Factors affecting the personal knowledge management amongst sales officers in Indonesian leading automotive companies

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Abstract: A capable and knowledgeable team is critical to an organisation's success, particularly with the transition in economic activity toward a knowledge-based economy. With the growing demand for knowledge workers, it is vital to implement personal knowledge management for each of the individuals. However, effective personal knowledge management is complicated to implement. Therefore, it is critical to understand the factors that could affect successful personal knowledge management practices, especially after the massive deployment of technology during the Industrial 4.0. This study aims to ascertain which factors affect the implementation of effective personal knowledge management, and their relative importance. This study found that leadership significantly affects trust, while trust and extrinsic rewards impact knowledge sharing activities. Technology application was found to affecting learning behaviour, while knowledge sharing and learning behaviour significantly impact one's ability to handle personal knowledge effectively. This study revealed that intrinsic rewards are more amenable to knowledge sharing.

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1 Introduction

Today's economic activity is shifting toward a knowledge-based economy. A knowledge-based economy can be defined as an environment based on knowledge and technology to enhance its production and service. A knowledge-based economy is one in which economic incentives and entities stimulate the acquisition, formation, dissemination, and application of knowledge to boost growth and prosperity, taking into account the state of education and capabilities, information and communication technology, research and development, and, of course, innovation (Asian Development Bank, 2014). The primary component of a knowledge-based economy is intellectual ability (Ben Hassen, 2020). Three factors are critical in implementing a knowledge-based economy: capable workers, incentives, and innovation (Barkhordari et al., 2019).

According to the World Bank, Indonesia's Human Capital Index scores at 0.54 in the knowledge-based economy. Given the critical role of human capital or skilled labour in a knowledge-based economy, Indonesia's human capital index is alarming. The economic world's transition to a knowledge-based economy, which requires skilled workers, encourages knowledge-based activities individually, often refers to personal knowledge management (PKM). PKM is necessary to promote workforce development in preparation for the knowledge-based economy. It aims to hone individual abilities through learning, creating knowledge, and trust-based knowledge sharing (Mittelmann, 2016). Successful PKM depends on how well new information is organised and combined with individual efforts to enrich the information and knowledge acquired (Cheong and Tsui, 2010). Ismail et al. (2015) proposed the GUSC model for implementing successful PKM. Get (G) is defined as a method for an individual to acquire knowledge; understand (U) refers to the process by which an individual acquires knowledge; and share (S) is acknowledged as the process by which an individual shares

the knowledge they gain with others. Connect (C) is an activity in which an individual interacts with other individuals to generate new knowledge and stimulate discussion.

Several factors are considered enablers of knowledge sharing and learning behaviour, encouraging effective PKM. First, as per the GUSC model and Mittelman's understanding, knowledge sharing is critical for PKM. Second, knowledge sharing enables an individual to acquire knowledge from others and share the knowledge he already possesses (Ouakouak and Ouedraogo, 2019; Durmusoglu et al., 2014; Nguyen and Malik, 2020).

This study aims to identify and confirm factors affecting effective PKM implementation and their relative importance. Interviews were held to determine the determinants that affect effective PKM implementation. The anticipated outcome is developing a model that can facilitate the implementation of effective PKM.

2   Literature review

2.1   Leadership and trust

Through every level of the organisation, effective leadership is required. Leadership is a quality that leaders possess, such as expertise, attention, and trust, that enables them to encourage or motivate others in the organisation, thereby affecting job performance (Koohang et al., 2017). Leadership could also be interpreted as a process of social interaction in which one can support others to reach a common goal (Al Dari et al., 2018). Additionally, leadership is a predictor of knowledge sharing within an organisation (Lo and Tian, 2020). It is also found that employees who fully trust their leaders will improve work engagement. This condition could also be followed by improved engagement by knowledge sharing between employees (Hsiesh and Wang, 2015). Leaders who are aware of their capabilities act consistently and can unite and accept their subordinates' differences of opinion and viewpoints. Leaders educate and involve their associates in decision-making (Jiang and Luo, 2018).

Leadership is composed of three components: leading the organisation (capacity to ensure organisational progress), leading people (ability to increase employee productivity), and conducting oneself (capacity to improve one's quality) (Koohang et al., 2017). Having a leader who demonstrates effective leadership can develop a sense of trust among work colleagues. Employees believe that their supervisors could use better efforts to assist their job and care about their well-being and their inputs to the job (Khattak et al., 2020). Thus, the first hypothesis can be developed as follow:

H1   Leadership has a significant positive effect on trust.

2.2   Trust, extrinsic rewards, and knowledge sharing

Knowledge is a critical source of an organisation's competitive advantage in a knowledge-based economy. As a result, an organisation's knowledge management capabilities must be strong (Pangil and Chan, 2014; Mittal and Kumar, 2019). One way to accomplish this is to promote employee knowledge sharing.

Knowledge sharing is the process of exchanging information and knowledge within an organisation in the form of ideas, suggestions, and expertise that can be utilised to

solve work problems by other employees (Mafabi et al., 2017; Rutten et al., 2016; Seitz and Misra, 2020; Zhang, 2014). Knowledge sharing is influenced by an individual's awareness, trust, and behaviour in knowledge-sharing activities (Keshavarz, 2021).

In today's knowledge-based economy, it is critical to instil a sense of trust among employees (Rutten et al., 2016; Oktaviani et al., 2020). Trust can be interpreted broadly as a desire to reduce one's defences against the actions of others (Ben Sedrine et al., 2020). Without a sense of trust, an organisation will not reach its full potential. In knowledge-sharing activities, trust is critical. Knowledge sharing can be coercive without trust, increasing a person's reluctance to share. As a result, top management fosters an atmosphere of trust among employees (Omar and Adruce, 2018). In addition, employees develop a sense of trust in their superiors through their interactions (Jiang and Luo, 2018).

Someone is averse to sharing knowledge because doing so entails the risk of losing personal advantages that other colleagues do not possess (Zhang, 2014). A sense of trust enables an individual to interact more freely with others (Wang et al., 2019). Trust comprises three components: ability (belief in one's ability), integrity (belief in fair and honest behaviour), and benevolence (belief in non-egocentric behaviour) (Lee et al., 2020; Wang et al., 2019). When someone is in a trusting environment, their actions are more likely to receive positive and beneficial feedback (Pangil and Chan, 2014). Based on the above discussions, the following hypothesis is derived:

H2 Trust has a significant positive effect on knowledge sharing.

Even though sharing knowledge would be the fruit of trust, an incentive mechanism is needed to motivate employees to provide better information and knowledge (Bao and Han, 2019). Trust encourages knowledge sharing among employees and encourages the organisation through rewards (Wassan and Rasool, 2011). However, knowledge sharing can also be a voluntary activity motivated by personal desires (Chedid et al., 2020). Someone will share knowledge if they anticipate receiving something in return, such as status, praise, or a bonus (Bao and Han, 2019; Rohim and Budhiasa, 2019). Sometimes in a work-related environment, employees are hesitant to share their knowledge from the fear of being used and losing advantages (Ouakouak and Ouedraogo, 2019).

Knowledge-sharing activities can be facilitated and motivated by extrinsic and intrinsic rewards. Extrinsic rewards could be in the form of bonuses, wages, or promotions. At the same time, the intrinsic reward could be in the form of praise, approval, or other forms. Unfortunately, these statements are not followed (Seba et al., 2012b), who state that extrinsic rewards should be re-evaluated before giving them to employees. However, the most frequently used motivation is an extrinsic reward (Pasquire et al., 2011). Therefore, the following hypothesis is formed:

H3 Extrinsic rewards has a significant positive effect on knowledge sharing.

2.3 Technology application and learning behaviour

The use of technology is mandatory in the Industrial Revolution 4.0 era. The application of technology is becoming increasingly critical, even more so during the current pandemic. Technology applications such as communication media and the internet have been widely adopted. Additionally, the use of technology facilitates the effective implementation of PKM. The application of technology helps discover, process, and

disseminate information within the organisations (Hortovanyi and Ferincz, 2015; Merlo, 2016).

The advancement of technology that enables access to information and knowledge will result in learning behaviours distinct from those observed before technological advancements (Yan and Au, 2019). The use of technology enables a person to be more adaptable and determine the subjects he wishes to study. Not only that, the application of technology allows for greater flexibility in how and when a person obtains and comprehends knowledge (Dhahir, 2020). With the convenience that technology provides, individuals are expected to be more active in their learning. The following hypothesis is developed;

H4 Technology application has a significant positive effect on learning behaviour.

2.4   *Knowledge sharing, learning behaviour, effective PKM*

PKM is a subset of knowledge management (Ahmad et al., 2013). PKM aims to assist an individual in completing daily tasks without entirely relying on the organisation. The primary purpose of PKM is to create a framework on knowledge management at the personal level in managing, combining, and enriching their knowledge in a practical way (Cheong and Tsui, 2010). PKM is a personal choice determined by an individual's personality (Värk and Reino, 2020) and organised around four primary structures: acquire, comprehend, share, and connect (Ismail et al., 2015; Jain, 2011). Amongst the four, knowledge-sharing is the critical aspect (Chedid et al., 2020; Dalati and Alchach, 2018; Elianto and Wulansari, 2016).

Knowledge sharing could be projected in these four structures based on four primary structures. First, knowledge sharing could be one medium for employees to get new knowledge in acquiring knowledge and information. Second, there has to be an exchange for information or knowledge, as in knowledge sharing. Third, knowledge sharing could be done in a discussion forum to comprehend and connect structure. Fourth, employees could share and ask about information and knowledge they have not yet understood or expand their understanding about something. Based on the above discussions, the fifth hypothesis is derived:

H5 Knowledge sharing has a significant positive effect on effective PKM.

PKM can be defined as self-directed learning undertaken by an individual to remain relevant in the workplace. As a form of independent learning, PKM is inextricably linked to one's learning behaviour. One's learning behaviour could be pushed by using technology. Technology application is shown to positively affect learning behaviour in searching, reading, and browsing through the internet (Ho et al., 2010). Learning behaviour could be interpreted as paying attention to getting, finding, and understanding something new. This includes discussing the matters with others (Onputtha and Oupananchai, 2018).

Learning behaviour can be classified into four types: planned learning (directed learning), emergent learning (learning from unexpected opportunities), meaning-oriented learning (deep understanding through experience), and instruction-oriented learning (learning under the direction of others) (Kusemererwa et al., 2020). A person's learning behaviour affects how he seeks, acquires, shares, and integrates the information and knowledge he possesses. Therefore, technology that pushed learning behaviour to more

critical for the gained information and knowledge would also push their behaviour to manage their knowledge effectively. Thus, the following hypothesis is derived:

H6 Learning behaviour has a significant positive effect on effective PKM

Figure 1 research model is constructed.
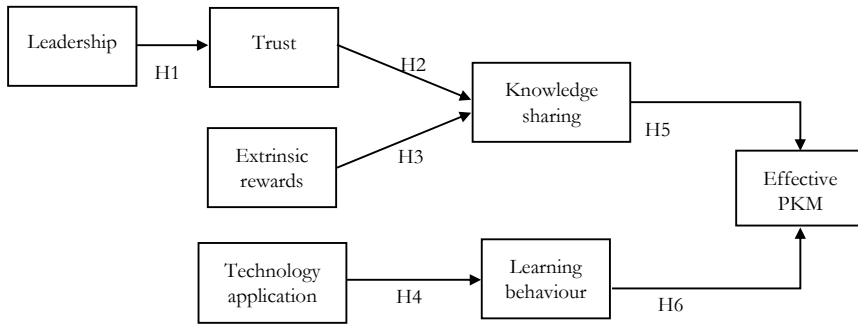
Figure 1 Theoretical framework

Table 1 Respondents' demography

	n	*%*
Workplace		
AI	54	42.19
S	15	41.41
H	53	11.72
W	2	1.56
N	2	1.56
M	2	1.56
Time working at the current place		
<1 year	15	11.72
1 year	13	10.16
2 years	30	23.44
3 years	14	10.94
4 years	15	11.72
5 years	15	11.72
>5 years	26	20.31
Time working at other places		
<1 year	8	6.25
1 year	14	10.94
2 years	32	25.00
3 years	22	17.19
4 years	13	10.16
5 years	12	9.38
>5 years	27	21.09

3   Methods

A survey questionnaire was conducted to collect responses from sales officers. A qualitative approach was utilised in the form of semi-structured interviews. As in the purposive sampling approach, the researcher chose the data samples and deliberately selected them (Kothari, 2004). The triangulation phase applied semi-structured interviews involving three experts, business leaders who keep up with knowledge management development, and three respondents.

Table 2   Validity and reliability test results SPSS – PLS-SEM

Indicator	SPSS					PLS-SEM		
	r value	Sig. (2-tailed)	Validity	Cronbach's alpha	Reliability	Loading factor	Composite reality	AVE
pkm1	0.576	0.000	Valid	0.866	Reliable	0.509	0.898	0.598
pkm2	0.746	0.000	Valid		Reliable	0.729		
pkm3	0.759	0.000	Valid		Reliable	0.747		
pkm4	0.771	0.000	Valid		Reliable	0.801		
pkm5	0.747	0.000	Valid		Reliable	0.730		
pkm6	0.753	0.000	Valid		Reliable	0.796		
pkm7	0.773	0.000	Valid		Reliable	0.790		
pkm8	0.665	0.000	Valid		Reliable	0.668		
ldr1	0.715	0.000	Valid	0.938	Reliable	0.705	0.948	0.549
ldr2	0.744	0.000	Valid		Reliable	0.731		
ldr3	0.677	0.000	Valid		Reliable	0.684		
ldr4	0.584	0.000	Valid		Reliable	0.568		
ldr5	0.678	0.000	Valid		Reliable	0.679		
ldr6	0.748	0.000	Valid		Reliable	0.723		
ldr7	0.749	0.000	Valid		Reliable	0.728		
ldr8	0.750	0.000	Valid		Reliable	0.739		
ldr9	0.795	0.000	Valid		Reliable	0.804		
ldr10	0.816	0.000	Valid		Reliable	0.828		
ldr11	0.624	0.000	Valid		Reliable	0.645		
ldr12	0.807	0.000	Valid		Reliable	0.824		
ldr13	0.734	0.000	Valid		Reliable	0.738		
ldr14	0.836	0.000	Valid		Reliable	0.853		
ldr15	0.799	0.000	Valid		Reliable	0.809		
trust1	0.731	0.000	Valid	0.906	Reliable	0.781	0.929	0.571
trust2	0.662	0.000	Valid		Reliable	0.672		
trust3	0.665	0.000	Valid		Reliable	0.719		
trust4	0.789	0.000	Valid		Reliable	0.811		
trust5	0.804	0.000	Valid		Reliable	0.831		
trust6	0.831	0.000	Valid		Reliable	0.819		

Table 2 Validity and reliability test results SPSS – PLS-SEM (continued)

Indicator	SPSS					PLS-SEM		
	r value	*Sig. (2-tailed)*	*Validity*	*Cronbach's alpha*	*Reliability*	*Loading factor*	*Composite reality*	*AVE*
trust7	0.828	0.000	Valid	0.906	Reliable	0.798	0.929	0.571
trust8	0.805	0.000	Valid		Reliable	0.787		
trust9	0.817	0.000	Valid		Reliable	0.807		
trust10	0.562	0.000	Valid		Reliable	0.454		
rew1	0.869	0.000	Valid	0.892	Reliable	0.851	0.922	0.598
rew2	0.830	0.000	Valid		Reliable	0.833		
rew3	0.569	0.000	Valid		Reliable	0.669		
rew4	0.794	0.000	Valid		Reliable	0.76		
rew5	0.803	0.000	Valid		Reliable	0.769		
rew6	0.787	0.000	Valid		Reliable	0.743		
rew7	0.170	0.055	Valid		Reliable	Not valid		
rew8	0.795	0.000	Valid		Reliable	0.793		
rew9	0.756	0.000	Valid		Reliable	0.754		
ks1	0.570	0.000	Valid	0.805	Reliable	0.701	0.880	0.515
ks2	0.529	0.000	Valid		Reliable	Not valid		
ks3	0.617	0.000	Valid		Reliable	0.700		
ks4	0.692	0.000	Valid		Reliable	0.775		
ks5	0.695	0.000	Valid		Reliable	0.826		
ks6	0.668	0.000	Valid		Reliable	0.661		
ks7	0.710	0.000	Valid		Reliable	0.753		
ks8	0.573	0.000	Valid		Reliable	Not valid		
ks9	0.533	0.000	Valid		Reliable	Not valid		
ks10	0.647	0.000	Valid		Reliable	0.577		
pt1	0.868	0.000	Valid	0.786	Reliable	0.931	0.887	0.726
pt2	0.822	0.000	Valid		Reliable	0.863		
pt3	0.859	0.000	Valid		Reliable	0.752		
LB1	0.641	0.000	Valid	0.904	Reliable	0.638	0.923	0.546
LB2	0.733	0.000	Valid		Reliable	0.761		
LB3	0.704	0.000	Valid		Reliable	0.734		
LB4	0.776	0.000	Valid		Reliable	0.773		
LB5	0.678	0.000	Valid		Reliable	0.647		
LB6	0.766	0.000	Valid		Reliable	0.760		
LB7	0.824	0.000	Valid		Reliable	0.826		
LB8	0.843	0.000	Valid		Reliable	0.855		
LB9	0.758	0.000	Valid		Reliable	0.742		
LB10	0.650	0.000	Valid		Reliable	0.617		

This study analysed samples of sales representatives within Java Island. The questionnaire was distributed to 300 sales officers and returned by 128 individuals (see Table 1). Each sales officer had at least one year of sales experience. PLS-SEM was used to evaluate the research model. PLS-SEM was chosen due to the small sample size (Kante et al., 2018). In addition, Pearson's product-moment and Cronbach's alpha were used to examine the instrument's validity and reliability.

3.1   Data processing

The validity test used Pearson's product-moment with r value > 0.146 and sig. < 0.10. The findings indicate that each instrument used in this study is valid – Cronbach's alpha reliability test results with a cut-off value of 0.7. Table 2 summarises the validity and reliability test results. The findings suggest that each instrument used in this study is reliable. As in PLS-SEM criteria are AVE score > 0.5 and composite reality score > 0.7.

In comparison, PLS-SEM (Figure 2) indicated that one extrinsic reward instrument (rew7) and three knowledge-sharing instruments (ks2, ks8 and ks9) were invalid and will not be included in the subsequent analysis. Six automobile manufacturers responded to the questionnaire in this study. Table 3 summarises the hypothesis test results.

Figure 2   PLS-SEM analysis (see online version for colours)
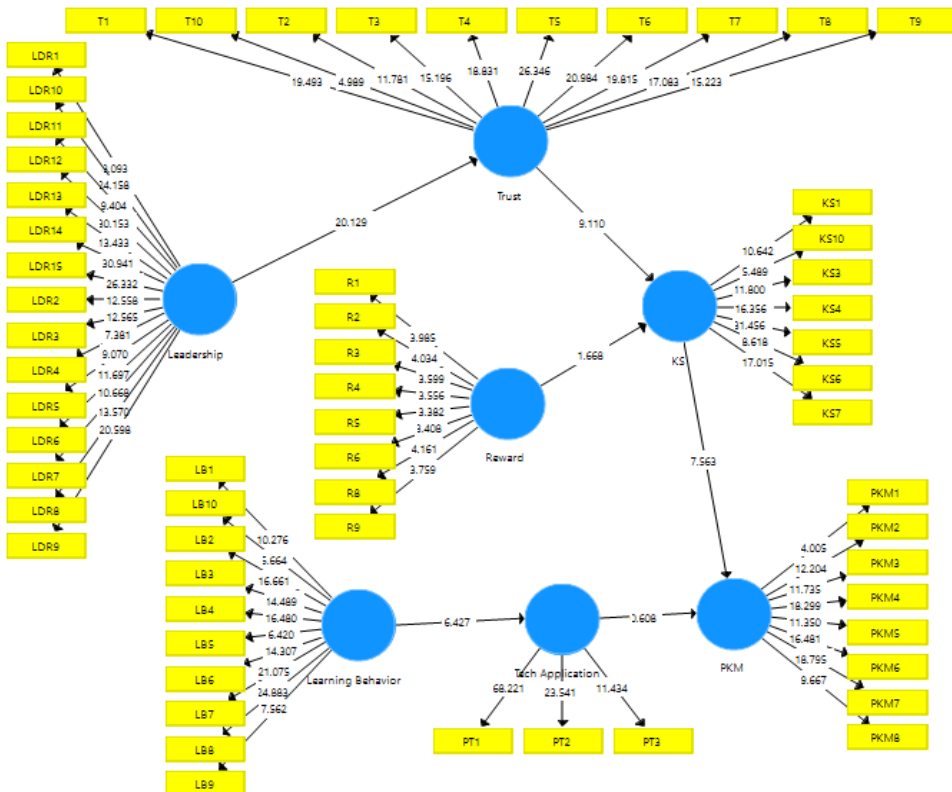
Table 3 Data processing results

Hypotheses		t table	t count	P-value	Effect size	Result
H1	Leadership has a significant positive effect on trust	1.65	19.371	0.000	1.192	Accepted
H2	Trust has a significant positive effect on knowledge sharing	1.65	9.473	0.000	0.711	Accepted
H3	Extrinsic rewards have a significant positive effect on knowledge sharing	1.65	1.715	0.087	0.036	Accepted
H4	Technology application has a significant positive effect on learning behaviour	1.65	5.606	0.000	0.324	Accepted
H5	Knowledge sharing has a significant positive effect on personal knowledge management	1.65	1.812	0.071	0.038	Accepted
H6	Learning behaviour has a significant positive effect on personal knowledge management	1.65	4.024	0.000	0.241	Accepted

4 Discussion

4.1 Leadership and trust

Indeed, leadership has a significant positive effect on establishing and fostering trust among sales officers, with an effect size of 1.192. This result is consistent with Jiang and Luo (2018) and Koohang et al. (2017). This finding demonstrates that sales officers identifying a leader at work aided in establishing a trusting environment among colleagues. This condition also implies that leaders in automotive companies promote a culture of knowledge sharing aimed at the company's success. Good leaders who can motivate, listen to others' perspectives, and communicate effectively with their subordinates can foster employee trust.

According to one of the sales officers interviewed, "My boss always creates opportunities for everyone to meet one another so that we can develop trust." Another sales representative stated, "My manager encourages us to be united and trust one another by acting fairly. As a result, we can work honestly and without attempting to harm one another because we have mutual trust."

4.2 Trust, extrinsic rewards, and knowledge sharing

According to the interviews, leaders who act pretty and encourage teamwork can help build trust among a company's members. Sales representatives believe they will not harm their co-workers when they have mutual trust. Indeed, faith significantly positively affects knowledge sharing between sales officers. Trust itself has an effect size of 0.711. This finding is consistent with those of Ng (2020), Pangil and Chan (2014) and Wang et al. (2019). This finding implies that sales representatives have developed trust in one

another. Therefore, sales representatives believe in their co-workers' abilities and that their co-workers will not harm them.

Additionally, one of the sales officers interviewed stated that "the strategy for becoming a good salesperson is to observe, copy, and modify. Therefore, even though we shared our knowledge, the other person must modify the process and input their outputs, which may differ from ours." Another sales officer stated, "I do not feel attacked if I share my knowledge with my co-workers; after all, it is for the company's success." This means that if sales officers trust one another, they will not hesitate to share their knowledge with their co-workers.

Extrinsic rewards also positively affect knowledge sharing, with an effect size of 0.036. This finding is consistent with Rohim and Budhiasa's (2019) and Wassan and Rasool's (2011). This finding demonstrates that extrinsic rewards (i.e., promotion, bonus) encourage knowledge sharing among sales officers. However, a sales officer interviewed stated, "I am not looking for financial gain by sharing my knowledge. If my knowledge benefits others, it is sufficient for my gratification." Additionally, another sales officer stated, "I am not looking for extrinsic rewards, but I will not refuse to accept one if offered. Sharing my knowledge gives me a sense of fulfillment." The contradictive finding supported previous findings by Chedid et al. (2020) and Tohidinia and Mosakhani (2010). This contradiction may account for the small effect size observed in statistical tests. Some sales officers discovered that they would share knowledge for extrinsic material rewards, while others discovered intrinsic rewards (personal satisfaction, self-pleasure) are more valuable than extrinsic ones.

4.3   Technology application and learning behaviour

The application of technology is found to positively affect sales officers' learning behaviour, with an effect size of 0.324. This finding is consistent with Dhahir (2020) and Hortovanyi and Ferincz (2015). Many automotive companies applied and adopted technology in their daily operations. As an integral part of the company, sales officers have embraced technology to aid in their daily operations, from acquiring to maintaining relationships with a large number of customers.

According to one of the sales officers, "we must be adaptable to the development and new trends in technology. By being adaptable, we can leverage the new trend to our advantage." While another sales officer stated, "technology forces me to stay current on new trends and developments. Technology aids my education by making tasks easier and more efficient."

As per interviews, technology applications assist sales officers in learning new trends and remaining relevant in their jobs. Additionally, it assists them in performing their duties during this pandemic era. Technology application is coercive to learn for sales officers.

4.4   Knowledge sharing, learning behaviour, effective PKM

With an effect size of 0.038, knowledge sharing is positively significant for effective PKM. Given that knowledge sharing is a critical and significant aspect, this finding supports the previous statements by Chedid et al. (2020), Dalati and Alchach (2018) and Elianto and Wulansari (2016). By fostering knowledge sharing among sales officers, each

sales officer can acquire new knowledge, comprehend it, and connect it to existing knowledge through discussion.

According to the interviews, sales officers can easily acquire new information and knowledge through knowledge sharing. By acquiring new knowledge, sales teams can grow and improve their value. Furthermore, as knowledge sharing can be applied to numerous steps of PKM, we could say that multiple steps of PKM can be accomplished effectively during a single knowledge-sharing session.

With an effect size of 0.241, learning behaviour is positively significant in affecting effective PKM. As previously stated, PKM is one method of self-education. Therefore, this finding supports the notion that sales officers' learning behaviours affect their ability to manage their knowledge effectively.

According to one of the sales officers, "My learning style is to learn through everyday activities and work. By adopting a flexible attitude, I find that this learning method is more effective for me than learning to achieve the target." Another sales officer stated, "I need a goal to pursue. Therefore, my learning style is planned learning, in which I set objectives and goals and work toward achieving them. Additionally, this job as a sales officer pushed me to continue learning and improving myself."

The interviews indicated that learning behaviour would affect how effectively sales officers manage their knowledge. Some will engage in planned learning, while others will engage in emergent learning. Having a target in mind is a sound strategy, as it helps sales officers prioritise which aspects and skills to develop.

Throughout the semi-structured interview phase with experts, the respondents stated that leadership is critical for developing personal knowledge behaviours. In addition, leaders serve as the link between organisations and employees to achieve success through the efforts of their employees. Finally, according to experts, a great leader would motivate their subordinates to improve and grow.

Additionally, the experts stated that extrinsic rewards are not a good stimulant for knowledge sharing. Extrinsic rewards, according to experts, are only effective for higher-level employees, such as supervisors. Since supervisors are responsible for developing and enhancing their subordinates' performance through teaching and sharing their knowledge, the experts agreed that trust could be the primary motivator for knowledge sharing, as trust fosters a sense of belonging among sales officers.

Experts also agree that personal behaviour, for example, learning behaviour is one of the crucial stimulants in encouraging effective PKM. They stated that every sales officer needs to be aware of the importance of being relevant and keep upgrading their value. If sales officers do not want to learn, they will not be relevant anymore and might be replaced with someone else.

5 Conclusions

The research's findings and analysis indicate that leadership has a significant positive effect on trust. Trust and extrinsic rewards both have a significant positive effect on knowledge sharing. Technology application has a significant positive effect on learning behaviour, and both knowledge sharing and learning behaviour have a significant positive effect on practical personal knowledge. Good leadership fosters trust among sales officers. By fostering mutual trust among co-workers, sales representatives will freely

share their knowledge without fear of reprisal. Extrinsic incentives may also encourage knowledge sharing between sales officers, but intrinsic incentives are likely to have a more significant impact than extrinsic incentives. Learning is made more accessible and more efficient through the use of technology. Indeed, knowledge sharing is a critical component of PKM. Sales officers' learning behaviours will also affect their ability to manage their personal knowledge effectively.

As a result of this study, automotive companies are encouraged to invest in knowledge sharing and technology applications. Since it was identified that knowledge sharing is a critical component of PKM and can be integrated into all stages of PKM, it can be implemented throughout. By investing in knowledge sharing, it is possible to improve the efficiency and effectiveness of PKM. Additionally, investing in technology, such as an e-learning portal or learning management system, will assist sales officers in searching for, acquiring, sharing, and investing their knowledge even more efficiently. Investment in technology should be accompanied by education and training in applying that technology. Automotive companies could also cultivate a learning culture to instill a habit of independent learning. This learning culture could be defined as a coercive act of PKM, such as regulations or sales targets, but not as a burden.

According to prior research, no study has conducted an empirical examination of the effect of various factors on effective PKM in automotive companies. Furthermore, no other studies attempt to investigate and explain the factors that may contribute to effective PKM. As a result, this study proposes a better understanding of the factors that encourage sales officers in the automotive industry to manage their personal knowledge effectively.

Additionally, this study includes recommendations for future research: First, it is necessary to assess the effect of PKM on performance or productivity. Second, future research could examine and investigate the effects of personal behaviour on PKM. Third, numerous variables and other factors could be investigated to determine what motivates individuals to manage their personal knowledge effectively.

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