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The Role of Organizational and Individual Factors in Knowledge Management System Acceptance

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Abstract

The aim of this study is to investigates the how individual and organizational factors influence people behavior in using knowledge management. This research applied Technology Acceptance Model (TAM) as a basis theory; TAM was enriched with individual and organizational factors for this study. A survey approach was conducted for data collection. Three of institutions in Banking Sector at Indonesia were invited to join this study and 215 knowledge workers were participated for the survey. Data from survey were analyzed through Structural Equations Model (SEM) using PLS (Partial Least Square) V2. The conclusion specify that "individual elements" and "organizational elements" are the significantly affect people behavior in KMS acceptance factors that influence knowledge worker behavior in knowledge sharing. However this study not found relationship between individual and organization factors and "perceived ease of use" construct with people behavior in accept KMS.

Keywords*: knowledge management system, technology acceptance, people behavior, individual factor, organizational factor*

1. Introduction

Fast growing in Information Technology development has brought many benefits in support organization in manage their knowledge more effectively. Information Technology brings opportunity for the organization by providing various feature and ability in manage their knowledge [1]. The use of Information Technology to support Knowledge Management (KM) process is recognizing as Knowledge Management System (KMS). Todays, implementation of KMS has been considered a fundamental part of the KM projects [2]. It is believed that KMS give immense opportunities to break down barriers by making the information presented at every level and units in organization hence it will help to enhance organization becomes more effective [3]. There some example of Information Technology that could support Knowledge Management activities, such as a groupware, groupware is an application that develops to facilitate collaboration and sharing of knowledge among people in the community. Content Management Systems (CMS), this application could use to help people in creating the content and documents in the web system. Electronic Learning is developing to help the organization to conduct training and/or education using information technology. Video conference; this technology enables a member of one organization could conduct a virtual meeting with other company in remote location support by the internet [1].

Although Information Technology provides many values for KM in the organization, however, KM, in fact, is not all about Information Technology [4]. Previous research found the barriers in using KMS is not much about technology but it more about people and culture [4-6]. Research in KM and KMS has identified the main barriers in KM is not related with the Information Technology itself, however study in this area reveals that people/user behavior is became the main problem in KM/KMS project success [7]. People are playing a vital role in KMS project; this is because people are the main actor in KM. People are actor that has the knowledge and they are also the actor who will contribute and receive the knowledge. IT is an enabler that would help people in contribute and receive the organizational knowledge. It is become critical for organization which develop KM to understand the reason why people use or not use the KMS. The interesting fact about using KMS is when people using the KMS (as tool/technology) he/she not only accepts the technology itself, but in the same time he/she also

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need to agrees to contribute or receive knowledge (known as Knowledge Sharing/KS). KS as the main activities in KM was influence by what she/he believe related with the KS. Cabrera and Cabrera [8] studies in KS explain people will do KS if they get maximal benefit from KS and provide minimal effort for KS. In accept KS people will consider what benefit and cost they have when conduct KS [9]. Some people conduct KS because of external driven and others because of internal driven, external motivation such as financial and nonfinancial reward and reciprocity is one of example from internal motivation [10].

In organizational context, people behavior is much influence by organization culture and policy [11]. When organization is able to create appropriate organization culture, people as member of organization will tend to have behavior according the organization culture [5]. In KM initiation, organization needs to pay attention and provide more effort to support the KM, by focus in develop an effective strategy [12] that brought a conductive environment with positive culture that will encourages people in doing KS [13]. With focus on people and organization factor, we argue organization could have better understanding in why people accept the KMS in KM initiation [14]. Better understanding in KMS acceptance is important for KM success; researches related in KMS acceptance argue that KMS acceptance became one of prominent agenda research in KMS area [2], [15-16]. In this research, we would like to contribute in making better understand why people are accepting and not accept the KMS. Our study focus to investigate factors influences people behavior in KMS acceptance both from individual and organizational factor. We applying TAM as a basis theory, we also consider both individual and organization factor to be investigated.

Our article outline describes as follow; the first section would describe introduction and the related study. The second section presents theoretical framework and hypotheses development for this study. The third section explains the research method. The last section we will provide data analysis, result, and discussion.

2. Theory and Hypotheses Development

2.1. Theory Technology Acceptance Model (TAM)

This study using the Theory Technology Acceptance Model (TAM) as the basic reference in resolving the issues raise in this study. TAM is one design that is constructed to evaluate as well as comprehend the variables that affect the approval of using computer technology which was initially introduced by Fred Davis in 1986. TAM is the outcome of the growth of the Theory of Reasoned Action (TRA), which initially established by Fishbein and also Ajzen on 1980. TAM aims to discuss as well as predict the function (acceptance) customers versus an information system. TAM gives an academic basis to establish the factors that influence the acceptance of the modern technology within a company. TAM clarifies the causal connection between confidence (the advantages of a system of information and also the simplicity of use) and actions, purposes, and also the actual use the individual/ user of an information system.

TAM model, in reality, is taken from the model TRA, it is the principles of reasoned action by using the hypothesis that the reactions and one's perception of things, it will certainly determine the mindset and also the behavior of the person. Responses, as well as understandings of users to Information Technology (IT), will certainly impact its perspective in the approval of these modern technologies. Among the elements that could affect it is the user's understanding of the effectiveness and also simplicity by the utilization of IT because an act that is reasonable in the connection to concerning modern technology, so the factor someone discover the benefits and also simplicity of use of IT making the activity/behavior of people such as standards in the approval of a technology.

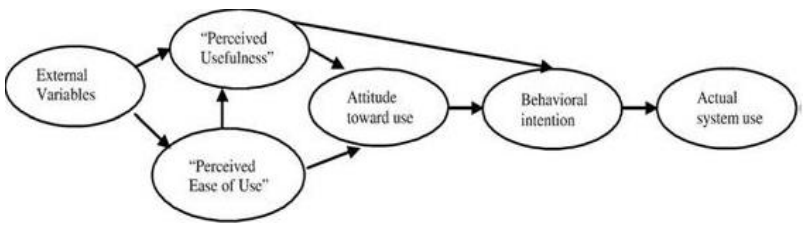

Figure 1. TAM model

The studies which applied in this theory have been proven that this theory is able to explain and predict the behavior and the good intentions of a person's actual behavior. Researchers generally collaborate on this theory with other theories or add other relevant factors to be explored in connection with this theory can provide a better explanation of human behavior. In connection with the adoption of research in the field of KMS Acceptance then factor "Individual" and "Organizational" is regarded as a critical factor that must be considered to understand. Several studies which are evaluating the impact of factors "Individual" and "Organizational" in conjunction with the adoption of mobile KMS Acceptance [17-20].

2.2. Development of Research Model and Hypotheses

The following picture shows the relationship between variables in this study.

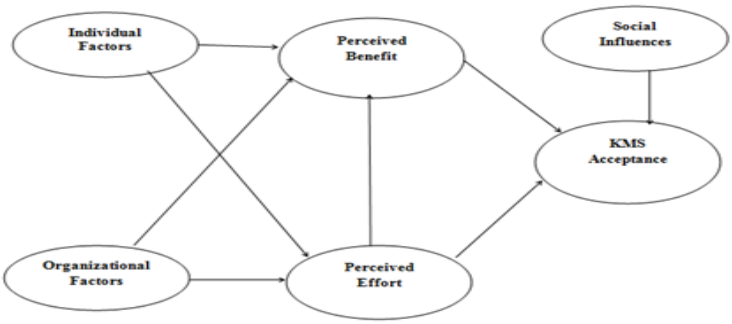

Figure 2. Research model

The research model consists of six variables in Figure 6. There are three independent variables and three dependent variables. Four clusters of constructs such as external factors (consist of an individual and organizational factor), user belief (consist of perceived benefit and effort), social influences and KMS acceptance. The operational definition of each construct explains in Table 1. We conduct eight hypotheses; the hypotheses have been grouped under individual factors, organizational factors, and perceived benefit, perceived effort, social influences and KMS acceptance.

Table 1. Operational Definition of Variables

Factor	Definition	Number of Indicators	References
Individual factors	Individual factors are the role of individual difference (a role with regard to technology, tenure in the workforce, prior experiences and participation in training	Five indicators for individual factors have adapted from a previous study.	[2], [21-28]
Organizational Factors	Organizational factors are related to knowledge infrastructure capability (technology, structure, and culture) along with knowledge process capability (acquisition, conversion, application and protection) which is essential organization capabilities and a precondition for effective knowledge management	We adapted elephant indicator from previous studies to measure our organizational factors.	[2], [15], [24-25], [29-34]
Perceived Benefit	Perceived benefit is the degree to which an individual finds using and contributing in KMS give benefit and useful.	Eight indicators have been adapted for these studies	[2], [15], [23-24], [26-27], [30-31], 34-40]
Perceived Effort	Perceived benefit is the degree to which an individual finds using and contributing in KMS free of effort and or cost.	We adapted eight indicators to measure perceived effort in this study	[2], [15], [23-24], [26-27], [30-31], [34-40]
Social Influences	Social Influences is an individual's perception that most people who are notable to the individual think he or she should or should not use the KMS	Three indicators have been adapted for this study	[25, 41].
KMS Acceptance	KMS Acceptance is the decision to using or using the KMS	We adapted eight indicators to measure KMS acceptance construct in this study	[2], [15], [23-24], [26-27], [30-31], [34-40]

2.3. Individual Factor

Past studies [2], [21], [25], [28] specify that the end/individual/user characteristic 'different are decisive aspects in describing/forecasting the technology acceptance. Furthermore, Davis (1989) in technology acceptance model recommends that external variables such as individual variables will influences system acceptance by affecting perceived usefulness. External factors are substantiated to have a direct impact on PU. External factors may include system feature, training, document support consultations [24]. External factor provides "the bridge between the internal beliefs, attitude, and intention represented in TAM and the various individual different situation constrains and managerially controllable intervention impinging on behavior [24]. Furthermore, a study by Agarwal and Prasad (1999) found that individual different have influenced individual belief (in this context PB and PE) in technology acceptance. Our propose hypotheses for individual factors are:

H1: Individual Factor will have a direct impact to Benefit of using KMS

H2: Individual Factor will have a direct impact to Effort of using KMS

2.4. Organizational Factor

Previous studies [2], [42] reveals that organizational aspects have an influences people in the acceptance of the technology. Relevant with that, Davis [24] suggests that in the technology acceptance model, the external factors such as individual factors will influences knowledge management system acceptance by impact to perceived usefulness factors. External factors are substantiated to have a direct impact on Perceived Usefulness. External factors could consist of system feature, training, document support consultations [24]. External factor provides "the bridge between the internal beliefs, attitude, and intention represented in TAM and the various individual different situation constrains and managerially controllable intervention impinging on behavior [24]. Our propose hypotheses for organizational factors are:

H3: Organizational Factors will have a direct impact to Effort of using KMS

H4: Organizational Factors will have a direct impact to Benefit of using KMS

2.5. Perceived Benefit

Perceived Benefit construct is modified from Perceived Usefulness construct of TAM [24]. Perceived Usefulness (PU) is a fundamental determinant of user acceptance of an information system. PU defined as "degree to which person believes that using a particular system would enhance his or her job performance [23]. Relevant with another IT acceptance researchers in other area, studies in KMS acceptance survey also found that perceived usefulness is a "crucial factor" of someone purpose to take advantage of KMS [2], [15], [23-24], [26-27], [30-31], [34-40] In addition TAM postulates PU is assigned by PEOU as well as external variable. Our propose hypotheses for perceived benefit is:

H5: Benefit will have a direct impact to KMS Acceptance

2.6. Perceived Effort

Perceived Effort was modified from original Perceived Ease of Use in TAM [24]. In TAM PEOU is one of the fundamental determinants of user acceptance of information system [2], [15], [23-24], [26-27], [30-31], [34-40]. PEOU postulated to have a direct impact as well as indirect on behavioral intention trough PU. TAM posits PU are specified by PEOU and external variable. PEOU is postulate having a direct impact on PU. Our propose hypotheses for perceived effort are:

H6: Effort will have a direct impact on benefit of using KMS

H7: Effort will have a direct impact to KMS Acceptance

2.7. Social Influences

We refer to Fulk et al. 1990 for social influences model in this research. This concept argues that people behavior will influence with other people who are important to him/her/If the important people suggest he/she to do so, he/she will perform the action. Previous research found social influences have a direct effect on individual intention to use [2], [25-26], [42-43]. Our propose hypotheses for social influences are:

H8: Social Influence will have a direct impact to Benefit of using KM

3. Research Methodology

3.1. Sample

Indonesia banking institution was selected for the survey setting. We invited the banks which have implemented Knowledge Management System. Five hundred questionnaires were distributed to the employees of selected Bank. Data was collected from the middle of September 2015 to early November 2015. To increase the responses rate, a reminder message was sent out two weeks after and respondents who return the questionnaire were given a souvenir [44]. There were two hundred and twenty questionnaires was return, and two hundred and fifteen questionnaire was valid. The final sample size is 215 subjects, and the reply rate ranges from 10% to 43% with an average reply rate of 25%.

The respondent comprised of 63% male and 37 % female. 37% of respondent were in group 31 to 35, 26% in 36 to 40, 16% in 41 to 45 and 14 % in group younger than 30. 62% of the respondent were holding the staff position, 10% were assistant manager and manager and 10% were supervisors. 73% of the respondent holds a bachelor degree, 24% having a master degree, 2% associate degree and 1% having a high school degree. 47% having years experiences for 2 to 5, 29% for 6 to 10, and 13% 11 to 15, 1% for 16 to 20 and 20 or more, and 8% for less than 1 year. Distribution of respondent base by the organization was as following: 17% from Bank A, 49% from Bank B and 34% from Bank C. The description of profile respondent listed in Table 2.

Table 2. Respondent Profile

Information	Categories	Number	Percent
Gender	Male	135	63 (%)
	Female	80	37 (%)
Organization	Bank A	36	17 (%)
	Bank B	105	49 (%)
	Bank C	74	34 (%)
Age Group	31-35	79	37 (%)
	36-40	62	26 (%)
	41-45	34	16 (%)
	45-50	9	4 (%)
	51or older	1	1 (%)
	30 or younger	30	14 (%)
Rank of Position	Assistant Manager	21	10 (%)
	Manager	22	10 (%)
	Staff	133	62 (%)
	Supervisor	39	18 (%)
Education	High School	1	1 (%)
	Associate Degree	5	2 (%)
	Bachelor Degree	157	73 (%)
	Master Degree	51	24 (%)
Years of Experiences	Less than 1 years	18	8 (%)
	2 until 5 years	102	47 (%)
	6 until 10 years	62	29 (%)
	11 until 15 years	28	13 (%)
	16 until 20 years	3	1 (%)
	More than 20 years	1	1 (%)

3.2. Technical Analysis

This research applied PLS for data analysis using Smart PLS V2 software. There are two main stages in data analysis; the first stage is conducted an evaluation of "measurement model". The second stage is conducted the structural model evaluation. The aim of measurement model evaluation is to ensure that the research instrument developed in this study met the criteria that have been determined for quantitative study. The structural model evaluation is conduct to test the research hypotheses.

4. Results and Discussion

The stages of the validation of the instrument are through a series of statistical evaluation. This part intends to make sure that the research study tool established in this study

satisfied the requirement that has actually been identified in a quantitative study. In quantitative research, the validity and reliability to a research instrument is a task that needs to conduct.

4.1. Instrument Measurement

This study conducts three approaches of pre-testing such as face validity, content validity, and pilot study [45-46]. Information related the step of pretest explain below. The first stage in instrument validation is face validation. The aim of this stage is to get the feedback from expert in term of questionnaire content and design. Two expert in this filed were invited to provide feedback. The inputs from expert are use in improving the design. Several modifications were made to the wording and scaling of certain question.

After conduct face validation, this study performs content validation. Content validation is conduct with reviewing all of items on the questionnaire to make sure whether the questionnaire cover the overall topic in this study [47]. This type of validation is often the most powerful validation in developing new questionnaire. We invite three of experts to conduct our content validity. The experts are experiences as consultant in knowledge management. They have more than ten years in implementing Knowledge management in many organizations at Indonesia. Content validity conducts by review the items for construct using a scale to evaluate all of items. There are some method that could apply in evaluate degree of agreement regarding the content relevant of an instrument have been proposed. For this study one approach that recommended for several decades is apply. This method involving having a team of experts indicates where each item on the scale is relevant to the construct, computing the percentage of items deemed to be relevant for each expert, and then taking the average of the percentages across experts [47]. Average of percentages across expert known as ACP (average congruency percentage); if ACP is 90 percent or higher would be consider acceptable [47]. We created a list of all that items in the questionnaire to validate and check by expert's team. The items were grouping in their variable. Expert was asked to rate each scale of item. We provide 4 point scale base on Davis (1992); 1=not relevant, 2=somewhat relevant, 3=quite relevant, 4=highly relevant. The result showed all items in the questionnaire have ACP higher than 90%.

The next step is perform pilot study, by conduct pilot study it is could increase reliability of measures [48]. This research conduct a pilot study conducted by ten KM Consultant employees. The objective of the study was to ensure that the survey instrument is clear and concise, to ass's time require completing the questionnaire and that the measurement items reveal their intended meaning. The pilot participants were asked to read the cover letter, complete the survey, and provide feedback, as well as overall reaction to the survey based on their experiences. Feedback was used to make the necessary adjustment to improve the questionnaire

4.2. Validity and Reliability Test

This study perform construct validity for evaluate the validity of the instrument. The aim of these activities is to make sure the instrument meet the criteria. Construct validity of the measures was evaluated regards to convergent validity and discriminant validity. The convergent validity of the procedure is specified as the level to which a collection of items merge consistently to determine a specific concept. It can be determined by using the variable loadings, composite reliability (CR) and also average variance extracted (AVE) standards [49]. To develop that, we analyzed the items' variable loadings and cross loadings to recognize if there are issues pertaining to some items. The cutoff value of 0.5, as recommended by [49], was used to assess the goodness of items' loadings. Result from Smart PLS indicated that all items were got acceptable not including items KA 5 (0.42), KA 6 (0.49), KA 8 (0.41) and SI3 (0.2) have loading values less than 0.50. Next these items were reduced from more evaluations just to increase their item reliability. Therefore, the composite reliability was verified as significant factors of convergent validity. The composite reliability relates to the level to which a set of items shows consistently the latent construct [49]. As shown in Table 4, the composite reliability has specified limit from 0.884 to 0.954 that more than the recommended value of 0.7 thus represent an enough convergent validity [50, 51]. Furthermore, the average variance extracted (AVE) that relates to the average variance extracted among a set of items, was analyzed. Actually, AVE can be utilized to measure the variance captured by the indicators with the variance assignable to the measurement errors. As recommended by Barclay et al. (1995),

values of AVE higher than 0.5 show that the set of items has an enough convergence in determining the concern construct [52].

According to the final outcome of PLS Algorithm, from six construct have AVE value less than 0.5. Effort has AVE value 0.43 while Organizational Factor has value 0.37. In order to increase AVE value we drop the items which have lowest loading value in each construct one by one. From effort construct item E7 (0.51) is found to be the lowest loading value among others. After drop E7 item, we check again AVE value for effort construct. Because AVE value was still below 0.5, than we dropped the others item in effort construct E8 (0.47). Last AVE to effort increase after drop items E7 and E8 became 0.53. Next, we do some procedure for organizational variables construct. First item OG7 (0.53) as the lowest loading value among others were identified, and we drop it. Because AVE value for organizational factors was still not acceptable, then we dropped other items, OG11 (0.58), OG6 (0.56), OG10 (0.59), OG9 (0.54), and OG8 (0.53). After we drop the items from the model, AVE value for organizational factors increase became 0.52, and it was acceptable. Then model was retested and found have acceptable measurement properties for every item in each construct. Table 3 shows final items for its constructs and all the items greatly loaded on its respective elements when compare to their loadings on other factors.

Table 3. Cross Loading Factors

	Benefit	Effort	Individual Factor	KMS Accept	Org Factor	Social Influences
PB1*	0.6985	0.3147	0.3008	0.5184	0.205	0.2641
PB2	0.8164	0.3166	0.3456	0.4774	0.1995	0.2204
PB3	0.8276	0.2731	0.336	0.4199	0.215	0.2417
PB4	0.7583	0.2599	0.3739	0.3748	0.2656	0.2318
PB5	0.7842	0.297	0.2351	0.4367	0.2786	0.2336
PB6	0.8238	0.2583	0.2322	0.3766	0.1617	0.2854
PB7	0.8221	0.2178	0.2365	0.3807	0.0441	0.2553
PB8	0.8093	0.1962	0.249	0.3789	0.0687	0.2658
PE1	0.2614	0.7519	0.238	0.129	0.292	0.1712
PE2	0.1994	0.7617	0.231	0.1483	0.2784	0.1822
PE3	0.3577	0.8337	0.2945	0.2345	0.2738	0.1667
PE4	0.0935	0.7188	0.2727	0.1067	0.2732	0.1879
PE5	0.3361	0.7267	0.2896	0.2355	0.275	0.3184
PE6	0.1805	0.5358	0.3049	0.3153	0.4526	0.0546
IF1	0.2419	0.3376	0.8027	0.3028	0.3426	0.1898
IF2	0.3101	0.3579	0.8653	0.334	0.3599	0.1879
IF3	0.2593	0.3155	0.7435	0.2853	0.467	0.1827
IF4	0.2849	0.2189	0.6212	0.3013	0.3861	0.1784
IF5	0.283	0.1406	0.6106	0.2931	0.2326	0.117
KA1	0.3877	0.2568	0.348	0.8445	0.2833	0.2266
KA2	0.411	0.157	0.2776	0.8433	0.191	0.1646
KA3	0.4838	0.2315	0.3629	0.8941	0.2466	0.165
KA4	0.5444	0.211	0.3355	0.887	0.2084	0.1359
KA7	0.3436	0.321	0.3392	0.5781	0.2894	0.1996
OG1	0.1675	0.2264	0.3445	0.2195	0.7671	0.1211
OG2	0.127	0.204	0.3355	0.1664	0.6894	0.1219
OG3	0.1555	0.264	0.2861	0.2393	0.7305	0.0206
OG4	0.1928	0.369	0.4526	0.2104	0.6691	0.129
OG5	0.1866	0.414	0.3145	0.223	0.7353	0.0554
SI1	0.3022	0.2474	0.2196	0.2028	0.127	0.9878
SI2	0.3189	0.2424	0.244	0.2257	0.1149	0.9902

*PB=Perceived Benefit PE=Perceived Effort IF=Individual Factors
KA=KMS Acceptance OG=Organizational Factors SI=Social Influences

As presented in table 4 the AVE calculates of all the constructs get more than the minimum level, ranging from .62 to .97. The AVE is greater than .50 is thought appropriate, which indicates that “There are 50% or more variance of the indicators should be considered for” [53]. In summary, these results indicate that all the constructs in the model prove about high internal consistency. Next we will check the reliability of each construct. Reliability is the level to

which “a specific method, used continuously to the similar item, which could generate the similar outcome each time” [50-51]. Reliability is assessed with both composite reliability and Cronbach’s Alpha. A value of at minimum 0.70 was applied as the thresholds to show suffice reliability (Nunnally 1978). We can look on Table 4 that present the reliability of the constructs. Each one of the constructs had great reliability and scored well above 0.70.

Table 4. Reliability Indicator

	Cronbach’s Alpha	Composite Reliability	AVE
Perceived Benefit	0.9161	0.9314	0.6298
Perceived Effort	0.8179	0.8689	0.5287
Individual Factor	0.7829	0.8526	0.5409
KMS Acceptance	0.8688	0.9082	0.669
Org Factor	0.7769	0.8423	0.5171
Social Influences	0.9777	0.9889	0.9781

The composite reliability was counted to assess the internal consistency for the indicators of each construct. In contrast to Cronbach’s alpha, composite reliability does not conclude that all items are just as calculated [53]. All of constructs in the research model showed great internal consistency as shown by their composite reliability scores (Table 4). Composite reliability result higher than .70 is analyzed appropriate. Composite reliability of all the constructs has more than 0.80 which showing the measurement model has high internal consistency.

4.3. Discriminant Validity

Discriminant validity refers to “the degree to which items differentiate among constructs or measure distinct concepts” [50-51]. To evaluate loadings, cross-loadings, and discriminant validity were compared. To show discriminant validity, loadings need to be higher than cross-loadings. Simply, the indicators must give higher for their associated construct than indicators for other constructs. This recommends that the construct component rating forecasts each indicator for the linked construct much better compared to indicators for other constructs [53].

Among of test for discriminant validity in order to compare the inter-construct relationship as well as the square root of the AVE. The square root of the AVE need to higher than the inter-construct correlations [53], showing that “the constructs were correlated a lot higher with their indicators compared with other constructs in the model” [50-51]. In other words, the AVE shared between the construct and its indicators need to be greater than the variance shared between the construct to the other constructs [53].

Table 5. The Square Root of AVE

	CR	AVE	Perceived Benefit	Perceived Effort	Ind Factor	KMS Accept	Org Factor	Social Influe
Perceived Benefit	0.9314	0.6298	0.793					
Perceived Effort	0.8689	0.5287	0.3444	0.727				
Individual Factor	0.8526	0.5409	0.3719	0.385	0.735			
KMS Acceptance	0.9082	0.669	0.5396	0.2892	0.4105	0.817		
Org Factor	0.8423	0.5171	0.2385	0.4397	0.4899	0.2989	0.719	
Social Influences	0.9889	0.9781	0.3144	0.2474	0.235	0.2173	0.122	0.988

As presented in Table 5 the square root of the AVE calculation for all constructs (in diagonals) is higher than the inter-construct correlations (off-diagonals). These outcomes show that all the constructs fulfill the standards for enough discriminant validity. The conclusion, all the constructs show enough validity and reliability, showing that the measurement model is acceptable.

4.4. Global fit Measure

Since specified with Tenenhaus et al. (2004), a global fit measure (GoF) for PLS path modeling is the geometric method of the average communality as well as average R2 for the endogenous constructs. To maintain the validity of the PLS model, GoF value was approximated depending on the standards set up by Wetzels et al. (2009). In our research, the

achieved GoF value was 0.26. The evaluation was prepared with the baseline values of GoF (small=0.1, medium=0.25, large=0.36) because it was recommended by Wetzels et al. (2009) giving proof of appropriate of universal PLS model validity [54].

4.5. Predictive Relevance of Model

When mentioned previously, the size of the R2 for the endogenous variables has a predictive power indicator of the model. In order to validate the anticipating significance of the model, the sample reuse method was used as recommended by Stone (1974) and also Geisser (1975). Actually, the sample's reuse method that was said by Wold (1982) to accommodate effectively the PLS modeling method (Götz, Liehr-Gobbers, & Krafft, 2011). Furthermore, especially, we then analyzed the predictive validity of the model by using the procedures recommended by Stone–Geisser non-parametric test [53, 55]. In order to accomplish this objective, the blindfolding procedures integrated into Smart-PLS bundle were utilized. Blindfolding procedures is created to eliminate some information and after that approximate them as missing values. Based upon that, the blindfolding procedure generates basic cross-validating metrics Q2.

According to this method, there are distinct forms of Q2 that can be measured based upon the form of preferred forecast. A cross-validated communality Q2 could be acquired when the information factors predicted based on the latent variable scores. From different view point, when the data points are got by the LVs that predict the block concerned, a cross-validated redundancy Q2 is the outcome. The cross-validated redundancy method could be a trusted measure of the predictive relevance of the model examined [55]. If the evaluation of requirement, repetitive communality was discovered to be higher than 0 for all the endogenous variables, the model is regarded to have predictive validity, typically, the predictive relevance of the model could not be deduced [55]. The outcomes of our model show that the cross-validated redundancy for "Perceived Benefit". Perceived Effort" and "KMS Acceptance" was respectively 0.11, 0.10 and 0.19 is higher than zero. Therefore the used model predictive validity was built.

4.6. Testing Research Model

The hypotheses are checked by analyzing the statistical relevance of the path coefficients with t-statistics determined to make use of the bootstrap resampling method of 500 samples. The bootstrap is a "nonparametric method for approximating the accuracy of the PLS valuations" [53]. The test of the structural model includes estimates of the path coefficients indicating the strength of the relationships between the dependent independent variables; and estimates of the R2 values, which work with the amount of variance in the dependent variable clarified by the independent variables. We utilized the repetitive indicator method to approximate the second-order molar construct, commitment [56]. Under the repeated indicator approach, the higher-order constructs are straight determined by manifest indicators for the first-order constructs. The repetitive indicators approach enables inspection of the relative path weights of the factors creating the higher-order constructs [56]. To examine the specific hypotheses (summarized in Table 6) suggested in the research model, we evaluated the t-statistics for the consistent path coefficients by using bootstrap with 500 re-samples. We used two-tailed as well as one tailed t-test due to the fact that the hypotheses were unidirectional and also directional. The outcomes of the evaluation are illustrated in Figure 3 and recapped in Table 6.

Table 6. Hypotheses Testing

	Hypotheses	Path Coe	T-stat	P-value	Result
H1	Individual Factor will have direct impact to Perceived Benefit of using KMS	0.28	3.291	0.0011	Supported
H2	Individual Factor will have direct impact to Perceived Effort of using KMS	0.22	4.9716	0.0001	Supported
H3	Organizational Factors will have direct impact to Perceived Effort of using KMS	0.33	2.1152	0.0352	Supported
H4	Organizational Factors will have direct impact to Perceived Benefit of using KMS	-0.004	1.2106	0.2276	Not Supported
H5	Perceived Benefit will have direct impact to KMS Acceptance	0.49	7.1737	0.0001	Supported
H6	Perceived Effort will have direct impact on Perceived benefit of using KMS	0.24	2.6044	0.0100	Supported

H7	Perceived Effort will have direct impact to KMS Acceptance	0.11	1.7355	0.0833	Not supported
H8	Social Influences will have direct impact to KMS Acceptance	0.04	2.4315	0.0159	Not Supported

As shown in Figure 3, the model accounts for 30% of the variance in KMS Acceptance, 18% of the variance in users' perceived benefit of using KMS, and 23% of the variance in perceived effort. Every hypothesis were bolstered not include for H4, H7, and H8.

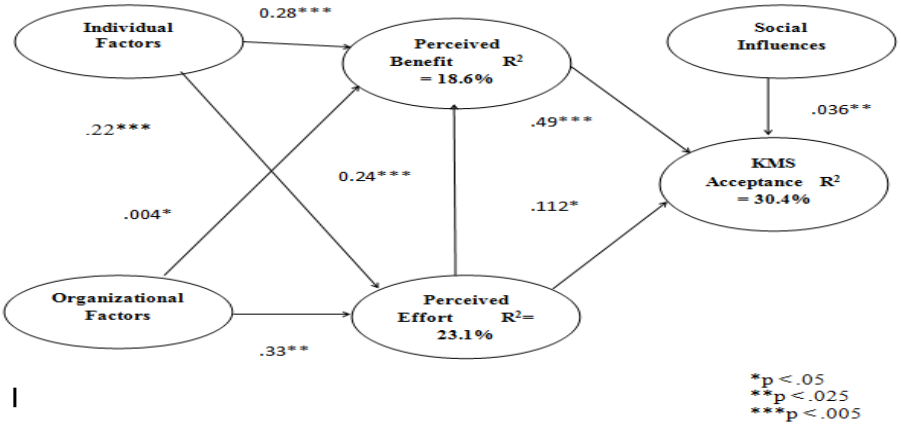

Figure 3. Path analysis result

4.7. Discussion

The research discovered just what affects the use of KMS in Indonesia Bank organization. We sustained the TAM (Davis, 1989) with SET to examine knowledge contributor behavior in acceptance KMS. We will talk about the findings related to each hypothesis in turn. Hypotheses 1, Consistent with Davis et al (1989) proposed, we found that individual variables can influences knowledge management system acceptance by influencing perceived benefit. This supports Davis's argument that External factor provides "the bridge between the internal beliefs, attitude, and intention represented in TAM and the various individual different situation constrains and managerially controllable intervention impinging on behavior [24]. Hypotheses 2, as hypothesized, Individual Factor will have a direct impact on perceived effort of using KMS. This finding was as we looked forward that the behavior and attitudes are conceptually comparable and strengthening. These outcomes come with those for hypothesis 1, indicate that external factors influence perceived benefit as well as perceived effort. Furthermore, this is relevant with a study by Agarwal and Prasad (1999) found that individual different have influenced Perceived Benefit and effort in technology acceptance. Hypothesis 3, this hypothesis was supported. Our hypotheses that argue organizational Factors will have a direct impact on Perceived effort of using KMS. This relevant with previous research that found external factors for example organizational variables will influences knowledge management system acceptance by influencing perceived benefit. Hypotheses 4, we had hypothesized that Organizational Factors will have a direct impact to Perceived Benefit of using KMS. This finding has opposite to that in the literature that recommends external factors, for example, organizational variables will influences knowledge management system acceptance by influencing perceived benefit. Hypothesis 5, this hypothesis was strongly supported. Our hypotheses that Benefit will have a direct impact to KMS Acceptance were strongly evident affect KMS acceptance. In the line with previous studies in KMS acceptance study aadditionally discovered that perceived usefulness is a "significance determinant" of the personal objective to use KMS and that regarded simplicity of use is a "significant secondary determinant" of use objectives [30-31], [57]. Hypotheses 6, Consistent with Davis's (1989) findings, we found that perceived effort posited to have a direct effect an indirect on behavioral intention trough perceived a benefit. Hypotheses 7, we had hypothesized that perceived effort posited to have a direct effect behavioral intention. This finding has opposite to those in the literature that recommends a perceived effort posited to

have a direct effect behavioral intention Hypothesis 8, As hypothesized, peers or superiors reflect he or she must show the behavior, weighted by the person's intention to fulfill with those others, as forecasted by the social influence model (Fulk et al. 1990), social influence utilized by the behavior and attitude of management and co-workers in a users' social and work environments can significantly affect the users' actions concerning technology use. This finding has opposite to those in the literature that recommends those social influences can be connected to fulfilment in mandatory settings which makes it have a straight effect on intention.

5. Conclusion

This research empirically tested how individual and organizational factors influences people behavior in accept knowledge management systems. By collecting data from 215 Indonesia Banking Institutions employees, this study found that both individual and organizational factor influences people behavior in accept KMS by affect perceived benefit variable. This study has contributed in theoretical aspect by providing detailed factors of people behavior in knowledge management systems acceptance. In a practical aspect, the results of this research can help organizations, which are currently practicing knowledge management system to develop an appropriate strategy in enhancing effective KMS implementations by considering the finding factors. The research limitation of this study is the related with sample size. In the future, parts of the model could be extracted and investigated in detail. For further intriguing upcoming research could be checking out at the differentiation among the various types of knowledge management systems adopters.

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