The Effect of Knowledge Sharing Partners, Leadership Support on the Success of Knowledge Management and Organizational Innovation Performance

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Abstract:
This study aims to determine the effect of peer/peer knowledge sharing on the success of knowledge management. The influence of leadership support on the success of knowledge management. Researched 100 SMEs domiciled in the city of Tangerang as research samples, which were selected using purposive sampling technique. Data collection techniques by distributing questionnaires via google form. The analysis technique uses SEM with the Smart PLS program. The results showed: Sharing knowledge of colleagues on the success of SME knowledge management did not have a significant effect; Leadership support on the success of knowledge management has a significant influence; Leadership support for peer knowledge sharing has a significant effect; The success of knowledge management has a significant influence on innovation performance.

Keywords:
knowledge sharing with colleagues; leadership support; knowledge management success; innovation performance

I. Introduction

The success of a business is highly dependent on the ability to innovate. The ability to innovate because of the knowledge possessed. Many SMEs grow without having quality human resources, so the businesses they run are unable to compete, especially with large businesses. In order to be able to run a better business in SMEs, quality human resources are needed through knowledge sharing. Knowledge sharing at the individual level carries significance in the creation of organizational value (Ipe, 2003). Meanwhile, employees' reluctance or inability to “share knowledge with coworkers threatens the basic interests of the organization” (Bavik et al., 2018). Husted and Michailova (2002) explain that the main management challenge in the knowledge economy is to build mechanisms that work together, coordinate activities and integrate knowledge into productive activities. The wider the knowledge and insight possessed; the employees will have good performance support. In this case, every employee must play a supporting role for other employees because the support from the environment and co-workers is very influential on employee performance. Edwards (2017).

Previous studies have shown a positive relationship between general knowledge sharing and organizational performance (Ali et al., 2019; Keszey, 2018; Oyemomi et al., 2016; Wang and Wang, 2012). However, there is a need for greater clarity about how knowledge sharing can be conceptualized within organizations, and whether knowledge sharing impacts organizational performance (Edwards, 2017). Moreover, most empirical studies have examined the relationship by treating knowledge sharing as a unified concept without
distinguishing between horizontal and vertical knowledge flows, focusing on general intra-firm or inter-firm knowledge sharing.

Several previous studies have demonstrated the importance of organizational innovation performance in the context of knowledge sharing (Keszey, 2018; Ritala et al., 2015; Singh et al., 2019b; Wang and Hu, 2020). So, in this paper, we will examine the impact of peer knowledge sharing not only on financial performance but also on innovation performance, with reference to organizational KBV (Kogut and Zander, 1992). Rather than peer knowledge sharing directly impacting performance, we propose that organizational-level performance benefits are realized only when peer knowledge sharing contributes to the success of organizational knowledge management. This paper further refers to the theory of social capital (Nahapiet and Ghoshal, 1998) to evaluate the role of leadership support in facilitating peer knowledge sharing and its subsequent impact on organizational performance. By integrating the knowledge-sharing perspectives of social capital theory and knowledge-based theory of the firm, we present a more comprehensive model of peer knowledge sharing and its impact on organizations.

Despite the abundance of research currently available on knowledge sharing, Edwards (2017) argues that knowledge sharing, as an organizational phenomenon, is not yet fully understood, mainly because knowledge sharing is treated simply as an exchange without much consideration of context, and organizational setting, what knowledge is shared, and who it is shared with is very important. Research by Alvesson (2019) shows that in a growing number of situations, individuals in contemporary organizations are practicing more and more based on peer influence in horizontal rather than vertical relationships. Meanwhile, according to Edwards (2017) states there is a need for greater clarity about how knowledge sharing can be conceptualized within organizations, and whether and how knowledge sharing actually impacts organizational performance. Research by Nahapiet and Ghoshal (1998) states to evaluate the role of leadership support in facilitating peer knowledge sharing and its subsequent impact on organizational innovation performance. The purpose of this study is to find out: The effect of sharing knowledge with colleagues/peers on the success of knowledge management, the effect of leadership support on the success of knowledge management, the effect of leadership support on sharing knowledge of colleagues/peers, the effect of successful knowledge management on innovation performance.

II. Review of Literature

Knowledge management is a collection of strategies for analyzing and sharing experiences and understandings. Experience and understanding will arise because of knowledge, whether it has occurred within a person or a process that occurs within an organization Wang et al., (2014). Knowledge management is needed to find new ways, in processing raw data to become useful data or information, so that information or data can become knowledge. The main concern of knowledge management is the exploitation and development of organizational knowledge towards the goals to be carried out by the organization further. Knowledge management is done to find out how to do things better. Usually, knowledge management is related to the organization's goal of achieving a certain result. Caimo and Lomi, (2015).

2.1 Peer Knowledge Sharing and Knowledge Management Success

Social capital theory also states that knowledge exchange occurs when people have access to others to share knowledge, enabling them to anticipate the value of sharing and
motivating them to share knowledge (Chiu et al., 2006). By sharing knowledge with others, it is increasingly possible that these three aspects – access, ability to anticipate values and motivation – can be more widely present among others, and, in so doing, can contribute to the success of knowledge management. Sharing peer knowledge also facilitates the combination skills required for successful knowledge management due to the common language and narrative among peers (Zhuge, 2002). According to Ahmad and Karim (2019), the impact of peer knowledge sharing can be summarized in the form of increasing creativity, learning and performance. Sharing knowledge with colleagues also has an impact on the success of knowledge management by providing more freedom, equality, and interconnection for sharing organizational knowledge in general (Amayah, 2013). For this reason, the proposed research hypotheses are:

H1: Peer knowledge sharing has a positive influence on the success of knowledge management

2.2 Leadership Support and Knowledge Management Success

Donate and Sanchez De Pablo (2015) found that knowledge-oriented leadership positively affects the success of knowledge management. Similarly, Akram et al. (2019) shows that leadership empowerment improves the relationship between various knowledge management practices, contributing to the success of knowledge management. In a team context, Jiang and Chen (2018) show that transformational leadership can provide the right environment and impetus needed for successful knowledge management. There is substantial evidence to suggest that leadership plays an important role in the overall success of knowledge management in organizations (Akram et al., 2019; Rao Jada et al., 2019; Singh et al., 2019a). Leaders who support knowledge management can facilitate the structural, relational and cognitive skills that are needed not only to promote knowledge sharing but also for the success of broader knowledge management in organizations (Balundi and Kilduff, 2006; Jiang and Chen, 2018; Maak, 2007). then the research hypothesis is:

H2: Leadership support has a positive influence on the success of knowledge management

Srivastava et al. (2006) found that leadership empowerment had a positive impact on the efficacy of knowledge sharing and ultimately team performance. Le and Lei (2019) found that transformational leadership has a positive impact on knowledge sharing, as well as product and process innovation. Likewise, research on leadership support from multiple perspectives – such as ethical leadership (Bavik et al., 2018), respectable leadership (Gerpott and Ulrike, 2019), supervisor support (Chae et al., 2019), management support (Galeazzo and Furlan) 2019) and organizational support (Han et al., 2019) – all of which have been found to positively influence knowledge sharing in organizational contexts.

In a review by Mishra and Pandey (2019), various leadership styles were found to positively influence knowledge sharing. Effective leadership has strong potential to increase the reach and quality of knowledge sharing by creating a knowledge-friendly climate, providing shared goals and a clear vision, enhancing trust-based relationships, using motivators and removing barriers such as lack of communication or shared misunderstandings. (Amayah, 2013). From a social capital perspective, leadership support can play an important role in facilitating the structural, relational and cognitive aspects that individuals need to share knowledge with their peers (Casimir et al., 2012). then the research hypothesis is:

H3: Leadership support has a positive effect on sharing peer knowledge
2.3 Knowledge Management Success and Innovation Performance

The relationship between knowledge management and innovation has attracted the attention of many researchers. Knowledge management is logically linked and is often identified as an important antecedent of innovation performance. Innovation relies heavily on knowledge, especially tacit knowledge (Rahimi et al., 2017; Zaim et al., 2015). Therefore, knowledge management is seen as a prerequisite for successful innovation, but only if it contributes to the capabilities of organizations that are able to build knowledge management capabilities through effective intra-organizational knowledge sharing and other knowledge management activities prove to be more innovative (Ritala et al., 2015; Singh et al., 2019b; Wang and Hu, 2020; Zhang et al., 2018). Mardani et al. (2018) investigated the direct and indirect effects of knowledge management on innovation performance and found that knowledge management activities impact innovation and organizational performance directly, and indirectly through increased innovation capabilities. Likewise, Alegre et al. (2013) concluded that knowledge management practices have a positive impact on innovation performance and this relationship is mediated by knowledge management success in the form of dynamic knowledge management capabilities. Furthermore, several studies have demonstrated the mediating role of successful knowledge management on innovation performance in various contexts (Dzenopoljac et al., 2018; Lai et al., 2014). Then the research hypothesis is:

H4. Knowledge management success is positively related to organizational innovation performance.

III. Research Methods

The population in this study is all SMEs domiciled in the city of Tangerang, because in the city of Tangerang many researchers have known before through community service activities. Besides, the domicile of UKM is not too far from the team’s university. The sample selection method used purposive sampling, by using certain criteria: 1). have a minimum of three employees. 2). Minimum business period of three years and 3). Manage their own business. In measuring knowledge sharing is measured at an individual level and includes three items: "I often share my knowledge with my colleagues;" "I often involve myself in discussions on various topics with my colleagues;”; "I often take the time to discuss complex issues with my coworkers and share useful information with colleagues." Similar to this, as measured by Zaim et al. (2019), Ali (2019). The measure of knowledge management adoption success is similar to the knowledge management performance of Oztekin et al. (2015) and Zaim et al. (2007 includes three items that measure the success of knowledge management implementation, commitment of organizational resources in terms of time and effort and other investments required as high-level proxy indicators of knowledge management success. The measure of operationalized leadership support here is similar to that of supervisor support as measured by Kulkarni. et al. (2006) (Kulkarni et al., 2006; Metz et al., 2017) using three items that include supervisor encouragement, their commitment and demonstration of encouragement through actions and words, Operationalization of innovation performance construction through opinion, Wang and Wang (2012) based on new ideas generated, new products, new processes, new practices, and new management activities compared to their main competitors.

The data collection instrument used a questionnaire that had been provide answers choices. According to Sekaran & Bougie (2017) questionnaire is a list of written questions that have been previously formulated where respondents will record their answers, usually in several different alternatives clearly defined. Questionnaires are generally designed to collect
lots of quantitative data. To facilitate the assessment, the researcher used an interval scale with divide the five preference levels by their respective scores 5 for response Strongly Agree (SA), score 4 for response Agree (A), score 3 for response Neutral (N), score 2 for response Disagree Agree (DA), and score 1 to respond Strongly Disagree (SD). The analysis used in this study is the partial approach analysis Least Square (PLS) using SmartPLS software version 3.0. Partial Least Square is a method that is not based on many assumptions and conditions, the sample used also does not have to be in large quantities and does not have to be multivariate normal distribution. The Partial Least Square (PLS) method was used to confirm and explain whether or not there is a relationship between the variables studied. Partial Least Square is an alternative form of covariance-predictive based on structural equation modeling (Ghozali I., 2014). Partial Least Square data analysis evaluated by two stages of testing, namely the outer model and the inner model.

IV. Discussion

4.1 Results

a. Respondent Profile

The study used 100 respondents, who were selected by sample. Of the 100 respondents used, the majority of respondents were male as much as 54%. For the age of respondents who gave the most assessments were in the age of 30 to 45 years, at the level of education most are in education less than and equal to high school as much as 68%, the most time running a business for 6 to 9 years. In the type of business, the respondents who gave the most assessments of the type of culinary business were 48 respondents.

b. Analysis

Processing research data using PLS-SEM software which consists of two analyzes, namely the outer model and the inner model.

c. Outer Model

Based on the analysis of the results of the measurement model (Outer Model Analysis) it was found that all the indicators used to measure the research variables were valid and reliable so that they could represent the research variables and were trustworthy and reliable.

d. Convergent Validity

<table>
<thead>
<tr>
<th>Table 1. AVE. Score Result</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Knowledge Colleagues</td>
<td>0.610</td>
</tr>
<tr>
<td>Leadership Support</td>
<td>0.477</td>
</tr>
<tr>
<td>Knowledge Management Success</td>
<td>0.498</td>
</tr>
<tr>
<td>Innovation Performance</td>
<td>0.684</td>
</tr>
</tbody>
</table>

Based on the results of the analysis above, the AVE value of each variable in the table has a value above 0.5 so it can be concluded that the above variable has met the analysis of convergent validity which can be measured by the AVE value.
e. Discriminant Validity

Table 2. Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>Share Knowledge Colleagues</th>
<th>Leadership Support</th>
<th>Knowledge Management Success</th>
<th>Innovation Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Knowledge Colleagues</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership Support</td>
<td>0.567</td>
<td>0.691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Management Success</td>
<td>0.446</td>
<td>0.720</td>
<td>0.706</td>
<td></td>
</tr>
<tr>
<td>Innovation Performance</td>
<td>0.417</td>
<td>0.414</td>
<td>0.499</td>
<td>0.827</td>
</tr>
</tbody>
</table>

From the results of the discriminant validity analysis in the table it shows that the value of the Heteroit-Monotrait Ratio on each variable indicator has a value less than 0.90 (<0.90) so that all indicators of each variable can be accepted.

f. Composite Reliability Test

Sekaran and Bougie (2013) stated that the reliability of a measurement indicates that the indicator is consistent to be used from time to time. Testing reliability by looking at the value of composite reliability and Cronbach's Alpha. If each item used in measuring the variable has a composite reliability value > 0.60 then the variable is declared reliable, if each item used in measuring the variable has a Cronbach's Alpha value > 0.60 then the indicator or item to measure the variable is declared reliable. (Malhotra, 2020).

Table 3. Cronbach's Alpha and Composite Reliability

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Knowledge Colleagues</td>
<td>0.787</td>
<td>0.862</td>
</tr>
<tr>
<td>Leadership Support</td>
<td>0.631</td>
<td>0.784</td>
</tr>
<tr>
<td>Knowledge Management Success</td>
<td>0.630</td>
<td>0.790</td>
</tr>
<tr>
<td>Innovation Performance</td>
<td>0.845</td>
<td>0.896</td>
</tr>
</tbody>
</table>

From the results of the reliability analysis shows that the value of Cronbach's Alpha and Composite Reliability on each variable indicator has a value greater than 0.60 (> 0.60) so that all indicators of each variable have met the requirements and are declared reliable.

g. Inner Model

Coefficient of Determination Test (R2)

1. The Result of the Coefficient of Determination

The value of R-Square (R2) is used to determine the coefficient of determination and measure the level of variation of changes in the independent variable to the dependent variable. The R-Square value has 3 criteria, namely as follows: a value of 0.75 – 1 indicates (the influence is strong), a value of 0.5 – 0.74 indicates (the influence is moderate), then a value of 0.25 – 0, 49 indicates (the influence is weak).
Based on the results of testing the coefficient of determination (R2), it can be explained that the R-square value of knowledge management success is 0.520, which means that 52% of knowledge management success can be explained from peer knowledge sharing and leadership support.

**h. Inner Model Test**

Results from bootstrapping. Is

**Table 4. Coefficient of Determination R-Square**

<table>
<thead>
<tr>
<th>Knowledge Management Success</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.520</td>
</tr>
</tbody>
</table>

**Figure 1. Bootstrapping Test Results**

Based on the results of the bootstrapping test which can be seen in Figure 2, The complete significance test results can be seen in table 5 below:

**Table 5. Test Results**

<table>
<thead>
<tr>
<th></th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard deviation</th>
<th>T statistics</th>
<th>P values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Knowledge Colleagues → Knowledge Management Success</td>
<td>0.055</td>
<td>0.063</td>
<td>0.126</td>
<td>0.442</td>
<td>0.659</td>
</tr>
<tr>
<td>Leadership Support → Knowledge Management Success</td>
<td>0.688</td>
<td>0.690</td>
<td>0.110</td>
<td>6.274</td>
<td>0.000</td>
</tr>
<tr>
<td>Leadership Support → Share Knowledge Colleagues</td>
<td>0.567</td>
<td>0.583</td>
<td>0.089</td>
<td>6.403</td>
<td>0.000</td>
</tr>
<tr>
<td>Knowledge Management Success → Innovation Performance</td>
<td>0.499</td>
<td>0.503</td>
<td>0.109</td>
<td>4.576</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Based on the results of the bootstrapping test, it can be explained:

1). On the path showing influence share knowledge mate to the success of knowledge management, the p value obtained is 0.000 with a T statistic of 0.442 and the path coefficient is positive at 0.055. Because the path p value is > 0.05, the T statistic is < 1.96 and the path coefficient is positive, it can be concluded that sharing peer knowledge on the success of SME knowledge management does not have a significant effect. This shows that research hypothesis 1 which says “: Peer knowledge sharing has a positive influence on the success of knowledge management. “Not accepted.

2). On the path showing influence leadership support to Knowledge Management Success, the p value obtained is 0.000 with a T statistic of 6.274 and a positive path coefficient of 0.688. Because the path p value < 0.05, T statistic > 1.96 and the path coefficient is positive, it can be concluded that leadership support to Knowledge Management Success have a significant influence. This shows that research hypothesis 2 which says “: Leadership support has a positive influence on the success of knowledge management. “Received.

3). In the path that shows the effect of leadership support on peer knowledge sharing, the p value obtained is 0.000 with a T statistic of 6.403 and a positive path coefficient of 0.567. Because the path p value < 0.05, T statistic > 1.96 and the path coefficient is positive, it can be concluded that leadership support for peer knowledge sharing has a significant influence on. This shows that research hypothesis 3 which says “: Leadership support has a positive influence on sharing peer knowledge" received.

4). On the path showing influence. The success of knowledge management on organizational innovation performance, the p value obtained is 0.000 with a T statistic of 4.576 and the path coefficient is positive at 0.499. Because the path p value < 0.05, T statistic > 1.96 and the path coefficient is positive, it can be concluded that the success of knowledge management on innovation performance has a significant effect. This shows that research hypothesis 4 which says “: The success of knowledge management is positively related to organizational innovation performance." is accepted.

4.2 Discussion

The challenge of SME management today is to build mechanisms that work together, by coordinating activities and integrating knowledge among co-workers productively. Knowledge exchange between individuals in organizations is an important aspect of creating an intellectual capital level organization which is a key element of successful knowledge management. Wang et al., (2016). co-workers have had a positive effect on the success of knowledge management (Van Esch et al., 2019; Zhuge, 2002). The results of previous studies are not in accordance with this study, which in this study found that sharing knowledge among colleagues did not have a significant effect on the success of knowledge management, this condition is related to the number of SMEs studied that do not involve employees in their business, most SMEs are managed individually.

Leadership support is conceptualized as knowledge management related support received from direct managers. Considering that direct supervisors and managers are viewed as organizational agents of employees in perspective, the support they often receive is equated with support from the organization (Kulkarni et al., 2006; Metz et al., 2017). Donate and Sanchez (2015) found that knowledge-oriented leadership positively affects the success of knowledge management. Similarly, Akram et al. (2019) shows that leadership empowerment improves the relationship between various knowledge management practices, contributing to the success of knowledge management. The results of previous researchers have supported
this study which also found a positive and significant effect of leadership support on the success of knowledge management.

The importance of leadership support and its positive impact on desirable individual behavior in organizations, and in particular, on knowledge-sharing-oriented individual behavior. Le and Lei (2019) found that transformational leadership has a positive impact on knowledge sharing, as well as product and process innovation. Likewise, research on leadership support from multiple perspectives – such as ethical leadership (Bavik et al., 2018), respectable leadership (Gerpott and Ulrike, 2019), supervisor support (Chae et al., 2019), management support (Galeazzo and Furlan), 2019) and organizational support (Han et al., 2019) – all of which have been found to positively influence knowledge sharing in organizational contexts. As well as, Jiang and Chen (2018) found that transformational leadership has a positive impact on knowledge sharing among team members. Supervisors and direct managers are often considered as substitutes for the organization in the minds of employees (Metz et al., 2017). In this study, it supports previous research which said that leadership support had a positive influence on peer knowledge sharing. Knowledge management is seen as a prerequisite for successful innovation, but only if it contributes to a firm’s KM capabilities through the creation, evolution, exchange and application of new ideas to create new marketable goods and services (Cabrilo and Dahms, 2018; Cohen and Levinthal), 1990; Darroch, 2005). Organizations that are able to build knowledge management capabilities through effective intra-organizational knowledge sharing and other knowledge management activities have proven to be more innovative (Ritala et al., 2015; Singh et al., 2019b; Wang and Hu, 2020; Zhang et al., 2018).

Empirical evidence supports the view that firms with successful knowledge management capabilities will use resources more efficiently, contributing to their innovative performance (Darroch, 2005). Mardani et al. (2018) investigated the direct and indirect effects of knowledge management on innovation performance and found that knowledge management activities impact innovation and organizational performance directly, and indirectly through increased innovation capabilities. Likewise, Alegre et al. (2013) concluded that knowledge management practices have a positive impact on innovation performance and this relationship is mediated by knowledge management success in the form of dynamic knowledge management capabilities. In line with the discussions developed by Oe et al. (2022), information sharing is critical for effective knowledge management, the empirical results with analytical model with measurements can be useful guideposts for the field of study.

V. Conclusion

Through the research results, it can be concluded: Share peer knowledge has no significant effect on the success of knowledge management; The leadership support has a positive and significant influence on knowledge management success; Leadership support has a positive and significant influence on sharing peer knowledge; The success of knowledge management has a positive and significant influence on innovation performance. This outcome should be evaluated with some more datasets in different contexts to develop more robust implications for relevant researchers and practitioners. As Yamaoka and Oe (2021) examined the critical essence to enhance effective information sharing, an experiment could be designed with volunteer participants to contribute to practical guidance for relevant sectors. Suggestions depicted from this empirical study could be further expanded for both researchers and business practitioners in enhancing their scope of the discussion areas.
References


