

Developing an Android Software “Glossary of Sharia Economics”

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Abstract: This study is conducted to describe the process of developing of android software system which contains the terms in sharia economics field in three languages (Arabic, English, and Indonesia) for the students of Islamic Economics and Business Faculty. The study used research and development methodology. The steps comprised: preliminary study, making the product, validation of the product and try out the product. Before making the product, the researcher conducted preliminary study to the students which the result was the students need a specific tool to ease them in learning the terms. After the product was made, the researcher then tried out the product to the students. To evaluate the product, the researcher then distributes the questionnaires through online survey to the students to find out their opinion about the product. The result of the questionnaires showed that most of the students satisfied with the product. In conclusion, the android software is very promising to be used as the supporting tool in learning.

Keywords: *Android software, Sharia economics, Vocabulary mastery.*

INTRODUCTION

English is one of crucial subjects in University. Teaching English is conducted for the students of Islamic and Economics and Business Faculty majoring sharia banking, sharia Economics, and sharia business management. It is considered as teaching English for specific purpose (ESP) since the language is taught to students of Non-English department and the material is particularly designed to the students' need and differ from general English. (Mahanani, 2017) remarked ESP as an English course in which textbooks and materials are adjusted to learners' desires and purposes. (Agustina, 2014) conveyed that ESP is understood to be about preparing learners to use English within academic, professional, or workplace environments, where the language is going to be used.

As part of teaching the language, vocabulary should be introduced first. Moreover, as the ESP, the vocabulary contained is specifically made only for one certain field, which in this case is sharia economics. The vocabulary in sharia economics is far different from other vocabulary in others field.

Vocabulary is the most fundamental part of a language. The vocabulary functions like a foundation for a language. Someone who is studying a language will definitely learn vocabulary before other aspects of language itself such as language rules (grammar), changes of words form (tenses, regular/irregular verbs, singular/plural), etc. Wilkins (Thornbury, 2008) stated that "without grammar, only a few things can be conveyed. However, without a vocabulary,

nothing can be said". This illustrates how important the mastery of vocabulary in learning a language.

In line with this, Nation (Schmitt & McCarthy, 1997) explained that "knowledge of vocabulary allows for the occurrence of language use, the use of language allows increased knowledge of vocabulary, knowledge of the world allows increased vocabulary knowledge, language use and so forth". Here there is a clear picture that the vocabulary is the initial key in mastering a language. The more vocabularies mastered; the more knowledge can be obtained.

According to Nation (2008) the vocabulary is divided into 4 (four) types, namely: (1) High frequency words, is the vocabulary that most often appears in both formal and informal situations in the form of words and writings. (2) Academic words, is a vocabulary that appears usually in written form or academic writing contained in textbooks or journal articles. (3) Technical words, is a vocabulary of specialization or vocabulary that is specific to a particular field. For example, vocabulary in the field of physics or vocabulary in the field of applied linguistics. Last (4) Low frequency words, is a vocabulary that is rarely used.

In recent years, sharia economics and their derivatives such as sharia banking, sharia accounting, sharia business management, sharia financial management, etc., which were initially less known by the public suddenly became one of the favorite sciences to be studied especially in the college. The public's interest and attention were getting higher to these majors. In fact, the level of competition has been very high to compete for seats in universities for these majors (Farah, 2018).

This was matching with the booming of sharia financial institutions in the form of sharia banks, sharia rural banks (BPRS), Baitul Maal wa At-tamwil (BMT), sharia financial services cooperatives (KJKS), and so on. Those institutions need a lot of employees every year. Assuredly, those institutions require employees who understand the knowledge of sharia economics perfectly.

The first step that could be done in studying about sharia economics is to study the terms contained in the sharia economic itself. Unfortunately, because these terms are in foreign language, it is like a hindrance for the students to learn, understand, and memorize the terms. Thornbury (2008) stated that there are several factors that cause a person difficulty in mastering vocabulary, including: 1). Pronunciation (pronunciation), 2). Spelling, 3). Length and Complexity (word length and complexity), 4). Grammar (rules of language), 5). Meaning, and 6). Range, Connotation and Idiomaticity (range, connotation and idiomaticity). These factors will be felt when the learner's native language was completely different from the target language. In this case, Arabic as the root of the terms contained in the sharia economics was different from English as the target language.

Vocabulary which was intended here refers to the contracts or terms that functioned as the basis of all activities in the sharia economics sector. Sale and purchase of goods, lending and borrowing activities, saving activities, accounting records, and many more also use the contracts or the terms as a basis as well as guidance on its implementation

A contract or term used will determine how the rule of the game in an economic activity. Different contracts or terms will

produce different rules. The aim was that all of these activities were in accordance with the applicable religious law, no party was harmed, and bring benefit to all parties involved. Compared to conventional economics, the sharia economic will be more stringent in the rules so it is not surprising if any transaction that could be carried out in conventional economics but prohibited in the sharia economic.

The initial idea of this research was the condition of the students in Islamic Economics and Business Faculty where the researcher taught English for the last three years. The researcher found that the students hard to understand the material taught in the classroom since the material was made from the combination between English and Arabic terms. To solve this, the researcher then tried to made a software with android based which contained the material in three languages (Arabic, English, and Indonesia) which was very practical since it could be learned anywhere and anytime.

The idea to made the android based software was the fact that almost of the students had smartphones. At present, smartphones are not a luxury and exclusive item. We could say that everyone owns it. Some even have more than 1 smartphone. This happened because the smartphone factories were competing to create smartphones at the cheapest price possible. The rush of smartphones from China at a relatively cheap price to Indonesia has made it easier for everyone to own the smartphone. According to Hootsuite data as quoted by the portal *industri.bisnis.com* (2018), the number of smartphone users in Indonesia in January 2018 was reached 177.9 million people. While reports from the *statista.com* page (2018),

until December 2017, the number of android-based smartphone users in Indonesia was reached 88.37 percent, very far leaving other smartphone-based users such as iOS with only 3.84 percent, Blackberry or others.

There were numbers of research about the use of technology to enhance the student's ability especially in language learning. Harison, Busran, & Putra (2016) invented an android software that could be adjusted according to the user. They stated that the software could help the learner to save vocabulary from Indonesia to English and vice versa. The software also possible to be used to measure how much vocabulary already mastered by the learner.

The important of the use of technology, especially the smartphone in learning English for the students also a concern of Lekawael (2017) whom revealed that there is an urgent need for teachers to implement smartphone-based language learning in order to engage the students to be critics with material and its content so it enables the students to build and enhance a technology awareness of smartphone and internet usage on English language learning in classroom.

Asmar & Ardi (2013) in their research using "Listening Media" applications or software for high school students stated that the use of the software was able to make the students more focused in learning, the students' motivation to be higher, and able to make the students more familiar with pronunciation or pronunciation of vocabulary in English because the sound in the software is the sound of a native speaker. Horvath, Blaske, & Szabo (2016) applied a software called "Duenna" to the students in a school. The result is that the software is able to

improve listening and writing skills for the students. The students' understanding also increases with the software

Danka (2017) used the "Quizlet" software in teaching English to 121 students at Assumption University, Bangkok, Thailand. The result is that the students feel satisfied and more active in the learning process. The latest research was conducted by Puspitasari & Subiyanto, (2017) where they developed an Android-based software for reading or reading learning for kindergarten students based on the system "Learning to Read without Spelling (BMTM)". The result of learning using the software is that the ability to read kindergarten students increases

The definition of the glossary, According to Susanti, (2016), the glossary can be said as a list of alphabetical forms summarized in a book, paper, and others that have meaning and are very helpful for finding meaning from difficult words. According to wikipedia.org, the glossary is an alphabetical list of terms in a particular domain of knowledge that is equipped with definitions for these terms. A bilingual glossary is a list of terms in one language defined in another language or given the closest synonym (or at least synonym) in another language. From these points it can be concluded that the glossary is the definition of words in a special field arranged in alphabetical order in other languages.

The urgency of this research is to find out the difficulties and needs of students in understanding and mastering the sharia economics vocabulary, creating learning media that are in line with market needs among today's students who prioritize technology, and create a new breakthrough in

learning sharia economics which is easy and practical.

MATERIALS AND METHODS

This research is in the form of Research and Development. According to Borg & Gall, (1996) research and development research in education is an industry-based development model where the results of the research are used to design new products and procedures which are then systematically evaluated, evaluated and refined to meet the effective criteria, quality, or the same standard.

The research subjects were first semester students of 2018/2019 Academic Year in the department or study program of Sharia Banking and Sharia Economics which took English courses 1. According to Gall et al (Adisti, 2012), there were several steps in preparing research and development research (research and development). The description of these steps is: 1. Collecting information, 2. Planning, 3. Making the initial product, 4. Initial testing, 5. Product revision, 6. Real trial, 7. Revision of operational products, 8. Operational testing, 9 Final product revision, and 10. Dissemination and implementation

However, because of time constrain, the steps were modified into: 1. Need analysis. This is conducted by asking the students' opinion using online survey. 2. Product arrangement. The second step was making the product. The product was made based on the students' need 3. Validation. After the product was made, the researcher made consultation to the validators. There are two validators; media validator whose expertise on learning media and material validator with the expertise on the sharia economics. 4. Tryout. The last step was tried out the software to the students.

In this study, two data analyze were carried out, namely data analysis for the preliminary study and data analysis to test the product quality. This stage begins with a sampling technique. This technique consists of selecting and determining respondents, determining sample size, and determining the objectives to be achieved from this test. The sample in this preliminary study is 45 respondents. This amount is sufficient to meet the goal of exploring the obstacles faced by the students and knowing their needs in learning. While for the test the dimensions of product quality the sample amounted to 106 respondents. This amount is also enough to meet the criteria in analyzing because the question items only amount to 9.

The purpose of the product quality dimension test is to determine the extent to which the product, which in this case is software or application Glossary of Sharia Economics, meets the criteria of 8 dimensions of product quality according to Garvin, (1987). But not all of the 8 dimensions of product quality can be used in this study. The technique of collecting data at the preliminary study and testing the dimensions of product quality using online surveys using research instruments in the form of questionnaires using google form. This technique is very effective and appropriate because all respondents have an Android smartphone so that the distribution and filling in questionnaires can be done quickly. The statistical analysis technique used in this study was descriptive statistics using SPSS.

RESULT AND DISCUSSION

Before the software is made, the researcher conducted need analysis or preliminary study. This study contains some questions. Two

most important questions are: whether they use smartphone with android operating system or not and whether the students need a special software to learn or not. The initial study applied to 45 students. The result are as follows:

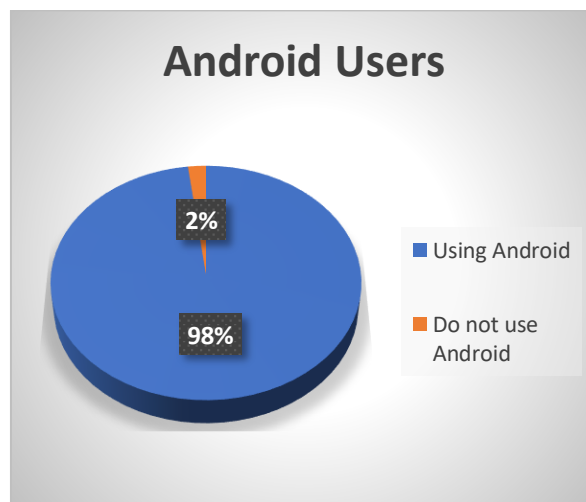


Chart 1. The Comparison of Smartphone Users

The chart shows that around 98 percent of respondents using Android-based smartphone while the other 2 percent using other operating systems. This condition shows how powerful android is compared to other operating systems. This is in line with the conditions and data of the smartphone users in Indonesia as described in the before.

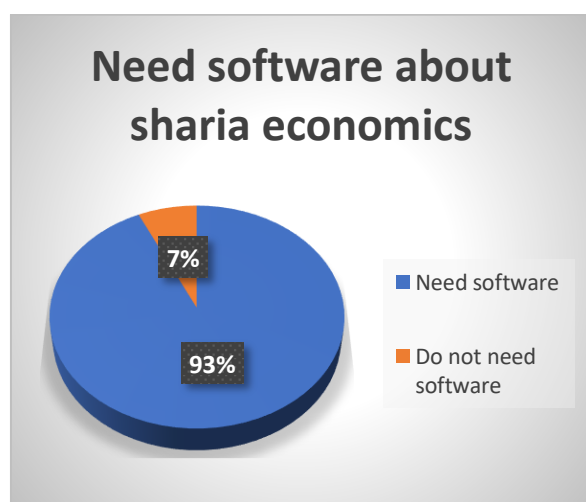
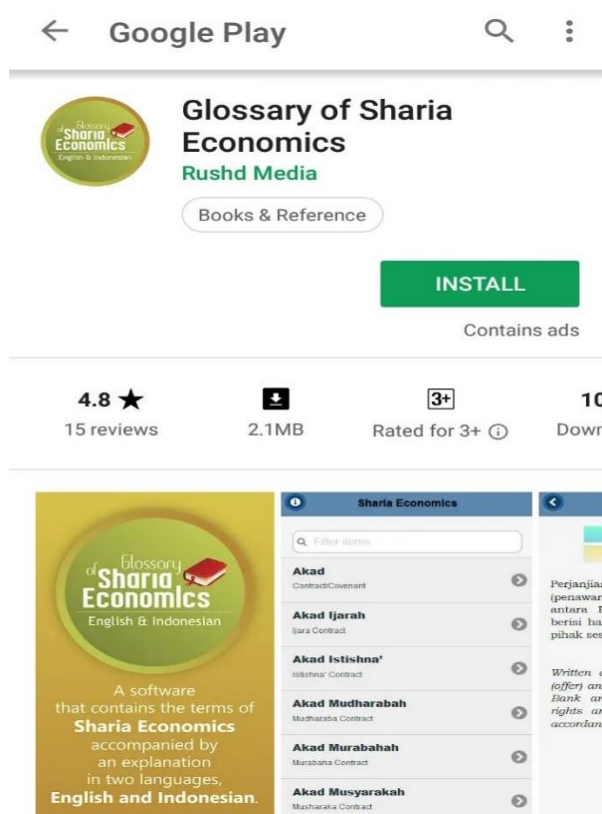


Chart 2. The Need Analysis

Chart 2 shows that as many as 93 percent of students claimed to need tools to simplify the learning process and facilitate them in understanding the contract or terms in Islamic economics. From the results of preliminary study then the application or software is created and named "Glossary of Sharia Economics". The glossary consist of the terms in sharia economics with the main part is in Arabic language but provided the definitions and the explanations in English and Indonesia. This is to make the students easier to understand the material.

After it is made, then the glossary is uploaded to the Google Play Store. The display of the software is as follows:



Picture 1. The Display of the Software in GPS

After the product is uploaded into Google Play Store then the researcher make consultation to two validators about the product. The validators give positive remarks

about the software and also give valuable input for the development of the software.



Picture 2. The Example of the term

The following step of the development of the software is trial. The first trial is a small trial since it is conducted only by 4 students. After the trial, the researcher doing a discussion to the students to know about their impression about the software. Most of them said that the software is quite good and ease them to learn about sharia economics vocabulary since the software is provided with three languages.

Next, the researcher conducts second trial. This time with more participants. About 106 students are involved. As the first trial, the researcher then having discussion with the students about their impression of the software. More valuable inputs are got from the students.

Test of Product Quality Dimension

After the trial is conducted, students are asked to give an assessment and input related to the

application by using an online survey. The online survey questionnaire was compiled based on Garvin's theory (1987) on the test of product quality dimensions. The items to be tested are; Performance, Features, and Aesthetic aspect. Each aspect consists of three questions. The survey used those 106 respondents. The results of the survey are as follows:

Table 1. Performance Aspect

No.	Question	Yes	No
1.	Does the software is easy to use?	100%	0%
2.	The software performance as expected?	94.4 %	5.6%
3.	The software is very useful	100%	0%

The table tells that the performance aspect is very satisfactory. This can be seen from the students' respond which very convincing. Two out of three question get perfect score.

Table 2. Feature Aspect

No.	Question	Yes	No
1.	The feature of the software is different from other software	91.6%	8.4%
2.	The software offers new experience in learning	96.3%	3.7%
3.	The feature of the software is quite complete	76.9%	23.1%

Table 2 depicts of the students' assessment about the feature aspect of the software. Although the score is relatively high, but compared to performance aspect, there are some deflations. This means that the feature should get some improvement in the future.

Table 3. Aesthetics Aspect

No.	Question	Yes	No
1.	The software has a good design	75%	25%
2.	The software has a unique display	66.7%	33.3%
3.	The design of the software makes me interested to use it	93.5%	6.5%

The percentage in the aesthetic aspect is the lowest percentage compared to the previous two aspects. The researcher should improve the aesthetics aspects as well in order to make the user easier to operate the software. However, the assessment of the majority students still shows a positive response.

In addition, based on the assessment from the students, there are two major factors that need special attention; the number of the terms that not complete yet and the need to give example of the activity in each term. These weaknesses will be improved soon as the continuous process of the development of the software.

CONCLUSION

The making of the software "Glossary of Sharia Economics" is based on the results of preliminary study which show that the students need a tool to facilitate them in learning and understanding about the vocabulary in the sharia economy. In this case, the vocabulary is in the form of contracts and terms.

The results of the product quality test illustrate that the majority of the students are satisfied with the performance, features, and aesthetics of the software. There are various notes given by the students as the users regarding to the software. This is certainly a valuable input for the development and improvement of the software in the future.

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