User Satisfaction Evaluation for Alumni Mobile Registration Using End User Computing Satisfaction

Susan Dian Purnamasari¹, Usman Ependi²

Computer Science, Bina Darma University Ahmad Yani Street Number 12 Post Code 30264 Plaju Palembang susandian@mail.binadarma.ac.id¹ usman@mail.binadarma.ac.id²

Abstract. Mobile Alumni registration is one of the facilities provided by Bina Darma Career & Training Center to conduct data collection for prospective graduates Bina Darma University. To achieve user satisfaction or repairs must be done to know the weaknesses of products owned so as to make improvements in order to achieve end user satisfaction. End user computing satisfaction is one of the methods to measure user satisfaction; the measurement includes content, accuracy, format, timeliness and ease of use. Hypothesis tests using the F test and t test results obtained $Y = 0.205 \times 1 - 0.832 \times 2 + 0.047 \times 3 + X4 + 0183 \times 50202$, of the five variables were tested only three variables that could indicate an effect on satisfaction, namely: variable accuracy, ease of use and timelines, while the other two variables, namely the content and the format has no effect on user satisfaction.

Keywords: Satisfaction; Mobile Registration; EUCS.

1 Introduction

Physical or non-physical facilities are something that must exist for an organization, because the facility is supporting the running of an organization. Mobile Alumni registration is one of the facilities owned by Bina Darma Career & Training Center are provided to support the day-to- day operations or activities exist. The use of mobile registration Alumni are very influential on the passage of the alumni organization because all the data collection is done through this system. Users who always use mobile Alumni registration have different levels of capabilities to a system, so that the possibility of dissatisfaction will appear on a system. End User Computing Satisfaction method is a method used to measure the level of satisfaction of a user of the system they use. To determine the extent of satisfaction of the users of the mobile registration alumni of the existing instruments on the End User Computing Satisfaction can be used due to the End User Computing Satisfaction has a very precise variable that include the content, accuracy, form, timeliness and ease of use.

The research uses the End User Computing Satisfaction method has been carried out. Among others: from previous studies, end user computing satisfaction instrument as web performance assessment tools [1]. In addition, Analysis of end-user

acceptance is using the technology- acceptance model of end user computing satisfaction and the implementation of core banking system at ABC Bank [2]. Other researchers also discuss the method of end user computing satisfaction is Measurement of User Satisfaction with Web - Based Information Systems: An Empirical Study [3].

This research aims to measure and study the user satisfaction of an information system so that an organization can implement the system determines its system performance. So for an organization such as Bina Darma Career & Training Center to the question about who owned the current system is how the alumni of the user satisfaction of mobile registration owned? One of the studies is to answer these questions through analysis study on the use of alumni satisfaction of mobile registration using end user computing satisfaction that includes content, accuracy, form, timeliness and ease of use then the answer to that question can be found.

In addition, this study was conducted aimed to determine how much influence the alumni of the user satisfaction of mobile registration EUCS seen from the instrument (the content, accuracy, shape, timely, easy to use, access speed). Based on the description that has been stated in the introduction above, the problem is formulated as follows:

- 1) Is there any instrument influence the content to the satisfaction of the alumni users of mobile registration?
- 2) Is there any effect of the instrument accuracy of the alumni of the user satisfaction of mobile registration?
- 3) Is there any effect of the instrument on the format of the mobile user satisfaction alumni of registration?
- 4) Is there any effect of the instrument timelines to the satisfaction of the alumni users of mobile registration?
- 5) Is there any influence of a young instrument ease of use to the satisfaction of the alumni users of mobile registration?

2 Research Mythology

2.1 Research Methods

Research design explained what, why, and how the problem examined using the principles of the methodology. In general, the study contains two aspects are interconnected and it is a requirement that the substance of the research study and research methodology [4]. With regard to the second requirement, then design research in general can be divided into two principal, namely the conceptualization and operationalization issues laid out in the basic principal as research background, objectives and hypotheses, the basic framework of the research, the withdrawal of samples, methods of data collection and data analysis.

There are two types of research is exploratory research and research hypothesis testing. This study uses a research hypothesis testing, the hypothesis that researchers build a foundation of relevant theory and research [5]. Data obtained by distributing questionnaires to selected respondents. Questionnaires were distributed containing

structured questions regarding the study variables were tested. Before distributing to the actual respondent then tested the validity and reliability of the questionnaire first. This is done to gain confidence that the question asked was appropriate to address the problems studied.

2.1 Research Hypothesis

The hypothesis in this study is:

- Factors contents, accuracy, convenience, timeliness of output information generated by mobile Alumni registration, and ease of use of the Information System, jointly affect the wearer satisfaction.
- H1a Content factor which is part of the instrument EUCS related to the satisfaction of the alumni users of mobile registration
- H1b Accuracy factor which is part of the instrument EUCS related to user satisfaction of mobile Alumni registration
- H1c The form factor which is part of the instrument EUCS related to user satisfaction of mobile Alumni registration
- H1d Timely factors that are part of the instrument EUCS related to user satisfaction alumni of mobile registration
- H1e Factors that ease of use is part of the instrument EUCS related to the satisfaction of the alumni users of mobile registration

3 Result and Discussion

3.1 Respondent

This study disseminate the questionnaire to the alumni who graduated in the first period of the academic year 2013/2014, a total of 127 Questionnaires were returned from 200 questionnaires were distributed. Questionnaire was successfully answered by the prospective graduates of 100 respondents. Where the 100 respondents consisted of 55% of the Computer Science faculty, 20% of the Faculty of Economics, 8% of the Faculty of Psychology, 15% of the Faculty of Teacher Training and Education, and the last 2% of the faculty of Science Communication. Respondents if viewed from the gender of male respondents and 68% female 32%. Respondents with the male gender is derived from the Information Systems courses as much as 9%, 15% of Information Engineering, Information Management 10%, 3% Management, Accounting Program 10% and 15% Sports. While female respondents consisted of 11% Study Program Information Systems, 7% of Informatics, Information Management 3%, 2% Management, Accounting 5%, 8% and 2% Communication Psychology. This indicates that respondents who filled in a questionnaire is the male gender - male and Faculty of Computer Science. Judging from the experience of using computers, the majority of respondents use a computer for 6 years with a percentage of 33%, and then experience for 5 years was 22 %, 4 years' experience as much as 15 %.

3.2 Test Validity and Reliability

The purpose of validity testing is to determine the validity of each question based item questionnaire that has been distributed and filled out by the respondents. All data processing was performed using SPSS to avoid mistakes. Test validity is done by comparing with the provision that if rount > rtable then the item is declared invalid. In this study, n = 100, and there are 6 variables, so df = n - 6 = 94, with a significant level of 0.05 then obtained rtable of 0.302 (2-tailed). Reliability test results indicate whether the instrument is made can be trusted or not. The level of stability and permanence of measuring instruments used in the study is true or not a measurement is measured. Reliabilities test results can be seen in table 1.

| Table | 1 | Reliability | Test | Results |
|-------|---|-------------|------|---------|
| | | | | |

| | rechability Test result | .5 | |
|---|-------------------------|---------------------------|-------------|
| | Variable | Cronbach's Alpha Based on | explanation |
| | | Standardized Items | |
| | Content | 0.630 | Reliable |
| | Accuracy | 0.604 | Reliable |
| | Format | 0.619 | Reliable |
| _ | Ease of Use | 0.645 | Reliable |
| | Timelines | 0.637 | Reliable |
| | Satisfaction | 0.592 | Reliable |

3.2 Hypothesis Testing

This study used multiple linear regression analysis. Variable alumni of mobile user satisfaction is influenced by variables predicted registration contents, accuracy, shape, convenience, and timeliness. F-test was conducted to determine whether or not the regression model can be used to predict the dependent variable is satisfaction. F test results can be seen in Figure 1.

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|---------|-------------------|
| | Regression | 32.852 | 5 | 6.570 | 325.425 | .000 ^b |
| 1 | Residual | 1.898 | 94 | .020 | | |
| | Total | 34.750 | 99 | | | |

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson | |
|-------|-------|----------|----------------------|----------------------------|---------------|--|
| 1 | .972ª | .945 | .942 | .14209 | 1.890 | |

Fig. 1. Test Result F

Based on the test results of the F test above, the resulting F value of 325 425 with a significant level (P Value) 0.000 < 0.05. Based on the comparison of the H1 H0 is rejected or accepted, in other words that the fill factor, the accuracy, the shape, the ease, timeliness of results by alumni of the mobile registration information, and ease of use of the application, together equally affect the wearer satisfaction. Adjusted R2 of 0.942 indicates that 94.2% of mobile user satisfaction Alumni registration bias is explained by the five independent variables, and the remaining 5.8% is explained by other factors. T test was conducted to determine the effect of partially independent variable to dependent variable. Based on figure 2 obtained multiple linear regression analysis models as follows:

$$Y = 0.205 X1 - 0.832 X2 + 0.047 X3 + 0.002 X4 + 0.183 X5$$
 (1)

| Coefficients ^a | | | | | | | | |
|---------------------------|-----------|-----------------------------|------------|------------------------------|--------|------|--|--|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | | |
| | | В | Std. Error | Beta | | | | |
| | (Constant | 249 | .095 | | -2.623 | .010 | | |
| | X1 | .205 | .132 | .182 | 1.555 | .123 | | |
| 1 | X2 | .832 | .074 | .763 | 11.275 | .000 | | |
| | X3 | .047 | .084 | .043 | .558 | .578 | | |
| | X4 | 202 | .079 | 174 | -2.566 | .012 | | |
| | X5 | .183 | .078 | .164 | 2.362 | .020 | | |

Fig. 2. Test Result t

Based on the results of t-test, that there are three alternative hypothesis bias acceptable (H1b, H1d, H1e), and two hypotheses are not accepted (H1a, H1c).

- 1. H1a stated that the contents obtained from mobile Alumni Registration no effect on the wearer satisfaction. It can be seen that the P Value of 0.123. By seeing that P Value > 0.05 then H1a unacceptable or content that is generated by the alumni of the mobile registration does not affect the satisfaction of alumni.
- 2. Stating that H1b Accuracy generated by mobile registration alumnus effect on user satisfaction with the level of confidence of 95%, the results from table 5.9 that P Value 0.000 and P Value of < 0.05, then the resulting accuracy alumni of mobile registration affect the wearer satisfaction.
- 3. H1c states that the format of the generated alumni of mobile registration does not affect the user satisfaction; it can be seen from the P value of 0.578 thus the P value > 0.05 H1c cannot be accepted or rejected.
- 4. H1d stated that ease of use is obtained from the alumni of the mobile registration effect on user satisfaction, it can be seen that the P value of 0.012, the P value < 0.05 is thus acceptable H1d.
- 5. H1e stated that the timelines generated by the alumni of the mobile registration effect on user satisfaction, it can be seen in figure 2 where the P value of 0.020, the P value of < 0.05. Thus H1e acceptable.

4 Conclusion

From the data processing has been done, it can be concluded as the following:

- 1. Questionnaires were collected has been deemed invalid so that can be calculated from the data of the questionnaire, 68% were male and 32% female.
- 2. Based on the test results of the F test above, the resulting F value of 325 425 with a significant level (P Value) 0.000 > 0.05. On the basis of the comparison of the H1 H0 is rejected or accepted, or in other words that the fill factor, the accuracy, the shape, the ease, timeliness of results by alumni of the mobile registration information, and ease of use of the application, jointly affect the wearer satisfaction. Figures Adjusted R2 of 0.942 indicates that 94.2% of mobile user satisfaction Alumni registration bias is explained by the five independent variables, and the remaining 5.8% is explained by other factors.
- 3. Based on the results of the t test, the alternative hypothesis that there are three acceptable bias are Accuracy, Ease of use and timelines (H1b, H1d, H1e), while the two hypotheses are not acceptable Content and format (H1a, H1c).

References

- Alfatha, Febri, 2011, instrumen end user computing satisfactionsebagai Assessment toolskinerja web, STIE Perbanas, (Online), (http://katalog.library.perbanas.ac.id/view/instrumen-end-usercomputingsatisfaction- sebagai-assessment-tools-kinerja-web, accessed at 4 February 2013)
- Sekundera P.L, Charlesto, 2006, analisis penerimaan pengguna akhir dengan menggunakan echnology acceptance model dan end user computing satisfaction terhadap penerapan sistem corebanking pada Bank ABC, Universitas Diponegoro, (Online), (http://eprints.undip.ac.id/15440/, accessed at 4 February 2013)
- 3. Xiao L., Dasgupta S. 2002. Measurement of User Satisfaction with Web-Based Information Systems: An Empirical Study, (Online), (http://melody.syr.edu/hci/amcis02_minitrack/CR/Xiao.pdf, accessed at 4 February 2013)
- 4. Gulo, W. 2004. Metodologi Penelitian. Grasindo. Jakarta.
- 5. Jogiyanto. 2005. Analisis dan Desain Sistem Informasi. Yogyakarta: Penerbit Andi.