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THE USE OF INSTANT MESSAGING BY EMPLOYEES AT COLLEGES IN PEKANBARU

Seri Hartati

Departement of Political Science, Faculty of Social and Political Sciences, Universitas Abdurrab, Pekanbaru, Indonesia
seri.hartati@univrab.ac.id

Widdya Rahmalina

Departement of Informatics, Faculty of Engineering, Universitas Abdurrab, Pekanbaru, Indonesia
widdya.rahmalina@univrab.ac.id

Diki Arisandi

Departement of Informatics, Faculty of Engineering, Universitas Abdurrab, Pekanbaru, Indonesia
diki@univrab.ac.id

Abstract

Instant Messaging (IM) now become one of the common communication tool used for personal activities and corporate needs. According to survey results from eMarketer reports, instant messaging users in Indonesia in 2014 was 37.6 million users, increased in 2015 as much as 52.9 million users, 2016 as many as 62.6 million users and predicted to continue to improve in 2017 (72, 5 million users), 2018 (81.7 million) and 2019 as many as 91.6 million users. This number shows increasing use of IM continuously. Although some research suggests that using IM may interfere with the work activity, but in recent years research has increased IM usage in the workplace. The application of IM by employees in college affects their performance in daily activities. Therefore the use of IM requires proper management to maximize its benefits. Using

this IM technology allows sharing information quickly, precisely and accurately; so that will improve the effectiveness of employee performance. This research was using a qualitative method, by testing the influence of independent variable to dependent variable. Through this research is expected to contribute the use of IM, so that the college can provide more specific management services for employees. Hopefully, could support the creation of e-management and E-education as the power of the smart city in Pekanbaru.

Keywords

IM, Effectiveness, Employee, Colleges, Information Technology

1. Introduction

Pekanbaru is the capital of Riau province, located in Indonesia, has implemented smart city policy since 2016 with the slogan: "Pekanbaru Kota Madani," which has three main pillars: smart people, smart technology and smart government (Mashur, 2017). Smart people means the citizen of Pekanbaru can use information technology but also have enough moral and spiritual intelligence, while smart technology means the technology must be able to answer the needs of the citizen in Pekanbaru and have a Malay cultural by local customs. The last pillar is a smart government which means officials and civil apparatus of Pekanbaru should be able to provide services and policies related to the smart city. (Febriyan, 2015).

Instant messaging (IM) is an application on a smart device or smartphone that is widely used in urban communities (Lebbon & Sigurjónsson, 2016). At this time, we know a lot of IM applications that are widely used such as Whatsapp, Telegram, BBM, Line, Viber, etc. (Sutikno, Handayani, Stiawan, Riyadi, & Subroto, 2016). IM allows users to be able to interact and share information using text, voice, and video in real-time. It is similar to the use of social media, where the interaction is not only for friendship but also for business and so on (Arisandi & Sukri, 2017). Related to the smart city of Pekanbaru, people are required to be multitasking, give each other information quickly and real-time, also anytime and anywhere (Sheer & Rice, 2017). Based on these needs, the IM application became popularly used and significantly support the activities of urban communities in communicating and sharing information personally or within a group discussion. (Pazos, Chung, & Micari, 2013).

The use of IM personally or by group discussion becomes a standard feature among urban communities, but also students (Bouhnik, Dshen, & Gan, 2014), academics and researchers in college (Gikas & Grant, 2013) including in Pekanbaru. A small observation has

been made at an existing university in Pekanbaru about the use of IM on working hours in the college environment, and the results indicated that the use of IM had become a necessary tool to communicate and share information between lecturer and students, lecturers and employees, or among the employees in the college.

This work could be a substantial finding because we assume that most employees in the college for Pekanbaru were already using IM for daily communication. Many factors support that IM is indeed used by almost all people in Pekanbaru, especially employees in the college. The 2017 survey released by APJII (Asosiasi Penyelenggara Jasa Internet Indonesia - Indonesia Internet Service Provider Association) shows cities in Indonesia, including Pekanbaru, shows a significant increase in internet usage and IM applications (APJII, 2017). Besides, we also see how the network coverage is adequate in Pekanbaru, and the test results can be seen in the following figure:

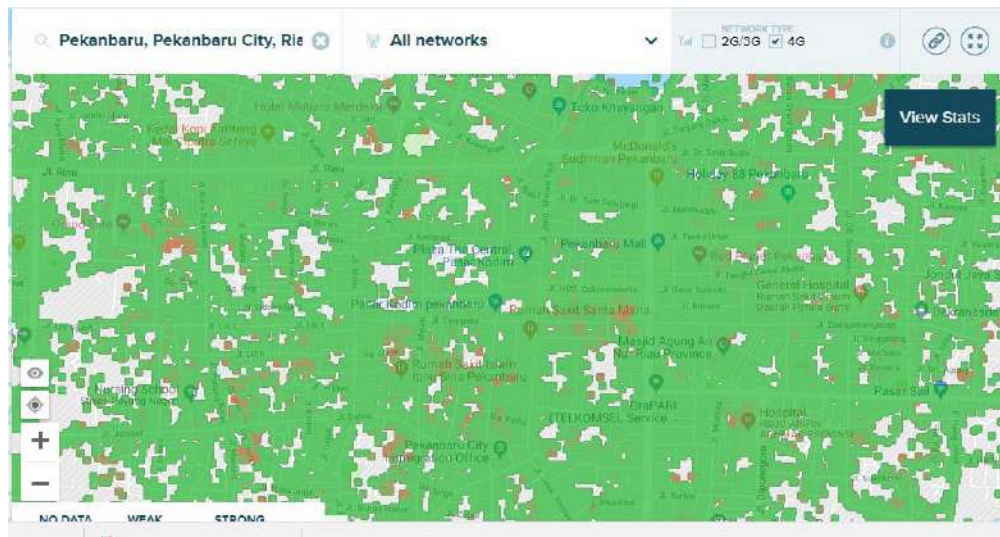


Figure 1: Coverage Network Testing Using www.opensignal.com

Testing in Figure 1 using the www.opensignal.com application, the results showed the Pekanbaru area has an excellent cellular signal coverage support (green mark) and can be used to communicate via IM. Another critical factor is that smartphones are a necessity and not just a lifestyle in the city of Pekanbaru (Darmasari & Wijayanto, 2014). On the service provider side, of course, this is a challenge that with the increase of smartphone users, the need for internet connection services from providers must be in line with the number of users so that customer satisfaction can be maintained. (Ridaningsih, 2014). Another factor, in general, can be said that

Pekanbaru is not the only city that has implemented a smart city policy, some other big cities in Indonesia have already performed this policy (Jamilah, Akbar, Gunawan, & Marantika, 2016), where a city that has implemented smart city is undoubtedly using smartphone media or IM applications (Namiot, 2013), (Sneps-Snepe & Namiot, 2013).

Based on the factors that we consider to be able to support our research, we want to see whether the trend of IM usage in the work environment is also done by other colleges in Pekanbaru. The aim of this study can be considered for the College to make a decision or policy related to the usage of their work hours. For the government or internet service provider (ISP), this research should be an insight to address the use of IM in the world of work, of course, it will have an impact on smart city policies that are run in the city of Pekanbaru.

2. Method

Respondents in this research are Lecturers and Employees in universities in Pekanbaru region. Respondents came from 15 places: 1 public university, five private universities, one polytechnic, five institutes, three academies/diplomas degree with the average number of sample per location was 14 respondents. The choice of respondents based on purposive sampling, where respondents from each college firstly asked whether IM had involvement in their day of work or not. The questions were related to the effectiveness of IM on work effectiveness. The respondents are given an item from the questionnaire about their activities in the workplace using IM; how often using IM, the ease of IM application, the benefit by using IM, the effectivity, and the working progress comparison while using the IM application and not using the IM application. In this research, the effectiveness of IM was independent variables (x), and work effectiveness was the dependent variable (y).

After the data collected from all the respondents, the questionnaire will be tested for its validity and reliability (Janti, 2014). It is intended to determine the level of homogeneity of answers from respondents and the reliability of the questionnaire used in this research (Drost, 2011). After the test of validity and reliability, the next step is to perform regression tests between x and y variables. This test is conducted to determine whether the effectiveness of IM affect the effectiveness of work and how much the influence to y variable. (Fox, 2016).

3. Discussion

The results of validity test on the data that has been collected from 211 respondents, compared with r table value is 0.1345 on the standard error 0.05. Validity test results can be seen in the following table:

Table 1: Validity Test

Questions	Validity Test Score	Result
Question 1	0,884	Valid
Question 2	0,938	Valid
Question 3	0,937	Valid
Question 4	0,935	Valid
Question 5	0,878	Valid
Question 6	0,893	Valid
Question 7	0,829	Valid
Question 8	0,934	Valid
Question 9	0,938	Valid
Question 10	0,894	Valid
Question 11	0,955	Valid
Question 12	0,884	Valid
Question 13	0,917	Valid
Question 14	0,943	Valid
Question 15	0,915	Valid
Question 16	0,909	Valid
Question 17	0,943	Valid
Question 18	0,951	Valid
Question 19	0,948	Valid
Question 20	0,793	Valid
Question 21	0,952	Valid
Question 22	0,942	Valid
Question 23	0,952	Valid
Question 24	0,923	Valid
Question 25	0,952	Valid
Question 26	0,939	Valid
Question 27	0,952	Valid
Question 28	0,945	Valid

Source: The Validity Test Based on the Questionnaire from Respondents

The results of validity test in table 1 can be seen that the obtained r-value in the validity test score is more significant than r table (0.1345), it means that all r value was valid. To test the reliability, the results can be seen in the following table:

Table 2: Reliability Test

Cronbach's Alpha	N of Items
,993	28

Source: The Reliability Test of the Questionnaire after Tabulation Data

This reliability test was using Cronbach's alpha, the result obtained is 0.993. This reliability means the questionnaire was reliable because the minimum value for the reliability test is 0.7.

The next test was a regression test, which is used to determine the influence of independent variables on the dependent variable. The results can be seen in the following table:

Table 3: Regression Test Result

Variable	t	F	Sig.	Mark
$x \rightarrow y$	35,991	1295,323	0,000	Significant
R Square	0,861			

Source: the regression test based on tabulation from the questionnaire

From the result of the regression test that has been done, the obtained value of t and f was more significant than the value from t and f table. This is clarified by a significance value of 0.000 which is smaller than the α (0.05) which means that the effectiveness of IM (x) significantly affects work effectiveness (y) of 0.861 or 86.1%. The result of this regression test shown that the x not only affects the y variable, but it could be said that the use of IM is very influential on the effectiveness of work at the college environment in Pekanbaru. The other result also is seen from some summaries of comments that have been collected as follows.

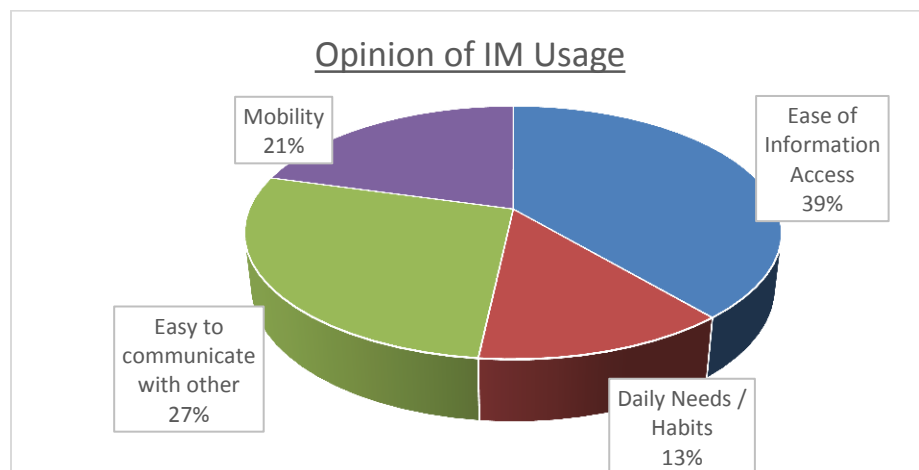


Figure 1: Chart Of IM Usage Based On The Opinion From Employees

Not all respondents gave their comment upon completing the questionnaire, but from 211 respondents, 53% volunteered to add comments. Most comments said that IM provides ease of access to information (39%), some said easy to communicate with others (27%), become a habit and need to use IM in communicating (13%) and mobility matters (21%). Based on the graph, it can be concluded the ease of communication and ease of getting information was the strong arguments to set the IM as a communication tool in college and also had a substantial influence on the effectiveness of employees.

The results were in line with some previous research, where the IM applications have an impact on the activity at the college. Lecturers can send memos or messages to students, and students can remind their lecturing schedule to lecturers, lecturers and students can discuss the material in the discussion group, etc. (Hartati & Arisandi, 2017). Students assumed they are always familiar with the technology, so by using IM can help them in daily activities on campus, and of course, information can be obtained more easily and quickly (Kafyulilo, 2014). As it is known that Lecturers in Indonesia must implement "Tridharma" which means Lecturer must perform three mandatory activities including: teaching, researching and serving the community (Presiden Republik Indonesia, 2005). By this three mandatory demands makes Lecturer should be able to manage the time as efficiently as possible. With the IM application, it allowed the lecturer to send to students or colleagues a brief, messages over the Internet, directly from one smartphone to another and suggested that it was "ideal for educational and learning environments" (Lauricella & Kay, 2013). This ideal environment isn't just fit for education, but also for daily social life, particularly the city that already implement the smart city policy where many things can be exchanged in electronic forms such as electronic money which has begun to be widely used in urban communities (Joy, 2018).

4. Conclusion

Recently, the development of technology allows us to be able to exchange information quickly and anywhere, especially with the support from IM. This research proves the use of IM for colleges in Pekanbaru has a significant influence, and it means IM affects the effectiveness of employees. But there are some things realized that IM requires a sufficient internet connection, so if it implemented in areas which do not have a stable internet connection, then it can not be applied maximally. Besides, the existing IM apps have a very general feature. The feature is

general real-time conversation or discussion in groups; this causes the user must continuously monitor the IM so that the information will not be displaced by others.

Hopefully, from this research, the government, college, and internet service providers can collaborate to create a similar IM system in general but especially used in college, with the addition of specific features such as scheduling, better file sharing, desktop management, etc so that it can contribute to realizing the implementation of smart city in Pekanbaru. We also recognize that this study has limitation during our research activities. We did not involve respondents from students or decision-makers in the universities we visited to collect data. For further research, the respondents involved need to be more than just employees so that we can get information or insight into the use of IM in universities.

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