IDO: USER EVALUATION OF ONLINE FUNDRAISING MOBILE APPLICATION

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Abstract:

Many aid organizations have historically relied on conventional methods of fundraising. The technology evaluation has enabled online funding which recently has gained popularity especially during the COVID-19 pandemic. This article's major discussion will focus on the evaluation of iDo, a mobile app for online fundraising. The evaluation processes were thoroughly covered, and the findings demonstrated that this application is usable and effective. This finding indicates that donations made via the internet are accepted, and the features used in this mobile application can serve as a model for other similar applications.

Keywords:

Mobile Application, Online Fundraising, Evaluation, Online Crowdfunding, Online Donation

Introduction

The Internet has revolutionized the ways in which organizations can fundraise and connect with their supporters – yet many still do not have a digital strategy, and it is increasingly difficult to reach potential donors when countless other organizations have a more targeted online presence. Online platforms have now become an integrated part of the fundraising toolkit, especially because online giving offers a very effective way to raise money quickly (Wright et al., 2022).

Online fundraising or crowdfunding is one of the financial sharing services by asking several people to donate some money using an online platform. Therefore, it can attract the attention of many people so that it can be done together (Artha et al., 2020). This online fundraising involves a process of seeking and collecting voluntary financial contributions from various parties, such as individuals, businesses, foundations, charities, or government institutions. Through online platforms, crowdfunding has made tremendous progress as a dynamic way to raise funds for professional and private projects in recent years (Konhäusner et al., 2021). Crowdfunding has achieved remarkable developmental steps; the growth of the online crowdfunding volume has become one of the fastest types of global financial innovation (Rau, 2020). This activity enables contributors to make rapid and safe financial contributions while also being able to collect money from all over the world (Sasmito & Fauzan, 2020). But the inability of assistance organizations to raise money is always a challenge. Therefore, several aspects of the online fundraising were also investigated such as stated by Hou et al. (2021) and Kim and Kim (2021) regarding trust in the online contribution platform, peer pressure, and enjoyment of helping others. These factors are all positively associated with the intention to donate online.

When COVID-19 occurs, many activities are conducted online, including donations (Kim and Kim, 2021). Although online fundraising is increasingly accepted, donors are exposed to the danger of being defrauded (Elmer and Ward-Kimola, 2022) in some cases. Therefore, the donors may greatly reduce their chances of getting scammed by donating through a verified online fundraising mobile application. Hence, we have developed a mobile-based online fundraising application to serve the purpose. iDo (I-Donate) is a mobile-based application based on the concept of online virtual fundraising for collecting funds for a selected Aid Institution.

This paper reports the evaluation that has been conducted for the iDo application. This work is crucial in order to find out the effectiveness of this application through the usability evaluation. Then the next section is the review of some related articles regarding fundraising issues, followed by the evaluation procedures before it ends with results and discussion section.

Donation Requirement of Mobile Fundraising Application

A list of requirements is essential to directing the design and development process of any application. This requirement stems from multiple data collection processes (primary or secondary), which have typically been analysed throughout the analytical phases. So, in this section, we looked at some papers that dealt with this subject. The chosen articles help us grasp

the issues, the development process, and the requirements to be taken into account when creating a fundraising mobile application.

In the article by Aklani and Lim (2022), the discussion of the design and development of a donation mobile application using the Scrum framework mentions a feature to create a user-friendly donation mobile application. These requirements include the login and register functions; home; community detail; user profile menu; address list; as well as the donation form and donation history. The UML and use case diagrams are created before the beginning of the application development. Furthermore, they stated that their limitation is the lack of an algorithm to generate a list of community members near a user's location or suggestion, as well as a website admin panel to manage incoming donations via this application.

Additionally, work by Setiabudi et al. (2020) has indicated the expected requirement for a mobile application for donors in natural disasters. The quality of the information is important for an online fundraising mobile application. Using the questionnaire approach, they discovered that the standard of quality information must be reliable and up to date in order to introduce the organization. Furthermore, only the authorised administrator has the ability to modify the information in order to maintain its quality. The other key to importance is ease of access, especially the transaction process, as well as understandable symbols and language style. These listed aspects are related to the intention of the donors.

Pataropura (2022), on the other hand, created a mobile-hybrid-based online crowdfunding platform information system to solve the problem of donor data loss using the waterfall model, which is the most similar to this work. Before creating the system, he had identified problems other than the main ones using the framework model. Next, a case diagram and class diagram are produced to clarify the framework of the system. He has concluded that the online crowdfunding platform information system must be online, providing a data storage feature and implementing electronic data, which is faster and better able to provide accurate data.

From the publications that have been studied, a study topic regarding fundraising or donation mobile applications has been identified and is able to provide some context for this issue. The articles however, focus mostly on the initial phases of application development. Although this is crucial, particularly for establishing user requirements, the user evaluation component that came later has received less attention.

iDo: Fun Rising Mobile Based Application

iDo stands for I-Donate. This mobile-based application provides a trustable online fundraising platform to aid institutions, especially orphanages and old folks' homes, so they could have opportunities to gain financial resources from the public. This application facilitates an online fundraising effort compared to traditional fundraising methods. This can ensure an increased chance for those aided institutions to have adequate funds for the continuity of their operations. The aid organizations that need help in obtaining the necessary groceries and funds are able to register an account in iDo and the account will be verified. After the account and details have been verified, the donors will be able to donate due to their needs more easily.

iDo application has been developed using an iterative design of User Centred Design (UCD) approach. Accoring to Norman and Drapper (1989), in UCD approach the design was done iteratively, which allows designers to focus on the users and their needs in each phase of the

design process. In the evaluation phases, it has went through the formative evaluation phases. Now, this application needs to go through the summative evaluation procedure (explained in the next section). Figure 1 shows the interfaces for i-Do application.
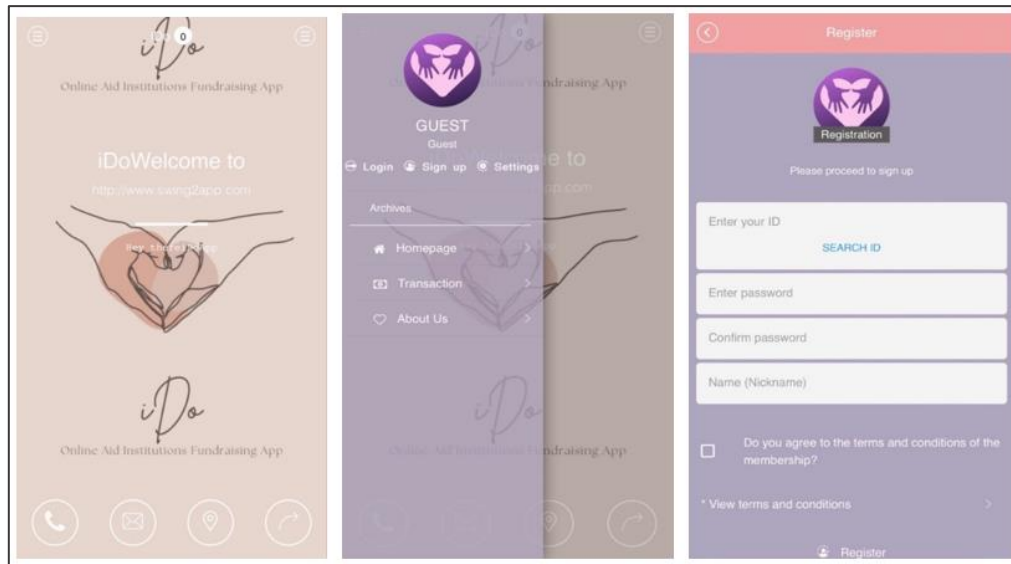

Figure 1: i-Do Mobile Fundraising Mobile Application

Summative Evaluation Procedure

While formative evaluation is carried out to improve designs (Saidin, 2018), summative evaluations on the other hand, aim to comprehend the usability and user experience of an interactive application. The summative evaluation of the application design process has been completed in order to determine how well the product performs based on the user experience. Before any product is made available to the general public, this procedure is crucial.

Evaluation Planning

Evaluation is conducted after the application is complete. A survey that is conducted using google form platform has been created. The questionnaire has been developed (refer to the next part) and data has been collected after that. Next, the data were analysed and interpreted according to the result received.

Instrument Development

The evaluation used the survey method. Questionnaire is developed for the purpose of collecting the data. The questionnaire was adapted from the previous work which included demographic part, design, content, and functionality and navigation dimension. The pilot testing is then conducted to test the feasibility and performance of the questionnaire using 10 participants. This test is conducted to ensure that the participant is able to answer the question and eliminate any error that might risk the data validity.

Participants

The target participants of this work are adults whose age exceeds 18 years old. The questionnaire is distributed through online platforms such as WhatsApp, Telegram and Facebook.

Analysis

The data that is collected from the survey is analysed and then transformed into diagrams such as pie charts and bar graphs for better representation and interpretation.

Results & Findings

There was total of 20 respondents who answered the survey as convenient sampling. Their results were represented according to the dimension investigated of the respondent demographic, application design, application content, application function and application navigation.

Table 1. Demographic Profile of Respondents

Gender	Female	60%
	Male	40%
Age	18 – 27	80%
	28 – 37	20%
	38 – 47	-
	48 and above	-
Race	Female	60%
	Chinese	80%
	Malay	20%
	Indian	-
	Other	-

Table 1 shows the demographic of the respondents. This user evaluation consists of 12 female respondents (60%) and 8 male respondents (40%). There were 16 respondents (80%) between the ages of 18 to 27 (the survey form was distributed among student of Universiti Utara Malaysia). It was found that 16 respondents (80%) were Chinese and 4 respondents were Malay (20%).

Table 2 shows the findings of the user evaluation on application design dimension. There were 90% agree with the statement of the application screen design is good, whereas 10% stands as neutral. The second highest score of application design among the respondents are the app logo is simple and memorable and the rating of interface design. It shows that out of 20 respondents, there were 85% respondents agree with the former statement (Agree 45%, Strongly Agree 40%) whereas 85% (Agree 40%, Strongly Agree 45%) support the latter statement. After that, the statement of "The fonts and text used are suitable" was agreed by 80% of respondents (Agree 50% Strongly Agree 30%).

Table 2. User Evaluation on Application Design.

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree(%)	Strongly Agree (%)
The application screen design is good.	0	0	10	60	30
The app logo is simple and memorable.	0	0	15	45	40
The fonts and text used	0	0	20	50	30

are suitable.					
The colours applied are attractive.	0	5	15	35	45

The table 3 shows the finding of user evaluation on application content. All respondents (100%) agree with the statement of "The language used in this application is appropriate". There were 18 respondents (Agree 50%, Strongly Agree 40%) who agree with the statement "The content arrangement is easy to read" while 1 respondent (5%) disagree with it. Besides, 85% of the respondents agree that all the information provided in the application is appropriate.

Table 3. User Evaluation on Application Content

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
The language used in this application is appropriate.	0	0	0	50	50
The application is easy to use.	0	0	25	30	45
All details and descriptions can be understood well.	0	0	20	45	35
All the information provided is appropriate.	0	0	15	55	30
The content arrangement is easy to read.	0	5	5	50	40

Table 4 shows the result of the questionnaire regarding the function of the apps. For the first question, majority of the respondents strongly agreed (8, 40%) and agreed (7, 35%) that the loading speed of this app is fast and responsive.however5 respondents were neutral for this statement. Then the next question is to determine the compatibility of the apps where almost all respondents (14, 70%) strongly agreed that the apps is available on their mobile operating system. 5 respondents (25%) were agreed, and 1 respondent (5%) was neutral for this statement. For the security aspect,9 respondents (45%) were agreed, and 7 respondents (35%) were strongly agreed that the mobile app is secure in terms of privacy and transaction. 4 respondents (20%) were not sureabout the security of the apps, therefore neutral were selected as their responses. Furthermore, 10 respondents (50%) agreed, and 7 respondents (35%) strongly agree that thesearch button is suitable and allows them to find information easily. 3 respondents stated neutral for this statement.

Table 4. User Evaluation on Application Functionality.

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
The loading speed of this app is fast.	0	0	25	35	40
This app is available on my mobile operating system (iOS, Android, and Windows).	0	0	5	25	70
This mobile app is secure in terms of privacy and transaction.	0	0	20	45	35
The search button is suitable and allows to find information easily.	0	0	15	50	35

Whereas for table 5 shows the feedback from the respondents regarding the navigation of the apps. The first question was about the clarity of the navigation of the app. Most respondents (11, 55%) agreed that the application is clear and direct, and 8 respondents (40%) strongly agree with the statement. There were only 1 respondent (5%) disagree that the application has clear and direct navigation. Regarding the menu button, most of the respondents (8, 40%) were strongly agreed and 7 respondents agreed with the statement that the menu button allows access to more valuable information which means the buttons in the application is responsive and functional. 5 respondents (25%) were not sure that the menu button can access to valuable information, therefore they chose neutral for this statement. The respond for the third question is more diverse. There were 8 respondents (40%) agreed and 7 respondents (35%) strongly agreed that the tab bar allows direct access and presents feedback on the icon it's related to. 2 respondents (10%) were disagreed and 1 respondent strongly disagrees with the statement. There were 2 respondents chose to be in neutral position for this statement. The last question is regarding the confusion while using the apps. Most of the respondents (11, 55%) were agreed that the apps is simple and did not have any confusion when using the app while 6 respondents (30%) were agree with this statement. However, there were 3 respondents (15%) chose neutral as their answer.

Table 5. User Evaluation on Application Navigation.

	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
The navigation of this app is clear and direct.	0	5	0	55	40
The menu button allows access to more valuable information.	0	0	25	35	40
The tab bar allows direct access and	5	10	10	40	35

presents feedback on the icon it's related to.					
I don't feel confused when using this app.	0	0	15	55	30

Conclusion and Limitation

In conclusion, it was discovered that the majority of respondents gave highly positive feedback towards iDo. Although we are fully aware that the number of respondents to this evaluation procedure was relatively small, we decided to make this the first cycle of summative evaluation phases. Generally, respondents gave positive feedback regarding the four components of design, content, functionality, and navigation asked in the questionnaire. However, a number of issues were discovered during the We took seriously all the comments, including those from a small percentage of users who thought that the tab bar's malfunction misled them during the work. As a result, a quick redesign will take place in order to improve the functionality of the iDo application. Without a doubt, using a mobile app for online fundraising like iDo enhances the usability and satisfaction of online donations. In the future, we intend to make the iDo online fundraising mobile application available to the general public and conduct another summative evaluation to reflect the country's diverse respondent population. The data gathered would offer more reliable and relevant feedback for future app improvements.

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