

Article 6

Evaluating the Usability of Emergency Fund Target Web System among Young Adults

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Abstract

Young adults need to know the importance of having a good financial management to prevent the engagement in extensive debt. One of the ways is by having saving for emergency fund. Emergency fund is vital as it can be used during any unwanted events such as job loss, health emergency and other unexpected expenses. Most existing web systems for personal financial management are more towards budgeting and tracking expenditures. Thus, to encourage people especially young adults to build emergency fund, a web system called Emergency Fund Target (EFT) was developed. This paper investigates the ease-of-use and benefits of EFT web system among young adults. Evaluation for this web system using usability testing involved 15 young adults who already being employed. From the findings, it is discovered that EFT system is easy to use and enables users to learn about emergency fund in order to use the system to keep track their saving for emergency fund. For the future works of EFT, the web system will enhance to advice users who has completed the emergency fund saving on moving into investment for short, medium and long term financial goals.

Keywords: *Financial Management, Emergency Fund, Usability Testing*

Introduction

Young adults are people from 18 to 35 years of age (Arnett, 2000). Upon starting working, they enter the phase from financial dependence to financial independence (Soyeon et. al., 2009) as they should no longer rely on their parents. Those who graduated from colleges and universities face a bigger challenge as they need to manage financial independently not only for accommodation and transportation but also burdened by education loan. If financial management is not done wisely, it could lead to overspending, deficit and eventually extensive debt. Hilgert, Hogarth and Beverly (2003) stated that the task of managing financial independently is more complex as it involves money management, credit management, saving and investing management.

Generally, a good money management involves controllable credit management to achieve saving for future needs. One of the important savings that young adults must have is emergency fund. Using savings for establishing emergency fund should be done before investing for other short, medium and long term financial goals (Begin Young, 2016). The term emergency fund refers to the fund that can be used to respond to emergent events and financial emergency such as loss of job, reduction of income, health emergency, automobile repair, and house repair (Money Management International, 2016).

Currently, there are many web systems for personal financial management. Nonetheless, these web systems emphasize on financial budgeting and expenditures tracking but lack on establishing emergency fund. Accordingly, a web system called Emergency Fund Target (EFT)

was developed to inform young adults about emergency fund and to enable them to use the system for emergency fund saving. Usability testing was conducted to evaluate the ease-of-use and benefits of EFT web system among young adults. Nielsen Usability Model (Nielsen, 2012) was adapted in the usability testing.

Research Model

Figure 1 shows the research model that has been applied in the development of EFT web system.

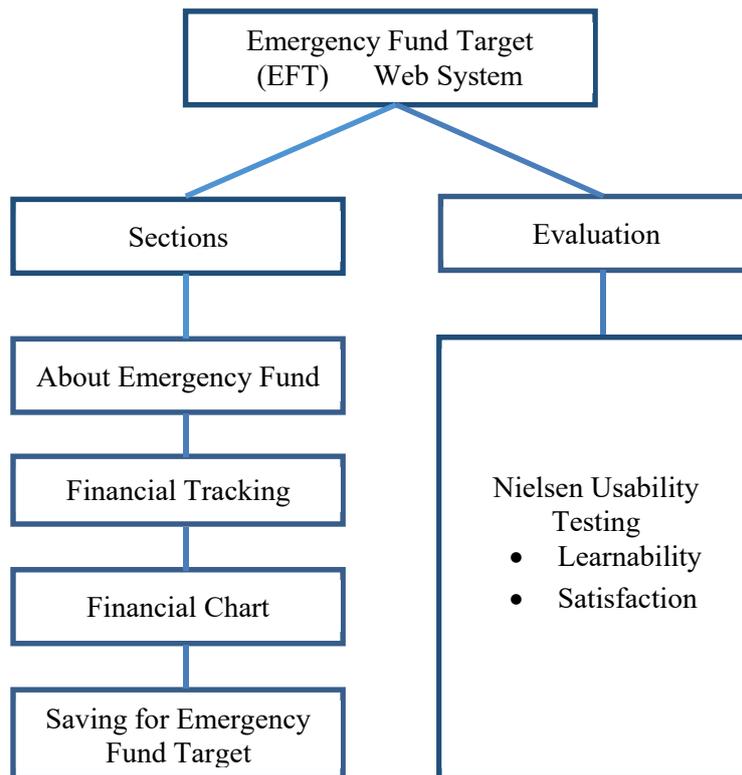


Figure 1: Research Model for the Development of EFT Web System.

Methodology

The usability testing involved 15 young adults aged between 24 to 30 years old. The young adults are users that have at least a bachelor degree and come from various education disciplines such as Computer Science, Chemistry, Physics, Accounting and Quantity Surveyor.

The type of usability method used is questionnaire. The questionnaire questions were classified according to usability quality components that is adapted from Nielsen Usability Model as summarized in Table 1.

Table 1: Quality Components of Usability (Adapted from Nielsen, 2012)

Classification	Explanation
Learnability	<i>Refer to the ease-of-use of the users to accomplish the tasks the first time they use the system.</i>

Satisfaction	Refer to pleasant experience of the users in using the system.
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Questionnaire regarding learnability component evaluate the ease-of-use of the user to effectively accomplish the tasks of the system from learning ‘About Emergency Fund’ section, to key-in income and expenses in ‘Financial Tracking’ section, to view the ‘Financial Chart’ section that displays expenditures breakdown and to monitor ‘Saving for Emergency Fund Target’ section. Questions on satisfaction component evaluate the user pleasant experience in using the EFT web system.

Results and Findings

Respondents answered 12 questions to evaluate EFT web system learnability and users’ satisfaction. The range response for each questionnaire question is measured between 1 (*Strongly Disagree*), 2 (*Somewhat Disagree*), 3 (*Neutral*), 4 (*Somewhat Agree*) and 5 (*Strongly Agree*) as shown in Table 2.

Table 2: Measurement Criteria

Rank	Value
Strongly Agree	5
Somewhat Agree	4
Neutral	3
Somewhat Disagree	2
Strongly Disagree	1

The result of the questionnaire for learnability and satisfaction is as tabulated in Table 3.

Table 3: Result of EFT Web System Learnability & Satisfaction

No.	Learnability	Mean Score
1	I understand the sentences, words, buttons and symbols that are used in EFT system.	4.1
2	I find that the pages (About Emergency Fund, Financial Tracking, Financial Chart and Saving for Emergency Fund Target) are easy to understand.	4.0
3	I find that the pages in EFT system (About Emergency Fund, Financial Tracking, Financial Chart and Saving for Emergency Fund Target) are easy to navigate step-by-step.	4.3
4	I understand to fill the form in the ‘Financial Tracking’ section.	4.1
5	I am able to complete all the tasks in the EFT web system towards understanding about emergency fund savings.	4.1
6	Overall, I find that this EFT web system is easy to use.	3.7
	Satisfaction	
7	I am satisfied with all the pages (About Emergency Fund, Financial Tracking, Financial Chart and Savings for Emergency Fund) in helping to understand about emergency fund saving.	4.1
8	The EFT system makes me easy to learn about savings for emergency fund.	3.9
9	With EFT system, I understand how emergency fund is calculated.	3.8
10	I find that the EFT system enables me to self-monitor my savings.	3.9

11	I find that the EFT system encourages me to keep engage in savings for emergency fund.	4.1
12	I will use this application to keep track on my emergency fund saving.	3.9

Usability testing on learnability refers to the ability of users to easily learn to use the EFT system to accomplish tasks. Testing on learnability quality component is important to evaluate whether users are able to understand the system. Result of EFT web system learnability shows that from question number 1 to 5, majority of the users choose *moderately agree* and *strongly agree*. In spite of that, one user answered *moderately disagree* and four users choose *neutral* making question 6 result slightly below mean score of 4.

The next usability testing is on users' satisfaction. This testing evaluates the pleasant experience of users upon using the EFT system. Evaluation on users' satisfaction is crucial to enable young adults to know about emergency fund thus, empower them to use the system to save money for emergency fund. The data collected shows that for question number 7 and 11, majority of the users choose *moderately agree* and *strongly agree*. For question number 8, 9, 10 and 12, the result is slightly below mean score of 4 because one user answered *moderately disagree* for the questions with a few users choose *neutral*.

From the users' feedback, users who answered *moderately disagree* or *neutral* neither has knowledge about financial management nor tracks their monthly expenses making them less understand the system. Nevertheless, the majority of the users found that it is easy to learn to use the EFT system and most of the users are satisfied with the benefits of the system. Although for some questions the score is below mean score of 4, the score is not too low. Out of 15 users, 10 users agree that the EFT system is easy to use. In addition to that, 11 users agree that they will use EFT system to keep track of emergency fund saving.

Conclusion and Future Works

EFT is a web system that can inform young adults about emergency fund and enable them to use the system to monitor savings for emergency fund. These can be achieved through the four sections of the system that consist of About Emergency Fund, Financial Tracking, Financial Chart and Saving for Emergency Fund Target.

From the findings, it can be concluded that the EFT web system is easy to use. The system can help young adults to know about emergency fund. Majority of the young adults agree that they will use the system to save money for establishing emergency fund.

For future works, the EFT system can be enhanced by providing quiz section to improve the young adults' knowledge about emergency fund especially for those who do not have financial background studies. In addition to that, the web system can be extended to include other functions of investment to manage saving for short, medium and long term financial goals, once a dependable emergency fund target has been achieved by users of the system.

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