

## Knowledge Sharing Behavior Factors of Public Sector Employees in Jambi City, Indonesia

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### Abstract

*The purpose of this research is to evaluate the individual, organizational and technological factors that influence knowledge sharing behavior among public sector employees in Jambi City. This is a survey and explanatory research with questionnaires used to obtain data from 86 employees in Jambi's public sector and analyzed using factor analysis. The results showed that individual, organizational, and technological factors, such as awareness and altruism, organizational rewards, and IT application usage, respectively, have a significant effect on knowledge sharing. This is opposed to self-efficacy and top management support.*

**Keywords:** Knowledge Sharing; Knowledge Sharing Behavior Factors; Public Sector Employees; Jambi City

### Abstrak

Penelitian ini bertujuan untuk mengevaluasi faktor faktor yang berpengaruh terhadap *knowledge sharing*, faktor faktor tersebut yaitu faktor individu, faktor organisasi dan faktor teknologi. Penelitian ini berjenis penelitian survei dengan tujuan eksplanatif, sampel yaitu sebanyak 86 orang pegawai yang bekerja pada sektor publik di Kota Jambi, pengumpulan data menggunakan kuesioner dan data diolah dengan analisis faktor. Hasil dari penelitian ini menjelaskan bahwa terdapat faktor individu yaitu *awareness* dan *altruism*, faktor organisasi yaitu *organizational rewards*, faktor teknologi yaitu *IT application usage* berpengaruh signifikan terhadap *knowledge sharing* sedangkan *knowledge self-efficacy* dan *top management support* tidak berpengaruh signifikan terhadap *knowledge sharing*.

**Kata kunci:** Knowledge Sharing; Faktor Yang Mempengaruhi Perilaku Knowledge Sharing; Pegawai Sektor Publik; Kota Jambi

## INTRODUCTION

Knowledge is the best strategic asset needed by organizations in accordance with the inception of the digital era 4.0. According to Novak (2017), organizations have a greater percentage of success in the future by doing investment in knowledge. Similarly, studies related to knowledge have been widely conducted (Afsar et al., 2019; Asbari et al., 2019; Irawan et al., 2018; Nguyen et al., 2020; Yu et al., 2013) because it is closely related to the innovation process in private and public organizations.

Asbari et al. (2019) stated that knowledge is divided into two types, namely tacit and explicit. Tacit knowledge is obtained from individual experience while explicit knowledge is documented, such as procedures, literature, etc. These pieces of knowledge need to be properly utilized and managed by an organization through knowledge management. The importance of implementing knowledge management in an organization is to make the organization better and more focused. This process also leads to creating and distributing knowledge among individuals through an effective process known as knowledge sharing (Nghah and Ibrahim, 2010).

According to Wu et al. (2012), knowledge sharing is the exchange of knowledge, experience, and information between individuals in an organization. It can also be defined as the process of tacit and explicit communication between individuals. Organizations that apply knowledge sharing are superior

and competitive. Therefore, it is the essence of knowledge management.

Several factors influence the knowledge sharing process, such as individual, organizational and technological factors (Wu et al., 2012). The individual factors are related to individual attitudes, beliefs, and feelings, while organizational factor is closely related to the working environment. Technological factor is related to the supporting equipment for the creation of the knowledge sharing process.

Previous studies carried out by Noor & Salim (2011) and Yusof & Ismail (2010) focused on individual factor as a factor influencing knowledge sharing. In addition, several other studies have also tried to determine other factors that influence knowledge sharing, such as organizational factors (Kuzu and Özilhan, 2015; Wu et al., 2012). Therefore, this study analyzes these three factors and determines those that are included in the individual, organizational and technological aspects with a significant effect on increasing knowledge sharing behavior.

The framework in this study is as follows:

Wu et al. (2012) stated that the numerous factors influencing the knowledge sharing process are divided into individual, organizational, and technological factors. This is in line with the research carried out by Noor and Salim (2011), which stated that individual factors consist of awareness, altruism, and personality, organizational factors include trust among employees, social

networks, organization rewards, office layouts, and work processes, while technological factors include IT application usage, end-user focus, and ICT Infrastructure. However, research carried out by Kanaan et al. (2013) stated that individual factors consist of altruism and self-efficacy, organizational factors include organization rewards and top management supports, while technological factor is only IT application usage.

In this study, the factors proposed to measure individual factors are awareness, altruism, and knowledge self-efficacy. Organizational factors are organizational rewards and top management support, while technology factors are IT application usage and end-user focus. The following is an explanation of each factor.

a. *Awareness*. This is associated with the importance of sharing knowledge with individuals in order to make work easier (Noor and Salim, 2011; Yusof and Ismail, 2010).

b. *Altruism*. Altruism is a situation where individuals feel happy to help others. This motivates them to volunteer in providing knowledge to others (Kanaan et al., 2013; Yusof and Ismail, 2010).

c. *Knowledge Self efficacy*. It is an individual condition with the belief that knowledge can solve problems at work.

d. *Organizational rewards*. Organizational reward is a condition in which an organization forms the behavior of its employees by providing rewards, such as promotions, bonuses,

etc (Kuzu and Özilhan, 2015; Wu et al., 2012).

e. *Top management supports*. It is a situation where a culture of knowledge sharing is supported by top management (Kanaan et al., 2013).

f. *IT Application usage*. IT application usage is a situation where information technology increases the speed of searching and retrieving data to support knowledge for easy completion of work.

g. *End-user focus*. It encourages individuals to use information technology.

Based on the explanation above, the framework in this study is shown in Figure 1.

**Figure 1: Framework**



Sources: processed by researchers, 2020

**METHODS**

This is a survey and explanatory research that determines individual, organizational, and technological factors on knowledge sharing behavior. Data were collected by distributing closed questionnaires containing statements on the factors being studied to 86 purposively selected employees in the public sector in Jambi City. The data were further processed using the help of SPSS Ver.22.

**RESULTS AND DISCUSSION**

The following table is a statistical descriptive test result on knowledge sharing factor analyzed using the mean value.

**Table 1.** Statistical Descriptive Test Results on Knowledge Sharing Factor

Factor	Mean	Std. Dev
Awareness	4,493	1,056
Altruism	4,668	1,275
Knowledge Self efficacy	4,265	1,366
Organizational rewards	4,662	1,343
Top management supports	4,319	1,167
IT Application usage	4,887	1,021
End-user focus	4,329	1,097

Sources: processed by researchers, 2020

Table 1 shows that the largest and lowest mean results are IT application usage and knowledge self-efficacy with values of 4.887 and 4.265.

**Table 2.** Correlational Matrix Test Results on Knowledge Sharing Factors

Factor	Correlation	Sig
Awareness	0,023	< 0,05
Altruism	0,017	< 0,05
Knowledge Self efficacy	0,061	> 0,05
Organizational rewards	0,044	< 0,05
Top management supports	0,083	> 0,05
IT Application usage	0,027	< 0,05
End user focus	0,035	< 0,05

Sources: processed by researchers, 2020

The correlational matrix test results show several factors with an insignificant effect on knowledge sharing, such as self-efficacy and top management support, with correlation values of 0.061 and 0.083 (greater than 0.05).

**Table 2.** Anti-Image Matrices Test Result on Knowledge Sharing Factor

Factor	MSA
Awareness	0,815
Altruism	0,875
Knowledge Self efficacy	0,723
Organizational rewards	0,854
Top management supports	0,796
IT Application usage	0,913
End-user focus	0,804

Sources: processed by researchers, 2020

The anti-image matrices table shows that the factor that greatly influences knowledge sharing is IT application usage. This is the existence of

information technology that supports the speed of information and knowledge retrieval with a Measurement of Sampling Adequacy (MSA) value of 0.913, while the smallest influencing factor is self-efficacy.

The factor analysis results show that several factors tend to be low and do not have a significant effect on knowledge sharing, such as self-efficacy. This is because of the individual or employee believes that the knowledge and information they possess is more useful than others. Furthermore, this analysis is influenced by several factors, such as the country's culture or the organization's environment. Another factor that tends to be low is top management supports. Meanwhile, other factors such as awareness, altruism, organizational rewards, IT application usage, and end-user focus have a significant effect on knowledge sharing. The continuous increase in the availability of these factors leads to a rise in knowledge sharing behavior among public sector employees in Jambi. This research is in line with the previous studies carried out by Holste & Fields (2010), Ismail & Yusof (2010), Kanaan et al. (2013), and Noor & Salim (2011).

This study proved that not all factors included in the individual, organizational, or technological categories had a significant effect on knowledge sharing behavior. However, several factors tend to be low and do not affect the knowledge sharing behavior process. This is because they are also influenced by other factors, such as the

community's culture, as well as the internal and external environment of the organization.

## CONCLUSION

In conclusion, individual, organizational and technological factors such as awareness, altruism, organizational rewards, and IT application usage have a significant effect on knowledge sharing. The more these factors increase, the greater the knowledge shared among public sector employees in Jambi. Furthermore, this study also found that knowledge self-efficacy and top management support tend to be low and had no significant effect on knowledge sharing. Therefore, further research is recommended to determine the cultural and organizational environmental factors.

## REFERENCES

1. Afsar, B., Masood, M. and Umrani, W.A. (2019), "The role of job crafting and knowledge sharing on the effect of transformational leadership on innovative work behavior", *Personnel Review*, Vol. 48 No. 5, pp. 1186–1208.
2. Asbari, M., Wijayanti, L.M., Hyun, C.C., Purwanto, A., Santoso, B. and Article, H. (2019), "Effect of Tacit and Explicit Knowledge Sharing on Teacher Innovation Capability", *Dinamika Pendidikan*, Vol. 14 No. 2, pp. 227–243.
3. Bock, Zmud, Kim and Lee. (2005), "Behaviour intention formation in

- knowledge sharing: Examining the roles of extrinsic motivators, social psychological forces, and organizational climate”, *MIS Quartey*, pp. 87–111.
4. Davis, F.D. (1989), “Perceived usefulness, perceived ease of use and user acceptance of information system”, *MIS Quarterly*, Vol. 13 No. 3, pp. 318–342.
  5. Gold, A.H., Malhotra, A. and Segars, A.H. (2001), “Knowledge Management: An Organizational Capabilities Perspective”, *Journal of Management Information Systems*, Vol. 18 No. 1, p. 185.
  6. Gurteen, D. (1999), “Creating a Knowledge Sharing Culture”, *Knowledge Management Magazine*, pp. 1–4.
  7. Holste, J.S. and Fields, D. (2010), “Trust and tacit knowledge sharing and use”, *Journal of Knowledge Management*, pp. 128–140.
  8. Huysman, M. and Wulf, V. (2006), “IT – to support knowledge sharing in communities, towards a social capital analysis”, *Journal of Information Technology*, Vol. 21 No. 1.
  9. Irawan, D., Bastian, E. and Hanifah, I.A. (2018), “Knowledge Sharing , Organizational Culture , Intellectual Capital, and Organizational Performance”, *Journal of Accounting and Investment*, No. 2001.
  10. Ismail, B. and Yusof, Z. (2010), “The Contribution of technological factors on knowledge sharing quality among government officers in Malaysia. In P. Virtanen, & N”, *INTECH Open Access*.
  11. Kanaan, R., Masa’deh and Gharibeh, A. (2013), “The impact of knowledge sharing enablers on knowledge sharing capability: An empirical study on Jordanian telecommunication firms”, *European Scientific Journal*, Vol. 9 No. 22, pp. 237–258.
  12. Kuzu, Ö.H. and Özilhan, D. (2015), “The Effect of Employee Relationships and Knowledge Sharing on Employees ’ Performance : An Empirical Research on Service Industry ScienceDirect The Effect of Employee Relationships and Knowledge Sharing on Employees ’ Performance : An Empirical Research o”, *Procedia - Social and Behavioral Sciences*, Vol. 109 No. January 2014, pp. 1370–1374.
  13. Lin, H. (2007), “Knowledge sharing and firm innovation capability: an empirical study”, *International Journal of Manpower*, Vol. 28 No. 3, pp. 315–332.
  14. Ngah, R. and Ibrahim, A.R. (2010), “The Effect of Knowledge Sharing on Organizational Performance in Small and Medium Enterprises”, *Proceedings of Knowledge Management 5th International Conference 2010*, No. Stewart 2000, pp. 503–508.
  15. Nguyen, T.P.L., Tran, N.M., Doan, X.H. and Nguyen, V.H. (2020), “The Impact of Knowledge Sharing on Innovative Work Behavior of Vietnam Telecommunication Enterprises Employees”, *Management Science Letters*, Vol. 10, pp. 53–62.
  16. Noor, N. and Salim, J. (2011),

- “Factors influencing employee knowledge sharing capabilities in electronic government agencies in Malaysia”, *International Journal of Computer Science Issues*, Vol. 8 No. 4, pp. 106–114.
17. Norris, D. (2003), “A Revolution In Knowledge Sharing”, *Educause Reviews*.
18. Novak, A. (2017), “Knowledge Management and Organizational Performance – Literature Review”, *Management, Knowledge and Learning International Conference 2017*, No. May, pp. 433–440.
19. Phung, V.D., Hawryskiewicz, I. and Ha, B.M. (2017), “The influence of knowledge sharing behavior and transactive memory systems on innovative work behavior: A conceptual model”, *Proceedings - 2017 9th International Conference on Knowledge and Systems Engineering, KSE 2017*, Vol. 2017-Janua, pp. 227–232.
20. Wu, W.-L., Yeh, R.-S. and Hung, H.-K. (2012), “Knowledge Sharing And Work Performance: A Network Perspective”, *Social Behavior & Personality: An International Journal*, Vol. 40 No. 7, pp. 1113–1120.
21. Yu, C., Yu, T.-F. and Yu, C.-C. (2013), “Knowledge sharing, organizational climate, and innovative behavior: A cross-level analysis of effects”, *Social Behavior and Personality: An International Journal*, Vol. 41 No. 1.
22. Yusof, Z.M. and Ismail, M.B. (2010), “The impact of awareness, trust and personality on knowledge sharing practice”, *Information Retrieval & Knowledge Management*.