# ANALYZE THE USER EXPERIENCE OF SOCIAL MEDIA YOUTUBE USING USABILITY

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**Abstract**

*User Experience is not about how a product or service works. But how is the interaction between the user and the product, such a user experience in using the product, is it easy to use, as simple as how to operate the product or service to the experience to find, absorb and understand the information available. This is important because when a product is being developed, its usually pays more attention to what it does or develops. While user experience is the other side that is often overlooked, both in terms equations to how it works. Though UX can make the difference between a successful and failed product. In this case Youtube requires an important role from the user, with the various advantages when accessing Youtube, of course encourages the creation of User Experience. For this reason, Youtube can survive and compete with other similar social media, it is necessary to improve quality and pay attention to Usability.*

*Keywords: User Experience, User, Youtube, Product, Information, Usability*

## INTRODUCTION

Growth in the current era of globalization is pushing various sectors, especially information technology companies, competing to create works that are acceptable in the public space. These works include social media. Generally social media is the latest improvement from the internet-based web improvement innovation that is used as a means to make it easier for all users to be able to communicate, take part, share, and form a web layout, so user can grow the substance independently.

The increasingly rapid use of Youtube as one of the media in finding various information and news that is needed in every development Youtube requires an important role form the user or users. Youtube as an application or website that has entertainment balanced with easy access in it. In addition, users are constantly interested in Youtube related to any content in it can be accessed easily using an internet quota without making other payment. Then, with the various advantages when accessing Youtube, it certainly drives the user experience that it creates. However, until now there has been no checking of the quality of the application or website and also testing of Youtube. Currently the developer only develops applications that are based on the desire or view from the user's side, so there is no clear measurement of the user's view of Youtube. Therefore, this website needs detailed analysis to determine user-friendly usage in terms of ease of study, use, satisfaction, and level of efficiency

This is useful for the continuity and development of Youtube in the future. For this reason Youtube can survive and compete with other similar social media, it is necessary to improve quality and pay attention to usability. The ISO 9241-210 standard defines user experience as a person perception and response resulting from the use of a product, system, or service.

## LITERATURE REVIEW

### User Experience

According to the definition of ISO 9241-210, user experience is a person's perception and response from the use of a system product, and service. User Experience (UX) is the study of what is felt by users in using the system so that they get satisfaction after using it. UX is not only what the user sees, not only produces an interesting design to look at, but can answer why the design is like that, a design that is able to make users feel comfortable when successfully achieving their goals when using a product or application. Because there are several things that need to be learned to be able to make a good and appropriate UX, it is called a UX designer.

**Usability**

Usability as a measure of the quality of user experience when interacting with products or systems whether the website, software applications, mobile technology, or other equipment operated by users. Factors causing the importance of the website have aspects of usability, including the habits or behavior of users who access the website. Not a few users who can not accept a bad website design and what to learn a website. Or in other words, users really want to understand immediately, what is presented on a website (Nilsen, 1994).

**Usefulness, Satisfaction, and Ease of Use (USE)**

The USE Questionnaire was introduced by Arnold (Arnie) M. Lund in 1998. Usefulness, Satisfaction, and Ease of use Questionnaire is one of the instruments in the form of a questionnaire package that can be used to measure research on usability (Lund, 2001). The USE questionnaire package is used because it can cover 3 dimensions of usability measurement according to (ISO 9241-11, 1998), namely efficiency, effectiveness and satisfaction. Although also found several other dimensions, but these 3 things are the parameters that are the most easily observed and compared the results if you have to evaluate more than one interface of an information technology product.

**Usability Testing**

The measure of success of a website usability can be seen from how well a website can provide quality service to users, reducing the possibility of errors in the system, easing the learning process of the website and using it efficiently so that users are satisfied with the website. To be able to find out the quality of the website in interacting with users is to evaluate the website from the usability aspect. The framework of thinking in this study can be illustrated in the chart below:
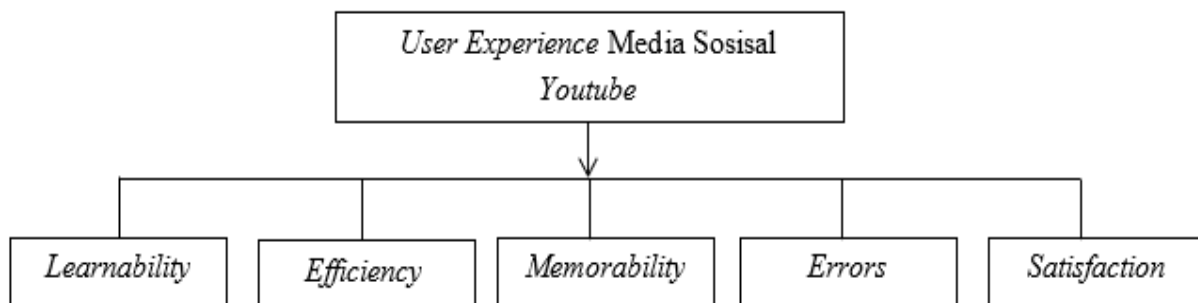


Figure 1 Conceptual Framework

## RESEARCH METHOD

### Research Design

This research is a quantitative research. Sugiyono (2010: 13) argues that quantitative research is research based on the philosophy of positivism, used to examine populations or specific samples, sampling techniques are generally carried out randomly, data collection using research instruments, data analysis is quantitative statistical with the aim to test the hypothesis that has been set.

### Population and Sample

The population is the whole subject of research (Arikunto, 2010: 173). Population is a generalization area consisting of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2010: 115). The population in this study was 133 YouTube social media users. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2010: 116). The sampling technique in this study uses the Slovin formula, in this study the Slovin formula (Umar, 2004: 108) is as follows:

$$n = \frac{N}{1 + N.e^2}$$

Where,

N = Population size

n = Sample size

e = error (5%)

So,

$$n = \frac{133}{1 + 133.0.05^2}$$

$$n = \frac{133}{1.3325}$$

$$n = 99.81 = 100$$

### Data Collection Techniques

Data collection techniques used in this study is to use a questionnaire. Questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer. Questionnaire is a data collection technique that is suitable to be used if the number of respondents is quite large and spread over a wide area (Sugiyono, 2010: 199).

**Validity Testing**

Validity test is used to measure the validity or validity of a questionnaire. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. Significance test is done by comparing the value of r arithmetic with r table for degree of freedom (df) = n-2, in this case n is the number of samples. If r arithmetic is greater than r table and a positive value, then the question is declared valid (Ghozali, 2013: 52-53).

**Reliability Testing**

Reliability is a tool to measure a questionnaire which is an indicator of a variable or construct. A questionnaire is said to be reliable or reliable if a person's answer to a question is consistent or stable from time to time. Reliability measurement can be done in two ways, namely (Ghozali, 2013: 47-48):

1. Repeated measurements (repeated measure). This method is done by giving the same question at different times, and then see if it remains consistent with the answer.

2. One shot or measurement only once and then the results are compared with other questions or measure the correlation between answers and questions.

**Data Analysis**

Data analysis in this study was carried out using an approach that is a quantitative approach. For quantitative data analysis the results of the questionnaire in this study were carried out after data processing was done first. Quantitative data processing is done after getting the results of the validity and reliability test in accordance with the provisions. Quantitative data processing is carried out with the aim to measure the percentage value of the feasibility of use experience through the usability principle.

**RESULTS AND DISCUSSION**

Validity test is done to find out whether the primary data collection tool (through a questionnaire) that is used can be in accordance with the targets to be addressed in the study. The number of respondents to test the validity and reliability of question items is 100 respondents.

**Test Results Variable Learnability**

Validity test is done by comparing the calculated r value with the sign / p value. The following are the results of the validity test for each variable (Table 1).

Table 1 Learnability Test Result

| No | Learnability | | | |
|---|---|---|---|---|
| | r table | r hitung | p | ket |
| L1 | 0.1966 | 0.733 | 0.000 | valid |
| L2 | 0.1966 | 0.787 | 0.000 | valid |
| L3 | 0.1966 | 0.814 | 0.000 | valid |
| L4 | 0.1966 | 0.691 | 0.000 | valid |

Based on the results of data recapitulation presented in the table above shows that of all items of the statement used to measure learnability variables are declared valid. This conclusion can be drawn by comparing the value of r count with r table. With the number of data (n) of 100 respondents and a degree of confidence of 5% or 0.05, r tables are obtained 0.1966. The correlation between all statement items with a total score of all of them is greater than rtable = 0.1966, so that all statement items are declared valid. While the value of p is obtained from the large error value obtained by researchers from the statistical calculation of 0.05, if p> 0.05 means that it represents a deviation from the normal distribution. From all items of the statement, it is seen that the calculated r value for all question items used to measure the Learnability variable is worth more than p. Thus the question items used to measure the Learnability variable are considered valid and can be used to obtain research data

**Test Results Variable *Efficiency***

Validity test is done by comparing the calculated r value with the sign / p value. The following are the results of the validity test for each variable.

Table 2 Efficiency Test Result

| No | Efficiency | | | |
|---|---|---|---|---|
| | r table | r hitung | p | ket |
| EF1 | 0.1966 | 0.689 | 0.000 | valid |
| EF2 | 0.1966 | 0.518 | 0.000 | valid |
| EF3 | 0.1966 | 0.661 | 0.000 | valid |
| EF4 | 0.1966 | 0.600 | 0.000 | valid |
| EF5 | 0.1966 | 0.688 | 0.000 | valid |

Based on the recapitulation of data presented in the above table shows that of all items of the statement used to measure the Efficiency variable is declared valid. This conclusion can be drawn by comparing the value of r count with r table. With the number of data (n) of 100 respondents and a degree of confidence of 5% or 0.05, r tables are obtained 0.1966. The correlation between all statement items with a total score of all of them is greater than rtable = 0.1966, so that all statement items are declared valid. While the value of p is obtained from the large error value obtained by researchers from the statistical calculation of 0.05, if p> 0.05 means that it represents a deviation from the normal distribution. From all items of the statement, it is seen that the calculated r value for all question items used to measure the Efficiency variable is more than p. Thus the question items used to measure the Efficiency variable are considered valid and can be used to obtain research data

**Test Result Variable *Memorability***

Validity test is done by comparing the calculated r value with the sign / p value. The following are the results of the validity test for each variable.

Table 3 Memorability Test Result

Hasil Uji Validitas *Memorability*

| No | *Memorability* | | | |
| --- | --- | --- | --- | --- |
| | r table | r hitung | p | ket |
| M1 | 0.1966 | 0.935 | 0.000 | valid |
| M2 | 0.1966 | 0.794 | 0.000 | valid |

Based on the recapitulation results of the data presented in the above table shows that of all items of the statement used to measure the Memorability variable is declared valid. This conclusion can be drawn by comparing the value of r count with r table. With the number of data (n) of 100 respondents and a degree of confidence of 5% or 0.05, r tables are obtained 0.1966. The correlation between all statement items with a total score of all of them is greater than rtable = 0.1966, so that all statement items are declared valid. While the value of p is obtained from the large error value obtained by researchers from the statistical calculation of 0.05, if p> 0.05 means that it represents a deviation from the normal distribution. From all items of the statement, it can be seen that the calculated r value for all question items used to measure the

Memorability variable is more than p. Thus the question items used to measure the Memorability variable are considered valid and can be used to obtain research data.

## Test Result Variable *Error*

Validity test is done by comparing the calculated r value with the sign / p value. The following are the results of the validity test for each variable.

Table 4 Error Test Result

Hasil Uji Validitas *Error*

| No | *Error* | | | |
|----|---------|---------|-------|-------|
| | r table | r hitung | p | ket |
| ER1 | 0.1966 | 0.898 | 0.000 | valid |
| ER2 | 0.1966 | 0.358 | 0.000 | valid |
| ER3 | 0.1966 | 0.876 | 0.000 | valid |

Based on the recapitulation of data presented in the table above shows that of all items of the statement used to measure the Error variable declared valid. This conclusion can be drawn by comparing the value of r count with r table. With the number of data (n) of 100 respondents and a degree of confidence of 5% or 0.05, r tables are obtained 0.1966. The correlation between all statement items with a total score of all of them is greater than rtable = 0.1966, so that all statement items are declared valid. While the value of p is obtained from the large error value obtained by researchers from the statistical calculation of 0.05, if p> 0.05 means that it represents a deviation from the normal distribution. From all the statement items, it is seen that the calculated r value for all question items used to measure the Error variable is more than p. Thus the question items used to measure the Error variable are considered valid and can be used to obtain research data.

## Test Result Variable *User Satisfaction*

Validity test is done by comparing the calculated r value with the sign / p value. The following are the results of the validity test for each variable.

Table 5 User Satisfaction Test Result

| No | User Satisfaction | | | |
|---|---|---|---|---|
| | r table | r hitung | p | ket |
| US1 | 0.1966 | 0.899 | 0.000 | valid |
| US2 | 0.1966 | 0.830 | 0.000 | valid |

Based on the results of the data recapitulation presented in the table above, it shows that all statement items used to measure the User Satisfaction variable are declared valid. This conclusion can be done by comparing the value of rcount with rtabel. With the number of data (n) as many as 100 respondents and a degree of confidence of 5% or 0.05, it is obtained r table of 0.1966. The correlation between all statement items with a total score of all of them is greater than rtable = 0.1966, so that all statement items are declared valid. While the p value is obtained from the error value obtained by the researcher from the statistical calculation results of 0.05, if p> 0.05 it means that it describes the deviation from the normal distribution. From all the statement items, it can be seen that the calculated r value for all the question items used to measure the User Satisfaction variable is more than p. Thus the question items used to measure the User Satisfaction variable are considered valid and can be used to obtain research data.

**Usability Measurement**

Usability measurement is done by calculating the percentage of answers from respondents using the following formula:

$$Persentase\ Kalayakan\ (\%) = \frac{skor\ yang\ diobservasi}{skor\ yang\ diharapkan} \times 100\%$$

Then the data is converted based on the following category:

| Angka (%) | Klasifikasi |
|---|---|
| <21 | Sangat tidak layak |
| 21 – 40 | Tidak layak |
| 41 – 60 | Cukup |
| 61 – 80 | Layak |
| 81 – 100 | Sangat Layak |

The results of the calculation of usability value can be presented as follows:

Table 6 Calculation of usability value

| No | Faktor | Skor yang diharapkan | Skor yang diobservasi | % | Keterangan |
|----|--------|---------------------|----------------------|-----|-----------|
| 1 | Learnability | 100 x 25 = 2500 | 1785 | 71% | layak |
| 2 | Efficiency | 100 x 14 = 1400 | 1161 | 83% | layak |
| 3 | Memorability | 100 x 7 = 700 | 581 | 83% | layak |
| 4 | Error | 100 x 6 = 600 | 450 | 75% | layak |
| 5 | User Satisfacation | 100 x 4 = 400 | 381 | 95% | layak |

Based on the calculation table above, it can be seen that the factors of Learnability, Efficiency, Memorability, Error, and User Satisfaction show usability values in the range 61-80% or in the Eligible category.

## CONCLUSION

From the results of the research and discussion it can be concluded that:

1. Use of Youtube user experience in terms of the Learnability factor The calculation results are known that the Lernabililty factor shows usability value of 71%, the results are in the feasible category. So it can be concluded that the Youtube user use experience in terms of the learnability factor is feasible to be operated by the user.

2. Use of Youtube user experience in terms of Efficiency factors. The calculation results are known that the Efficiency factor shows a usability value of 83%, the results are in the very feasible category. So it can be concluded that the Use of Youtube user experience in terms of the Efficiency factor is very feasible to operate the user.

3. Use of Youtube user experience in terms of the Memorability factor The calculation results are known that the Memorability factor shows usability value of 83%, the results are in the very feasible category. So it can be concluded that the Use of Youtube user experience in terms of the Memorability factor is very feasible to be operated by the user

4. Use of Youtube user experience in terms of the Error factor. The calculation results are known that the Error factor shows usability value of 75%, the results are in the feasible category. So it can be concluded that the Use of Youtube user experience in terms of the Error factor is feasible to be operated by the user.

5.      Youtube user use experience in terms of the User Satisfaction factor. The calculation results are known that the User Satisfaction factor shows usability value of 95%, the results are in the very feasible category. So it can be concluded that the Use of Youtube user experience in terms of the User Satisfaction factor is very feasible to be operated by the user

## RECOMMENDATIONS

Suggestions that can be used for developing this application are as follows:

1. It is hoped that this research can be a reference for the development of knowledge, and can be a reference for students who conduct research with Alternative themes.

2. It is recommended to YouTube to be able to further improve usability on YouTube users.

3. It is hoped that this research can become information and learning material so as to increase knowledge and insights for future researchers.

## REFERENCES

Aisyah, Siti. 2017. Video Blog Sebagai Media Representasi Diri Vlogger di Kota Makassar. LTA S-I Kearsipan Fakultas Ilmu Sosial dan Ilmu Politik. Universitas Hassanudin.

Antony, Mayfield. 2008. What is Social Media?. London: iCrossing.

Arikunto, Suharsimi. 2010. Prosedur Penelitian Suatu pendekatan Praktek. Jakarta: Rineka Cipta.

Baym, Nancy K. 2011. Social networks 2.0. di dalam Mia Consalvo & Charles Ess (editor), The Handbook of Internet Studies. UK: John Willey-Blackwell Ltd.

Beech, Nic, & McKenna, Eugene. 2000. The Essence of Manajemen Sumber Daya Manusia. Yogyakarta: Andi.

Boyd, danah m.,Ellison, N.B. 2008. Social network sites: definition, history, and scholarship. Journal of computer mediated communication, 13(1), 210-230.  Retrieved from www.danah.org/papers/JCMCIntro.pdf.

Castells, Manuel. 2010. The rise of the network society. Volume 1. Singapore:  Willey-Blackwell.

Castells, Manuel. 2011. Communication power. United States: Oxford University Press.

David, Eribka Ruthellia. 2017. Pengaruh Konten Vlog dalam Youtube terhadap Pembentukan Sikap Mahasiswa Ilmu Komunikasi Fakultas Ilmu Sosial dan Politik Universitas Sam Ratulangi. e-journal "Acta Diurna", Vulume VI No. 1. Hal 1-18.

Garrett, Jesse James. 2011. The Elements of User Experience: User-Centered Design for the Web and Beyond, Second Edition. California: New Riders.

Jensen, Klaus Bruhn & Jankowski, Nicholas W. 2011. A Handbook of Communication Research, New York : Routledge.