STAFFS MOTIVATIONAL IN KNOWLEDGE TRANSFER BEHAVIOUR

Saide¹, Nurul Aini², Saikou Sanneh³ and Nurjamaliah⁴

¹Department of Information System, State Islamic University of Sultan Syarif Kasim Riau (UIN Suska Riau University), Riau, Indonesia.
²Department of Information System, Diponegoro University, Semarang, Indonesia.
³Graduate Institute of International Human Resource Development, National Taiwan Normal University, Taipei, Taiwan.
⁴Department of English Study, Riau University, Riau, Indonesia.

ABSTRACT

Previous have highlighted knowledge transfer behaviour (KTB) for an increase organization performance, however an obstacle from the perspective among staffs still exists. The problem is still difficult because staffs will not share their knowledge as they thinking their knowledge is important. This paper investigated factors of staffs motivational that influence KTB among staffs in Riau Province of Indonesia. The survey 400 respondents were used, 325 were returned, and 75 were not returned. Likert and smart PLS to confirmation the conceptual model. This paper conclude factors that reward, trust, and an enjoyment helping colleagues of staffs motivation are factors which influencing the KTB. The results and conclusions are discussed.

KEYWORDS

Knowledge Management (KM), Knowledge Transfer Behaviour (KTB), Smart PLS, Staffs Motivational, Riau Province.

1. INTRODUCTION

Knowledge Management (KM) is the process of gathering, managing and sharing staffs knowledge capital throughout the organization [1]. Knowledge transfer throughout the organization enhances existing organizational business processes, introduces more efficient and effective business processes. According to [2], knowledge transfer is a process where individual exchange his or her knowledge and ideas through discussions to create new knowledge or ideas. For individual staffs, knowledge transfer is talking to colleagues to help them get something done better, more quickly, or more efficiently.

Knowledge transfer can helps staffs to new understanding their jobs and bring personal recognition within the department. Knowledge transfer include staff willingness to communicate actively with colleagues (sending knowledge), and actively consult with colleagues to learn from them (receiving knowledge). In another side, organizations must also consider how to transfer expertise and knowledge from expert who have it to novices who need to know [3]. The biggest
challenge in KM is to ensure participation by the people or staff in the knowledge sharing, collaboration and re-use to achieve business results.

A critical problem regarding the knowledge base in an organization is making staffs willing to transfer knowledge from staff to other staffs or to the organization. This problem arises from the staff himself or the organization climate. Staff may be anxious that he will lose his power or value by transfer his knowledge. Individuals do not always willing to share their knowledge and they may not be willing to share as much as the organization would like them to. It is important to understand when people are willing to share their knowledge and how an organization can facilitate this type of behaviour from both research and practical standpoint.

This is important because it is still crucial to accurately explain the knowledge transfer behaviour of individual organization [4]. This idea is also in line with suggestions from previous studied stating that findings from current studies need to be expanded team and organizational level knowledge is influenced by the extent to which knowledge transfer occurs between staffs [5]–[8]. This study differs essentially from prior studies by examining existing factors of knowledge transfer in the context where the staffs come from different culture in Indonesia’s organizations.

2. PREVIOUS STUDIES

Hence the need of KM initiative arises to become solution for such problems, which brings together people and process to helping corporate to achieve its goals and vision. However, experienced users of electronic KM systems now realize that managing knowledge is a much more complicated process [1]. According to [2], knowledge sharing is a process where individual exchange his or her knowledge and ideas through discussions to create new knowledge or ideas. For individual staff, knowledge sharing is talking to colleagues to help them get something done better, more quickly, or more efficiently.

KM is critical to the operation of modern organizations and has attracted much attention by the business world since the introduction of the concept by [6], [9]. It can help businesses retain their valuable intangible assets that are keeping in the mind of their staffs. Particularly, effective knowledge transfer among units of an organization has been one of the most important issues of KM.

According to [10], there are two benefits organization gained if the members in organization shared their knowledge. Firstly, valuable knowledge can be disseminating effectively and efficiently within the organization through the process of knowledge transfer. Secondly, the ability of individual knowledge to recognize the value of knowledge, assimilate it, and apply it in the commercial end, can be increase by knowledge transfer among individuals of an organization. Knowledge transfer offers an organization the potential for increased productivity as well as retention of intellectual capital, even after staffs leave the organization, which is necessary for business that creates value added [11].

Various researchers tried to found what the reason why the staff didn’t to share them knowledge to other and have noted that firms can successfully promote a knowledge transfer culture not only by directly incorporating knowledge in their business strategy, but also by changing staff attitudes and behaviours to promote willing and consistent knowledge transfer, like mentioned by [12]–[14]. This is a crucial process for an organization to become successful. [15]–[17] found that anticipated extrinsic rewards had a negative effect on attitudes toward knowledge transfer. Several studies found no relationship between extrinsic motivation and knowledge transfer intentions or attitudes toward knowledge transfer [11], [18].
It is important to recognize that staffs may decide to share (or not share) knowledge for various reasons. Cheng (2002) stated that, knowledge sharing can help staff to new understanding their jobs and bring personal recognition within the department. Knowledge sharing includes staff willingness to communicate actively with colleagues (sending knowledge), and actively consults with colleagues to learn from them (receiving knowledge).

3. Knowledge Sharing Behaviour

Knowledge sharing is a fundamental knowledge management process. For large organizations, the ability to effectively share knowledge across the organization can lead to new competitive intelligence being created and best practices being achieved, organization wide. An important enabler of KM is knowledge sharing [19]; and many organizations state that sharing knowledge is vital to utilize core competencies and to realize sustainable competitive advantage [20].

KM is the process through which organizations generate value from their intellectual and knowledge based assets. Defined in this manner, it becomes apparent that KM is concerned with the process of identifying, acquiring, distributing and maintaining knowledge that is essential to the organization. Knowledge creation phase includes the emergence of knowledge from the origin to the development, later stages of development, such as documentation of knowledge, recorder of knowledge, transfer of knowledge, and distribution of knowledge. There are two main aspects of KM, namely, information management and people management [21]. Viewed from this perspective, KM is about information, on one hand, and people, on the other.

Knowledge transfer challenges were caused by the fact that knowledge has become a routine process, but the staffs are not fully aware of the separate steps taken in the process of explicitly expressing knowledge [22] [23], [24]. The fundamental reason why Japanese companies are successful, because of their skills and experience was created of organizational knowledge [6]. Knowledge creation is achieved through acquiring of synergistic relationship between tacit and explicit knowledge.

Knowledge transfer challenges were caused by the fact that knowledge has become a routine process, but the staffs are not fully aware of the separate steps taken in the process of explicitly expressing knowledge [22] [23], [24]. The fundamental reason why Japanese companies are successful, because of their skills and experience was created of organizational knowledge [6]. Knowledge creation is achieved through acquiring of synergistic relationship between tacit and explicit knowledge.

Knowledge transfer challenges were caused by the fact that knowledge has become a routine process, but the staffs are not fully aware of the separate steps taken in the process of explicitly expressing knowledge [22] [23], [24]. The fundamental reason why Japanese companies are successful, because of their skills and experience was created of organizational knowledge [6]. Knowledge creation is achieved through acquiring of synergistic relationship between tacit and explicit knowledge. It is the process through which explicit or tacit knowledge is communicated to other individuals. This is considered to be an effective transfer by people. Knowledge is shared and not recommendations based on knowledge and it may take place across individuals, groups, departments or organizations.

The process of knowledge integration often encounters barriers i.e. tacit and knowledge that are embedded in routines and standalone [25]. Tacit knowledge that exists in system and the organization made the implementation knowledge integration to be slow and difficult [13] [6]. Increased sharing of knowledge generates the benefits of increased organizational knowledge without having to increase the energy or cost. In this section the various processes used to manage knowledge including processes for applying knowledge, processes for capturing knowledge, processes for sharing knowledge, and processes for creating knowledge.

Ways to do this include encouraging communication, offering opportunities to learn, and promoting the transfer of appropriate knowledge artefact (KM is an attempt to increase the useful knowledge in the organization, among nurture a culture of communication between personnel, provide opportunities for learning, and promoting each other to share the knowledge).

4. Conceptual Model

The conceptual model (Fig. 1) is formulated based on selected previous research as important factors that influence knowledge transfer behaviour. These factors of knowledge transfer behaviour in the conceptual model were derived from existing constructs in the knowledge transfer behaviour concern [11], [26]–[31].
Giving reward is one of the factors that influence people to do knowledge sharing [32] and personal intrinsic rewards have higher levels of innovation (Judge et al., 1997) as cited in [33]. Expected rewards, believed by many as the most important motivating factor for knowledge sharing, were not significantly related to the attitude toward knowledge sharing. As expected, positive attitude toward knowledge sharing was found to lead to positive intention to share knowledge and, finally, to actual knowledge sharing behaviours. Rewards are defined as individuals expectations of achieving implicit outcomes (e.g., personal reputation and relationships with significant others) in return for performing knowledge transfer behaviour [34]–[36]. In addition, rewards may make individuals feel implicitly controlled or pressured to perform the behaviour due to the implicit consequences related to the behaviour, and are thus forms of interjected regulations/moderately controlled motivations [37], [38].

Trust has attracted the most research attention in organizational culture and climate [39]. That is the most effective and least costly method that can encourage people to share their knowledge (Dyer & Singh, 1998) as cited in [32]. It is an important facilitator in communication and integrity based trust has an important role to play in motivating knowledge-sharing. Mutual reciprocity, honesty, reliability and commitment, there is likely to be a greater degree of motivation to participate and share one’s knowledge [40]. Many previous studies [35]–[75] have reported that a high level of trust facilitates knowledge transfer. Thus it concludes that high level of interpersonal trust correlate with high levels or willingness to knowledge transfer (Kalantzis & Cope, 2003) as cited in [2].

Management support has been shown staff’s perceptions to be willingness to help others and share knowledge [11]. Although, culture is rooted in the organization's core values and assumptions. Staff are often acting in ways consistent with its underlying or core values [2]. People would share their ideas and exchange knowledge with others because they treat this culture as natural, rather than they are force to share their knowledge with others [32]. Helping others as including discretionary behaviours that help specific others with organizationally relevant tasks or problems Organ (1998) as cited in [11]. Helping others is enjoyable and brings satisfaction [46]. In Intangible returns, staff share the knowledge because their got returned such as reputation, status and direct obligation from the knowledge seeker challenging in community, helps to refine their thinking, and contributes to the development of new insights [33]. They enjoy learning and sharing with others [46]. Knowledge staffs may be motivated by relative helping others owing to their desire to help others [9] [47].
5. DATA AND MEASURES

The data was collected by questionnaires, the data in this paper also was taken from the organizations in Riau Province of Indonesia.

The details are 6 institutions of Riau Province in Indonesia. Total questionnaires returned is 325 of 400 questionnaires that we provided, there are 75 questionnaires were not returned. In this paper, we used a structured questionnaire consisting of three parts. The first part is the introduction, the second part is the demographic information about the participants, and the last part of the questionnaire measures based on the constructs in the research model, in conjunction with thirty-three main questionnaire items and also the last part of the questionnaire is the comment section by respondents.

SmartPLS and SPSS were used because its premises are less limiting and the sample size of data was relatively small [48]. These items were scored using Likert scale with 5 five-points. We assess knowledge transfer behaviour using two sub-factors that eight items are adapted from [31], [49]. For staffs motivation and individual characteristics measures items were adapted and we divided into four factors groups that reward with four items, trust with four items and helping others with four items, adapted based on various study [11], [28], [50], [51].

6. FINDINGS

SmartPLS was adopted for measurement validation and for testing the conceptual model based on the data collected. Confirmatory factor analysis was performed to examine the validity and reliability of the constructs. In addition, a bootstrapping procedure was conducted for the significant tests of the hypotheses model.

Table 1 showed for male and female were 50.8% and 48.8%, is missing 1.2%. The biggest of responses come from lecturer / teacher is 52.6%. To assess confidence in their answers, respondents were also asked to indicate how long they had worked in their organization. We know that 26.5% of the respondents had worked 1-3 years, 16.3% of the respondents had worked 4-6 years, 27.4% of the respondents had worked 7-9 years, 9.5% of the respondents had worked 10-12 years, and 18.8% had worked for more than 13 years (Table 1).

Table 1. Profile of Respondent

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dean / Vice Dean</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>Chairman of Department</td>
<td>9</td>
<td>2.8</td>
</tr>
<tr>
<td>Head of Division</td>
<td>25</td>
<td>7.7</td>
</tr>
<tr>
<td>Lecturer / Teacher</td>
<td>171</td>
<td>52.6</td>
</tr>
<tr>
<td>Secretary</td>
<td>3</td>
<td>0.9</td>
</tr>
<tr>
<td>Staff</td>
<td>112</td>
<td>34.5</td>
</tr>
<tr>
<td><strong>Working Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>86</td>
<td>26.5</td>
</tr>
<tr>
<td>4-6 years</td>
<td>53</td>
<td>16.3</td>
</tr>
<tr>
<td>7-9 years</td>
<td>89</td>
<td>27.4</td>
</tr>
<tr>
<td>10-12 years</td>
<td>31</td>
<td>9.5</td>
</tr>
<tr>
<td>More than 13 years</td>
<td>61</td>
<td>18.8</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>165</td>
<td>50.8</td>
</tr>
<tr>
<td>Female</td>
<td>156</td>
<td>48.8</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>1.2</td>
</tr>
</tbody>
</table>
6.1 Measurement of Conceptual Model

The measurement conceptual model was further assessed for construct reliability and validity. The composite reliability for each construct of this study is presented in Table 2. The composite reliability values was used to examine reliability shown in table 3, which all of the constructs composite reliability were exceed recommended cutoff of 0.7 that indicating a commonly acceptable level for confirmatory model [52].

6.1.1 Convergent Validity

Convergent validity was evaluated for measurement scales using three criteria suggested by [53]–[57]. All indicators factor loading should be significant and exceed 0.6, composite reliability should exceed 0.7, and average variance extracted (AVE) from each constructs should exceed 0.5 [53]–[57].

Table 2. Items loadings and reliability

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Items</th>
<th>Loadings</th>
<th>Status</th>
<th>CA</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward (Rew)</td>
<td>Rew 1</td>
<td>0.85</td>
<td>Valid</td>
<td>0.92</td>
<td>0.80</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>Rew 2</td>
<td>0.92</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rew 3</td>
<td>0.90</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rew 4</td>
<td>0.90</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tru 1</td>
<td>0.74</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tru 2</td>
<td>0.78</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tru 3</td>
<td>0.86</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tru 4</td>
<td>0.75</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust (Tru)</td>
<td>Enj 1</td>
<td>0.85</td>
<td>Valid</td>
<td></td>
<td>0.79</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Enj 2</td>
<td>0.91</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enj 3</td>
<td>0.90</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyment</td>
<td>Enj 4</td>
<td>0.68</td>
<td>Invalid</td>
<td></td>
<td>0.79</td>
<td>0.62</td>
</tr>
<tr>
<td>Helping Colleagues</td>
<td>Rec 1</td>
<td>0.77</td>
<td>Valid</td>
<td></td>
<td>0.79</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Rec 2</td>
<td>0.80</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rec 3</td>
<td>0.73</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Transfer</td>
<td>Rec 4</td>
<td>0.65</td>
<td>Invalid</td>
<td></td>
<td>0.79</td>
<td>0.62</td>
</tr>
<tr>
<td>Behaviour (Rec and Sen)</td>
<td>Sen 1</td>
<td>0.77</td>
<td>Valid</td>
<td></td>
<td>0.79</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>Sen 2</td>
<td>0.70</td>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sen 3</td>
<td>0.64</td>
<td>Invalid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sen 4</td>
<td>0.56</td>
<td>Invalid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: CA (Cronbach Alpha), AVE (Average Variance Extracted), CR (Composite Reliability)

Factor loadings, composite reliability and average variance extracted were used to assess convergence validity. The loadings for all items exceeded the recommended value of 0.7 except items for Rec 4, Sen 3 and 4. Composite reliability values (Table 2), which showed the degree to which the items indicated the latent construct, ranged from 0.70 (KTB) to 0.94 (reward), which exceeded the recommended value of 0.7 [53]–[57]. The average variance extracted (AVE) was in the range of 0.51, which exceeded the recommended value of 0.5 and 0.7 [53]–[57].

6.1.2 Discriminant Validity

Discriminant validity measure by cross loading [58]. Discriminant validity can be examined by comparing the squared correlations between constructs and variance extracted from a construct. Table 3 indicating the measure has adequately discriminant validity.
Table 3. Correlation matrix (fornell-larcker) and discriminant validity

<table>
<thead>
<tr>
<th>Constructs</th>
<th>ENJ</th>
<th>KTB</th>
<th>RE</th>
<th>TRU</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENJ</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KTB</td>
<td>0.46</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REW</td>
<td>0.44</td>
<td>0.48</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>TRU</td>
<td>0.34</td>
<td>0.43</td>
<td>0.36</td>
<td>0.78</td>
</tr>
</tbody>
</table>

Note: ENJ (Enjoyment Helping Colleagues), KTB (Knowledge Transfer Behaviour), REW (Reward), TRU (Trust).

6.2 CONSTRUCT AND HYPOTHESES RESULTS

The results of the constructs analysis are displayed in Figure 2. Analysis of the construct model is the analysis among variables is an analysis of the hypotheses of the paper. Model hypothesis is acceptable if a connection variable correlated positively and significantly based on the test results of the t-test and path coefficients.

Figure 2. Results of conceptual model.

To identify the relationship between individual factors, correlation analysis was conducted. Correlation analysis indicates the strength and direction of relationship between the independent and dependent variables under studied. The result of correlation analysis showed that all the variables are significantly correlated with knowledge transfer behaviour. Table 4 showed that the relationship between variables is positive or positively correlated and significant effect.

Table 4. Hypothesis tests based on PLS-SEM based model

<table>
<thead>
<tr>
<th>Path</th>
<th>Hypothesis</th>
<th>Coefficients</th>
<th>T-Values</th>
<th>P-Values</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reward → Knowledge Transfer Behaviour</td>
<td>H1</td>
<td>0.13</td>
<td>2.68</td>
<td>0.01</td>
<td>Accept**</td>
</tr>
<tr>
<td>Trust → Knowledge Transfer Behaviour</td>
<td>H2</td>
<td>0.22</td>
<td>4.91</td>
<td>0.00</td>
<td>Accept***</td>
</tr>
<tr>
<td>Enjoyment Helping Colleagues → Knowledge Transfer Behaviour</td>
<td>H3</td>
<td>0.20</td>
<td>4.29</td>
<td>0.00</td>
<td>Accept***</td>
</tr>
</tbody>
</table>
7. DISCUSSION AND CONCLUSION

The findings confirm the positive direct effects of reward, trust, and enjoyment helping colleagues for knowledge transfer behaviour. We measures that knowledge transfer behaviour from two sub-factors that sending and receiving knowledge among staffs based on [31], [49]. The results of this study showed that reward a positive influence on knowledge transfer behaviour (H1, coefficient = 0.13). Rewards are defined as individuals expectations of achieving implicit outcomes (e.g., personal reputation and relationships with significant others) in return for performing knowledge transfer behaviour [34]–[36]. For example, staffs outcome expectations, including improved work relationships with others (i.e., relatedness) and self-image/reputation (i.e., competence), can be considered forms of rewards that are positively associated with sharing intentions and behaviours (G. W. Bock & Kim, 2002; Kankanhalli et al., 2005). Also indicates that rewards as a result of knowledge transfer behaviour, may satisfy staff needs to be socially acceptable in an organizational context.

Trust among staffs is a critical factor that influences knowledge transfer behaviour [41]–[45]. The results of this paper showed that trust (H2, coefficient = 0.22), have significant influence on knowledge transfer behaviours. The result also indicates that trust among the staffs is considered as an important factor that influences staffs to share knowledge. This suggests that staffs may share their knowledge based on trust and irrespective of others different cultures, educational level and also job position. This suggests that staff may share their knowledge based on trust and irrespective of others different cultures, educational level and also job position.

Many previous studies also suggested that enjoyment helping colleagues among staffs is one of the success factors of knowledge transfer behaviours. The results of this study showed that helping others (H3, coefficient = 0.20), have significant influence on knowledge transfer behaviours. Helping others as including discretionary behaviours that help specific others with organizationally relevant tasks or problems Organ (1998) as cited in [11]. Enjoyment helping colleagues as including discretionary behaviours that help specific others with organizationally relevant tasks or problems (Organ, 1998 as cited in Lin, 2007). Knowledge contributors who derive enjoyment from helping others may be more favourably oriented towards knowledge transfer behaviour and more inclined to share knowledge.

This is important because it is still crucial to accurately explain the knowledge transfer behaviour of individual professional groups [4] and also because team and organizational level knowledge is influenced by the extent to which knowledge transfer occurs between staffs [5]–[8]. For this reason, we have provided a research model derived from previous studies to be tested in organization. This would provide helpful guidelines for human resource managers and knowledge staffs working in today’s growing number of knowledge-intensive organizations. As mentioned earlier, this study attempted to fill the gap in the current literature by examining the factors that influence knowledge transfer among staffs of organizations in Riau Province of Indonesia. The results of this study indicated that reward, trust and enjoyment helping colleagues have an influence on knowledge transfer behaviour.

References


Authors

Saide, S. Kom., M. Kom., M. IM.
He did Double Degree Master in 2016 which in Department of Information Management at National Taiwan University of Science and Technology and Department of Information Systems at Institute Technology of Sepuluh Nopember (ITS), Surabaya, Indonesia. Received the B.Sc. degree of information systems in 2013 at State Islamic University of Sultan Syarif Kasim Riau, Indonesia.

His research majors includes knowledge management strategy, knowledge transfer framework, management information system, renewable energy, and project management. He also an executive and project management at energy research center (enreach.or.id), Riau, Indonesia.

Nurul Aini, S. Kom.
She is currently Master Degree Student of Information System Department at Diponegoro University, Semarang, Indonesia. She did her B.Sc. degree of Information System in 2012 at State Islami University of Sultan Syarif Kasim Riau, Indonesia.

His research fields includes green ICT, management information system, and supply chain management.

Saikou Sanneh, BA.
He is currently a Master Student at the Graduate Institute of International Human Resource Development, National Taiwan Normal University, Taiwan. He obtained his BA at the University of The Gambia with a Major in English Language and Minor in Management.

His research fields include Human Resource Development and Knowledge Management

Nurjamaliah, S. Pd.
She is alumni of English study program of University of Riau in 2015. She conducted a research about writing ability, academic word, and report text. She works at Islamic Senior High School 2 Pekanbaru Riau as dormitory supervisor.

While she also likes to join such organization and communities that related to youth empowerment, education, entrepreneurship social, and knowledge management.