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Conference Paper

User's Technology Acceptance of *thinkgather.com* App-Based Platform: Collaboration and Networking App for Researchers

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Abstract

This research is based on the desire to increase the amount of research and the number of publications resulting from the increased ease of finding research groups and accelerating the process of disseminating information in accordance with the field of research. This study was applied to a research group consisting of 50 research lecturers from universities. This research method was conducted by comparing the ease felt by the research lecturer in using the thinkgather.com application. The analysis applied in this study is based on the Technology Acceptance Model (TAM). TAM is a method used to determine the tendency of users to use new technology. The results of the research conducted are lecturers, as users of the thinkgather.com application, who have a high desire in using this application (BI). This was obtained because respondents showed a high Perceived Usefulness (U) of 82,5% and showed a high Perceived Ease of Use (E) of 85%. Based on these results states that the research lecturer, as a user, feels increased ease of collaboration and networking.

Keywords: app-based platform, networking media, thinkgather.com, user's technology acceptance

1. Introduction

The progress of world civilization can be caused by the research conducted. Science will continue to develop through research [4]. In addition, the results of research can be used for the purposes of solving problems encountered in the industry. Based on this, to increase the competitive advantage of a nation it is necessary to increase the number and quality of research. Indonesia continues to strive to improve the quality of the nation to pursue developed countries. What is needed to realize this goal is to improve the quality of its human resources [5]. An increase in the number of scientific publications can be interpreted as an increase in the quality of human resources in a country.

A total of 54,146 Indonesian global indexed publications according to SCImago data from 1996 to 2016. Based on these data, Indonesia is far below the position of the three countries, Singapore, Thailand and Malaysia [6]. In terms of internationally publicized documents, Indonesia ranks 45th globally. In ASEAN ranks fourth, while in Asia, Indonesia ranks 11th. In addition, the number of publication documents that publish in Singapore, Thailand, Malaysia and Indonesia continues to increase. Starting in 2010, Malaysia shifted Singapore's position to second place.

Lack of researchers is a factor that causes Indonesia's position is still below that of other southeast Asian countries. The latest data states that the number of researchers in Indonesia amounted to 9,685 people in 2017 [7], if compared with the population of Indonesia, the ratio of the number of researchers to the population in Indonesia is 90 researchers compared to 1 million population [8]. This number is still low when compared to countries in Asia. southeast. For example, the ratio of the number of researchers to the population in Singapore is more than 7000 thousand researchers per one million population. While Malaysia as many as 2,590 researchers per one million population. While in Indonesia, the ratio is 1,071 researchers per one million population [9].

Previous study from Kane (2010) said that collaboration and networking are key in developing science [1]. If a country has the ability and supporting facilities to collaborate, it will strengthen the conditions of scientific development in the country. While what is written in research Sweeny (2019) says that collaboration is a new way to bring out innovations [2]. These innovations will encourage new thoughts on research.

Technological assistance strongly encourages creative thinking processes that encourage innovation. Supporting facilities will also encourage innovation. Technology can be used as a good tool if it is formed in accordance with user needs. Technology-based tools encourage research acceleration that will enhance scientific development [3].

Based on the problems described earlier, researchers are interested in applying the use of the thinkgather.com application to facilitate researchers in collaborating and creating collaborative networks. If by applying the thinkgather.com application, it is hoped that researchers will be helped to create research groups that will enhance and accelerate the growth of international publications and increase the citation of scientific works.

2. Research Limitation

The limitation of this research is that the researcher focuses on knowing how technological acceptance from thinkgather.com users is due to the increased ease of collaboration and networking between researchers. With these limitations, this study only discusses the scope of the interaction of users (researchers) with the application thinkgather.com. While aspects outside of that caused by the use of the thinkgather.com application were not considered in this study.

3. Research Objective

The main objective of this research is knowing how technological acceptance of thinkgather.com application based on user experience. To find out how technology acceptance by thinkgather.com users, in this study there are several objectives, are:

1. What is the demography of thinkgather.com application users in this research?

2. What are the results of the analysis of perceived usefulness and perceived ease of use by users?

4. Research Method

The method applied in this study uses the Technology Acceptance Model (TAM) approach. TAM is a method used to determine the tendency of users to use new technology. The following is a figure that illustrates this approach.
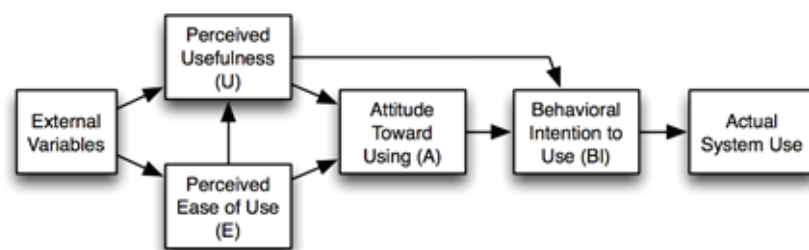
Figure 1: Technology Acceptance Model (TAM). (Source: Author's work based on several resources).

The application of TAM in this study is used to measure the perceived usefulness (U) and perceived ease of use (E) obtained from the user. If you already know these 2 variables, we can know the attitude toward using (A) of the user which will lead to how much behavioral intention to use (BI). The sample used in this study was 50 research lecturers from the university, thus representing the general and broad users of the

thinkgather.com application. Data collection was carried out by means of a question-naire that was distributed to the research lecturers, as users of the thinkgather.com application. the questionnaire distributed would measure the importance and score of each variable used in the analysis of this study.

5. Result

The results of the study will be elaborated according to the stages of this research.

5.1. Data Collecting

From the data that has been collected, data obtained as many as 50 respondents of research lecturers spread across several faculties with certain levels. The following is a summary of demographic data, namely gender, education level, faculty,
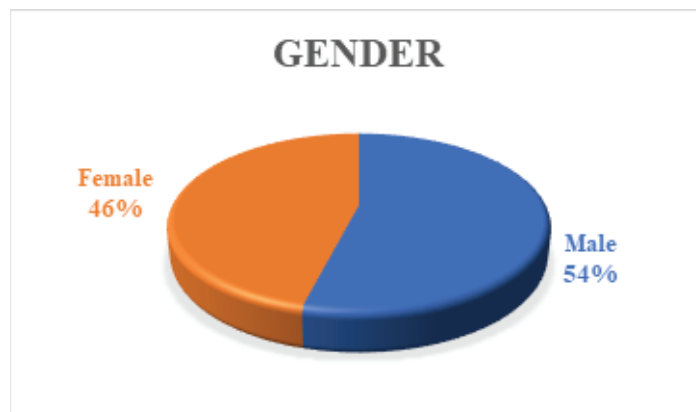
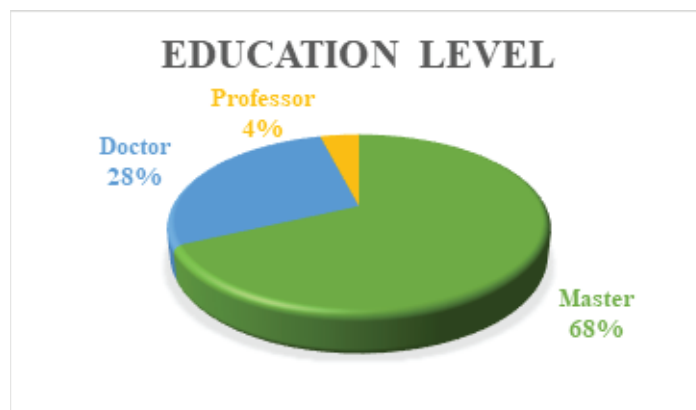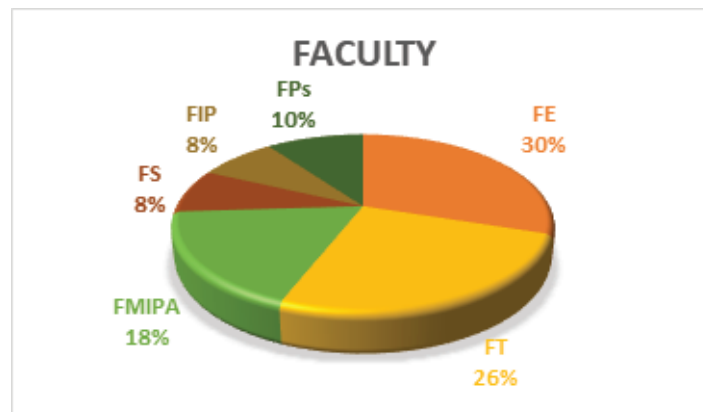**Figure** 2: Gender of Respondent. (Source: Data collected by author).

Figure 3: Education Level of Respondent. (Source: Data collected by author).

Figure 4: Faculty of Respondent. (Source: Data collected by author).

5.2. Validity and Reliability Test

Validity shows the extent to which a measuring device to measure what is valid or not an instrument item can be known by comparing the Pearson Product Moment correlation index with a significance level of 5% with its critical value. Validity and reliability tests are divided into two, namely validity and reliability tests for experts and users. Based on the results of the expert validity test, it is known that the entire questionnaire question items for experts and users have a probability value (sig) of less than 0.05 so that it can be said that all question items in the questionnaire for experts and users are valid.

The reliability test used is Alpha Cronbach. Reliability test results show that the variables in the questionnaire have a Cronbach Alpha coefficient greater than 0.6 so that it can be said that the question instruments used in users and expert questionnaires are reliable.

5.3. Analysis of Perceived Usefulness and Perceived ease of use

The data that has been collected has been declared valid and reliable, so that it can be further processed in this study. There are 2 variables measured in the questionnaire used, namely Perceived Usefulness (U) and Perceived Ease of Use (E). Perceived Usefulness is a variable that measures how important their perception of the usefulness will be obtained from the new technology that will be used. Meanwhile, Perceived Ease of Use (E) is a variable that measures their perception of the ease of using new technology to be used. If the user feels that the new technology has uses that are in accordance with their assumptions and has facilities that help in working, then the user will use the new technology. In this case the research lecturer is thinkgather.com user.

Based on the data collected it was found that there was a high value in the perceived usefulness variable at 82.5% and the perceived ease of use variable at 85%. A high value on the variable perceived usefulness, it means that researchers have high perceived value toward the usefulness of this application. A high value on the variable perceived ease of use, it means that researchers have high perceived value toward ease of use thinkgather.com application.

6. Conclusion

There are some conclusions that obtained from the research conducted are as follows. Respondents showed a high perceived usefulness, which is 82,5%. It means that researchers have high perceived value toward usefulness of this application. Respondents showed a high perceived ease of use, which is equal to 85%. It means that researchers have high perceived value toward ease of use thinkgather.com application. Respondents show a high intention to use behavior, meaning that the user has a high desire to use the thinkgather.com. It means that researchers have high behavioral intention to use thinkgather.com application.

7. Further Research

Based on limitation of this research, this research only covers about interaction between user (researcher) and thinkgather.com application. For further research, it can also cover several aspects of the research activity, such as financial technology (budget, funding, and more) and human resource (recruiting, communication, and more) management system.

References

[1] A. Sweeny *et al.*, "A Queensland research support network in emergency healthcare: Collaborating to build the research capacity of more clinicians in more locations," *J. Health Organ. Manag.*, vol. 33, no. 1, pp. 93–109, Mar. 2019.

[2] G. Mancioppi, L. Fiorini, M. Timpano Sportiello, and F. Cavallo, "Novel Technological Solutions for Assessment, Treatment, and Assistance in Mild Cognitive Impairment," *Front. Neuroinformatics*, vol. 13, Aug. 2019.

[3] H. Jiang, S. Zhao, Y. Yuan, L. Zhang, L. Duan, and W. Zhang, "The coupling relationship between standard development and technology advancement: A game

theoretical perspective," *Technol. Forecast. Soc. Change*, vol. 135, pp. 169–177, Oct. 2018.

[4] K. Kane, J. Robinson-Combre, and Z. L. Berge, "Tapping into social networking: Collaborating enhances both knowledge management and e-learning," VINE, vol. 40, no. 1, pp. 62–70, Feb. 2010.

[5] L. C. Engel and M. M. Siczek, "A cross-national comparison of international strategies: global citizenship and the advancement of national competitiveness," Comp. J. Comp. Int. Educ., vol. 48, no. 5, pp. 749–767, Sep. 2018.

[6] L. Lukman, Y. Rianto, S. A. Hakim, I. M. Nadhiroh, and D. S. Hidayat, "Citation performance of Indonesian scholarly journals indexed in Scopus from Scopus and Google Scholar," Sci. Ed., vol. 5, no. 1, pp. 53–58, Feb. 2018.

[7] M. K. McNutt et al., "Transparency in authors' contributions and responsibilities to promote integrity in scientific publication," Proc. Natl. Acad. Sci., vol. 115, no. 11, pp. 2557–2560, Mar. 2018.

[8] N. Kurniasih, C. Hasyim, A. Wulandari, M. I. Setiawan, and A. S. Ahmar, "Comparative Case Studies on Indonesian Higher Education Rankings," J. Phys. Conf. Ser., vol. 954, p. 012021, Jan. 2018.

[9] S. Arsyad and D. Adila, "Using local style when writing in English: the citing behaviour of Indonesian authors in English research article introductions," Asian Englishes, vol. 20, no. 2, pp. 170–185, May 2018.