Analysis of Measurement of Readiness Level of Knowledge Management System Implementation in Karawang State Court

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Abstract. The Karawang District Court is an official body or institution that organizes the judicial system in the form of examination, examination, and deciding cases. In carrying out its duties and functions, the Karawang District Court cannot be separated from the competition out there which demands that each division or division in it is required to be able to manage every stage of science effectively and efficiently. If this knowledge is managed properly, there will be many benefits that can increase the competence of the Karawang District Court. Therefore, it is necessary to apply knowledge management in the Karawang District Court which is an attraction for researchers to analyze the readiness of the application of the KM system in the Karawang District Court. Therefore, this study aims to measure the level of readiness to implement the system in the Karawang District Court. The research method used is descriptive quantitative while compiling the questionnaire using the Knowledge Management Success Factor (KMCSF) approach to help determine the extent to which the Karawang District Court is ready to implement knowledge management. The sampling technique used is non-probability sampling with the type of snowball, so the number of respondents in this study was 60 respondents. The results of this study after data analysis and data testing can be concluded that the Karawang District Court is ready to implement knowledge management.

Keywords: District Court, Knowledge Management, Knowledge Management Success Factor

1. INTRODUCTION

In the era of industrial revolution 4.0, technological developments are growing and developing rapidly so that knowledge is needed where this knowledge becomes a means of information for those who want to develop an organization to be more effective and efficient. Knowledge called knowledge management is a management tool that justifies the belief that knowledge is an asset to increase organizational capacity to be able to work more effectively (Nonaka & Takeuchi, 1997). However, in fact this knowledge management has failed in the implementation process due to several factors. Several organizations such as companies and agencies have encountered these failures.

The process knowledge management according to Probst in (Tobing, 2011) is: 1) Knowledge identification ; 2) Knowledge acquisition ; 3) Knowledge development ; 4) Knowledge sharing ; 5) Knowledge utilization ; 6) Knowledge retention. The application of knowledge management in an organization certainly requires a lot of readiness, whether it is in the form of software or hardware needed to manage knowledge the existing in the management system (KMS). According to (Munir & Rohendi, 2012) the success and failure factors of implementing KMS in an institution also depend on the

The 2nd International Conference on Inovations in Social Sciences Education and Engineering (ICoISSEE) August 07th, 2021

process of forming an organizational culture that supports the implementation of knowledge sharing. (Tobing, 2011) explained that the process of knowledge sharing is the essence of the success of KM. Without sharing, the scale of utilization knowledge will also be very limited, because knowledge is only used by a limited person or unit.

The Karawang District Court is an official institution that implements a judicial system in the form of examining, hearing and deciding cases. In carrying out its duties and functions, the Karawang District Court cannot be separated from the competition out there which demands that every division or division within it is required to be able to manage every stage of knowledge effectively and efficiently. Each section or division in the Karawang District Court is: 1) KM in Case Administration; 2) KM in the trial administration; 3) KM in General Administration; 4) KM in Public Services; 5) KM in Financial Management; 6) KM on Complaint Handling.

Every knowledge is stored in the mind of each individual which can be lost when an employee is no longer in the organization, for example due to promotion and transfer, retirement or death, so it is important to manage it properly. On the other hand, if this knowledge is managed properly, there will be many benefits that can improve the competence of the Karawang District Court. Therefore, it is necessary to implement knowledge management at the Karawang District Court which is an attraction for researchers to analyse the readiness to implement the KM system at the Karawang District Court.

But in reality, the implementation of knowledge management in an organization does not always work as expected. Some of the failures that occur are because the KM implementation strategy only emphasizes IT factors, the lack of user participation in designing tools KM, and the reluctance of individuals in the organization to share their knowledge for the benefit of the organization (Fernandez-Baccera, 2004).

Several previous studies related to the level of KM readiness include research (Prapto & Hutagalung, 2016) entitled Level of Readiness of Knowledge Management Implementation at the Information Technology Division of Pt. "X". Then the research conducted by (Isnandar & Budi, 2015) entitled Analysis of Measurement Level of Knowledge Management Implementation Readiness at SMP Muhammadiyah 1 Pringsewu Lampung. Lastly, research conducted by oleh (Prabowo, 2010) with the title Knowledge Management in Higher Education. Some of these studies use Knowledge Management (Knowledge Management Readiness) to measure the readiness of Knowledge Management Implementation. Therefore, based on the description and some previous research above, it is necessary to hold an important measurement stage for the Karawang District Court in carrying out measurements before the implementation of KM. With this measurement, the management who manages this KM will know the level of readiness of the Karawang District Court to implement the Knowledge Management.

2. LITERATURE REVIEW

2.1 Knowledge

Knowledge is information that has been compiled and analysed so that it is easy to understand and useful for problem solvers and can be used as material for decision making. *Knowledge* can also be interpreted as all parts of visions, experiences, and procedures that are considered validity and correctness that can affect thoughts and behaviour, which can increase the ability to solve problems, make decisions as well as learning and teaching (Liebowitz & J.Beckman, 1998). According to (Frappaolo & Toms, 1997), *knowledge* is information that lies in the human mind which is useful for making decisions even in different conditions.

2.2 Knowledge Management System

Knowledge Management System (KMS) is a system built to manage knowledge management because knowledge management is a very broad and very complex

The 2nd International Conference on Inovations in Social Sciences Education and Engineering (ICoISSEE)

August 07th, 2021

matter (Wijaya, 2017). While other opinions say Knowledge Management System (KMS) is a system of Knowledge Management. KMS refers to a group of information systems that are applied to manage knowledge within the organization, which is an information technology-based system developed to support and prioritize (knowledge creation), (knowledge storage / retrieval), (knowledge transfer), and (knowledge application) within the organization. KMS is a technology that enables Knowledge Management to run effectively and efficiently (Arribathi, 2020).

2.3 Knowledge Management Infrastructure

KM solution is an effort to facilitate the KM process which includes the process of searching (discovery), capturing (capturing), distributing (sharing), and applying (application) of knowledge in the organization. The KM solution includes the KM process and KM systems. KM solutions are very dependent on the KM foundation. Meanwhile, part of the KM foundation has infrastructure - Knowledge Management infrastructure includes five main components, namely: Organizational Culture, Organizational Structure, Information Technology Infrastructure, General Knowledge, Physical Environment (Becerra & Rajlv, 2010).

2.4 Knowledge Management System Readiness Knowledge

Knowledge Management System can also be interpreted as the receptive attitude of an organization member to be involved in the KM process through resource capabilities. Implementing KM in an organization requires significant changes in the organization, and because it is difficult to initiate a change, a number of preparations are needed first. Meanwhile KM readiness is also defined as the minimum level of KM Maturity before KM can be applied in an organization. The level of readiness of knowledge management is divided into five levels, namely (Ratwiyanti et al., 2020):

- 1. Not Ready,
- 2. Preliminary,
- 3. Ready,
- 4. Receptive,
- 5. Optimal.

2.5 Knowledge Management Success Factor (KMCSF)

According to Moffet et al., In conducting a readiness assessment, organizations first need to understand what KM is needed and in accordance with company strategy so that KM implementation can be completed. Infrastructure Knowledge Management (KM). KM infrastructure is the foundation upon which KM (Fernandez-Baccera, 2004) explained that there are five main components of KM infrastructure, namely: organization culture, organization structure, information technology infrastructure, common knowledge, and physical environment. Organization culture or organizational culture reflects the norms and beliefs that can direct the behaviour of individuals in the organization. A supportive organizational culture can help motivate employees to understand the benefits of KM.

3. RESEARCH METHODS/METHODOLOGY

The research method used is descriptive quantitative. Descriptive quantitative method is a method of researching the status of a group of people, an object, a set of conditions, a system of thought, or a class of events at the present time by using a questionnaire distribution method to obtain data or information from respondents to compose a description, picture or painting systematically. systematic, factual and accurate regarding the facts, properties and relationships between the phenomena being investigated diselidiki (Wicaksono & Nurhanisah, 2018). This research was conducted to determine the level of organizational readiness in implementing KM, where measurements were made on aspects that were considered as important factors for the success of KM in the agency. The stages carried out are planning, namely formulating problems and conducting literature studies, compiling research aspects. Each aspect that has been applied is then made statement items (items). The questionnaires that have been made are then handed over to the sample of

The 2nd International Conference on Inovations in Social Sciences Education and Engineering (ICoISSEE)

August 07th, 2021

respondents. The sampling technique used to determine the level of employee readiness in the KM implementation stage is non-probability, namely snowball. In snowball sampling, an initial identification of a person or case that falls into the research criteria is carried out, namely the actors involved in the process of implementing KM in the finance department of the Karawang District Court as many as 60 respondents, then testing, in this study the data testing was carried out by testing the validity and reliability, The last is descriptive analysis, at this stage the research results are presented. For all dimensions of KM, it is done by calculating the average of all aspects of the research. The results are then displayed in the form of a radar chart.

RESULTS AND DISCUSSION 4.

4.1 Data Collection Results

Based on data collection, 60 respondents were obtained from civil servants and finance at the Karawang District Court. Characteristics of respondents in the study were divided by education and gender.

Education	Men	Woman	Sum
Senior high school or equivalent	2	3	5
Bachelor (D3) or equivalent	5	5	10
Bachelor degree (S1)	25	20	45
etc	-	-	-
Total	32	28	60

Table 1. Characteristics of Respondents Based on Education and Gender

From the table above, it can be seen that there are more male respondents than female respondents, as many as 32 respondents are male and 28 respondents are female. Meanwhile, when viewed from the highest education level is Bachelor (S1), which is 45 respondents and the lowest education is SMA or equivalent, which is 5 respondents.

4.2 Validity Test

Testing the validity of this research instrument, using the correlation matrix from the calculation results of SPSS version 21 and the validity test in this study using the r table limit with a significance of 0.05. For the limit of r table with n = 60 then the r table can be 0.254, meaning that if the correlation value is more than the specified limit then the item is considered valid. The following are the results of testing the validity of each item:

			Correl	ations				
		AS.1	AS.2	AS.3	AS.4	AS.5	AS.6	Total_AS
AS.1	Pearson Correlation	1	.072	063	055	022	109	.255
	Sig. (2-tailed)		.585	.632	.675	.867	.408	.050
	N	60	60	60	60	60	60	60
AS.2	Pearson Correlation	.072	1	.112	.037	061	.126	.491 ***
	Sig. (2-tailed)	.585		.392	.781	.641	.337	.000
	N	60	60	60	60	60	60	60
AS.3	Pearson Correlation	063	.112	1	096	.021	.038	.369""
	Sig. (2-tailed)	.632	.392		.464	.875	.772	.004
	N	60	60	60	60	60	60	60
AS.4	Pearson Correlation	055	.037	096	1	101	114	.307
	Sig. (2-tailed)	.675	.781	.464		.442	.385	.017
	N	60	60	60	60	60	60	60
AS.5	Pearson Correlation	022	061	.021	101	1	.174	.422***
	Sig. (2-tailed)	.867	.641	.875	.442		.183	.001
	N	60	60	60	60	60	60	60
AS.6	Pearson Correlation	109	.126	.038	114	.174	1	.561**
	Sig. (2-tailed)	.408	.337	.772	.385	.183		.000
	N	60	60	60	60	60	60	60
Total_AS	Pearson Correlation	.255	.491**	.369**	.307	.422**	.561	1
	Sig. (2-tailed)	.050	.000	.004	.017	.001	.000	
	N	60	60	60	60	60	60	60

Table 2. Validity Test Results on Strategic Aspects

Correlations

The 2nd International Conference on Inovations in Social Sciences Education and Engineering (ICoISSEE) August 07th, 2021

Table 3. Validity Test Results on Organizational Aspects Correlations

		AO.1	AO.2	AO.3	AO.4	Total_AO
AO.1	Pearson Correlation	1	.430**	.405**	201	.659**
	Sig. (2-tailed)		.001	.001	.124	.000
	N	60	60	60	60	60
AO.2	Pearson Correlation	.430**	1	.503**	146	.692**
	Sig. (2-tailed)	.001		.000	.266	.000
	N	60	60	60	60	60
AO.3	Pearson Correlation	.405	.503	1	117	.748**
	Sig. (2-tailed)	.001	.000		.372	.000
	Ν	60	60	60	60	60
AO.4	Pearson Correlation	201	146	117	1	.290
	Sig. (2-tailed)	.124	.266	.372		.025
	Ν	60	60	60	60	60
Total_AO	Pearson Correlation	.659**	.692**	.748**	.290	1
	Sig. (2-tailed)	.000	.000	.000	.025	
	N	60	60	60	60	60

Table 4. Validity Test Results on Culture Aspects Correlations

		AC.1	AC.2	AC.3	AC.4	Total_AC
AC.1	Pearson Correlation	1	.582**	095	257	.656
	Sig. (2-tailed)		.000	.470	.048	.000
	Ν	60	60	60	60	60
AC.2	Pearson Correlation	.582	1	020	188	.698**
	Sig. (2-tailed)	.000		.879	.151	.000
	Ν	60	60	60	60	60
AC.3	Pearson Correlation	095	020	1	039	.316
	Sig. (2-tailed)	.470	.879		.768	.014
	Ν	60	60	60	60	60
AC.4	Pearson Correlation	257	188	039	1	.307
	Sig. (2-tailed)	.048	.151	.768		.017
	Ν	60	60	60	60	60
Total_AC	Pearson Correlation	.656	.698**	.316	.307	1
	Sig. (2-tailed)	.000	.000	.014	.017	
	Ν	60	60	60	60	60

Table 5. Validity Test Results on the Technology Aspect Correlations

		AT.1	AT.2	AT.3	AT.4	Total_AT
AT.1	Pearson Correlation	1	.194	036	042	.364**
	Sig. (2-tailed)		.137	.785	.748	.004
	N	60	60	60	60	60
AT.2	Pearson Correlation	.194	1	.111	.003	.498**
	Sig. (2-tailed)	.137		.399	.981	.000
	N	60	60	60	60	60
AT.3	Pearson Correlation	036	.111	1	.027	.495
	Sig. (2-tailed)	.785	.399		.841	.000
	N	60	60	60	60	60
AT.4	Pearson Correlation	042	.003	.027	1	.682**
	Sig. (2-tailed)	.748	.981	.841		.000
	Ν	60	60	60	60	60
Total_AT	Pearson Correlation	.364**	.498**	.495**	.682**	1
	Sig. (2-tailed)	.004	.000	.000	.000	
	N	60	60	60	60	60

The 2nd International Conference on Inovations in Social Sciences Education and Engineering (ICoISSEE) August 07th, 2021

Table 6. Validity Test Results on Motivation Aspects Correlations

oonendons									
		AM.1	AM.2	AM.3	AM.4	Total_AM			
AM.1	Pearson Correlation	1	.362**	.163	102	.651**			
	Sig. (2-tailed)		.004	.212	.439	.000			
	Ν	60	60	60	60	60			
AM.2	Pearson Correlation	.362**	1	.281	004	.712**			
	Sig. (2-tailed)	.004		.029	.974	.000			
	Ν	60	60	60	60	60			
AM.3	Pearson Correlation	.163	.281	1	.015	.582**			
	Sig. (2-tailed)	.212	.029		.908	.000			
	Ν	60	60	60	60	60			
AM.4	Pearson Correlation	102	004	.015	1	.381**			
	Sig. (2-tailed)	.439	.974	.908		.003			
	Ν	60	60	60	60	60			
Total_AM	Pearson Correlation	.651**	.712**	.582**	.381**	1			
	Sig. (2-tailed)	.000	.000	.000	.003				
	N	60	60	60	60	60			

Table 7. Validity Test Results on Process Aspects Correlations

		AP.1	AP.2	AP.3	AP.4	Total_AP
AP.1	Pearson Correlation	1	.488**	.204	.145	.697**
	Sig. (2-tailed)		.000	.118	.269	.000
	N	60	60	60	60	60
AP.2	Pearson Correlation	.488**	1	.361**	079	.672**
	Sig. (2-tailed)	.000		.005	.546	.000
	N	60	60	60	60	60
AP.3	Pearson Correlation	.204	.361**	1	036	.600**
	Sig. (2-tailed)	.118	.005		.786	.000
	Ν	60	60	60	60	60
AP.4	Pearson Correlation	.145	079	036	1	.502**
	Sig. (2-tailed)	.269	.546	.786		.000
	N	60	60	60	60	60
Total_AP	Pearson Correlation	.697**	.672**	.600**	.502**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	60	60	60	60	60

Table 8. Validity Test Results on the Human Resource Aspect Correlations

		AHR.1	AHR.2	AHR.3	AHR.4	Total_AHR
AHR.1	Pearson Correlation	1	153	023	200	.342
	Sig. (2-tailed)		.244	.860	.125	.007
	N	60	60	60	60	60
AHR.2	Pearson Correlation	153	1	188	232	.277
	Sig. (2-tailed)	.244		.151	.075	.032
	N	60	60	60	60	60
AHR.3	Pearson Correlation	023	188	1	247	.383**
	Sig. (2-tailed)	.860	.151		.057	.002
	N	60	60	60	60	60
AHR.4	Pearson Correlation	200	232	247	1	.364**
	Sig. (2-tailed)	.125	.075	.057		.004
	N	60	60	60	60	60
Total_AHR	Pearson Correlation	.342**	.277	.383**	.364**	1
	Sig. (2-tailed)	.007	.032	.002	.004	
	N	60	60	60	60	60

The 2nd International Conference on Inovations in Social Sciences Education and Engineering (ICoISSEE) August 07th, 2021

Based on the results of testing the validity of Strategic Aspects, Organizational Aspects, Culture Aspects, Technology Aspects, Motivation Aspects, Process Aspects and Human Resource Aspects, respectively, they are declared valid, because they have r table > 0.254.

4.2 Reliability Test

This reliability test is used to determine whether the measuring instrument gets a measurement that remains consistent if the measurement is repeated. In this study, the measurer used a Likert scale of 1 to 5.

Table 9. Reliability Test Results					
Reliability Statistics					
Cronbach's Alpha	N of Items				
.668	30				

4.3 Analysis Data Results

The following is a table of the results of the overall data analysis can be seen in Table 4.14 below:

No	Acnosta	Item score						Avorago
INO	Aspects	1	2	3	4	5	6	Average
1	Strategy	4.85	4.75	4.82	4.7	4.75	4.6	4.75
2	Organization	4.75	4.77	4.72	4.63			4.72
3	Culture	4.67	4.75	4.78	4.65			4.71
4	Technology	4.87	4.82	4.83	4.55			4.77
5	Motivation	4.7	4.73	4.8	4.68			4.73
6	Process	4.78	4.82	4.8	4.7			4.78
7	Human Resource	4.88	4.85	4.83	4.77			4.83
	Overall Value							

Table 10. Results of Overall Analysis of Knowledge Management Aspects

From the table above, it can be concluded that in current conditions the highest score is in the human resource aspect and the lowest score is in the cultural aspect. It can be concluded that the average value of the readiness of the Karawang District Court reaches 4.75, meaning that the level of readiness of the Karawang District Court is at the Optimal level (on a scale of 4.01 - 5.00). Where for the readiness of the strategy aspect has a score of 4.75; the organizational aspect has a score of 4.72; the cultural aspect has a score of 4.71; technology aspect has a score of 4.77; the motivation aspect has a score of 4.73; the process aspect has a score of 4.78; and the human resource aspect has a score of 4.83. The following is a radar graph of the overall analysis results:



Figure 1. Radar Graph of Overall Analysis Results

CONCLUSION

Based on the results of the analysis and discussion above, it can be concluded: Analysis results measuring the level of readiness The Karawang District Court in implementing KM is at level 5, namely Optimal, with an overall score of 4.75. This shows that the Karawang District Court is ready to implement knowledge management. From the number of dimensions of KM aspects analysed, the Karawang District Court still has several aspects that need attention, such as aspects of Culture, Organization, and Motivation. Because these three aspects always experience a decrease in effectiveness every year due to the employee mutation program, in order to increase the level of readiness to implement knowledge management smoothly and successfully, it is necessary to pay attention to the progress of these three aspects each year.

REFERENCES

- Arribathi, A. H. (2020). Efektifitas Penerapan Knowledge Management System (Kms) Berbasis Website Terhadap Pembelajaran Agama Islam (Studi Kasus di SMK Al-Fattah Tangerang). Jurnal Tahdzibi: Manajemen Pendidikan Islam, 5(1), 1–8. https://doi.org/10.24853/tahdzibi.5.1.1-8
- Becerra, I. F., & Rajlv, S. (2010). *Knowledge Management Systems and Processes*. M.E Sharpe Inc.
- Fernandez-Baccera. (2004). Kowledge management: challenges, solution and technology. Prentice Hall.
- Frappaolo, C., & Toms, W. (1997). *Knowledge management: from terra incognita to terra firma*. http://www.delphigroup.com/articles/1997/11071997
- Isnandar, S., & Budi, I. (2015). Analisis Pengukuran Tingkat Kesiapan Implementasi Knowledge Management Pada SMP Muhammadiyah 1 Pringsewu Lampung. *Jurnal Teknologi Informasi Magister Darmajaya*, *1*(02), 142–157.
- Liebowitz, J., & J.Beckman, T. (1998). *Knowledge Organization Every Manajer Should Know*. Boca Raton ERC Press Lc.
- Munir, & Rohendi. (2012). Development Model for Knowledge Management System to Improve University's Performance (Case Study In Indonesia University of Education). International Journal of Computer Science Issue, 9(1).
- Nonaka, I., & Takeuchi, H. (1997). The Knowledge-creating company: How Japanese companies create the dynamics of innovation I. Nonaka & H. Takeuchi, (Oxford University Press, London & New York, 1995), 284 pp., \$25.00, ISBN 0 19 509269
 4. Research Policy. https://doi.org/10.1016/S0048-7333(97)80234-X
- Prabowo, H. (2010). Knowledge Management di Perguruan Tinggi. *Binus Business Review*, *1*(2), 407. https://doi.org/10.21512/bbr.v1i2.1087
- Prapto, D. A. W., & Hutagalung, S. (2016). Tingkat Kesiapan Implementasi Knowledge Management Pada Divisi Teknologi Informasi Pt. "X." *Journal of Chemical Information and Modeling*, 12(2).
- Ratwiyanti, P., Munsaidah, Y., & Dewi, R. (2020). Knowledge Management System Readiness Di Universitas Amikom Purwokerto Berdasarkan Aspek People, Process, Technology. *Sistemasi*, *9*(1), 166. https://doi.org/10.32520/stmsi.v9i1.631
- Tobing, P. L. (2011). *Manajemen Knowledge Sharing Berbasis Komunitas*. Knowledge Management Society Indonesia.
- Wicaksono, A. S., & Nurhanisah, N. (2018). Studi Deskriptif Kuantitatif Tingkat Kepuasan Kerja Dan Cara Mengekspresikan Tingkat Kepuasan Kerja Yang Rendah Pada Karyawan Dengan Masa Kerja Di Atas Tiga Puluh Tahun. *MATRIK (Jurnal*

Wijaya, A. E. (2017). Knowledge Management System Model pada Forum diskusi Petani Buah Naga menggunakan CMS phpBB. *Jurnal Teknologi Informasi Dan Ilmu Komputer, 4*(1), 44. https://doi.org/10.25126/jtiik.201741150