

STUDENT SATISFACTION ANALYSIS OF SIATER USING END USER COMPUTING SATISFACTION (EUCS) (Case Study: Bandar Lampung University)

Jefri Krisna Putra

Department of Information System, Bandar Lampung University
Bandar Lampung, Lampung, Indonesia
jefrikrisnaputra@myself.com

Abstract

The purpose of this research is to know the extent to which students levels of satisfaction level of Strata-1 University of Bandar Lampung on the Sistem Informasi Akademik dan Administrasi Terpadu (SIATER) and any indicators that need to be improved in order to increase student satisfaction against SIATER. This type of research using a quantitative approach. The respondents determined using techniques research of Stratified Random Sampling with certain criteria. As for sample determination technique using tables Stephen Isaac & Willian B. Michael. From the results of the study showed that university students Bandar Lampung has yet fully satisfied against SIATER. Based on the method of End User Computing Satisfaction (EUCS), note that the indicators should be improved in order to increase student satisfaction is an indicator of formats, ease of use, and from the side of timeliness..

Keywords : *Student satisfaction, SIATER, stratified random sampling, End User Computing satisfaction, EUCS.*

I. INTRODUCTION

The growth of education in Indonesia has made significant progress. This can be seen by the many good places shaped education colleges, universities, and institutions of non-formal courses oriented to the needs of industry. With the increasing number of education places available, the cause of its own competition between the place of education. Various methods are used by the respective place of education to win the competition. One way that can be used is to improve the quality of service (revenue) so that customers can be satisfied with the service.

A satisfied customer is a customer who was getting value from suppliers, manufacturers or service providers. This value can be derived from the product, service, system, or something that is emotional (Handi Irawan D., 2009, p. 7).

Bandar Lampung University (UBL) as a place of education that has a reasonably good governance, seeks to meet the needs of its customers, in this case students, especially in the

service information. One of these is the information service of Academic and Administrative Information Systems Integrated (SIATER) are realized by UBL in the form of procurement www.siater.ubl.ac.id site, which is within the system not only contains the scheduling of the university, but also the service area student academic accessible. The system is specially designed by the university in order to provide more advanced services to the students so that students are expected to be more satisfied with the services provided by UBL.

Since the middle of 2013, students UBL was introduced with this system. But when this new system was first applied, the site was criticized by students UBL as a direct user of the information service website. Start of content / information content is less up to date until the unsatisfactory academic scheduling, such as charging Card Study Plan (KRS) online on the site are considered to be more complicated than KRS online using the LAN system which applied previously, namely Simperti. Considered to be more complicated because they have to make a new e-mails that have been determined by the University in its manufacture. And in the making, the student must queue up prior to the creation of e-mail and student registration. Not only that, Kartu Study Results (KHS) students in previous semesters should be accessible on this site in the slow-input or even not at all be input so that students who want to fill the KRS had to take care to the database and show the KHS half SIATER earlier that students can fill in KRS, whereas Grade (IP) is very influential on the number of students Semester Credit Units (SCU) which can be taken in the following semester.

In this research, the authors will use the approach satisfaction End User Computing (EUCS) which includes five components: Content, Accuracy, Shape, Ease and timeliness. Given this EUCS, is expected to determine the extent of student satisfaction as well as the end user of this SIATER can improve the satisfaction of the student to lawyer-input KRS Online, and can identify the deficiencies that exist in order to fix it.

II. LITERATURE REVIEW

1. Research journal by Nurmala Sari (2013) " Analysis of Student Satisfaction Hasanuddin University to Site www.unhas.ac.id".

This type of research uses a quantitative approach. As for the population in this study were undergraduate students of the University of Hasanuddin. Respondents are determined by proportional stratified random sampling based on certain criteria. The sampling technique using tables Stephen Isaac and William B. Michael. The results showed the student is not satisfied on the site Unhas www.unhas.ac.id. It is known that the indicators that need to be considered in order to increase student satisfaction is an indicator of www.unhas.ac.id website content, accuracy, format / shape, ease Applying, ketepatan time, security and privacy, as well as the response speed of the media. Research journal by Iman Sanjaya (2013) "Website of Department Computer and Information Service Quality Measurement Using WebQual 4.0 Method"

2. Research Journal by Rosinta (2010) "Effect of Service Quality on Customer Satisfaction in Shaping Customer Loyalty"

The purpose of this study was to analyze how the quality of service can affect the customer satisfaction in shaping the customer's loyalty. This research is quantitative and uses non-probability sampling technique purposive. The research instrument used questionnaires that were analyzed by Structural Equation Modeling. The results showed that the five dimensions, namely tangibles, empathy, reliability, speed, and positively affect the quality of service guarantee. The direct effects of service quality on customer loyalty does not maintain the study, because we found no significant direct relationship between service quality and customer loyalty.

3. Research Journal by Azlen Ilias (2009) "*END-USER COMPUTING SATISFACTION (EUCS) IN COMPUTERISED ACCOUNTING SYSTEM (CAS): WHICH THE CRITICAL FACTORS? A CASE IN MALAYSIA*".

The purpose of this study was to examine the critical factors, content, accuracy, format, ease of use, timeliness, satisfaction with system speed and reliability of the system in the End-User Computing Satisfaction (EUCS) that affect the satisfaction most end users. The study was performed using a set of questionnaires consisted of seven factors, content, accuracy, format, ease of use, timeliness, satisfaction with the speed and reliability of the system to measure the system end-user satisfaction. In addition, this study included 90 end users Computerised Accounting System (CAS) in the finance department, of 62 centers responsibility. This study analyzed the reliability methods, descriptive analysis and multiple regression. Overall, this study demonstrates that most users are satisfied with the end almost Computerised Accounting System (CAS), the results show that the ease of use, content, and accuracy has a significant impact on end-user satisfaction. Therefore, the empirical results of this study may provide support for the Doll and Torkzadeh Model (1988), which is related to the factors contributing to the satisfaction of the end-user accounting system.

III.METHODS

In this research the authors use quantitative research methods, in which this method is a research method that is based apada philosophy of positivism, used to examine the population or a particular sample, data collection using research instruments, data analysis is statistical, with the aim to test the hypothesis that has been set.

III.1 Data Collecting Method

Data collection can be done in a variety of settings, a variety of sources, and a variety of ways. There are many ways in data collection methods, but in the writing of this report the study using questionnaires and observation.

a. Questionnaire

In this questionnaire in the form of a list of questions about the characteristics of students and the student experience in online KRS input regarding student satisfaction of the running system is in conformity with the use of End User Computing Satisfaction. The questionnaire was given to students who have done KRS online. In this study conducted with a sample of questionnaires totaled 317 people.

b. Observation

This technique requires the observation of the researchers either directly or indirectly, of the research object. In this study the authors used participant observation which in this observation, the researchers directly involved with the activity being observed or used as a source of research data (Sugiyono, 2013, p. 145). Some of the information obtained from the observations include: space (a), actors, activities, objects, actions, events, or events, and time. The reason researchers conducted observations is to present a realistic picture of the behavior or events, answer questions, help understand human behavior and evaluations that is take measurements of certain aspects of the feedback to make such measurements.

III.2 Research Population

Research Variable used in this research is based on ISO/IEC 9126-4 Effectiveness Metrics standard. Effectiveness metrics measure whether a task performed by users meets the needs of specified users to achieve specified goals with accuracy and completeness in specified context. The population is the entire data Bandar Lampung University students who filled KRS-line numbering 3083 people according to the data summary Higher Education Database (PDPT) UBL active students in the first semester of the school year 2013/2014. The data obtained from the Bureau of Academic Administration (BAA) UBL.

Table 1. KRS data Odd Fillers 2013/2014

Program Study	Male	Female	Total
Science Business Administration	42	41	83
Public	98	77	175

Program Study	Male	Female	Total
Administration			
Economics and Accounting	123	233	356
Economics and Management	312	266	578
Legal Studies	701	215	916
Communication Studies	65	70	135
Technical Information	99	35	134
Information systems	57	67	124
English Education	56	140	196
architecture	64	14	78
Mechanical Engineering	108	7	115
Civil Engineering	171	22	193
TOTAL	1896	1187	3083

formula Stephen Isaac and William B. Michael which is as follows (Sugiyono, 2013, p. 87):

Figure 1. Table Determination of Total Sample

From the above table it can be concluded the image sampling totaled 317 respondents because the number of population being researched in the range of 3083 and into 3500.

III.3 Scale Measurement

In this research, researchers used a scale of measurement to determine the length of the short interval is to use a Likert scale is a scale used to measure attitudes, opinions, and perceptions of a person or a group of social phenomena.

With the Likert scale, the variables to be measured are converted into indicator variables. Then these indicators serve as a starting point to construct items that can be instruments of questions. (Sugiyono, 2013, p. 93).

Answer each item instrument that uses a Likert scale has gradations from very positive to very negative, which can be words, among others:

Table 2. Weighting Value

No.	Responses	Score
1.	Very Good	5
2.	Good	4
3.	Enough	3
4.	Less	2
5.	Very Less	1

III.3 Sample of Research

The samples in this research using probability sampling methods, further sampling techniques such as stratified random sampling. The determination of sample size using the

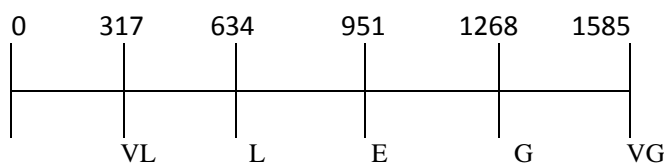
To calculate the number of the ideal score (criterion) of all the items, use the following formula, that is:

$$\text{Score criterion} = \text{value scale} \times \text{Number of respondents}$$

With the highest score is 5 (if all respondents answered "VG") 317 and the number of respondents, it can be formulated into:

$$5 \times 317 = 1585$$

Furthermore, all respondents are summed and entered into the rating scale and the area determined the answer. And then the score has been obtained and entered into the following rating scale:



TABEL 5.1
PENENTUAN JUMLAH SAMPEL DARI POPULASI TERTENTU DENGAN TARAF KESALAHAN 1%, 5%, DAN 10%

N	1%			5%			10%			
	N	1%	5%	N	1%	5%	N	1%	5%	
10	10	10	10	280	197	155	138	2800	537	310
15	15	14	14	290	202	158	140	3000	543	312
20	19	19	19	300	207	161	143	3100	558	317
25	24	23	23	320	216	167	147	4000	569	320
30	29	28	27	340	225	172	151	4500	578	323
35	33	32	31	360	234	177	155	5000	586	326
40	38	36	35	380	242	182	158	6000	598	329
45	42	40	39	400	250	186	162	7000	606	332
50	47	44	42	420	257	191	165	8000	613	334
55	51	48	46	440	265	195	168	9000	618	335
60	55	51	49	460	272	198	171	10000	622	336
65	59	55	53	480	279	202	173	15000	635	340
70	63	58	56	500	285	205	176	20000	642	342
75	67	62	59	550	301	213	182	30000	649	344
80	71	65	62	600	315	221	187	40000	653	345
85	75	68	65	650	329	227	191	50000	658	346
90	79	72	68	700	341	233	195	75000	658	346
95	83	75	71	750	352	238	199	100000	659	347
100	87	78	73	800	363	243	202	150000	661	347
110	94	84	78	850	373	247	205	200000	661	347
120	102	89	83	900	382	251	208	250000	662	348
130	109	95	88	950	391	255	211	300000	662	348
140	116	100	92	1000	399	258	213	350000	662	348
150	122	105	97	1100	414	265	217	400000	662	348
160	129	110	101	1200	427	270	221	450000	663	348
170	135	114	105	1300	440	275	224	500000	663	348
180	142	119	108	1400	450	279	227	550000	663	348
190	148	123	112	1500	460	283	229	600000	663	348
200	154	127	115	1600	469	286	232	650000	663	348
210	160	131	118	1700	477	289	234	700000	663	348
220	165	135	122	1800	485	292	235	750000	663	348
230	171	139	125	1900	492	294	237	800000	663	348
240	176	142	127	2000	498	297	238	850000	663	348
250	182	146	130	2200	510	301	241	900000	663	348
260	187	149	133	2400	520	304	243	950000	663	348
270	192	152	135	2600	529	307	245	1000000	663	348

As for knowing the number of answers from the respondents by percentage, the following formula that is used:

$$p = \frac{f}{n} \times 100\%$$

Ex.:

P: Percentage

F: The frequency of each answer questionnaire

N: Number of ideal score

100: Numbers remain

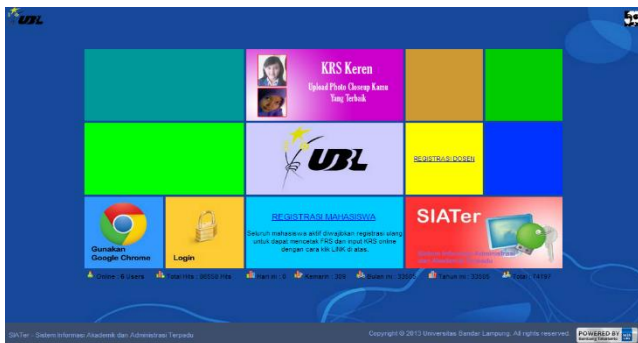
IV. RESULTS AND DISCUSSION

IV.1 Analysis Running System

Analysis of the current system obtained by the author conducts a review directly on SIATer (siater.ubl.ac.id). Here's a review directly on SIATer:

a. Main Page

The main page is a page that is used to login and registration of students or faculty. Here's a picture SIATer



main page:

Figure 2. Main Page Of SIATer

b. Student Login Page

Student login page contains the main page for the student. Here is the main page for the student:

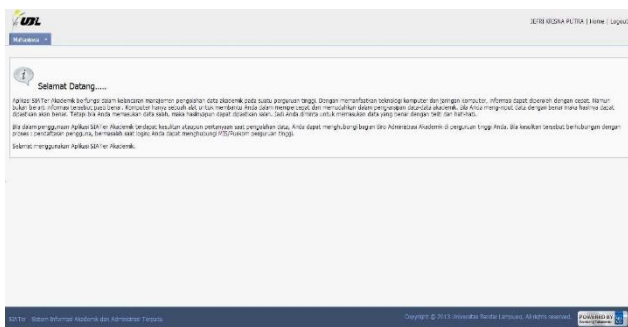


Figure 3. Student Login Page

c. Study Plan Form page (FRS)

3rd International Conference on Engineering & Technology De
Faculty of Engineering and Faculty of Computer Science
Bandar Lampung University

This page contains a form to be printed KRS to know what courses a student will take in the future. Here's a page FRS SIATer:

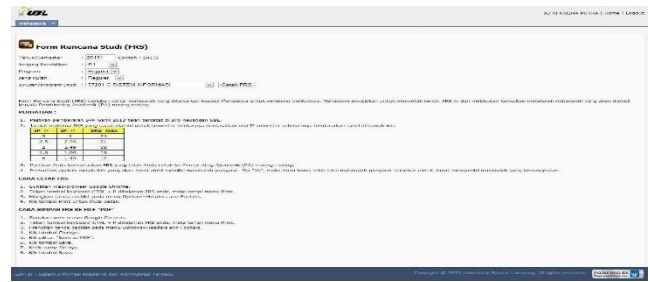
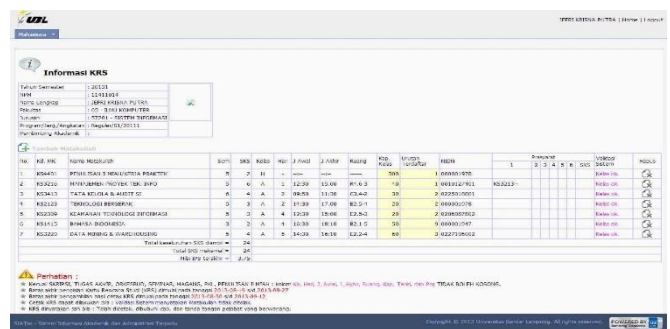


Figure 4. Study Plane Form Page

d. Page of Inputting KRS

This page is a page that is used for inputting student KRS.



Here is a page KRS:

Figure 5. Page of Inputting KRS

e. Take a Course Page

This page contains the eyes of courses that will be taken by the student. Here is the download page of the course:

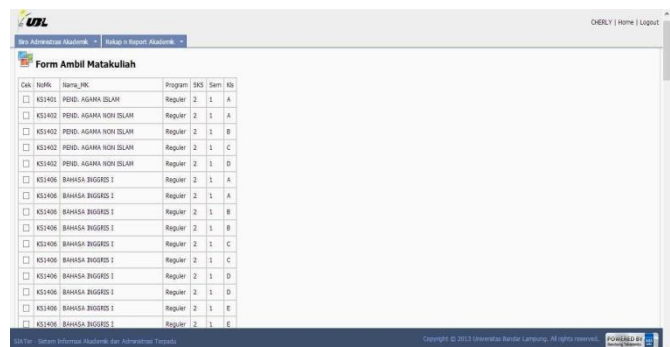


Figure 6. Take a Course Page

f. Page Upload a Photo

This page is used to upload photos to be used on the student sheet KRS. Here is the photo upload page:



Figure 7. Page Upload a Photo

IV.2 QUESTIONNAIRE RESULTS

To know the satisfaction of students at the University of Bandar Lampung on EUCS SIATer of each instrument, then the total score of the criterion of the responses each instrument summed and then divided by the number of questions each instrument. The following is the final value of each instrument EUCS from the questionnaire were distributed to the respondents.

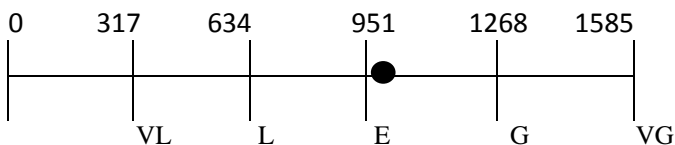
Table 3. Outcome Questionnaire

Instrumen	Final Score (Average)	Regional Results
Content	959	Good
Accuracy	973	Good
Format	887	Enough
Ease of use	825	Enough
Time lines	695	Enough

Based on the final results of the questionnaire above it can be concluded that from each instrument EUCS in this study are as follows:

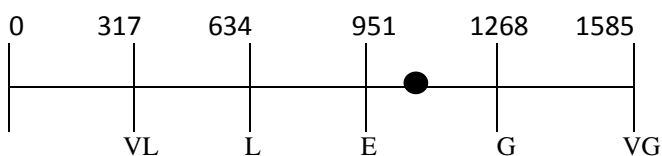
a. The content (content)

Based on the results of the questionnaire stated that for the content (content) of SIATer scored 959, so the value is in the category of "Good". Following its rating scale:



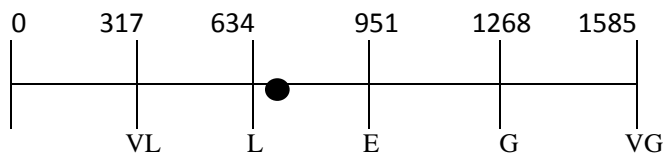
b. Accuracy (accuracy)

Based on the results of the questionnaire stated that for accuracy (accuracy) of SIATer scored 973, so the value is in the category of "Good". Following its rating scale:



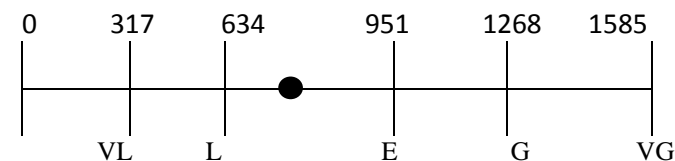
c. Format

Based on the results of the questionnaire stated that in order to form (format) of SIATer scored 887, so the value is in the category of "satisfactory". Following its rating scale:



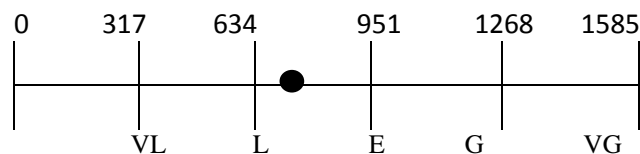
d. Ease of Use

Based on the results of the questionnaire stated that for simplicity (ease of use) of SIATer scored 825, so the value is in the category of "satisfactory". Following its rating scale:



e. TimeLines

Based on the results of the questionnaire stated that for timeliness (time lines) of SIATer scored 695, so the value is in the category of "satisfactory". Following its rating scale:



V. CONCLUSIONS

V.1 Conclusions

The results of present study reveal that:

a. KRS-line using SIATer not fully satisfy users, in this case the students at the University of Bandar Lampung. It is evident from the few instruments that has not met the expectations of its users. That is, the expectation of students to SIATer larger than their results after using the system.

b. Indicators that need to be considered to improve student satisfaction of online use SIATer KRS is an indicator of the form (format), usability (ease of use), timeliness (timeliness). If the scores are sorted according to the magnitude of the existing criterion of satisfaction, most indicators needs to be improved is an indicator of timeliness. As this indicator has the smallest gaps satisfaction is equal to 695. This shows that this indicator is most unsatisfactory student. The second indicator which has the smallest gap is an indicator of the ease of time that is equal to 825. Then proceed with the form of 887 indicators.

c. Need to improve the system SIATer by the university to improve student satisfaction in using the website SIATer. Improving the quality of this can be done by observing and improving the indicators used by the author in this study

(the content, accuracy, format / shape, ease of use, timeliness, security and privacy, the response speed of the media). Especially for indicators of content that has the smallest gaps satisfaction, which is an indicator of timeliness and speed of response of the media.

REFERENCES

- [1] Azleen Ilias, M. Z. (2009). End-User Computing Satisfaction (EUCS) in Computerised Accounting System (CAS): Which the Critical Factors? A Case in Malaysia. *Computer and Information Science*, 2(1).
- [2] Craw et al. (2003). *Total Quality Management*. Jakarta: Gramedia.
- [3] Drs. Zulkifli Amsyah, M. (2008). *Manajemen Sistem Informasi*. Jakarta: PT. Gramedia Pustaka Utama.
- [4] Efendi, U. (2010). *Definisi Online*. Retrieved Desember 7, 2013, from [blog.binadarma.ac.id:ttp://blog.binadarma.ac.id/usman/?p=938](http://blog.binadarma.ac.id/usman/?p=938)
- [5] F. A. Aryanti. (2010, Agustus 8). Retrieved Desember 7, 2013, from [http://elib.unikom.ac.id:http://elib.unikom.ac.id/gdl.php?mod=browse&op=read&id=jbptunikompp-gdl-friscaangg22471](http://elib.unikom.ac.id/gdl.php?mod=browse&op=read&id=jbptunikompp-gdl-friscaangg22471)
- [6] Fowler, M. (2003). *UML Distilled: A Brief Guide to the Standard Object Modeling Language (3rd Edition)*. Addison Wesley.
- [7] Handi Irawan D., M. (2009). *10 Prinsip Kepuasan Pelanggan*. Jakarta: Kelompok Gramedia.
- [8] Hendarti, H. (2008, April). Korelasi Antara Efektivitas Sistem Informasi KRS Online dengan Kepuasan Mahasiswa Universitas Bina Nusantara. *Jurnal piranti Warta*, 11, 242-257.
- [9] Koesmono, H. (2005, September). Pengaruh Budaya Organisasi Terhadap Motivasi Dan Kepuasan Kerja Serta Kinerja Karyawan Pada Sub Sektor Industri Pengolahan Kayu Skala Menengah Di Jawa Timur. *Manajemen dan Kewirausahaan*, 7, 171-188.
- [10] Kotler, P. (2002). *Manajemen Pemasaran, Analisis, Pemasaran, Implementasi dan Kontrol*. Jakarta: PT. Prenhallindo.
- [11] Mahmudah. (2011, Juni 24). *Manual Prosedur Penyusunan KRS*. Retrieved Desember 7, 2013, from <http://gjm.fp.ub.ac.id/images/stories/Pengumuman/panduan%20siater%20ubl%202013.pdf>
- [12] Munawar. (2005). *Pemodelan Visual dengan UML*. Yogyakarta: Graha Ilmu.
- [13] Putra, C. G. (2011). Analisis Kepuasan Pelanggan Pada Perusahaan Daerah.
- [14] Rahayu, M. (2006). *Bahasa Indonesia di Perguruan Tinggi*. Jakarta: Grasindo.
- [15] Rosinta, D. A. (2010). Pengaruh Kualitas Layanan terhadap Kepuasan Pelanggan Dalam Membentuk Loyalitas Pelanggan. *Ilmu Administrasi dan Organisasi*, 17(2), 114-126.
- [16] S., L., H., & Rivard, S. (1997). Factors of Success for End-User Computing. (31), 552-556.
- [17] Salim, A., Formen, Yahya, A., & Muhammad. (2006). *Teori dan paradigma penelitian sosial buku sumber untuk penelitian kualitatif (2 ed.)*. Yogyakarta: Tiara Wacana.
- [18] Sari, N. (2013). Analisis Tingkat Kepuasan Mahasiswa Universitas Hasanuddin Terhadap Situs www.unhas.ac.id. *Tesis*.
- [19] Sasongko, T. H. (2006). *Bersaksi Dalam Advokasi Irigasi*. Bandung: Yayasan AKATIGA.
- [20] Sugiyono, P. D. (2013). *Metode Penelitian Kuantitatif kualitatif dan R&D*. Bandung: Alfabeta.
- [21] Suhermin Ari Pujiati, N. R. (2008). *Penggunaan R Dalam Psikologi*. BerbagiNET Academic Publisher.
- [22] Torkzadeh, & Doll. (1991).
- [23] Website Universitas Bandar Lampung. (2013, Juli 22). Retrieved Desember 12, 2013, from

<http://ubl.ac.id/images/stories/Pengumuman/panduan%20siater%20ubl%202013.pdf>