The Influence of Interdependent Culture on Knowledge Management Orientation

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Abstract—Knowledge management orientation consisting of existing knowledge (organizational memory), knowledge sharing (knowledge sharing), combining new knowledge with existing knowledge (knowledge absorption), and receiving new knowledge (knowledge receptivity) are important tools and resources for companies to provide sustainable competitive advantage. Knowledge management orientation does not originate from company knowledge but comes from individual knowledge. This study aims to analyze the interdependent culture that has become an inherent culture in Indonesian people towards their efforts in implementing a knowledge management orientation. This study uses an experimental method with a sample of 100 accounting students from Universitas Muhammadiyah Riau who have worked in a variety of different companies. Data collected from these students were processed by simple linear regression using SPSS for Windows ver 25. The results of this study indicate that the interdependent culture that is owned by students can influence them in applying knowledge management orientation. This happens because someone who has an interdependent culture will always consider the good and bad impacts on others in making decisions. This research has implications for both practitioners and academics to improve the application of knowledge management orientation that can be used in dealing with the development of a competitive business world.

Keywords—knowledge management orientation, knowledge sharing, knowledge absorption, knowledge receptivity, interdependent culture

I. INTRODUCTION

The implementation of knowledge management orientation (KMO) specifically knowledge sharing behavior is a set of knowledge based on behavior that can effectively and efficiently improve problem solving capabilities so that the company can be more productive than the competitors [1] and can survive in the changing business world very quickly in the 21st century [2]. However, a number of companies still fail to implement knowledge sharing behavior. This failure is caused by a dilemma that when knowledge is shared, then other parties will freely use it as well as competitors [3], lack of consideration of organizational and interpersonal contexts as well as individual characteristics and wishes [4]–[6]. In addition, there are several studies stating that knowledge sharing is influenced by the culture of employees [7]–[9].

The importance of knowledge management orientation in improving company performance can be explained in knowledge-based theory. This theory states that the source of competitive advantage in a dynamic business environment comes not from organizational knowledge but from the knowledge of individual employees [10] and every individual in taking all actions will not be much influenced by the culture embedded in him [11]. In addition, this knowledge management orientation can also be explained in the social exchange theory introduced by Gergen (1969); Gouldner (1960); Blau (1964) which is a broad social paradigm and extends to social disciplines such as management, social psychology, and anthropology [12]. This theory sees an individual participating in exchange behavior because it is believed that the effort done will get a reward.

Many studies have found the influence of culture on knowledge sharing [7], [11], [13]–[15], culture on knowledge management [3], [7], [8], [16], [17] and culture collectivism for knowledge sharing [11]. However, there is no such research that links the interdependent culture which is a culture in Indonesia with a knowledge management orientation.

Countries that implement interdependent culture mostly come from countries on the Asian continent, one of which is Indonesia [18]–[20]. Interdependent or collective culture is a culture that focuses on mutual cooperation between individuals to read each other's thoughts, sympathize, take all actions in accordance with accepted social norms and rules [21], [19]. In interdependent culture, people emphasize "us" and the members are loyal in their groups, supporting one another. Individuals who are in high interdependent cultures place more emphasis on harmony, avoidance of conflict, mutual obligation, loyalty, feeling of ownership, and tend to show less individual consideration [22], [23]. However, in practice many employees in a company are still reluctant to share their knowledge.

Based on the above problems, this study aims to find out the effect of interdependent culture on knowledge management orientation. Furthermore, this research model will be displayed below:

Fig 1. Research model
This article consists of five parts. The next section will discuss the research methods used, from the selection of samples to the analysis tools. Section three contains the results and discussion of the data that has been processed. The last part is conclusions and suggestions for further research.

II. RESEARCH METHOD

This research uses experiment method with sample of 100 accounting students at Universitas Muhammadiyah Riau who have worked in a variety of different companies. The reason for using students is because students are the most appropriate representatives in decision-making experiments [23] and their workplace in different companies is expected to improve research results.

The participants were given a questionnaire containing statements related to the variables in this study. All statements were measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

The interdependent culture questionnaire in this study was adopted from Hofstede's study which consisted of four indicators, namely individualism-collectivism, uncertainty avoidance, masculinity-femininity and power distance [24]. Individualism emphasizes the needs of himself without regarding to the needs of others, while collectivism emphasizes group collaboration.

Uncertainty avoidance is divided into two conditions, namely high certainty avoidance and low certainty avoidance. High certainty avoidance emphasizes performance and risk taking, while avoidance of low certainty emphasizes the importance of security, continuity, group recognition and group progress [24].

Masculinity-femininity is divided into two groups. The first group is high masculinity which emphasizes the existence of intrinsic rewards, namely salary, bonuses and challenges in working. The second group is low masculinity which is more directed to the importance of relationships with others [24]. The last indicator of interdependent culture is power distance. Power distances refer to individual motivations obtained from the leadership [24].

Furthermore, knowledge management orientation is the relative tendency of companies to build knowledge memory, as well as to share knowledge, absorb external knowledge in the framework of internal knowledge and easily accept new knowledge [6]. This variable indicator consists of four, namely organizational memory, knowledge sharing, knowledge absorption, and knowledge receptivity [1].

The data analysis technique in this study is simple linear regression using SPSS (Statistical Product and Service Solution) software for Windows ver 25. Data can be processed using simple linear regression analysis if the dependent variable (Y) have linear relationship with the independent variable (x), errors variance is constant (is homogeneous), and have normal distribution [25].

The regression equation in this study is as follows:

\[ Y = a + b_1X_1 \]  

Explanation:

- \( Y \) = predict value
- \( a \) = intercept (estimated by regression)
- \( b \) = coefficient (estimated by regression)
- \( X \) = predictor (present in data)

III. RESULTS AND DISCUSSION

The questionnaires distributed in this study were 100 copies and 100 returned, but only 91 copies that were able to be processed because 9 more copies were incomplete. The 91 questionnaires were then tested for validity and reliability. The validity test in this study was measured by comparing the \( r \) count with the \( r \) table. all statement items on interdependent culture variables and knowledge management orientation have \( r \) count values greater than \( r \) tables so the data are said to be valid. While the reliability test is measured by looking at the Cronbach alpha value, if it is greater than 0.6 then the data is said to be reliable. The interdependent culture and knowledge management orientation have their respective Cronbach alpha values 0.837 and 0.813.

Next, the data normality test was performed. The results of the test were found to be of greater significance than 0.05 in the amount of 0.200, which means that the data were normally distributed.

Table 1. Data Normality Test

| One-Sample Kolmogorov-Smirnov Test | Unstandardized Residual |
|-----------------------------------|------------------------|
| N                                 | 91                     |
| Normal Parameters<sup>a</sup>     | Mean                   |
|                                  | Std. Deviation         |
| Most Extreme Differences         | Absolute               |
|                                  | Positive               |
|                                  | Negative               |
| Test Statistic                   |                        |
| Asymp. Sig. (2-tailed)           | .200<sup>b</sup>       |

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
Table 2. Determination Coefficient

| Model | R   | R Square | Adjust RSquare |
|-------|-----|----------|---------------|
| 1     | .440| .193     | .183          |

Based on the test results above, it was found that the R Square value is 0.193, which means that the influence of the independent variable (interdependent culture) on the knowledge management orientation variable is 19.3%, while the rest is influenced by other variables not included in this study.

Table 3. Simple Linear Coefficients

| Model | Unstandardized Coefficients | Standardized Coefficients | t     | Sig. |
|-------|-----------------------------|---------------------------|-------|-----|
|       | B                           | Std. Error                | Beta  |      |
| 1     | (Constat)                   | 40.730                    | 6.941 | 5.868 | .000 |
| K1    | 312                         | .074                      | .410  | 4.244 | .000 |

a. Dependent Variable: KMO

Based on the table above, the simple linear regression analysis formula is as follows:

\[ Y = 40.730 + 0.312X \]  

(1)

The explanation of the equation is:

1. A constant of 40.730 states that if there is no interdependent culture value, then the value of knowledge management orientation is 40.730.
2. X regression coefficient of 0.312 states that for each addition of 1 value of interdependent culture, the value of knowledge management orientation increases by 0.312.

Table 4. Hypothesis Testing

| Hypothesis | t     | Significance | Alpha (a) | Description |
|------------|-------|--------------|-----------|-------------|
| H1         | 4.617 | 0.000        | 0.05      | Accepted    |

Based on table 3, sig test was produced. 0.000 <0.05 so it can be concluded that H0 is rejected and Ha is accepted, which means that there is an influence between interdependent culture and knowledge management orientation.

The results of the empirical test in this study are in accordance with the characteristics of the interdependent culture developed by Hofstede [24] which is reflected in the average response of respondents which indicates that they are very concerned about interpersonal relationships. Individuals who have an interdependent culture will better maintain good relations with each other by always paying attention to the needs of others. In addition, individuals who have an interdependent culture in making decisions will first consider the good and bad impacts of the decisions to be taken. Similarly, superiors in a company or agency will always motivate subordinates so that the goals that have been designed can be achieved properly.

When interdependent culture has been well established in a company, the knowledge management orientation that has been built will be implemented well by all parties and will be able to improve company performance and be able to compete in the rapid development of the business world. This is in accordance with knowledge-based theory that competitive advantage does not originate from organizational knowledge, but comes from individual knowledge within the company [10] and is strengthened by Ardichvili's research results [9] stating that organizational culture in a company will shape knowledge sharing behavior of individual.

IV. CONCLUSION

This study aims to examine the effect of interdependent cultures measured using cultural indicators developed by Hofstede on the knowledge management orientation that uses four indicators, namely organizational memory, knowledge sharing, knowledge absorption, and knowledge receptivity. Based on the theory and the results of previous studies, the hypothesis of this study was proposed and found that interdependent cultures affect knowledge management orientation.

Limitations in this study are the small number of respondents, so the results are less generalizable and the R Square is relatively small which indicates that there are still many other factors that can be used in influencing knowledge management orientation.

Suggestions for further research are to increase the number of samples so that the results of the research will be better and can add variables to the style of leadership, motivation and psychological factors of individuals which are thought to affect knowledge management orientation.

In practice, this research is expected to provide direction to company management to maintain individual interdependent culture so that the knowledge management orientation that has been built is running effectively and efficiently in order to achieve all objectives.

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