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Usability Evaluation of Instagram for Elderly Arab Users

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Abstract

Social networks are on a continuous developing and have become widely used throughout the world wide, which imperative the equal access by all users. Usability is a main quality requirement that ensures software success. Elderly users had difficulties in their usage as literature reported, but little empirical data on this topic does exist. Seeking universal usability is a main concern for professional networking; therefore the aim of this paper is to evaluate empirically Instagram Interface by elderly Arab. The finding of the study highlighted a set of computer usability challenges that need to be taken into account by designers and developers in order to improve the usability of the Instagram Desktop Interface for elderly Arab.

Key Words : *Social Networks, Usability Evaluation, Instagram, Morae.*

Introduction

Social networks are on a continuous developing and have turn out to be generally utilized all through the around the world. From sites got to on PCs to applications got to on cell phones, informal communities have pulled in a large number of clients in different classifications and on various stages. Furthermore, social network has proven its huge impact in providing social support for variant categories of life events and for different society groups [1]. In such cases social network had been positively correlated with social support in several medical cases such as survival after breast cancer diagnoses [2], post stroke [3] and for the elderly in prices as stated in [4] and [5]. Along these lines, the enhancing of this application ease of use is of foremost significance, particularly for elderly individuals that experience the ill effects of age-related issues. Ease of use is an essential plan highlight that adds to the ubiquity of an application [6] [7]. As indicated by ISO 9241, Part 11, ease of use is "The degree to which an item can be utilized by determined clients to accomplish determined objectives with viability, effectiveness, and fulfillment in a predefined setting of utilization." [8].

Presently, Instagram is one of the prevalent social network considering it is been used by millions of people of all ages for divers purposes around the world [13].

The aim of this paper is to evaluate the usability of Instagram Desktop interface

focusing on the three attributes, which are effectiveness, efficiency and user satisfaction using PC. The evaluation method used the usability testing tool Morae [14] to gather data from the perspective of users and the SUS (System Usability Scale) questioner that is provided by the Morae will be used to capture the participant's subjective views of satisfaction. The SUS was developed by Brooky in 1996 [9] and from since till current time it had been used in various research papers such as [10], [11] and [12]. This empirical study focuses on elderly Arab users as it highlights a set of recommendations that have the potential to improve the usability of Instagram desktop interface on the website for them.

This paper is organized as follows: literate review II and in section III is the experiment. After that, section IV presents the evaluation results and discussion, then the conclusion and recommendations are presented in section V.

LITERATURE REVIEW

Elderly users have different cognitive and physical capability than the younger crowed [15]. Research with empirical data on evaluation the various applications of the social media from this user perspective is limited. Mentioning a few such as Brian Wentz and Jonathan Lazar [15] in 2011 did a usability evaluation for Facebook on two different platforms. One was Facebook Desktop interface and the other was Mobile application with 15 blind people as participant in this study. The comparative result of their study concluded that the usability of Facebook on the Mobile is higher than on the Desktop. In 2014 K. C. Chinthakayala et al, did a comparative study on three famous social network website which are Facebook, Twitter and MySpace based on four criteria which are navigation, interactivity, source credibility and intelligence and proposed a ground and guidelines as for social network evaluation for evaluators [18]. Arfaa J. and Wang Y. in 2015 had proposed a redesign a social network interface design so the elderly can enjoy theses websites benefits which they tests its usability on 22 elderly and gain a positive reaction on the sites that adopted their interface [19]. In 2011 B. Wentz and J. Lazar led that Facebook versatile interface is more usable than Facebook Desktop interface; nonetheless, a few highlights are truant in the portable interface consequently it isn't lined up with the Desktop interface. The ramifications of this examination demonstrates to the subject of whether there is regularly an ease of use and usefulness contrast between the two interfaces for an application when one interface is recommended to be the "available" form.

EXPERIMENT

3.1 Participants:

The participants consist of two men who are both 50 years old and a one woman who is 47 years old. Both of the men are considered experts with using the computer, but the woman is a novice.

3.2 Tasks Lists and Data Collection Instrument:

Morae the usability engineering tool was chosen to conduct the evaluation from the user's viewpoint, which is representative of how the participants interact with the application to perform the following four tasks respectively: sign in, comment, Like and Sign out. Effectiveness will be determined by the accuracy of the participants' task accomplished successfully and the completion time that the participants spent on the tasks will be used to measure efficiency. After the participants finish performing the requested tasks they were requested to answer the SUS questionnaire to capture their subjective satisfaction. The evaluation was done using Instagram Desktop

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Interface version 5.9.5 on operating system Windows 7.

RESULT AND DISCUSSION

Direct observation of the participants reveled that two of the participant completed all their tasks successfully, but the novice participant only completed the first task (Sign in) and fail to complete the remaining tasks as shown in table 1. From the observation this user took 0.44min for task 2 yet not completed because the like button was not clear for him and took 0.52 and 0.27min trying to complete task 3 and 4 respectively. The time mean for each task by the users is illustrated in figure 1 and presented with the mean time of each task in table 2.

Table 1.Tasks Completion Ratio

	User 1	User 2	User 3	Mean
Sign in	100	100	100	100
Comment	100	100	0	66.66
Like	100	100	0	66.66
Sign out	100	100	0	66.66

Figure 1.Tasks Completion Time by Each User

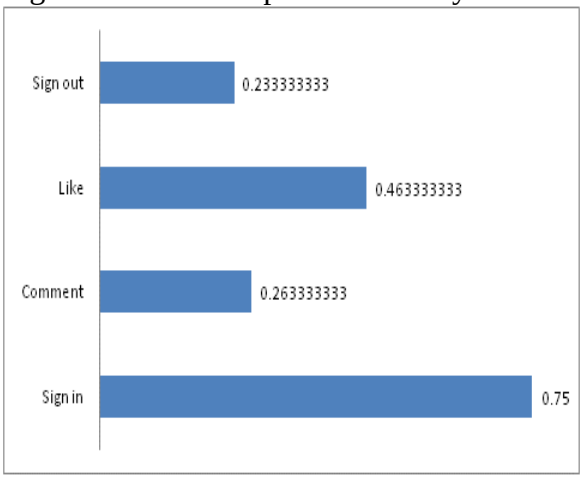

Table 2.Tasks Completion Time

	User 1	User 2	User 3	Mean
Sign in	0.66	0.45	1.14	0.75
Comment	0.17	0.18	0.44	0.263
Like	0.51	0.36	0.52	0.463
Sign out	0.24	0.19	0.27	0.233

Table 3 below demonstrates the result of the SUS scale which resulted in a score that is equal to 52.56 which is less than 68 that represent the average score in this scale indicating the existing of usability problems.

Table 3.System Usability Scale (SUS)

User	SUS Score
1	47.7
2	77.5
3	32.5
Average	52.5666667

The outcomes assembled in the analysis demonstrate that the elderly clients had marginally more trouble in playing out a portion of the given undertakings. As saw amid the test and as revealed in the input, the members confronted impediments regarding ease of use of cell phone.

1. Conclusion and Recommendation

The usage of social network such as Instagram is a fundamental requirement in professional networking. In this paper an evaluation for Instagram Desktop interface was performed and, identify some usability challenges by elderly Arab, in lighting user satisfaction which is a main factor of usability

that guide every developing phase. Suggestions that emerge from the study are listed below:

1. Provide a small description (use hint) of how to use the icons efficiently or help center.
2. The like button must be defined for example write (like) keyword below the button.
3. Enable users to change icons and font size as most elderly face vision impairment.
4. Enable user to choose interface preference from layout and color as some users consider bright colors annoying.

Further investigation should be conducted to assists Instagram and various social network applications to achieve and promote their universal accessibility and usability.

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