

AN ANALYSIS OF AN INNOVATION E-LEARNING ON MODERN PLATFORM

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Abstract: *The development of technology has resulted in many innovations. One of them is in the field of education. Innovation in the field of education today apparently uses online learning systems. Online tutoring course can make students or else easier to access knowledge anytime and anywhere. One of the E-learning innovations in online learning is an application called Ruangguru. The purpose of this research was to find out the effectiveness of using Ruangguru application as a modern learning platform. In this research, the researchers used cross-sectional survey research because survey research design are procedure in quantitative research. The result of this research showed 36% respondents were strongly agreeing that using Ruangguru was effective for learning media and 58% agree that using Ruangguru helped them to study and 6% disagreed for using Ruangguru was effective to improve their learning methods.*

Keywords: *Innovation, Ruangguru Application, E-learning*

INTRODUCTION

Indonesia is a country with the fifth-largest internet user on world. Based on data from the statistical center in Indonesia, there are at least 50% of the entire populations of Indonesia or around 132.7 million internet users. From this figure, 6.3% (8.3 million) are internet users who come from students. Within 17 years

lastly, the growth of internet users in Indonesia it reaches a figure of 6,535.0%. That fact is what becomes the potential for growth of various start-up models education to achieve education 4.0. From foreign to artificial local. However, the concept of digitization education is still moving teaching system from conventional to digital format.

In addition, follows the shifting technological developments that are classified as such rapidly. Now days, technology is wrongan offer that is very tempting for each person. The internet is a place for searching nearly any information we need. If we can learn anything from observing the innovative technology of the 21st century, it's that collaborating on a project is a pretty important part of work in the 4.0 or modern era.

Today's educational system is static, generalized and puts less focus on individual self-development than it perhaps should. This is why we should fix these issues and take education to the newest way, how to make education more exciting, fun and practical which can fully explored with using smart and correct use of technology. Emerging technologies can have far-reaching effect on how teachers teach and learners learn. The ability to harness these technologies in the design of online class can impact the engagement of teaching and learning by creating more options for learners to connect with course content as well as the other learners.

The popularity of online learning has really taken off in recent years and

many benefits of this kind of learning. For several reasons, online tutoring is a great way to help students who are struggling at school. One reason that online learning has become so popular with children nowadays is that today's generation has grown up in the internet age, and more familiar with digital and online devices than any other. It is a second nature for students to turn their phone, tablet, laptop, or PC when they need help, which means they are likely more comfortable with the online tutoring environment. E-learning and online tutoring has made it much more convenient for students to get help they need to succeed at school. The online system of online tutoring allows students to be able to repeat the material provided (Gideon, 2018:176).

One of the platform or an application that takes advantages of this opportunity is *Ruangguru*. It is a platform technology-based education service provider that can help student, teacher and parent to carry out their activities more effectively and efficiently.

REVIEW OF LITERATURE

***Ruangguru* Application**

Many students today find it difficult to understand the lesson learned at school so that they get home again and get busy with their gadget and forget the topic of lesson that have been learned at school. Therefore, most parents are aware of this so as to provide additional lesson to their children by enrolling their children in tutoring institution or looking for private tutors. The development of E-learning, students do not have to come to the tutoring location because they can learn whenever by their laptop or smartphone by accessing online tutoring.

According to Darin E. Hartley (2001), "E-learning is a type of teaching and learning that allows the delivery of teaching material to student using the internet, intranet, and other computer network media."

Multimedia learning is part of electronic-based learning (E-learning). In building or developing effective learning multimedia, it is of course necessary to pay attention to the principles (principles or theories) of effective learning as well. What factors influence the effectiveness of learning? According to Clark (2008) and Clark & Mayer (2008), the factors

that influence the effectiveness of learning are as follows:

- a) The existence of learning objectives (desire knowledge achievement)
- b) Content types (facts, concepts, procedures/processes, and principles)
- c) Learning methods or strategies
- d) Delivery media
- e) Learner learning style

In the context of multimedia learning, learning can be said to be effective if it successfully integrates that 5 elements.

In addition, related to the process of developing multimedia so that the effectiveness of a learning multimedia product increases, you need to consider the following things (Rusli, et al: 2014):

- a) Availability of learner control facilities to adjust student's cognitive load during the learning process (Multimedia interactivity)
- b) Availability of interactive learning facilities (there are practice question with answer or feedback)
- c) The topic condition (static/dynamic) presented

- d) Content visualization type (static or animated visualization).

Ruangguru exists as an alternative online tutoring that can be easily accessed via smartphone, laptop, or even PC. The use of smartphone or gadget as an educational tool is one of the effort to do the online tutoring (Rahmadani, 2019). *Ruangguru* application adopts tutoring services but is packaged in the form of online so that the teaching and learning process can be accessed through smartphones connected to the internet (Hasanah, et al : 2019). It is the largest and most comprehensive technology company in Indonesia that focuses on education-based service and has more than 6 million users and has managed more than 150.000 teachers offering services in more than 100 subject areas. The company was founded in 2014 by BelvaDevara and ImanUsman. *Ruangguru* also believes that technology can help students, teachers, and parent to carry out their activities more effectively and efficiently. *Ruangguru* is a forum that connects students with teachers (Fatimannisa, et al : 2020). The founder is determined to continue to

develop other services and collaborate with various parties to achieve their goal that to improve educational system in Indonesia.



Picture 1. *Ruangguru* Logo

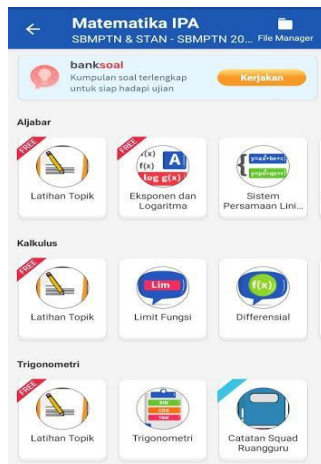
Source: <https://play.google.com/store/apps/details?id=com.Ruangguru.livestudents&hl=in>



Picture 2. *Ruangguru* Main Menu

Source: <https://bevpedia.blogspot.com/2019/04/belajar-bersama-Ruangguru-jadi-mudah.html>

Ruangguru main menu is a simple yet good design so users will not get confused to choose which class or lesson that the users pick.



Picture 3. one of Ruangguru Materials

Source: <https://bevpedia.blogspot.com/2019/04/belajar-bersama-Ruangguru-jadi-mudah.html>

Materials on *Ruangguru* are guaranteed easy to understand, quality and in accordance with the curriculum. All learning materials in *Ruangguru* follow the national curriculum, starting from KTSP, K-13, and K-13 revised.



Picture 4. Brief Animated Summary

Source: <https://bevpedia.blogspot.com/2019/04/belajar-bersama-Ruangguru-jadi-mudah.html>

There's a brief animated summary that the users can access so the user can take a look again on the material that the tutor has taught earlier with an animated design. The summary can also be downloaded.



Picture 5. Tutoring Online Class

Source: <https://www.youtube.com/watch?v=rBZXI2Nh6s4>

Learning methods use animated to facilitate students to easily understand the material and the video can be downloaded so that the users will not take more data to access the video over and over again.



Picture 6. Experienced Tutors

Source: <https://bevpedia.blogspot.com/2019/04/belajar-bersama-Ruangguru-jadi-mudah.html>

The tutor is the best graduate from the best university in the country and aboard, who is certainly an experienced tutors in his/her field. So it can be guaranteed the methods that they use are the best methods.

METHODOLOGY OF STUDY

Research Method

In this research, survey research design was used because survey research design are procedure in quantitative

research in which investigators administer a survey to sample or to entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population (Crasswell, 2012). According to Borg and Gall (1989), there are two types of surveys, namely cross-sectional surveys and longitudinal surveys. In the survey cross-sectional data collected from a sample from a predetermined population (Borg and Gall : 1989). Information is collected at one point in time even though it is actually take time to complete or take more than a day or a month. Generally, it can be analyzed in two ways, namely description single variable and exploration of relationships. In the description of a single variable, data reflects the results of the total sample covering a large number of alternative responses in a single questionnaire. In this research, the researchers used cross-sectional survey research.

The sample is a portion or representative of the population to be researched (Suharsimi Arikunto, 2010: 109). Sampling for research according to Arikunto (2010: 112), if the subjects are less than 100, people should all be taken, if the subject large or more than 100

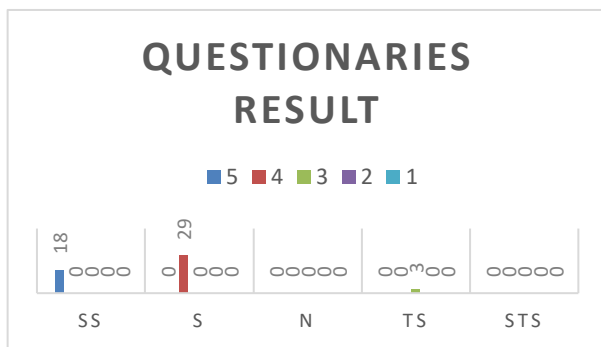
people can be taken 10-15% or 20-25% or more. Saptas and Zeller (2002) argue that a sample size of 50 is sufficient to evaluate the psychometric nature of a measure of social construct.

Respondent in this research were all students who had subscribed to *Ruangguru*. The instrument used was GoogleForm that contained some questions related to the effectiveness of the *Ruangguru* application and there was a response from students that subscribe to the *Ruangguru* application. On the form, the students expressed their experience of using *Ruangguru* as their platform to study.

Data analysis technique is a data processing that aims to get the right conclusion. In this survey research, the researchers used quantitative data analysis techniques with a descriptive approach.

The data was processed using Microsoft Office Excel 2007 to find out the score and percentage of questionnaires that have been filled up. After that, the data described to find out the effectiveness of using *Ruangguru* application as a modern learning platform.

RESULT AND DISCUSSION



After the researcher collected respondents who were willing to fill out the questionnaire the researcher had provided. The questionnaire points taken were validated. The numbers of respondent gathered were 54 people, the number was obtained from the help of my friend who know their friends or family who had subscribed to *Ruangguru* application and distribution of questionnaire links via social media platform (Twitter).

The analysis of the data in analysis “An innovation e-learning on modern platform” at the perspective of the people, who had subscribed to *Ruangguru* application, was adapted and illustrated in the following table.

Each answer was related to the form of statement or attitude support expressed in the following words.

Table 1. Point of the Statement

Positive statement	
Strongly Agree	5
Agree	4
Neutral	3

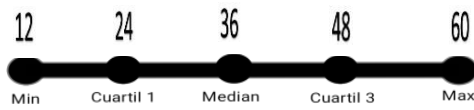
Disagree	2
Strongly Disagree	1

There were 5 Items to measure attitudes towards “The analysis the effectiveness of using *Ruangguru* application as a modern learning platform”, with 12 statements and answered by 50 respondents.

Based on these data above, the steps taken to find out how respondents’ opinion toward the effectiveness of using *Ruangguru* application as a modern learning platform were:

- a) Maximum score, the largest answer score at times many items. $5 \times 12 = 60$.
- b) Minimum score, the smallest answer score at times of many items. $1 \times 12 = 12$
- c) Median, which is the sum of the maximum score with the lowest divided by two. $(60 + 12) : 2 = 36$
- d) Quartile value 1, is the sum of the minimum score with a median divided by two. $(12 + 36) : 2 = 24$. While the quartile value 3, is the sum of the maximum score with the median divided by two. $(60 + 36) : 2 = 48$.

The figure below illustrates the minimum score, quartile 1, median, quartile 3 and score maximum.



Based on the scale drawings above the numbers are the score limits for each opinion. Then, the ranges of scores for the four categories were:

Opinion Category	Score Category	Range Score Total
Strongly agree	Quartile 3 \leq x \leq Score Maximum	48-60
Agree	Median \leq x $<$ Quartile 3	36-48
Disagree	Quartile 1 \leq x $<$ Median	24-36
Strongly disagree	Skor Minimal \leq x Kuartil 1	12-24

Based on the table above, it can be showed that opinion of the respondent about the effectiveness of using *Ruangguru* application as a modern learning platform that 36% strongly agree, 58% agree, and 6% disagree. It means that 36% respondents are strongly agree that using *Ruangguru* is effective for learning media and 58% agree that using *Ruangguru* help them to study and 6% disagree for using *Ruangguru* is effective to improve their learning methods.

According to AtingSomantri (2006 : 40) Likert attitude scale does not allow the statements of neutral items. So there are only two statements on the Likert scale, positive items statements and

negative items statements.

CONCLUSION AND SUGGESTION

Conclusion

Based on this research, it showed that students who had subscribed or used learning through *Ruangguru* application feel strongly agree or agree when using the *Ruangguru* application. It was effective in helping them to learn and makes it easier for students to learn anywhere and anytime.

Suggestion

As for the follow-up of the findings of this study, it is hoped that researchers who are interested in researching, can make the research “An analysis of the effectiveness of using *Ruangguru* application as a modern learning platform” as a reference material or develop other research based on this research and to educators, in order to be more acquainted with e-learning, especially learning through *Ruangguru* application in order to maximize students learning process so that students are able to achieve their best potential and make our educational system to the next or modern era.

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