, information quality and service interaction. Results of the user experience is used to answer questions about those dimensions.
3. There are differences lead to disparities, although not so significant between desktop and mobile access websites, there are difference in services are limitations menu option, limited number of links, the difference in layout, thus affecting user interests.
4. Model analysis of user perceptions on desktop and mobile website services can contribute to the models of the previous WebQual :
  - a. The discovery of "Trust" as a new part of the dimensions of information quality (external factors: brand image, previous experience, owner of brand communications, media and word of mouth) appeared to affect user perceptions.
  - b. At WebQual models, the 6th of usability dimensions (layout tools as appropriate) have similarities with the 7th of information quality dimensions (the information is presented in a suitable format layout). This causes the answer to both dimensions is almost indistinguishable.
  - c. Model analysis of the perception of this website service can complement the WebQual models by providing consideration services in the form of access devices that used (desktop and mobile)

## FUTURE RESEARCH

Here is a suggestion proposal related to this research and its future development are the object of research is a newspaper company. It is based on their priority interest that they relate directly to the website. Future studies can take gender, education level, location into consideration. Researchers can add focus on the manager of the website for the balance between the user and manager.

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