

# Corporate Internal Communication through the Use of WhatsApp Messaging Application and the Employee Performance of an IT Company in Indonesia

Melinda Devyna Listyorini

Magister of Business Management Department, School of  
Economics and Business  
Telkom University  
Bandung, Indonesia  
melindadevyna@student.telkomuniversity.ac.id

Ade Irma Susanty

Business Administration Department, School of  
Communication and Business  
Telkom University  
Bandung, Indonesia

**Abstract**—Employee performance is influenced by several factors, one of them is internal communication. The phenomenon occurring in this digital era is that corporate internal communications have developed significantly, one of them is through the use of instant messaging applications. This research was conducted to discover the influence of corporate internal communication which consists of vertical communication, horizontal communication, and diagonal communication using WhatsApp instant messaging application toward employee performance in one of IT companies in Indonesia. The sample of this research is 150 employees from the total population of 227 employees. Data were extracted through questionnaires containing 42 statements then processed using IBM SPSS v.22 for Windows and Microsoft Office Excel 2013. Data were analyzed using path analysis method. The result of the analysis is the influence value of independent variables of corporate internal communication using WhatsApp application either done vertically, horizontally, or diagonally on the dependent variable of employee performance is 35.3%. It shows that corporate internal communication done vertically, horizontally, and diagonally using WhatsApp instant messaging application as the media has simultaneously and partially significant effect on employee performance. In accordance with the research result, it is suggested that employees need to be more active to communicate the problems faced in the work clearly so knowledge sharing can occur to solve the problem and good cooperation can be improved to achieve corporate's goals. And for further research, it is recommended to explore other variables uncovered yet in this research, such as organizational culture, work environment, etc. Research on corporate internal communication toward employee performance can also be done in companies of other fields, for example in banking, mining industry, and so forth.

**Keywords**—*corporate internal communication; instant messaging application; employee performance*

## I. INTRODUCTION

Good employee performance is required by the company to achieve its goals. Company with good employees' performance

can support the company to aim higher achievements. Senyucel explains that success of the company depends on the quality of the human resource that the company have. Employee performance is influenced by several factors, one of them is internal communication [1].

According to Bhatia, internal communication has an important role in improving performance [2]. A research done by Atambo reveals that communications run at every level of position affect performance significantly [3]. Febrian discovers that the internal communication of an organization affects the performance of employees [4]. Senyucel explains that good communication skills become one of the competencies required by employees to maintain and improve their performance [1]. Gomez-Mejia, Balkin, and Cardy argue that communications taking place between supervisors and employees becomes one of the most important factors in determining the direction of employee performance whether it increases or decreases [5].

The phenomenon occurring in this digital era is that corporate internal communications have developed significantly, one of them is through the use of instant messaging applications. Maina points out that the use of instant messaging applications within an organization can positively boost the productivity of the company's business [6]. The use of instant messaging applications makes them easy to coordinate and provide each other with information, job reports, task orders, and also to share information about the technical details of the system with the internal team. Nevertheless, the employees admit that the delivery of work tasks from superiors to subordinates through instant messaging applications is less detailed and less formal.

The purpose of this research is to discover the simultaneous or partial influences of corporate internal communication done vertically, horizontally, and diagonally through the use of WhatsApp instant messaging application on employee performance.

**II. LITERATURE REVIEW**

**A. Human Resource Management**

Human resources are the most valuable asset which serve as the driving force of a company's business to generate profits. A company requires a management system to continuously manage, maintain and improve the quality of its human resources to be able to contribute maximally. Senyucel defines human resource management as a strategic approach to managing employment relationships emphasizing on the utilization of people skills which is very important for achieving competitive advantage through a series of integrated employment policies, programs and practices [1]. Human resource management can be interpreted as the processes of planning, organizing, directing, supervising and managing employees and relationships among employees efficiently to achieve corporate goals to the fullest.

**B. Employee Performance**

Good employee performance supports the company in achieving its intended goals. Employee performance according to Mangunegara is the work quality and quantity achieved by an employee in performing his or her duties in accordance with the responsibilities given to him [7]. Sudarmanto divides employee performance into four dimensions of work quality, work quantity, work discipline, and cooperation [8].

Mathis & Jackson explain that work quality can be measured from how perfect the employee's work is in accordance with the expected goals of the job, while work quantity can be measured from the number of tasks assigned and the results [9]. Afandi states that the dimension of work discipline has two indicators, namely the obedience to time and work responsibilities [10]. Job compliance indicator can be measured from punctuality, effective use of time, and work attendance (never been absent from work).

Indicator of work responsibilities can be measured by whether the employees comply with all organizational or corporate rules, achieve job targets, and make daily work reports. Samani defines cooperation as an act or attitude willing to work together with others to achieve mutual goals and benefits [11]. Mangkunegara states that the dimension of cooperation has two indicators of team work and togetherness [7].

**C. Organizational Internal Communications**

Bauer, et al. state that communication becomes one of the capabilities that must be owned by individuals within the organization [12]. Communication within an organization is a very important thing in which the employees share information, ideas and also problems or obstacles faced in carrying out their job duties. Afandi states that the number of people who exchange messages in a certain way is called a communication network [10].

Communication network is divided into two, namely formal communication network and informal communication network. A formal communication network occurs when messages or information are determined by the organization's official hierarchy or by job function distributed through official

channels. Three types of formal communication networks are vertical communication, horizontal communication, and diagonal communication. On the other hand, informal communication networks occur regardless of position within the organization, the flow of information is personal and based on what is heard or what people say.

One element in communication is the media. Some examples of communication media include social media, electronic mail, printed memo, phone, blog and short message app. Butterfield defines instant messaging applications as a technology that makes the communication between two or more people who type messages take place through devices connected to the internet [13].

Messages sent through instant messaging applications tend to be shorter, informal, and temporary. Bovee, et al. argue that communications through instant messaging applications have slowly replaced telephone and email communications in certain situations [14]. Guffey and Loewy state that there are several things to be considered in written communication through instant messaging applications such as the use of formal language, good grammar, correct spelling, and also the avoidance of using abbreviations [15].

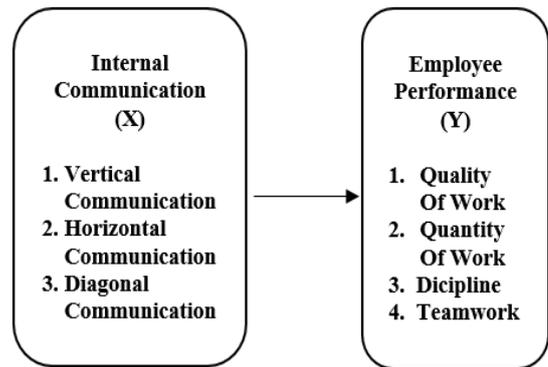


Fig. 1. Framework.

**III. METHOD**

This is a causality research using quantitative method. This study aims to find the description of corporate internal communication through the use of WhatsApp Instant messaging application and employee performance. In addition, this research is also intended to discover the simultaneous or partial influences of corporate internal communication consisting of vertical communication, horizontal communication, and diagonal communication through the use of WhatsApp instant messaging application on employee performance.

The primary data were obtained by distributing questionnaires containing 42 items of statement to five business units in a company engaged in technology in Indonesia. The statements are measured using a Likert scale with a range of values 1-5 in which 1 means "strongly disagree", 2 is "disagree", 3 describes "hesitant", 4 means "agree", and 5 describes "strongly agree".

Hypotheses of this research are:

H1: Corporate internal communication which consists of vertical communication, horizontal communication, and diagonal communication simultaneously has a significant effect on employee performance.

H2: Corporate internal communication which consists of vertical communication, horizontal communication, and diagonal communication partially has a significant effect on employee performance.

The population and sample used in this research are employees of an IT company in Indonesia incorporated in five business units from different directorates. Sampling is done using Slovin formula with the precision value of 95% so that a number of 150 samples is obtained. Probability sampling technique is applied in this research with the method of stratified random sampling. This is because the samples from members of population are taken randomly and stratified based on the business units and position levels. The data analysis technique used in this research is path analysis. Path analysis is used to determine the effects of corporate internal communication on employee performance either simultaneously or partially. The data were processed using the software of IBM SPSS v.22 for Windows and Microsoft Office Excel 2013.

**IV. RESULT AND DISCUSSION**

**A. Validity and Reliability**

From the results of validity test, it is obtained that all of the 42 statements are valid. From the calculation of reliability, it is found that all variables in this study are reliable with the Alpha Cronbach values > 0.7 as shown in the following table:

TABLE I. RESULTS OF VARIABLE RELIABILITY TEST

Variable	Alpha Cronbach Value	Conclusion
Vertical Communication (X <sub>1</sub> )	0.744	Reliable
Horizontal Communication (X <sub>2</sub> )	0.757	Reliable
Diagonal Communication (X <sub>3</sub> )	0.721	Reliable
Employee Performance (Y)	0.725	Reliable

**B. Hypothesis Test using F Test**

F test or simultaneous test is performed to determine the influence of independent variables on the dependent variable simultaneously by calculating the F value in the software of IBM SPSS v.22 for Windows and then it is compared with the F value in the table for the number of 150 samples with the value of  $\alpha = 0.05$ . The found value of  $F_{table} = 2.67$ . The results of the F test are as follows:

TABLE II. RESULTS OF VARIABLE F TEST

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	611.551	3	203.850	26.533	.000 <sup>b</sup>
Residual	1121.709	146	7.683		
Total	1733.260	149			

<sup>a</sup>. Dependent Variable: Employee performance

<sup>b</sup>. Predictors: (Constant), Diagonal communication, Vertical communication, Horizontal communication

From the result of F Test, it is obtained that the value of  $F_{count} (26.533) > F_{table} \text{ value } (2.67)$ . The  $F_{count}$  value is greater than the  $F_{table}$  value, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted. This means that the hypothesis of "corporate internal communication simultaneously has a significant effect on employee performance" is accepted.

**C. Hypothesis Test Using Determination Coefficient Test (R<sup>2</sup> Test)**

Hypothesis test using determination coefficient test (R-2 test) is done to know how big the influence of corporate internal communication variable on employee performance is. The following is the calculation result of determination coefficient test (R-2 test) performed using IBM software SPSS v.22 for Windows:

TABLE III. RESULTS OF VARIABLE DETERMINATION COEFFICIENT TEST (R<sup>2</sup> TEST)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.594 <sup>a</sup>	.353	.340	2.77181

<sup>c</sup>. Predictors: (Constant), Diagonal Communication, Vertical Communication, Horizontal Communication

The determination Coefficient or R<sup>2</sup> value of 0.353 or 35.3% means that the influence value of vertical communication variable (X<sub>1</sub>), horizontal communication variable (X<sub>2</sub>), and diagonal communication variable (X<sub>3</sub>) is simultaneous toward employee performance variable (Y) amounted to 35.3%. While the remaining 64.7% is influenced by other factors that are not discussed in this study.

**D. Hypothesis Test using T Test**

Partial test (T test) is done to know the significance and to partially test each independent variable of vertical communication (X1), horizontal communication (X2), and diagonal communication (X3) toward employee performance variable (Y).

T test or partial test is performed to determine the effect of independent variables on bound variable partially by calculating the value of T using IBM SPSS software v.22 for Windows and then it is compared with the value of T in the table for the number of 150 samples with the value of  $\alpha = 0.05$ . The found  $T_{table}$  value = 1.65.

TABLE IV. RESULTS OF VARIABLE PARTIAL TEST (T TEST)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	31.975	4.627		6.911	.000
Vertical Communication	.163	.040	.308	4.029	.000
Horizontal Communication	.699	.264	.216	2.645	.009
Diagonal Communication	1.606	.486	.245	3.304	.001

The comparison conclusions between  $t_{count}$  and  $t_{table}$  are as follows:

TABLE V. CONCLUSIONS OF T TEST RESULTS

Influence of variable	$t_{count}$ Value & significance value	Comparison	Conclusion
Variable of vertical communication ( $X_1$ ) on employee performance variable (Y).	$T_{count}$ of $X_1 = 4,029$ ; sig = 0,000	$T_{count} > t_{table}$ Sig < 0,05	$H_0$ is rejected and $H_1$ accepted. Vertical Corporate internal communication affects partially and significantly on employee performance.
Variable of horizontal communication ( $X_2$ ) on employee performance variable (Y).	$T_{count}$ of $X_2 = 2,645$ ; sig = 0,000	$T_{count} > t_{table}$ Sig < 0,05	$H_0$ is rejected and $H_1$ is accepted. Horizontal Corporate internal communication affects partially and significantly on employee performance.
Diagonal communication variable ( $X_3$ ) on employee performance variable (Y).	$T_{count}$ of $X_3 = 3,304$ ; sig = 0,001	$T_{count} > t_{table}$ Sig < 0,05	$H_0$ is rejected and $H_1$ is accepted. Diagonal Corporate internal communication affects partially and significantly on employee performance.

E. Path Analysis

From the previous calculations, the following values are attained:

- Standardized Coefficients in which the influence value of vertical communication variable on employee performance variable ( $\rho_{yx1}$ ) is 0.308, the influence value of horizontal communication variable on employee performance variable ( $\rho_{yx2}$ ) is 0.216, and the influence of diagonal communication variable on employee performance variable ( $\rho_{yx3}$ ) is 0.245.
- The residual variable or the error factor ( $\rho_{y\epsilon}$ ) can be obtained by the equation  $\rho_{y\epsilon} = 1 - R^2$  so  $\rho_{y\epsilon} = 1 - 0.353 = 0.647$

The following is the influence model of vertical communication ( $X_1$ ), horizontal communication ( $X_2$ ), and diagonal communication ( $X_3$ ) on employee performance (Y):

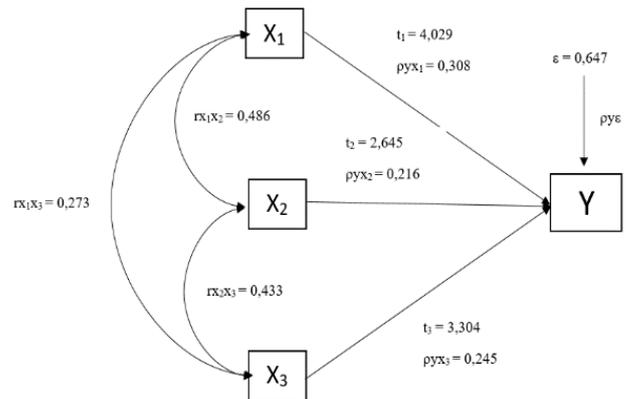


Fig. 2. Influence model of Vertical Communication ( $X_1$ ), Horizontal Communication ( $X_2$ ), and Diagonal Communication ( $X_3$ ) on Employee Performance (Y).

Based on Figure 2, the new structural equation of path analysis obtained in this research is as follows:

$$Y = \rho_{yx1}X_1 + \rho_{yx2}X_2 + \rho_{yx3}X_3 + \rho_{y\epsilon}$$

therefore

$$Y = 0,308X_1 + 0,216X_2 + 0,245X_3 + 0,647$$

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Referring to the research results, some conclusions can be drawn as follows:

- The results of simultaneous test (F test), it can be concluded that there is a significant influence of corporate internal communication using WhatsApp Instant messaging application on employee performance as the value of  $F_{count} > F_{table}$  value. This means that the overall corporate internal communication done vertically, horizontally, and diagonally has an influence on employee performance.
- The results of partial test (T test), it can be concluded that there are significant influences of corporate internal communication using WhatsApp Instant messaging application done vertically, horizontally, and diagonally towards employee performance. The total influence of vertical communication on employee performance is 14.78%. The total influence of horizontal communication on employee performance is 10.19%. While the total influence of diagonal communication on employee performance is equal to 10.35%. This means that corporate internal communications through WhatsApp instant messaging application are relevant and significant for the employee performance. The influence value of independent variables of corporate internal communication using WhatsApp application either done vertically, horizontally, or diagonally on the dependent variable of employee performance is 35.3%,

while the rest of 64.7% is influenced by other variables which are not discussed in this study.

### B. Suggestions

1) *Suggestions for the company:* Based on the research results, the authors would like to give suggestions for the progress of the company in terms of the three independent variables (vertical, horizontal and diagonal communications) of corporate internal communication toward the dependent variable of employee performance. Some suggestions relating to the object of research are as follows:

- Employees need to be more active to share the problems faced in the work clearly to their superiors. Superiors should also be willing to provide time to interact personally with the passive subordinates and with the subordinates who show the constraints in the process of work completion. In addition, the willingness of superiors is also required in helping solve the work problems faced by the subordinates. Furthermore, knowledge sharing from superiors to subordinates is needed so that if one day the subordinates face similar problems, they can proactively try to solve them in the work.
- Employees need to continue cultivating and enhancing empathy and kinship in the interaction with the fellow co-workers. Good cooperation and coordination are necessary in work as well as the mutual supports to fellow colleagues, so that all employees feel that they belong to the company and become an important part of it.
- Employees always need to maintain the relationships across the work units, so that the units can compete with each other in a healthy way, share information, and cooperate to achieve the corporate goals.
- In order to improve employee performance, especially in the aspect of work discipline, the company needs to implement a better and interesting discipline system and it can be started from the smallest units of work. For example, by appreciating the employees who come to the office on time and by providing rewards to employees who routinely make daily work reports. In addition, superiors should be able to provide good examples to subordinates so that they will be able to carry out the discipline of work and obey the rules in the company including the use of name tags and uniforms. Improvements are also required in the employee's attendance system to prevent employees from being absent from work. In the current conditions, attendance is run through login on the company's internal website and it can only be accessed through the company's internet. This can be an obstacle for employees who work outside the office, for example when there is a full day meeting at the customer company. An improvement in the attendance system needs to be made by adding the attendance feature on

the website of daily work report by calculating the employee working hours.

2) *Suggestions for further research:* For the further research, the authors would like to suggest the following:

- Further research can be done by examining other variables which may have a greater effect on employee performance in IT companies.
- Subsequent research can take samples of other research objects such as business units whose employee mobility is at higher levels.
- Research on corporate internal communication toward employee performance can also be done in companies of other fields, for example in banking, mining industry, and so forth.

### REFERENCES

- [1] Senyucel, Z. *Managing The Human Resource in 21st Century*. [Online] Retrieved from <https://bookboon.com/en/hrm-managing-the-human-ressource-ebook>. 2008.
- [2] Bhatia, K. and Balani, M. "Effective Internal Communication: A Crucial Factor Affecting Employee Performance". *International Conference on Management, Economics and Social Sciences*, 135-142, 2015.
- [3] Atambo, N.W. and Momanyi, D.K. "Effects of Internal Communication on Employee Performance: A Case Study of Kenya Power and Lighting Company, South Nyanza Region, Kenya". *Imperial Journal of Interdisciplinary Research*, 2(5), 328-340, 2016.
- [4] Febrian, R., Nuraeni, R., and Aprianti, A. "Pengaruh Komunikasi Internal Terhadap Kinerja Karyawan / the influences of internal communication on employee performance (A Study at Room Division of Hotel Horison Ultima Bandung)". *e-Proceeding of Management*, 3(2), 2447-2457, 2016.
- [5] Gomez-Mejia, L., D. Balkin, and R. Cardy. "Managing human resources Global", 2010.
- [6] Maina, T.M. Instant messaging an effective way of communication in workplace. *Research Gate*, 40-49, 2013.
- [7] Mangkunegara, A. A. *Manajemen Sumber Daya Manusia Perusahaan*, 2011.
- [8] Sudarmanto, *Kinerja Pengembangan Kompetensi SDM*, 2009.
- [9] Mathis, R.L., and Jackson, J.H. *Human resource management: Manajemen sumber daya manusia*. Terjemahan Dian Angelia. Jakarta: Salemba Empat, 2006.
- [10] Afandi, P. *Concept & Indicator of Human Resources Management for Management Research*. Yogyakarta: Deepublish, 2016.
- [11] Samani, M. *Konsep dan model pendidikan karakter*, 2012.
- [12] Bauer, T. and Erdogan, B. *An Introduction to Organizational Behaviour*. [Online] Retrieved from FlatWorld : <https://catalog.flatworldknowledge.com/bookhub/reader/4?e=fwk-122425-ch14#fwk-122425-chde>, 2017.
- [13] Butterfield, J. *Illustrated Course Guides: Written Communication - Soft Skills for a Digital*. Boston: Cengage Learning, 2009.
- [14] Bovee, C.L., and Thill, J.V. *Business Communication Today*. Edinburgh: Pearson Education Limited, 2014.
- [15] Guffey, M.E. and Loewy, D. *Essentials of Business Communication 10th Edition*. Boston: Cengage Learning, 2016.