THE IMPACT ON KNOWLEDGE MANAGEMENT SYSTEM'S ELEMENT TO THE PERFORMANCE IN HIGHER EDUCATION

[1] Jarot S Suroso, [2]Sasmoko, [3]Elisabeth

[1,3]Master in Information System Management, Bina Nusantara University, Jakarta, Indonesia, 11480
[2]Research Interest Group in Educational Technology, Bina Nusantara University, Jakarta, Indonesia, 11480
[2]Faculty of Humanities, Bina Nusantara University, Jakarta, Indonesia, 11480

URL: *https://ieeexplore.ieee.org/document/8005416/*

Scopus

Document details

Save to Mendeley ⌄   ⤓ Download   🖶 Print   ✉ E-mail   Save to PDF   ☆ Save to list   More... ›

View at Publisher

Proceedings - 2017 International Symposium on Educational Technology, ISET 2017
8 August 2017, Article number 8005416, Pages 180-183
2017 International Symposium on Educational Technology, ISET 2017; Hong Kong; Hong Kong; 27 June 2017 through 29 June 2017; Category numberP6181; Code 129880

The impact on knowledge management system's element to the performance in higher education (Conference Paper)

Suroso, J.S.[a] ✉,   Sasmoko[b] ✉,   Elisabeth[c] ✉

[a]Master in Information Systems Management, Bina Nusantara University, Jln. Kebon Jeruk Raya No. 27, Jakarta, Indonesia
[b]Faculty of Humanities, RIG in Education Technology, Indonesia
[c]Information Systems Management, Bina Nusantara University, Jln. Kebon Jeruk Raya No. 27, Jakarta, Indonesia

Abstract
⌄ **View references (6)**

This research aimed to analyze the impact of the competence, work ethic, professionalism and motivation of people (lecturer and staff) on their performance. The data taken from questionnaires to 317 respondents and interviewed the 12 respondents. Data were analyzed using multiple regression analysis. The results showed that the Competence, Work Ethics, Professionalism and Motivation on the lecturer and staff are positive and has significant impact on their performance. Therefore, it needs to make improvements to People element in order to apply Knowledge Management System so that it may increase its performance. © 2017 IEEE.

Author keywords

(Competency) (Knowledge Management System) (Motivation) (Performance) (Professionalism) (Work Ethic)

Indexed keywords

Engineering controlled terms: (Educational technology) (Employment) (Knowledge based systems) (Motivation) (Regression analysis) (Surveys)

Engineering uncontrolled terms   (Competency) (Knowledge management system) (Performance) (Professionalism) (Work ethics)

Engineering main heading: (Knowledge management)

Funding details

Metrics ⓘ

0   Citations in Scopus

0   Field-Weighted Citation Impact

✻

PlumX Metrics ⌄
Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert ›

Set citation feed ›

Related documents

Quality of transformation of knowledge as part of knowledge management system: (Research in private university in Jakarta)
Budiastuti, D. , Prabowo, H.
(2017) *Lecture Notes in Electrical Engineering*

Implementing a knowledge management solution: From scattered, individual tools to a shared, fully-stocked workshop
McGarrity, J.
(2001) *Proceedings ACM SIGUCCS User Services Conference*

Knowledge management system development at PT Bussan Auto Finance
Prasetyo, A.Y. , Harisno
(2017) *Proceedings - 11th 2016 International Conference on Knowledge, Information and Creativity Support Systems, KICSS 2016*

View all related documents based on references

Find more related documents in Scopus based on:

Authors ›   Keywords ›

References (6)

View in search results format ›

☐ All | Save to Mendeley ⌄ 🖨 Print ✉ E-mail Save to PDF Create bibliography

☐ 1 Dalkir, K.
Knowledge management in theory and practice
(2005) *ButterworthHeinemann*, 4. Cited 5 times.
http://doi.org/10.1002/asi.21613

☐ 2 Debowski, S.
(2005) *Knowledge Management: A Strategic Management Perspective*. Cited 114 times.
Australia: John Wiley &

☐ 3 Kidwell, J.J., Linde, V.K.M., Johnson, S.L.
Applying corporate knowledge management practices in higher education
(2000) *Educase Quarterly*, 4 (4), pp. 28-33. Cited 139 times.

☐ 4 Nevo, D.
(2003) *Developing Effective Knowledge Management Systems*. Cited 6 times.
University of British Columbia. University of British Columbia

☐ 5 Smith, P.A.C., McLaughlin, M.
(2004) *Knowledge Management: People Are Important ! Journal of Knowledge Management Practice*, pp. 1-14.
Retrieved from
http://www.tlainc.com/articl60.htm

☐ 6 Tungadi, A.L.
(2016) *Pengembangan IT Strategic Planning Menggunakan Mobile Enterprise Architecture Pada Proses Akademik Universitas Atma Jaya Makassar*
Universitas Bina Nusantara

About Scopus

What is Scopus

Content coverage

Scopus blog

Language

日本語に切り替える

切换到简体中文

切換到繁體中文

Customer Service

Help

Contact us

ELSEVIER

RELX Group™

RELX Group™

International Symposium on Educational Technology

Hong Kong SAR, 27 to 29 June 2017

International Programme Committee

Chairs

Fu Lee Wang, Caritas Institute of Higher Education, Hong Kong
Oliver Au, The Open University of Hong Kong, Hong Kong
Victor Lee, City University of Hong Kong, Hong Kong

Members

Jinnong Cao, The Hong Kong Polytechnic University, Hong Kong
Keith Chan, The Hong Kong Polytechnic University, Hong Kong
Peter Chan, Brigham Young University, United States of America
Chih-Tsan Chang, National Chung Cheng University, Taiwan
Simon K.S. Cheung, The Open University of Hong Kong, Hong Kong
David Delahunty, University of Oulu, Finland
Giuliana Dettori, Istituto di Tecnologie Didattiche del CNR, Italy
Min Eng, University of Toronto, Canada
Owen Hall Jr., Pepperdine University, United States of America

Andreas Henrich, University of Bamberg, Germany

Yoko Hirata, Hokkai-Gakuen University, Japan

Yoshihiro Hirata, Hokkai-Gakuen University, Japan

Jenq-Muh Hsu, National Chiayi University, Taiwan

Ronghuia Huang, Beijing Normal University, China

Kenichi Kubota, Kansai University, Japan

Reggie Kwan, The Open University of Hong Kong, Hong Kong

Lam-For Kwok, City University of Hong Kong, Hong Kong

Ivan Lai, Caritas Institute of Higher Education, Hong Kong

Jeanne Lam, HKU School of Professional and Continuing Education, Hong Kong

Jun Le, Guangdong Radio and TV University, China

Keith Lee, The Open University of Hong Kong, Hong Kong

Yan Li, Zhejiang University, China

Yi Li, Nanjing University, China

Will Ma, Hong Kong Shue Yan University, Hong Kong

Kousuke Mouri, Kyushu University, Japan

Steven Ng, Caritas Institute of Higher Education, Hong Kong

Hiroaki Ogata, Kyushu University, Japan

Diana Perez-Marin, Universidad Rey Juan Carlos, Spain

Petra Poulova, University of Hradec Králové, Czech Republic

Junjie Shang, Peking University, China

Liana Stanescu, University of Craiova, Romania

Jay Tashiro, University of Ontario Institute of Technology, Canada

Stefanie Trausan-Matu, University Politehnica of Bucharest, Romania

Aihua Wang, Peking University, China

Shudong Wang, Shimane University, Japan

Tak Lam Wong, The Hong Kong Institute of Education, Hong Kong

Di Wu, Central China Normal University, China

You Ru Xie, South China Normal University, China

Harrison Yang, State University of New York at Oswego, United States of America

Wing Lok Yeung, Lingnan University, Hong Kong

Morris Jong, The Chinese University of Hong Kong, Hong Kong

Liming Zhang, University of Macau, Macau

Guodong Zhao, Peking University, China

Jianhua Zhao, South China Normal University, China

Ying Zhou, Beijing Normal University, China

Enquiry Email

iset2017@cityu.edu.hk (mailto:iset2016@cityu.edu.hk)

Important Date

Deadline of submission : 28 February 2017 (extended)

Notification to authors : 15 March 2017

Deadline of final papers : 31 March 2017

Deadline of author registrations : TBC
Date of the conference : 27-29 June 2017

Conference Organizer

Conference Co-Organizers

Technical Sponsor

Conference Sponsor

The Impact on Knowledge Management System's Element to the Performance in Higher Education

Jarot S. Suroso

Master in Information Systems Management
Bina Nusantara University
Jln. Kebon Jeruk Raya No. 27 Jakarta Indonesia
jsembodo@binus.edu

[1] Sasmoko, [2] Elisabeth

[1] Faculty of Humanities, RIG in Education Technology
[2] Master in Information Systems Management
Bina Nusantara University
Jln. Kebon Jeruk Raya No. 27 Jakarta Indonesia
[1] sasmoko@binus.edu,
[2] margareth.maria.elisabeth@gmail.com

Abstract—**This research aimed to analyze the impact of the competence, work ethic, professionalism and motivation of people (lecturer and staff) on their performance. The data taken from questionnaires to 317 respondents and interviewed the 12 respondents. Data were analyzed using multiple regression analysis. The results showed that the Competence, Work Ethics, Professionalism and Motivation on the lecturer and staff are positive and has significant impact on their performance. Therefore, it needs to make improvements to People element in order to apply Knowledge Management System so that it may increase its performance.**

Keywords—Competency; Work Ethic; Professionalism; Motivation; Performance; Knowledge Management System

I. Introduction

Nowadays, Knowledge Management System has been implemented to solve the problems that occur in college, and of course, if implemented effectively, it will increase the ability of the college in making better decisions, reduce cycle time curriculum development and research, improve services academic and administrative as well as reduce costs (Kidwell, Linde, & Johnson, 2000), which in practical application of the knowledge management system will bring higher education in improving the performance and sustainability as a college (Mulyanto, 2008). According to Bhatt (Bhatt, 2000), Concept of Knowledge Management System (KMS) consists of three elements namely people, process and technology. But the implications of applying the KMS very influential on the strategy chosen. Therefore, consideration needs very careful in selecting the focus of the strategy will be applied. Because many people are focusing on technology while the main factors that were most responsible is not on technology but on people. University of Atma Jaya Makassar (UAJM) saw the need for the implementation of knowledge management system to improve performance and excellence in the public eye. However, UAJM need to prepare the people better. This is because people hold a very important role in the implementation of knowledge management (Smith & McLaughlin, 2004). UAJM itself also experienced circumstances in which people are held still weak. It can be seen from some of the problems complained of by the head of

the personnel staff and the Dean Faculty of Information Technology (interviews), which according to chief of staff personnel, the ability (competence) owned by administrative staff and other education personnel are still very diverse, in addition to the work ethic, professionalism and motivation in performing the duties and responsibilities and resolve problems as they arise is still lacking. This can be seen clearly from the daily work done. Based on the background that has been presented, the authors saw a need of UAJM to increase its performance by implementing a knowledge management system especially with managing the knowledge of faculty and staff close to retirement to be a provision for faculty and staff who will work replaces the work of faculty and staff History, so that personal knowledge of faculty and staff can become knowledge University to further develop UAJM. However, because the People are owned still weak in this study the researchers wanted to make improvements to the People of UAJM. The focus of research is examining the factors that held people in UAJM consisting of competence, work ethic, professionalism and motivation, where the analysis is to see the influence of these factors on the performance UAJM, namely whether the quality of the people that have positive effect UAJM significant performance improvement. The results of the analysis will be a recommendation for UAJM and lesson learned in helping UAJM before implementing a knowledge management system in the form of technology so UAJM KM Portal to further improve its quality. The research focus on people element in UAJM which is lecturer and staff. Besides the variables used are competence, work ethic, professionalism and motivation. The lecturers in this research addressed to permanent lecturers and Kopertis lecturers, then the staff at this research is addressed to administrative staff and academic support staff.

II. System Model and Emthods

The Research methods that is used in this research was described in Fig. 1 and Fig. 2. This research begins with problems identification which consist of some activities that is finding the background research of Atma Jaya Makassar University. Then the author can assess problems formulation and problems analysis. The next step, the authors conducted a literature review previous studies on the Effect of Knowledge

Management System in University, University Performance Indicator. After that, the authors compiled a useful research instrument at the time of data collection.
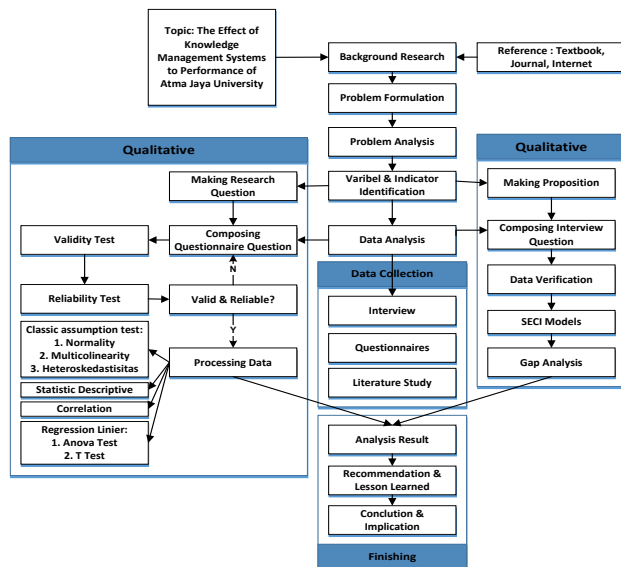

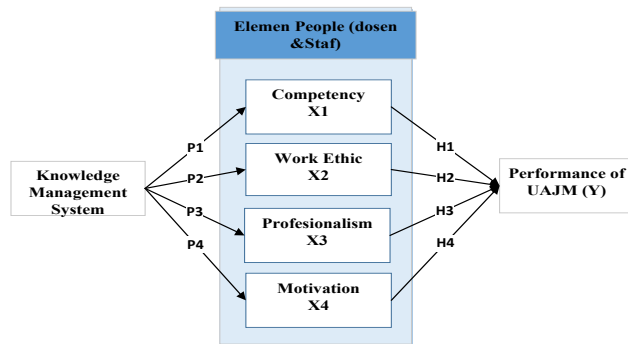Fig. 1. The Research Procedure

Fig. 2. The Research Design.

Hypotheses formulation for this research is

1. Competency = H1
   H0: There is no positive and significant impact between competency and Atma Jaya Makassar performance.
   H1: There is a positive and significant impact between competency and Atma Jaya Makassar performance

2. Work Ethic = H2
   H0: There is no positive and significant impact between work ethic and Atma Jaya Makassar performance.
   H1: There is a positive and significant impact between work ethic and Atma Jaya Makassar performance

3. Professionalism = H3
   H0: There is no positive and significant impact between Professionalism and Atma Jaya Makassar performance.

H1: There is a positive and significant impact between Professionalism and Atma Jaya Makassar performance

4. Motivation = H4
   H0: There is no positive and significant impact between Motivation and Atma Jaya Makassar performance.
   H1: There is a positive and significant impact between Motivation and Atma Jaya Makassar performance.

III. RESULTS

Knowledge Management System (KMS) Models that is used in this research is based on (Nevo, 2003, p. 3) which is explained in Fig. 3.
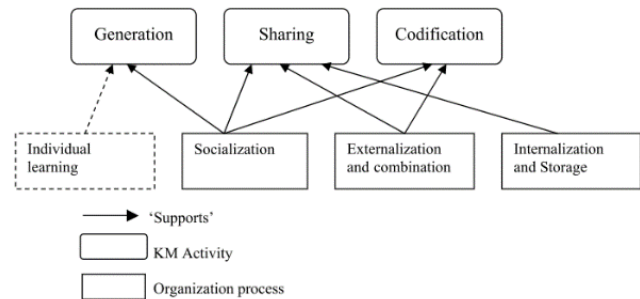

Fig. 3. Model of KMS (Nevo, 2003, p. 6)

Respondents in the research involved permanent lecturers, lecturers Kopertis, administrative staff, academic support staff and students of UAJM. Questionnaires distributed is divided into two major parts, namely assessment for staff and assessment for the lecturer. The assessment for staff and lecturer conducted by taking the reference standard lecturer certificate which distributed questionnaires to assess themselves from staff and lecturer are concerned, then assessing the staff and faculty colleagues. Students also take part in providing an assessment of their experience in face to face together faculty and in the services provided by the staff.

A) Validity & Reliability Test

The reliability test with Cronbach's Alpha is using to determine the consistency of measuring and analyzing Pearson Correlation (r count) to determine each of the questions are valid, i.e. if the coefficient correlation is smaller than 0.3, then the questions are not valid and should be removed for further analysis. Calculation results for Cronbach's Alpha obtained is > 0.7 in each variable, and then each variable is declared reliable. It can be concluded that each respondent had to answer consistently on variables. The result can be seen in Table I and Table II.

TABLE I. RELIABILITY TEST FOR STAFF

Variable	Result	Line	Sum
Competency (X_1)	0.940	> 0.7	accept
Work Ethic (X_2)	0.879	> 0.7	accept
Professionalism (X_3)	0.708	> 0.7	accept
Motivation (X_4)	0.844	> 0.7	accept
Performance (Y)	0.909	> 0.7	accept

(Source: IBM SPSS 23)

TABLE II. RELIABILITY TEST FOR LECTURER

Variable	Result	Line	Sum
Competency (X_1)	0.970	> 0,7	accept
Work Ethic (X_2)	0.879	> 0.7	accept
Professionalism (X_3)	0.948	> 0.7	accept
Motivation (X_4)	0.893	> 0.7	accept
Performance (Y)	0.929	> 0.7	accept

(Source: IBM SPSS 23)

B) Interpretation of the research result

1. Descriptive Statistic Analysis

Descriptive statistics were used to interpret the average size of UAJM performance, competence, work ethic, professionalism, and motivation. The result can be seen in Table III and IV.

TABLE III. DESCRIPTIVE STATISTICS STAFF

Var	Mean	Std Deviation	N
KJ_UAJM	3.03921568	.550767544	69
KP_S	3.98631240	.490042984	69
EK_S	3.87439614	.590921102	69
PR_S	3.05797102	.709313692	69
MO_S	3.19927536	.912111833	69

(Source: IBM SPSS 23)

TABLE IV. DESCRIPTIVE STATISTICS LECTURER

Var	Mean	Std Deviation	N
KJ_UAJM	3.20298260	.605199806	71
KP_D	4.06786171	.383920712	71
EK_D	3.77094142	.475610008	71
PR_D	4.01853225	.482220379	71
MO_D	3.19366197	.915342620	71

(Source: IBM SPSS 23)

2. Correlation

Correlation is used to determine whether there is a relationship between performance UAJM with competency, work ethic, professionalism, motivation. If there is a relationship it can be seen the relationship the four variables. The result can be seen in Table V and VI.

TABLE V. CORRELATION STAFF

Var	Pearson Correlation	Sig (1 tailed)	N
KJ_UAJM	1.000		69
KP_S	.531	.001	69
EK_S	.386	.002	69
PR_S	.340	.004	69
MO_S	.321	.000	69

TABLE VI. CORRELATION LECTURER

Var	Pearson Correlation	Sig (1 tailed)	N
KJ_UAJM	1.000		71
KP_D	.571	.000	71
EK_D	.502	.000	71
PR_D	.512	.000	71
MO_D	.510	.000	71

The relationship between the variables competency, work ethic, professionalism and motivation of faculty and staff with UAJM performance is strong. The positive correlation that shows in Table V and VI indicates that the relationship between the two in the same direction.

The numbers sig between two variables is smaller than 0.05 so that we can conclude the relationship between these variables is said to be significant.

3. Summary Model

Summary Model in the table 7 and 8 shows the coefficient of determination that serves to determine the percentage of dependent variable, i.e. performance UAJM, which can be predicted using independent variables, namely competency, work ethic, professionalism and motivation

TABLE VII. SUMMARY MODEL STAFF

Model	R	R^2	Adjusted R Square	SEE
1	.669	.448	.413	.421967827

TABLE VIII. SUMMARY MODEL LECTURER

Model	R	R^2	Adjusted R Square	SEE
1	.710	.504	.474	.438771217

4. Infrastructure in UAJM

Infrastructure in UAJM using two kind network which is internal and external network. Internal network including SIAMIK, SIMPER as intranet network, and internet network that is used for operational routines. Besides that external infrastructure including website, learning management system, email, and e-journal. This External network hosting others provider and has limit.
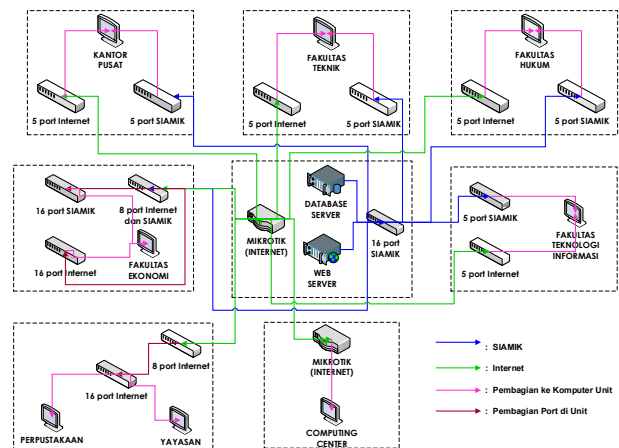

Fig. 4. Infrastructure in UAJM (Tungadi, 2016, p. 138)

IV. CONCLUSION

Based on the research, there are several conclusions namely:

1. Knowledge Management System has been improving lecturer's and staff's competency, work ethic, professionalism, and motivation but knowledge that has been stored from a lot of activity haven't used by university in making decision for improving UAJM's performance

2. Competency variable for staff/lecturer has a significant and positive impact on Atma Jaya Makassar University performance improvement with a value of = 0.486, this indicates that the relationship is strong enough and has the effect of 48.6% to the increase in Atma Jaya Makassar University performance.

3. Work Ethic variable for staff/lecturer has a significant and positive impact on Atma Jaya Makassar University performance improvement with a value of = 0.165, this indicates that the relationship is strong enough and has the effect of 16.5% to the increase in Atma Jaya Makassar University performance.

4. Professionalism variable for staff/lecturer has a significant and positive impact on Atma Jaya Makassar University performance improvement with a value of = 0.193, this indicates that the relationship is strong enough and has the effect of 19.3% to the increase in Atma Jaya Makassar University performance.

5. Motivation variable for staff/lecturer has a significant and positive impact on Atma Jaya Makassar University performance improvement with a value of = 0.122, this indicates that the relationship is strong enough and has the effect of 12.2% to the increase in Atma Jaya Makassar University performance.

REFERENCES

[1] Dalkir, K. (2005). Knowledge Management in Theory and Practice. ButterworthHeinemann (Vol. 4). http://doi.org/10.1002/asi.21613

[2] Debowski, S. (2005). Knowledge Management: A Strategic Management Perspective. Australia: John Wiley &.

[3] Kidwell, J. J., Linde, K. M. Vander, & Johnson, S. L. (2000). Applying Corporate Knowledge Management Practices in Higher Education. Educase Quarterly, 4(4), 28–33.

[4] Nevo, D. (2003). Developing Effective Knowledge Management Systems. University of British Columbia. University of British Columbia.

[5] Smith, P. A. C., & McLaughlin, M. (2004). Knowledge Management: People Are Important ! Journal of Knowledge Management Practice, 1–14. Retrieved from http://www.tlainc.com/articl60.htm

[6] Tungadi, A. L. (2016). Pengembangan IT Strategic Planning Menggunakan Mobile Enterprise Architecture pada Proses Akademik Universitas Atma Jaya Makassar. Universitas Bina Nusantara