

THE INFLUENCE OF KNOWLEDGE MANAGEMENT CAPABILITIES ON ORGANIZATIONAL EFFECTIVENESS

YOHANNES KURNIAWAN, ARVIN HARDIANTO, FENTY MEYLANI, WANDY

Information Systems Department, School of Information Systems, Bina Nusantara University, Jakarta,

Indonesia, 11480

E-mail: ykurniawan@binus.edu

ABSTRACT

This research aims to evaluate the knowledge management that runs on startup companies and to find out the factors that can improve organizational effectiveness through the implementation of knowledge management. Articles related to "Knowledge Management" are collected through online journal databases. These articles are then reviewed and analyzed and then described in relation to the organizational effectiveness in "Knowledge Management". Then, data collection methods using questionnaires and data analysis using a single regression model with SPSS software are conducted. From the test results, it can be concluded that Knowledge Infrastructure Capability and Knowledge Process Capability influence the effectiveness or productivity of the company. Moreover, the results of this research are expected to provide an evaluation for the company through the analysis of knowledge management, and to find out what variables influence the organizational effectiveness through the implementation of knowledge management, as well as to provide suggestions and recommendations that can improve the organization effectiveness to achieve strategy using knowledge management.

Keywords: *Knowledge Management, Capabilities, Organizational Performance, Case Study, System*

1. INTRODUCTION

It is an undeniable fact that the development of startup in Indonesia continues to increase every year. In the first quarter of 2015, one of the most highlighted countries in the first quarter was Indonesia [1]. The number of startups receiving funding has increased significantly compared to the previous quarter. In the first quarter, there were 24 Indonesian startups that received investments, while in the previous quarter there were only 14 Indonesian startups that received funding. Other countries that are also increasing are Malaysia and Thailand [2].

Startup era becomes the focus of various circles such as society and business. Some people think that startup is identical with the culture of free sharing. It is part of *Knowledge Management* whose benefits are to encourage learning processes that have implications for improving innovation through the creation of new *knowledge* [2]. Knowledge management is the important process in the organization to generate the value [3].

According to *Michael Page Indonesia Employee Intentions Report*, 72% of respondents in Indonesia in 2015 have an interest to change jobs within the next 12 months. Then, based on a study

conducted by Hay Group and *Center for Economics & Business Research* entitled *Preparing for Take-Off* conducted to 700 million employees in 19 different countries, the number of employees that have resigned worldwide will reach 192 million by 2018 [4].

Turnover leads to some losses for the company, such as the cost that needs to be borne by the company and the time spent on *recruitment*, *selection* and *training* in order to get employees that have the same quality with the employees who have resigned from the company [5].

Moreover, according to ECC UGM in July 2012 that has conducted a poll on 726 respondents about the causes of the respondents chose to resign or leave the organization, shows that 22.4% is due to salaries and facilities, 22.3% is due to unpromising career leader, 13.6% is due to an uncondusive working environment, 13.3% is due to a more attractive offer, 10.7% is due to incompatibility with systems or organizational culture, 8.3% is due to excessive work pressure, 6.1% due to having no challenge, and 1.2 % is due to the lack of social rewards [6].

Knowledge owned by the organization is considered as a very valuable asset and intangible assets. Knowledge also becomes the most valuable

and unique internal resources of the company that is difficult to replace, and thus, the company needs to be aware that it is important for them to manage and make the best use of knowledge from individuals in the organization as its asset. Knowledge embodied in every people, when they do the routine activities in organization [7]. The organization need knowledge management as the strategic tool of organization to improve their employees work effectively [8]. And Knowledge sharing as the important activity for effective knowledge management process in organization [9].

The organization need to consider culture to support knowledge management process running smoothly. Organization culture is the important part for knowledge management activities in organization [10]. At the end the organization need Key Performance Indicator (KPI) to help them monitoring the knowledge management process in organization [11, 12].

According to Munir, to gain the greatest benefits from knowledge and to know what the knowledge to have, the company should manage the knowledge through knowledge management. Through knowledge management, the knowledge which an employee possesses will remains and becomes the company asset although when their employees physically left the company. In addition, through knowledge management, organizations can also learn quickly and thus, they are adaptive to any changes, and able to improve organizational equality and to keep on the track [13].

The previous descriptions that have been explained become the reasons for the authors to conducted research on knowledge management and the factors that influence it. The previous research in Taiwan mentioned about “knowledge management capability and organizational effectiveness in Taiwanese public utility: the mediator role of organizational commitment” [14]. But in this research, we focus on start-up company in Indonesia and we analysis the data into 2 model (1st model focus on knowledge management system (if the company implemented software to support knowledge management process); 2nd model focus on knowledge management process (if the company not using the software)), So we know the impact of KM capability (with/out software) to organizational effectiveness.

Therefore, the title of this research is "The Influence of Knowledge Management Capabilities on Organizational Effectiveness". The knowledge management capabilities in this research focus on the management of knowledge of start-up

companies to create the new idea for business and IT innovation. So we know the impact of knowledge management capabilities to organizational effectiveness. The main research question for this research is: How the implementation of knowledge management influence the organizational effectiveness?

2. METHODS

The several phases conducted in this research entitled "The Influence of Knowledge Management Capabilities on Organizational Effectiveness" are as follows:

1. Identifying the object of research: Identification process of the research object is the result of the literature study, and we choose Startup Companies as an object of the research.
2. Determining variables and indicators: Process of determining variables and indicators is one of the important phases since the questions of the questionnaire that will be made represent each variable and indicator.
3. Designing questionnaires. Process of designing the questionnaire is also an important phase since the list of questions asked to the respondents should be easily understood by the respondents.
4. Data Collection. The next phase after determining the respondents for the questionnaire, the questionnaires were distributed to the start-up companies around two weeks via online (google form).
5. Processing data. After two weeks, the questionnaires were given back to us, and then the data is processed to be analyzed and to conclude the conclusions.
6. Results of data analysis. The results of data analysis is the result of data processing through various processes that have been done by the author which is associated with the theoretical framework.
7. Conclusions and suggestions. At this phase, the conclusions and results of the research are described and the suggestions for the companies related Knowledge Management are also provided.

Method of data collection in this research was conducted by literature study with the aim of studying the theories related to this research. Next, the author gives the questions to respondents, which are start-up employees using online survey with snowball sampling technique that is considered as the sampling through a group of

initial respondents, and then the initial respondents were asked to identify other respondents who have characteristics in accordance with the population target to take samples. Before distributing the questionnaires, we tested readability of questions to 10 respondents, so we believe our respondent sample clearly understood all the questions.

Furthermore, the data was analyzed using descriptive verification method with quantitative approach. The descriptive method is a research conducted to describe independent variables, either only one or more variables without making comparisons and looking for the variable with other variables. On the other hand, verification method for this research conducted on a specific population or sample with the aim to test the hypotheses that have been established, and for this research using SPSS software version 20 for the data analysis.

The population of this research is start-up companies in the category of marketplace, e-commerce as well as IT consultant, software house and other companies based on startupranking.com.

The amount of the sample in this research is 106 respondents which are collected using snowball sampling technique. The authors determined the number of the sample using the opinion of Roscoe (1975) as cited in Uma Sekaran [15] which gives a general reference for determining the sample size, i.e., samples over 30 and less than 500 are appropriate for most research. The data collected and then filtered based on several criteria, such as: start-up companies that are already legal entities and have at least 50 employees. And they should fill in all the questions including profiles (official email and mobile phone number) for verification process (if needed)

Based on the problem formulation, the hypotheses that will be tested in this research are as follows:

H0: The implementation of knowledge management does not influence the organizational effectiveness.

H1: The implementation of knowledge management influences the organizational effectiveness.

Based on the problems formulation and hypotheses that will be tested, the variables studied are Independent Variables which are Knowledge Infrastructure Capability (KIC) and Knowledge Process Capability (KPC), and Dependent Variable which is Organizational Effectiveness (OE). Research model conducted in this research was divided into two models that are as follows:

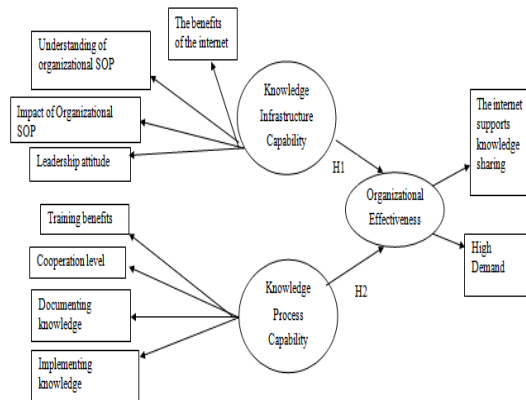


Figure 1: Knowledge Management Research Model

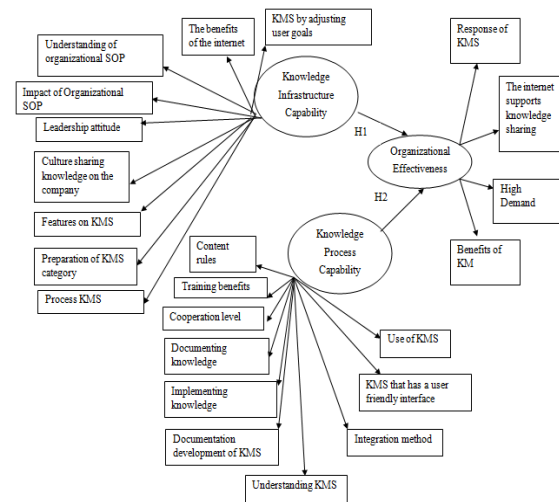


Figure 2: Knowledge Management System Research Model

The relationship between variables, indicators and questions that become the reference in making the research instrument through the questionnaire can be seen in Table 1 until 4.

3. RESULTS AND DISCUSSION

This research is conducted using primary data which collected using questionnaire and distributed to respondent in form of softcopy or online survey. The result of the questionnaire is consisting of 106 respondent which included 79 respondents are implementing knowledge management system or online, and 27 respondents are using either offline knowledge management process or without any software in orders to develop or distribute the knowledge. In this research, it will be using statistics calculations using *Microsoft excel* which will be comparing between companies which uses knowledge management and companies who implement knowledge management system. In this

section it will be consist of processing data using verification which will be resulting below:

Table 5: simple regression test in coefficient determination Knowledge Infrastructure Capabilities (KIC) variable for KM (offline process)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.513 ^a	.263	.256	.37910

a. Predictors: (Constant), Rata2KIC

b. Dependent Variable: Rata2OE

Based on table above R Square quantity = 0.263 those numbers shown 26.3% of the dependent OE variable which will affect from the independent KIC variable, moreover the rest of 73.7% affected by outside variable beyond this model.

Table 6: Simple regression test in coefficient determination Knowledge Process Capabilities (KPC) variable for KM (offline process)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.565 ^a	.319	.312	.36444

a. Predictors: (Constant), Rata2KPC

b. Dependent Variable: Rata2OE

Based on table above R Square quantity = 0.319 those numbers shown 31.9% of the dependent OE variable which will affect from the independent KPC variable, moreover the rest of 68.1% affected by outside variable beyond this model.

Table 7: Simple regression test in coefficient determination KIC variable for KMS Online

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.601 ^a	.362	.353	.37872

a. Predictors: (Constant), Rata2KIC

b. Dependent Variable: Rata2OE

Based on table above R Square quantity = 0.362 those numbers shown 36.2% of the dependent OE variable which will affect from the independent KIC variable, moreover the rest of 63.8% affected by outside variable beyond this model.

Table 8: Simple regression test in coefficient determination variable KPC for KMS Online

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.604 ^a	.365	.357	.37765

a. Predictors: (Constant), Rata2KPC

b. Dependent Variable: Rata2OE

Based on table above R Square quantity = 0.365 those numbers shown 36.5% of the dependent OE variable which will affect from the independent KPC variable, moreover the rest of 63.5% affected by outside variable beyond this model.

Table 9: multiple regression test in coefficient determination KMS Offline

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.595 ^a	.353	.341	.35674

a. Predictors: (Constant), Rata2KPC, Rata2KIC

b. Dependent Variable: Rata2OE

Based on table above R Square quantity = 0.353 those numbers shown 35.3% of the dependent OE variable which will affect from the independent KIC and KPC variable, moreover the rest of 64.7% affected by outside variable beyond this model.

Table 10: Multiple regression test in coefficient determination KMS Online

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678 ^a	.459	.445	.35083

a. Predictors: (Constant), Rata2KPC, Rata2KIC

b. Dependent Variable: Rata2OE

As above table explained. R Square's = 0.459 this number shown 45.9 % of the dependent OE variable can be affected independent KIC variable

with KPC, in the other hand 54.1% variable are affected outside this model.

The table below, it will show the results from the respondent (derived from questionnaire), which already descriptively processed and divided in to two different form based on research model which using likert scale (5 points), which mean 5 is very agree, 4 is agree, 3 is neutral, 2 which mean disagree, and 1 strongly disagree. Based on table 11 it shows the result of respondent knowledge management based on result model figure 1 which mean offline KM research model and table 12 which show the result of knowledge management system from figure 2 result model who showed knowledge management system research model:

Table 11: KM respondent result

Variabel	Indikator	\bar{x}
KIC	The benefits	4.88
	Understanding of Organizational SOP	3.74
	Impact of organizational sop	4.25
	Leadership attitude	4.07
KPC	Training benefits	4.25
	Cooperation level	4.51
	Documenting knowledge	4.33
	Implementing knowledge	4.11
OE	The internet supports knowledge sharing	4.81
	High demands	4.44

Table 11 are the result from the respondent which implement knowledge management manually or either did not use software or application in order to sharing the information inside their workplace.

Table 12: KMS respondent result

Variabel	Indikator	\bar{x}
KIC	The benefits	4.93
	Understanding of Organizational SOP	4.34
	Impact of organizational sop	4.46
	Leadership attitude	4.41
KPC	Training benefits	4.50
	Cooperation level	4.81
	Documenting knowledge	4.60
	Implementing knowledge	4.50
OE	The internet supports knowledge sharing	4.84
	High demands	4.60

Moreover, for the above table, which is table 12 it was the result of knowledge management system respondent who can be defined as doing knowledge sharing using either software or application from their workplace. From both table it can be shown knowledge infrastructure capability or KIC and KPC are affecting OE variable, whose can be shown from table 11 the indicator number from OE are 4,81 and 4,44. Moreover, there are differences in table 12 with the number of 4,84 and 4,60. Therefore, this happened because they are already supported by KMS and their already implemented knowledge management systems as their company Standard Operational Procedure (SOP).

In order to what training or workshop they provide to their employee which give positive impact to their knowledge, it can be show from figure 3 below:

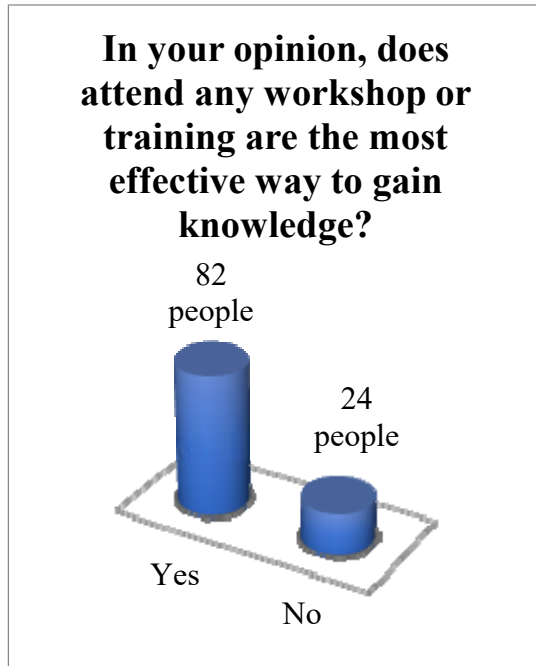


Figure 3: The result of workshop agreement questionnaire

Based on those summary, there are 82 respondents said workshop or training is the most effective way in order to gain new knowledge with various reasons:

1. Provides ideas, knowledge, and new insight which are currently unknown or uncertainly exist in their workplace.
2. Provides inspiration or motivation and triggering open minded.
3. In a mere hour, it is possible to obtain core information compare obtain it from read it (books), therefore it will give an instant impact.
4. Capable to provide instant information about science or latest information.
5. Workshop sometimes gives new knowledge without a doubt sometimes it cannot be gain from school or college.
6. In order to help gain other experience especially working together with team for a better purpose.

Moreover, the other 24 respondents who regards workshop or training only provide basic things, not like what they expected, wasting time, or boring, and some of them concluded it is more effective 'learning by doing' which mean studying about condition and real problem or discussion with their work partner. In order to gain information about how many training the company provide to their employee it can be seen on figure 4 and 5.

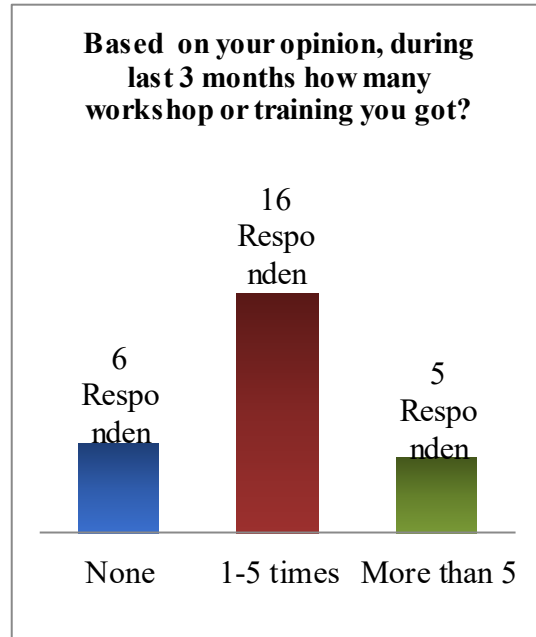


Figure 4: Responding about KM in terms of Workshop result

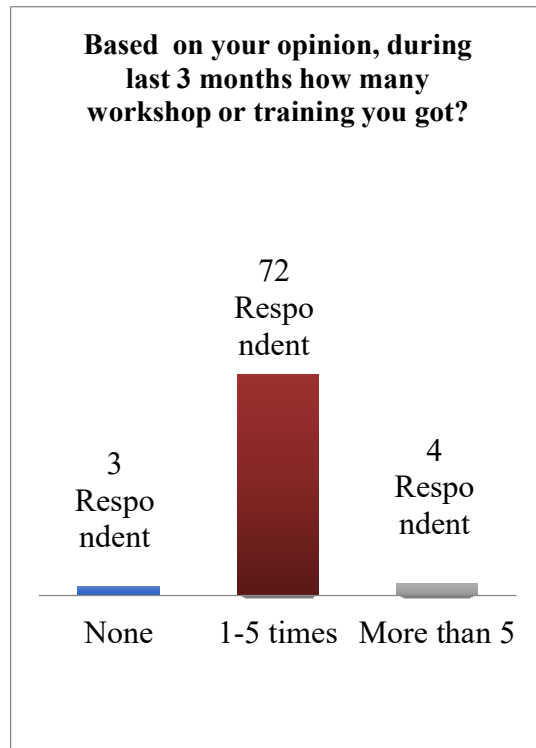


Figure 5: Responding about KMS in terms of workshop results

Based on those result, companies have average from 1 – 5 times during last 3 months. Moreover, there are some companies who provide

their employees more than 5 times during last 3 months. In the other hand, based on various comments from respondents, some companies need to improve or rethink about workshop or training for their employees, not the intensity of their training, so it will be more suitable with company employees based on their positive aspects or their future jobs. This matters also suitable with previous research which explained knowledge management was implemented, it also need to improve their content, regarding their discussion core things in order to provide more creative ideas. [16].

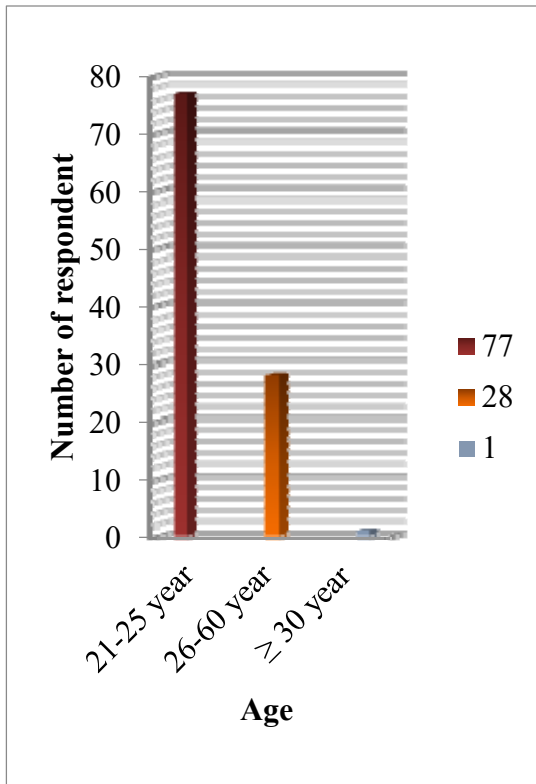


Figure 6: Respondent's age results

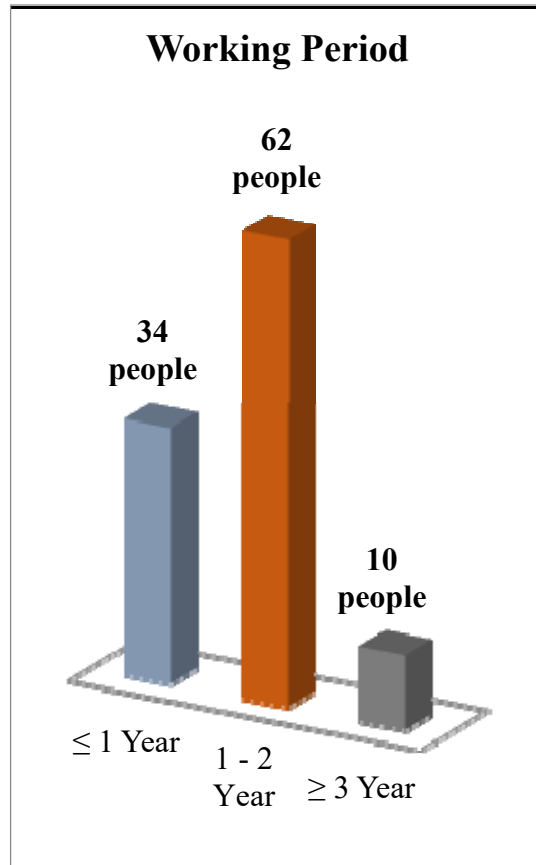


Figure 7: The working period results

Based on figure 6 questionnaire result, there are 106 respondents who represent entire staff, which mostly are in their young ages, moreover it will make their turnover intentions is quite high. It happened because of respondent result in figure 7 which their average years of service is 1 or 2 years. Moreover, based on citation from journal which explained turnover intention were probably happened if their employees think their job is not interesting, they will quickly capable to resign because considering they are still young and looking for other job which suitable with them. Therefore, in order to prevent it happen, the company need a knowledge management which capable to manage and record knowledge from their employee even where they are not present.

Companies also can provide enjoyable work environment, like research results from Jobplanet, who explain employee prefer works in a start-up company instead from the other companies because start-up have 'liquid' work culture. Inside start-up companies, border between supervisor with other employees are very thin, which make people more open during communication and interaction. [17].

In this section, it will explain the result of data management about software or KMS application inside their organization which using likert scale point, it also supporting table 12, whose provide information about respondents who use or implementing knowledge management system.

Table 13: Software KMS result

Variable	Indicators	—
KIC	Process knowledge management systems	4.48
	Preparation of KMS category	4.17
	Features on knowledge management systems	3.77
	Culture sharing knowledge on the company	4.59
	KMS by adjusting user goals	4.40
KPC	Documentation development of KMS	4.51
	Understanding KMS	4.25
	Integration method	4.15
	KMS that has a user friendly interface	4.46
	Use of KMS	4.00
	Content rules	3.01
OE	Response of knowledge management systems.	4.83
	Benefits of knowledge management	4.64

As show in table 13, who are affecting table 12 which is table 13 are the result of software from Knowledge Management System in organization. According to our opinion in KIC variable, there are some areas who need improvement which are, the areas in KMS who have average 3.77. Therefore, with the improvement KMS which already good according to our opinion, the knowledge management system must have a search engine function in order to make user easier to search the knowledge and information inside KMS.

Secondly, creating forum features in order to make employees easier to share their knowledge in every units inside the companies. Thirdly, create form which have explanation about all features inside KMS who either already implemented or not, and that form will be distributed to the users. And for KMS category indicator who have average 4.17, it also need improvement. Creating KMS category it must be done with simple and integrated which in

layout areas, it must be giving a big impact to creating KMS category, in order to select correct “font” it must be suitable in order to make the user read the knowledge easily, moreover in order to select suitable “color” for the background it must be suitable with the font color and button placement for search it must be easy to find for the user.

For the KPC section, the system needed improvement for all indicators who have average 3.01. In our opinion, a good content rules are the shareable content, employees have to share their files, information using KMS, and work process can be easily done by them, because they will use the content which related with company’s data when they want to finish their task.

For the indicator for KMS which have average 4.00. From that matter it can be concluded, we must be extra attention from user interface area for the KMS. Navigation must make the user easier to use the KMS.

Based on OE result it was already satisfied yet, we need to increase their average score. In benefits of knowledge management which has an average 4.64. So, the organization can make rules inside the organization, which make all employees documenting sharing their knowledge using KMS inside their workplace.

There are lot of software and application, like ‘slack’, company website, and telegram which frequently used. Each application or software have their own advantages or disadvantages. According from respondent answers, there are some answer they suggest like the mobile version, timestamp, and increasing storage from ‘slack’ application. Moreover, company website need to increase their system respond and other software need to use like mobile version, confluence need to improve their searching data result, source-tree need to improve their efficiency, chat-work to make their easier sharing knowledge.

Table 14: Results of comparison by indicator

KMS Name	Indicators				
	Understanding KMS	Use of KMS	Content rules	Feature on KMS	Integration method
Slack	3,9	3,7	3,9	-	-
Forum website perusahaan	-	-	2,87	-	-
Telegram	-	-	2,3	3,8	-
Google Drive	-	-	3,22	-	3,88
Ms. Outlook	-	-	3,71	-	-
Whatsapp	-	3,83	3,83	-	-
Trello	2,85	-	1,28	-	-
Line	-	-	3	3,2	-
Intranet	-	-	1	-	-
Phabricator	-	-	3,66	-	-
Skype	-	2,33	1	-	-
Social media	3,66	-	-	2	-
Facebook	-	3	1	1	-
IM	-	-	1	-	-

Table 14 is the result of all comparison between all software or application which are below 80% from 5 points or below 5 points based on Likert's scale:

1. KMS understanding

KMS understanding can be defined as user already KMS guide. Based on 3 software, there 8 respondents who are reluctantly about how to use the software or application, in the other hand the other respondent already understands how to use their application or software based on all respondent points using Likert's scale. They suggest, the organization have to create guide in order to use the application, either it's only words or tutorial video.

2. KMS usage

KMS usage can be defined as, each of the employee must use KMS, even though their job did not use KMS. Based on four software mentioned previously, some respondents are answers it reluctantly or even disagree to use their KMS. The suggestion for company is make their employee use KMS even tough, their employee can do it without KMS, from what they did on jobs, so it can be makes as reference or track record or back up for other purpose.

3. Integration methods

It can be defined as easy to adept for the KMS in the company, which have main purpose to integrate their work process to make it more efficient than before. Based on data from Google Drive's, there are some respondents answer "disagree", the average score 3.88 only. And the rest of respondent capable to use their KMS easily, because the rest of them put 5 points in Likert's scale. Suggestion for the company, they have to

make the employee easily adapt with KMS in order to teach who still not adapt with the KMS.

4. Contents Rules

Can be defined as having a content which can be freely modify. Based on many respondents who disagree that KMS can be part as their SOP and they also did not agree other users can modify their content. The suggestion, they have to ask the company to provide extra reward for any employees which willing to share knowledge via company software, for example printed press which have credible source or editor. So, they can make everyone know, where did they obtained their knowledge sources.

5. KMS's features

From their features there are some respondents who have some difficulty to use KMS features in their workplace. Suggestion for the company, to create form which can evaluate how the user (employees) uses the KMS application or software in their companies. Moreover, providing guidelines for the application or software. And the companies also need to make sure their employees are adept when they use KMS even toughs, they can make it without KMS.

Factors that affecting respondents in order sharing knowledge to their colleague, are their own will to supporting each other or either become as backup and as documenting work progress, rules factor or job desk, in order to prevent miscommunication with other colleagues, moreover it also accelerate project progress which they do now or in the future, and increasing their performance and quality, in order to know each other what they lack in each job desk.

In the other hand, the reason they want to use information or knowledge inside the software or application in KMS is when they work is it is relevant with their work, information they use are necessary to be fully up to date and make it as a rules or regulation inside the company in order to create software or application in KMS.

Based on respondents, there are few criteria, which they needed or it will make easier to share the knowledge for the software or application which can be seen below:

1. Storage

System must have a large database, so that user need to save their files, for example google drive which have a large storage 15 GB or more.

2. Easy to Access Archive Data

Have a purpose to search all data using filter base mention, star, and data. For this feature mention previously, nearly all of the software or

- application possessed all those features. Yet, from previous feature mentioned, the company need to improve their searching data result, like confluence, which one of respondents hope to find the searching data result more accurate from the application.
3. **Easy to Access**
Easy to access, not only just the application connected with the internet, but user can easily access it via their smartphone. This will trigger the positive impact, which make the user does not bring laptop instead they only need to bring smartphone in order to discuss or any other activity. This features also available in slack, google drive.
 4. **Group**
Inspired by whatsapp and slack, but nearly all software has this feature. This feature has a main purpose to classify discussion based on project or theme.
 5. **Integrated with other services or single sign on.**
Just like Microsoft outlook and other application which capable to combine email like gmail and yahoo in one location, therefore user only need an application or software and all data in same place or time.
 6. **Security**
Security in terms of sharing information sharing are really important. One of the main example of data security is one of the software have encrypted security which possessed end-to-end attribute which owned by whatsapp.
 7. **Sharing Documents**
Sharing documents are nearly same for all application or software which have various features like sending pdf, documents, and many others. Yet, there are maximum capacity which range from 25 megabytes until 100 megabytes.
 8. **Meeting Notes and share calender**
Have main function as writer and reminder, it will make user does not need to create new files or folder. Yet, with this features their team can know about schedule and access to plan their discussion or other in same times. This feature can be seen in confluence application.
 9. **FAQ**
Following example like whatsapp which has this feature. With this features act as supporters for user if they have difficulty when they use the application, this happen because based on each of software table possess average which does not reach 80% from strongly agree.

It is expected to conduct further research using different variables (Social Interaction, Motivation,

Leadership) in order to find out other factors, that may influence the organizational effectiveness.

4. CONCLUSION

To gain the greatest benefits from knowledge, the company should manage the knowledge itself by implementing KM. Through knowledge management, the knowledge of employee possesses remains and becomes the company asset although when they physically left the company. Moreover, through knowledge management, organizations can also learn quickly, and thus they are adaptive to any changes.

This research aims to evaluate the knowledge management that runs on the start-up companies and to find out the factors and indicators that can improve the organizational effectiveness through the implementation of knowledge management. From the result of simple regression test, it is concluded that Knowledge Infrastructure Capability (KIC) has a significant influence on organizational effectiveness (OE) of 36.2% for online Knowledge Management Systems, 26.3% for offline Knowledge Management Process. The result also shows that Knowledge Process Capability (KPC) has a significant influence on organizational effectiveness (OE) of 36.5% for online Knowledge Management Systems, and 31.9% for offline Knowledge Management Process.

In the T-Test, Knowledge Infrastructure and Process Capability have a significant influence on organizational effectiveness (OE). The amount of influence on knowledge management offline is 35.3% and on knowledge management online is 45.9%. From these results, it can be concluded that the implementation of knowledge management influences the organizational effectiveness.

Overall, the implementation of KM has been quite implemented. However, the need of company is to increase employee capabilities to be more competent to improve the performance of the company and also the technology improvement related to software or knowledge management system to be more efficient. Improvements of the content, related to the discussion content are also needed to be more relevant to the needs and job positions and thus, it leads to creative ideas.

In terms of the organizational culture, it needs to make dynamic environment and make the employee relationship is not only considered between senior and junior but also as friends. Therefore, the organizations in this research does not have turnover experience. This is due to the average working period in the company which is 1

up to 2 years from 77 respondents, aged 21- 25 years.

For organizations that develop their own KMS or using outsource software, they can upgrade KMS or review it based on feedback from KMS users. Therefore, the KMS that has been implemented can be maximally used. On the other hand, for the companies that have not implemented KMS, they do not have to rush to develop or use outsource since the current users are more used to utilize the manual or other media for free in developing knowledge management in the organization.

For further research, it is also expected to conduct research on company management in organizations that only focus on one of the startup companies, and thus, it can be known whether the company management has been performed properly. This is due to the limitations of this research in terms of samples collection since it does not receive the permission survey in startup companies.

REFERENCES:

- [1] Noviandari, L. (2015). Tren investasi startup teknologi di Asia Tenggara.(Online). Accessed date: 14 September 2017 from <https://id.techinasia.com/budaya-perusahaan-startup-menarik-karyawan-bangun-karier>
- [2] Suwarni, D. J., & Silvianita, A. (2017). Knowledge Sharing dan Inovasi pada Industri Startup. *Jurnal Ecodemica*, 98-106.
- [3] Dalkir, K. (2011). *Knowledge Management in Theory and Practice*. London.
- [4] Ramadhanti, Y. (2016). *Pengaruh Keadlian Organisasi dan Perencanaan Karier Terhadap Turnover Karyawan PT.Kajima Indonesia*. Skripsi S1. Universitas Bina Nusantara, Jakarta.
- [5] Prawitasari, A. (2009). Faktor-Faktor yang Mempengaruhi Turnover Intention Karyawan pada PT. Mandiri Tunas Finance Bengkulu. 177-186.
- [6] Setiawan, P.G. Alasan Karyawan Hengkang dari Perusahaan Anda (Online). Accessed date: 14 September 2017 from <https://m.inilah.com/news/detail/2151786/alasan-karyawan-hengkang-dari-perusahaan-anda>
- [7] Hislop, D. (2013). *Knowledge management in organisations: A critical introduction*. 3rd Ed. UK: Oxford University Press.
- [8] Lee, J. and Fink, D. (2013). Knowledge mapping: Encouragements and impediments to adoption. *Journal of Knowledge Management*, 17(1), 16-28.
- [9] Amayah, A.T. (2013). Determinants of knowledge sharing in a public sector organisation. *Journal of Knowledge Management*, 17(3), 454-471, doi: 10.1108/JKM-11-2012-0369
- [10] Liao, S. H., Chang, W. J., Hu, D. C. and Yueh, Y. L. (2012). Relationships among organisational culture, knowledge acquisition, organisational learning, and organisational innovation in Taiwan's banking and insurance industries. *International Journal of Human Resource Management*, 23(1), 52-70.
- [11] Wolf, J. & Tendron, J.-F. (2014). Knowledge Capture & Transfer at Kraft Foods.[Online]. [Retrieved January 13, 2015]. <https://www.apqc.org/knowledgebase/documents>
- [12] Wong, K.Y., Tan, L.P., Lee, S.C. and Wong W.P. (2013), 'Knowledge Management performance measurement: measures, approaches, trends and future directions,' *Information Development*, 31(3), 239–257.
- [13] Awad. (2007). What's your strategy for managing knowledge? *Harvard Business Review*.
- [14] Chiu C.N. and Chen H.H. (2016). The study of knowledge management capability and organizational effectiveness in Taiwanese public utility: the mediator role of organizational commitment. *SpringerPlus*, 5(1520), 1-34.
- [15] Sekaran, U. (2006). *Metodologi Penelitian untuk Bisnis 2*. Indonesia: Salemba Empat.
- [16] Sukmawati, A., & Kartika, L. (2014). Kontribusi Modal Sosial dalam Penerapan Manajemen Pengetahuan Usaha Kecil dan Menengah Kluster Kerajinan di Bogor. 76-88.
- [17] Melina, S. (2016). Budaya Perusahaan Startup Jadi Daya Tarik untuk Membangun Karier. (Online). Accessed date: 14 January 2018 from <https://id.techinasia.com/budaya-perusahaan-startup-menarik-karyawan-bangun-karier>

Table 1: Relationship Between Variables And Indicators (Knowledge Infrastructure Capability Without System)

Variables	Indicators	Questions
Knowledge Infrastructure Capability (Without system)	The benefits of the internet	The Internet is very helpful for sending data and adding my information or knowledge.
	The internet supports knowledge sharing	Internet in the company supports the process of sharing knowledge to colleagues for the progress of the organization.
	Understanding of organizational SOP	Moreover, my understanding of SOP has been very good.
	Impact of organizational SOP	With the SOP make my work more focused and structured
	Leadership attitude	Leadership in the organization is guiding, feels like a mentor and uniformity
	High demands	Leadership inside the organization mainly focus on achieving results.

Table 2: Relationship Between Variables And Indicators (Knowledge Process Capability Without System)

Variable	Indicators	Questions
Knowledge Process Capability (Without system)	Training benefits	I felt the training provided contributes to my ability to complete the task.
	Cooperation Level	I invite discussions with colleagues, when there are jobs which I do not understand.
	Documenting knowledge	I noted an important point during the discussion.
	Implementing knowledge	After discussion, knowledge or information can be easily applied.

Table 3: Relationship Between Variables And Indicators (Knowledge Infrastructure Capability With System)

Variable	Indicators	Questions
Knowledge Infrastructure Capability (With system)	Response of knowledge management systems	The performance of knowledge management systems is very satisfying to the effectiveness of the organization.
	Process knowledge management systems	The knowledge sharing process of knowledge management systems is well integrated and effective.
	Preparation of KMS category	Content on KMS has been compiled based on their respective categories.
	Features on knowledge management systems	You have difficulty when using the KMS feature of the company
	Culture sharing knowledge on the company	Sharing knowledge's culture using knowledge management systems in the company is now well integrated and effective.
	KMS by adjusting with user goals	Knowledge management systems are now in line with your goals

Table 4: Relationship Between Variables And Indicators (Knowledge Process Capability With System)

Variable	Indicators	Questions
Knowledge Process Capability (With System)	Documentation development of knowledge management systems	The process of developing knowledge management systems has been well documented and disseminated in every company unit.
	Understanding knowledge management systems	You already understand the KMS guidelines and how they are used.
	Method of integrating old and new knowledge	You are easy to adapt KMS in the company
	KMS which possessed user friendly interface	Knowledge management systems in the company already have a user-friendly interface
	Benefits of knowledge management tools	Knowledge management tools used today are very useful for the company
	Using the knowledge management systems	Each employee is mandatory to use KMS, although its work can be done without using KMS
	Content rules	Content inside the KMS is free to modify.