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The effect Knowledge Management Capabilities on Performance of Companies: A study of Service Sector

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Abstract: Studies on knowledge management capabilities (KMC) focused on manufacturing and technological sectors while the service sector received less attention. This paper investigates the effect of KMC on the organizational performance (OP) of service public listed companies (PLCs) in Malaysia. It also tests the mediating effect of trust. Data was collected from 153 senior executive top management of Malaysian PLCs. Using the Partial Least Square (PLS); the finding indicates that KMC has a significant effect on OP of Malaysian PLCs. Its knowledge acquisition dimension is the most significant followed by knowledge sharing and utilization. Trust has a partial mediating role between KMC and OP and a full mediating role between knowledge sharing and OP only. To increase the role of trust, managers are advised to link the KMC process to the Key Performance Indicator (KPI).

Keywords: Knowledge Management Capabilities, Knowledge Sharing, Trust, Organizational Performance, Service Sector

1. INTRODUCTION

During the last three decades, organizational performance (OP) has been one of the most highly researched dependent variables. A growing body of literature is still focusing on OP. Similarly, the studies that are pertaining to Public Listed Companies (PLCs) have increased. This is because a better OP of PLCs can enhance the Gross Domestic Product (GDP), reduce unemployment, and encourage the flow of Foreign Direct Investment (FDI) (Shah & Jan, 2014). At the individual and organizational level, a better performance is of extreme importance to stakeholders in general and shareholders in particular, as it helps to increase the value of the business, and offers the basis for distributing dividends, which in turn may attract investors (Müller, 2014).

One of the most recent driver of OP is the organizational knowledge. Knowledge is an intangible source that is rare, inimitable and creates competitive advantages for organizations as well as increases the

organizational performance (Grant, 1996; Zainal et al., 2009; Alaarj, et al., 2016). Nevertheless, prior literature particularly on PLCs performance focused on using secondary approach and as a result focused on the data that can be extracted from annual reports such as gender of the executives, duality, paid up capital and size of the organizations. In addition, most of the previous studies focused on the manufacturing and technological sector (Alaarj et al., 2016).

In Malaysia, according to the Malaysian Investment Development Authority (MIDA), the national economy is dominated by service sector which currently contributes by more than 53% to the GDP and it is expected to increase to 58% in 2020 (MIDA, 2016). Previous studies in the country called for more studies in KM and its effect on OP. For example, the study of Sambasivan *et al.* (2009) calls for more studies in KM in manufacturing and other economic sectors in Malaysia. Other researchers in Malaysia have called to further the studies of KM in the country (Najib Razali & Juanil, 2011; Moshari, 2013). Therefore, studies that deal with KMC and OP are needed not only in the manufacturing sector, but also in other sectors such as services(Alaarj *et al.*, 2015).

Trust is a new and emerging variable in the context of business management. Studies related to trust in business organizations are still in their infancy and there is a need for more studies in this domain(Wang et al., 2014). Majority of previous studies focused on trust in online environment (Alaarj et al., 2016). Trust is important to facilitate the organization's ability to enhance relationships, collect information related to market and technology development, and establish beneficial knowledge sharing internally and externally (Romijn and Albaladejo, 2002; Zainal et al., 2014). Collaboration, interaction, and exchange of knowledge are all enabled once the organization creates a culture of trust (Sambasivan et al., 2011). Trust increases the willingness to share and use tacit knowledge (Holste & Fields, 2010). However, few studies tested the mediating role of trust.

Consequently, the purpose of this study is to investigate the effect of KMC on the OP of Malaysian PLCs. It also aims to test the mediating role of trust between KMC and OP of Malaysian PLCs. The remaining of this paper discusses the literature review, methodology, findings, discussion, and conclusion.

2. LITERATURE REVIEW AND CONCEPTUAL MODEL

This section discusses the literature review of OP, KMC and trust. It also discusses the development of the conceptual model of this study.

2.1. Conceptual model

Building on the Knowledge Based View (Grant, 1996) and the model of Knowledge Management Capabilities (KMC) by Gold *et al.* (2001), this study proposed that the KMC and its dimensions could affect the organizational performance of PLCs. It also proposes that trust mediates the effect of KMC on OP. Figure 1 shows the conceptual model of this paper.

2.2. Hypotheses development

This section discusses the hypotheses development of this study. Mainly, the section discusses organizational performance, KMC and trust as a mediator.

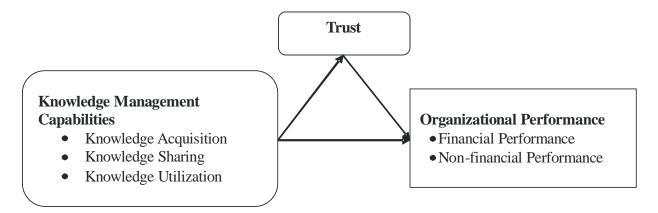


Figure 1: Conceptual Model

2.2.1. Organizational Performance

According to Richard et al. (2009), OP is the ultimate dependent variable of interest for researchers concerned with the management area. In contrast to the dominant role, that OP plays in management fields, is the limited attention paid by researchers to what performance is and how it is measured (Richard et al., 2009). Lebas and Euske (2007)defined the OP as a set of financial and non-financial indicators, which offer information on the degree of achievement of objectives and results. Popova and Sharpanskykh (2010) pointed out that performance could be estimated based on quantitative and qualitative approach. The balanced Scorecard (BSC) developed by Kaplan and Norton (1992) focused on evaluating the performance from four main perspectives that include the financial, learning and growth, customer satisfaction, and internal business process. Several researchers described this categorization as a financial and non-financial perspective (Ayoup et al., 2013; Ibrahim, 2015).

Evans and Davis (2005)pointed out that researchers have used many different criteria to measure performance and they concluded that the measurements of performance must be chosen according to the research topic. Kaplan and Norton (1996)pointed out the possibility of having misled indication of continuous improvement and innovation if only financial accounting measures are used to evaluate performance. Tseng and Lee (2014) investigated the effect of supply chain strategy and KMC on OP of Taiwanese manufacturing companies using financial and non-financial indicators. In addition, Ashnai *et al.* (2016) investigate the mediating role of trust in supply chain using financial and non-financial outcome as a dependent variable. This paper is using the financial and non-financial indicators as dimensions of the organizational performance.

2.2.2. Knowledge Management Capabilities (KMC)

Achieving improved performance is not only dependent on the successful deployment of tangible assets and natural resources but also on the effective management of knowledge (Lee & Sukoco, 2007). KMC is defined as the ability of an organization to leverage existing knowledge through continuous learning to create new knowledge (Bose, 2003). Researchers operationalized KMC differently, for example, Chen and Fong (2012) incorporated acquisition, dissemination, and utilization. Similarly, Liu and Deng (2015) included acquisition, conversion, application, and protection as dimensions of KMC. Sambasivan *et al.* (2009) included

acquisition and application as KMC. In this study, KMC is operationalized as knowledge acquisition, knowledge sharing, and knowledge utilization. This is because KMC is a continuous process that starts by acquiring the knowledge, then sharing the knowledge among organizational member, and lastly, utilizing the knowledge in decision-making.

Previous studies examined the effect of KMC on organizational performance outcomes. For example, Liu *et al.* (2004) conducted a study to identify the relationship between KMC and competitiveness in Taiwan's industries. KMC dimensions such as knowledge obtaining, refining, storing and sharing strongly affected the competitiveness. Wu and Chen (2014) attempted to develop and test a model that represents the KM value in Taiwanese manufacturing companies. They incorporated creation, transferring, integration and application. The findings indicate that KMC affect the business process capabilities.

Zheng et al. (2011) found that KMC has significant effect on innovation performance. Tseng and Lee (2014) investigate the effect of KMC processes such as transfer and protection on dynamic capabilities and OP. KMC processes enhanced the dynamic capabilities, which in turn improved the OP of Taiwanese technological companies. Lai and Lin (2012) tested whether the KMC enhances the innovation and new product development in Taiwanese manufacturing companies. The findings showed that knowledge creation, acquisition, knowledge diffusion, and integration affect the technology innovation. Gharakhani and Mousakhani(2012) found that KMC processes affect significantly the sales growth, quality improvement, and customer satisfaction. In this study, it is hypothesized:

H1: KMC has a significant effect on the OP of Malaysian PLCs.

2.2.2.1. Knowledge Acquisition: The term acquisition refers to an organization's capability to identify, acquire and accumulate knowledge that is essential to its operations (Gold et al., 2001; Zahra & George, 2002). Researchers suggested a positive link between knowledge acquisition and performance measures. For example, Song (2008) found that knowledge acquisition practices were significantly related to organizational improvement. The study of Chen and Fong (2012) found that knowledge acquisition is linked positively to KMC and OP. Yang et al. (2014) found that knowledge acquisition has a significant effect on OP of projects in Taiwan. Mills and Smith (2011), Chen and Fong (2015), Liu and Deng (2015) and Alaarj et al. (2016) found that knowledge acquisition has a significant effect on the organizational outcome. In this paper, it is hypothesized:

H1a: Knowledge acquisition has a significant effect on OP of Malaysian PLCs.

2.2.2.2. Knowledge Sharing: Jackson et al. (2006) defined Knowledge sharing as the fundamental means through which employees can contribute to knowledge application, innovation, and ultimately the competitive advantage of organizations. Studies that investigated the effect of knowledge sharing on organizational outcomes such as competitiveness, innovation, and financial and non-financial performance found that knowledge sharing is essential for organizations to achieve superior performance. For example, Liu et al. (2004) found that knowledge sharing is the most important variables that affect the competitiveness of Taiwanese companies. Similarly, the study of Chang and Chuang (2011)revealed a significant effect of knowledge sharing on business strategy of manufacturing companies in Taiwan. Gharakhani and Mousakhani, (2012), Kuzu and Özilhan (2014), and Alaarj et al. (2016) found a significant effect of knowledge sharing on organizational performance. In this study, it is expected that the knowledge sharing will affect positively the OP of Malaysian PLCs.

H1b: Knowledge sharing has a significant effect on OP of Malaysian PLCs.

2.2.2.3 Knowledge Utilization: Knowledge utilization indicates the extent to which the pool of available knowledge and expertise is activated and exploited within organization (Sung & Choi, 2012). Chen and Fong (2012, 2015)incorporated knowledge utilization as a component of KMC and they found that the effect of knowledge utilization on business performance is significant. Ganzaroli et al. (2016) investigated the effect of knowledge utilization on the post-performance of merger and acquisition and found that the effective utilization of acquired knowledge positively affects both acquirers' explorative and exploitative performance of post-merger. Teerajetgul and Chareonngam (2008) found that the utilization of knowledge in the construction project has increased the project success in Thailand. In this study, it is hypothesized:

H1c:Knowledge acquisition has a significant effect on OP of Malaysian PLCs.

2.2.3. Mediating role of Trust

Few researchers investigated the mediating role of trust. For example, Wat and Shaffer (2005) found that trust has a mediating role between perceived fairness and leader-member exchange, and organizational citizenship behavior in Hong Kong investment banking. Kath *et al.* (2010) investigated the role of trust and its outcome for organization. Findings indicated that trust played a partial mediating role between safety climate and safety motivation and between safety motivation and job satisfaction. In addition, trust mediated fully the relationship between safety climate and turnover intention.

Niu (2010) investigated the mediating role of trust in high tech industries and found that trust played a partial mediating role between industrial cluster and involvement in knowledge obtaining. Yoon *et al.* (2016) investigated the mediating role of trust in hotels industries in US. The findings showed that trust mediated the effect of environmental management strategy on organizational citizenship behavior. Similarly, Nohe and Michaelis (2016) found that trust mediated the effect of leader charisma on team organizational citizenship behaviour of large companies in Germany. In Saudi Arabia, Tlaiss and Elamin (2015) found that trust in the immediate supervisor played a mediating role between organizational justice and trust in the organization. Rezvani *et al.* (2016) found that trust mediates the relationship between emotional intelligence and project success in Australian defense industry. Alaarj *et al.* (2016) tested the mediating role of trust between KMC and organizational performance and found partial mediating role. Accordingly, in this paper, it is hypothesized:

H2: Trust mediates the effect of KMC on OP of Malaysian PLCs.

H2a: Trust mediates the effect of knowledge acquisition on OP of Malaysian PLCs.

H2b: Trust mediates the effect of knowledge sharing on OP of Malaysian PLCs.

H2c: Trust mediates the effect of knowledge utilization on OP of Malaysian PLCs.

3. METHODOLOGY

3.1. Population and Sampling

This paper is a quantitative in nature. The population is the PLCs in Malaysia. In particular, service sector. There are almost 900 service companies in Malaysia and this includes tourism, education, medical, finance,

and banking. A purposive sampling was deployed because this paper is only focusing on the executive senior top management. This is because Gold *et al.* (2001), Mills and Smith(2011) and Alaarj *et al.* (2016) indicated that those individuals have the required knowledge about the strategic operations in organizations.

3.2. Instrument of this study

The items of this paper was measured using 10 point where (1) refers to strongly disagree, and (10) refers to strongly agree. Table 1 provides a description of the measurements of this study along with the number of items, Cronbach's Alpha, and source of the measurement.

Table 1
Source of Measurements

| Construct | Element/dimensions | No. items | No. items after validation | Alpha | Source |
|----------------------------|----------------------------|-----------|----------------------------|----------------|--|
| KMC | Knowledge acquisition | 3 | 4 | 0.799 | Yang et al. (2014) |
| | Knowledge sharing | 7 | 5 | 0.812 | Cockrell and Stone (2010) |
| | Knowledge utilization | 4 | 4 | 0.752 | Chen and Fong (2012) |
| | Trust | 4 | 4 | 0.820 | Huff and Kelley, (2005) |
| Organizational performance | Financial Non-financial | 4 10 | 4 10 | 0.782 0.742 | Tseng and Lee (2014) Tseng and Lee (2014) |

Two experts in knowledge management and organizational performance validated the instrument. As a result, some items were deleted. Next, a pilot study was conducted on 33 PhD students in Malaysia. Results of Cronbach's Alpha are given in Table 1 showed that all the measurements are reliable.

3.3. Data Collection

The actual data collection survey was conducted from June 10, 2015 to March 1, 2016. The questionnaire sent to PLCs and requested to be answered by a senior top management executive. In the first two months of data collection, 101 responses were obtained. A follow up email increased the responses to 161(Hair *et al.*, 2014). These responses were considered sufficient for the use of Partial Least Square (Smart PLS). A test for non-response bias was conducted between the first wave and the last wave of responses. An examination of the means of main variables in this study was conducted. The independent t-test showed there is no significant difference between respondents in waves one and three, implying there was no presence of non-response bias.

4. FINDINGS

The data analysis was conducted using SPSS version 22.0 and Smart PLS version 3.2.7. The descriptive information of the respondent as well as missing value, outliers, normality, and multicollinearity were conducted using SPSS. Measurement model and structural model were conducted using Smart PLS.

4.1. Data examination

Data was examined for missing value, outliers, normality, and multicollinearity. No missing value was recorded. However, eight of the responses were removed due to outliers' issue resulting in 153 complete and usable responses. Skewness and Kurtosis of the data were less than absolute one implying that the data was normally distributed. In addition, the variation inflation factor (VIF) for all variables was less than 10 and the tolerance was greater than 0.10 indicating that there are no multicollinearity issues.

4.2. Respondents Profile

A total of 153 respondents have participated in this study. The majority of the respondents are younger than 40 years with overall mean of age 39 years. There are divided between male and female with bachelor degree and experience of less than 15 years. Table 2 shows the respondents' profile.

Table 2 Respondents' Profile

| Variable | Label | Frequency | Percent |
|------------|--------------------|-----------|---------|
| Age | 31-40 years | 105 | 68 |
| | 41-50 years | 42 | 27.4 |
| | Above 51 | 6 | 4.6 |
| Gender | Male | 83 | 54.2 |
| | Female | 70 | 45.8 |
| Education | Diploma | 4 | 2.6 |
| | Bachelor | 103 | 67.3 |
| | Master | 34 | 22.2 |
| | Ph.D. | 12 | 7.8 |
| Experience | 5-10 years | 34 | 22.2 |
| | 11-15 years | 69 | 45 |
| | 16-20 years | 42 | 27.4 |
| | More than 20 years | 8 | 5.4 |

4.3. Measurement Model

Researchers suggested for checking the measurement model to check the factor loading, reliability, composite reliability and convergent validity as well as discriminant validity (Hair *et al.*, 2014; Lowry and Gaskin, 2014). The convergent validity is achieved once the average variance extracted (AVE) is greater than 0.50.

4.3.1. Convergent Validity

For factor loading, reliability, and composite reliability, the threshold is 0.70 (Hair *et al.*, 2014). Table 3 shows that all the factor loading is greater than 0.70 and no items was deleted. The reliability of the measurement was achieved as well as the composite reliability with value of each variable greater than 0.70. AVE is greater than 0.50 indicating that the convergent validity was achieved.

Table 3
Result of Measurement Model

| Construct | Variable | Items | Factor loading > 0.70 | Reliability > 0.70 | Composite reliability >0.70 | AVE>0.50 |
|----------------------------|---------------------------|------------|--------------------------|-----------------------|-----------------------------------|----------|
| Knowledge management | Knowledge acquisition | KA1-KA4 | 0.76-0.83 | 0.79 | 0.86 | 0.61 |
| capabilities | Knowledge sharing | KS1-KS5 | 0.75-0.89 | 0.88 | 0.91 | 0.68 |
| | Knowledge utilization | KU1-KU4 | 0.80-0.84 | 0.83 | 0.89 | 0.67 |
| Trust | Trust | TR1-TR4 | 0.85-0.92 | 0.92 | 0.94 | 0.80 |
| Organizational performance | Financial performance | FP1-FP4 | 0.87-0.93 | 0.93 | 0.95 | 0.83 |
| | Non-financial performance | NFP1-NFP10 | 0.74-0.81 | 0.93 | 0.94 | 0.60 |

4.3.2. Discriminant Validity

For the discriminant validity, researcher also suggested that the square root of AVE should be greater than the cross loading of other variables. Table 4 shows that the square root of AVE (**bold** and <u>underlined</u>) is greater than its row and column. i.e. greater than the cross loading. Thus, the variables have discriminant validity.

Table 4
Discriminant Validity

| | FP | KA | KS | KU | TR | NFP |
|---------------------------|------|-------------|-------------|-------------|-------------|-------------|
| Financial Performance | 0.91 | | | | | |
| Knowledge Acquisition | 0.50 | <u>0.78</u> | | | | |
| Knowledge Sharing | 0.48 | 0.56 | <u>0.83</u> | | | |
| Knowledge Utilization | 0.46 | 0.48 | 0.52 | <u>0.82</u> | | |
| Trust | 0.41 | 0.36 | 0.54 | 0.29 | <u>0.90</u> | |
| Non-Financial Performance | 0.66 | 0.54 | 0.51 | 0.44 | 0.50 | <u>0.77</u> |

4.4. Hypotheses Testing

The hypotheses of this paper are tested using the structural model of Smart PLS. Based on the suggestions of Hair *et al.* (2014), 5000 bootstrap was used and the coefficient as well as the R-square (R²) of the models were reported.

4.4.1. Direct effect

The direct effect of the main hypothesis H1 and the sub hypotheses is presented in Table 5.

For the first main hypothesis, the effect of KMC on OP is positive and significant (β =0.65, T=7.12, P<0.001). Thus, H1 is accepted. For the first sub-hypothesis, this study predicted the effect of Knowledge acquisition is positive and significant. Table 5 showed that the hypothesis is supported (β = 0.34, T= 3.91,

Table 5
Result of Direct Effect Hypotheses

| | β | St.d | T Values | P-Values | Label |
|---|------|------|----------|----------|-------|
| KMC -> Organizational Performance | 0.65 | 0.09 | 7.12 | 0.00 | Sig |
| Knowledge Acquisition -> Organizational Performance | 0.34 | 0.09 | 3.91 | 0.00 | Sig |
| Knowledge Sharing -> Organizational Performance | 0.25 | 0.09 | 2.77 | 0.01 | Sig |
| Knowledge Utilization -> Organizational Performance | 0.19 | 0.07 | 2.72 | 0.01 | Sig |
| $R^2 = 0.43$ | | | | | |

Sig: significant

P<0.01). Thus, H1a is accepted. Similarly, for the second sub-hypothesis, the effect of knowledge sharing is positive and significant (β =0.25, T=2.77, P<0.01). Thus, H2b is accepted. For the third sub-hypothesis, it was predicted that knowledge utilization has a positive and significant effect on OP. Table 5 showed that the hypothesis is positive and significant (β =0.19, T=2.72, P=0.01). Thus, H1c is accepted.

4.4.2. Mediating Effect of Trust

The result of mediating effect testing is presented in Table 6. According to Lowry and Gaskin (2014), the direct effect before entering the mediator must be compared with the direct effect after entering the mediator. Mediation occurs when the direct effect reduced. If the direct effect turned into insignificant, thus, the mediation is full and if it remained significant, the mediation is partial. However, if the indirect effect is insignificant, there is no mediation.

Table 6
Mediating effect of trust

| | В | St.d | T Values | P-Values | Label |
|--|------------|----------|----------|----------|-------|
| Mediating effect of trust between | KMC and | OP | | | |
| KMC -> Organizational Performance | 0.52 | 0.09 | 5.82 | 0.00 | Sig |
| KMC -> Trust | 0.51 | 0.10 | 5.14 | 0.00 | Sig |
| KMC -> Trust -> Organizational Performance | 0.13 | 0.04 | 3.33 | 0.00 | Sig |
| Mediating effect of trust between dimens | sion of KM | IC and (| OP | | |
| Trust -> Organizational Performance | 0.25 | 0.06 | 4.29 | 0.00 | Sig |
| Knowledge Acquisition -> Organizational Performance | 0.32 | 0.09 | 3.70 | 0.00 | Sgi |
| Knowledge Acquisition -> Trust | 0.08 | 0.10 | 0.85 | 0.39 | n.s |
| Knowledge Sharing -> Organizational Performance | 0.12 | 0.09 | 1.28 | 0.20 | n.s |
| Knowledge Sharing -> Trust | 0.50 | 0.08 | 5.94 | 0.00 | Sig |
| Knowledge Utilization -> Organizational Performance | 0.19 | 0.07 | 2.74 | 0.01 | Sig |
| Knowledge Utilization -> Trust | -0.01 | 0.07 | 0.07 | 0.94 | n.s |
| Trust -> Organizational Performance | 0.28 | 0.06 | 5.02 | 0.00 | Sig |
| Knowledge Acquisition -> Trust -> Organizational Performance | 0.02 | 0.03 | 0.84 | 0.40 | n.s |
| Knowledge Sharing -> Trust -> Organizational Performance | 0.14 | 0.04 | 3.96 | 0.00 | Sig |
| Knowledge Utilization -> Trust -> Organizational Performance | 0.00 | 0.02 | 0.07 | 0.94 | n.s |

 $R^2 = 0.46$

Sig: significant, n.s: not significant

Based on the Table 6, the direct effect of KMC on OP reduced from 0.65 (Table 5) to 0.52 (Table 6). Thus, the mediation occurs, however, it is partial mediation because the effect is still significant and the indirect effect is significant (KMC -> Trust -> Organizational Performance). Therefore, H2 is accepted and trust partial mediated the effect of KMC on OP. For the first sub hypothesis, trust did not mediate the effect of knowledge acquisition on OP. This is because the indirect effect is not significant (Knowledge Acquisition -> Trust -> Organizational Performance). Thus, H2a is rejected. For H2b, trust mediated fully the effect of knowledge sharing on OP. This is because the direct effect of knowledge sharing became insignificant after entering trust into the model, thus a full mediation occurred. For H2c, trust did not mediate the effect of knowledge utilization on OP because the indirect effect is not significant (Knowledge Utilization -> Trust -> Organizational Performance). Thus, H2c was rejected.

5. DISCUSSION

This study has filled the gaps and responded to researchers to further the studies in KMC and its effect on OP. It also tested the mediating role of trust among the variables of this study. The findings of Smart PLS confirmed the prediction of the hypothesis. As predicted, the effect of KMC on OP is positive and significant. Accordingly, the first main hypothesis (H1) was accepted. KMC is important to improve the OP of Malaysian PLCs. Mastering the KMC processes will lead to better OP. In particular, companies that have mechanisms to acquire knowledge, share it, and utilize it in decision-making and improvement of internal process as well as solving problem, will enjoy better OP. The findings of this study are in agreement with the findings of previous studies such as Gold *et al.* (2001), Chen and Fong (2015), Chang and Chuang (2011), Mills and Smith (2011), and Alaarj *et al.* (2016). This has led to a conclusion that the increase in KMC will lead to positive increase in the OP of the Malaysian PLCs.

The findings indicated that the knowledge acquisition is the most important element of KMC and has the strongest effect on OP compared with knowledge sharing and utilization. The involvement in activities that increase the knowledge acquisition would lead to better OP. A better quality acquired knowledge will lead to the application of the right knowledge to formulate the right decision. Knowledge sharing is essential and the second most important process capabilities to improve the OP of Malaysian PLCs. Knowledge utilization comes in importance after knowledge acquisition and knowledge sharing. This is because the utilization of knowledge is linked to the process of first acquiring the knowledge then sharing it among organizational member and finally is the utilization of knowledge in business process and decision-making. The above findings are in agreement with the findings of other researchers such as Gold *et al.* (2001), Mills and Smith (2011), Alaarj *et al.* (2016), Ganzaroli *et al.* (2016), and Teerajetgul and Chareonngam (2008).

The second hypotheses assumed that trust plays a mediating role between KMC and the OP of Malaysian PLCs. The findings of mediation analysis showed that trust has a partial mediating role between KMC and OP. Thus, companies that create trusting culture will increase the ability to explain the relationship between the variables. Trust did not mediate the effect of knowledge acquisition on OP or the knowledge utilization on OP. However, it mediated fully the effect of knowledge sharing on OP.

Knowledge sharing is an individual behaviour that takes place among closely related co-workers or formally in workshops and question and answer (Q&A) session. This could possibly explains the full mediation role. In other words, if the employees trust each other, they will share their tacit knowledge in

informal way. While for acquiring the knowledge, it might not work the same. This could be due to the absence of organizational policy to encourage knowledge worker to provide their knowledge and be rewarded for this behaviour. Managers at the PLCs should implement clear policies regarding the knowledge activities. The managers are advised to link the Key Performance Indicator (KPI) to the KMC activities such as acquiring, sharing, and utilizing the knowledge. In agreement with our findings, trust was found to mediate the effect of perceived fairness and leader-member exchange on the organizational citizenship behavior in Hong Kong investment banking (Wat & Shaffer, 2005), partially mediated the relationship between safety climate and safety motivation and between safety motivation and job satisfaction and fully between safety climate and turnover intention (Kath *et al.*, 2010). Organizational trust also mediated the effect of industrial cluster on involvement in knowledge obtaining (Niu, 2010), emotional intelligence and project success (Rezvani *et al.*, 2016).

6. CONCLUSION

The purpose of this study was to investigate the effect of KMC on the OP of Malaysian public sector companies. The study also tested the mediating role of trust. The findings indicate that KMC is essential for the OP and trust has partially mediated the effect of KMC on OP while fully mediated the effect of knowledge sharing on OP.

This study deployed a purposive sampling technique and this has limited the findings to those who have participated in this study. For future work, researchers are recommended to use random sampling technique so that the findings can be generalized. The finding was derived from service sector only, researchers are recommended to investigate other sector such as education and public sector because few studies were found in this domain. This study could explain a moderate percentage of the variation in OP. future studies are recommended to include more variables such as business strategy and uncertainty to enhance the explanatory power of OP. Lastly, future studies are recommended to study the KMC among business partners such as to test the moderating effect of knowledge sharing among business partners' strategies.

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