

Voice of Academia

Academic Series of Universiti Teknologi MARA Kedah

VoA 2024
Volume 20 Issue 2

ISSN: : 1985-5079

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e-ISSN: 2682-7840



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UNDERSTANDING KNOWLEDGE TRANSFER BEHAVIOR IN MALAYSIAN ORGANIZATIONS

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ARTICLE INFO

Article history:

Received Dec 2023
Accepted May 2024
Published June 2024

Keywords:

Knowledge Management, Knowledge, Knowledge Transfer, Knowledge Sharing, Behaviour

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ABSTRACT

Firms invest their resources considerably to enhance job knowledge for their employees. In return, companies want employees to share what they have learned. Yet despite companies' attempts to encourage knowledge sharing, many employees withhold what they know a phenomenon known as knowledge hoarding or knowledge hiding. Therefore, the present study aims to understand knowledge transfer behavior (KTB) among employees. This paper reviews the nature of knowledge transfer, knowledge sharing and knowledge transfer behavior. The literature review is conducted to identify the differences between knowledge sharing and knowledge transfer characteristics. The initial discussion in this paper is discussing the nature of knowledge transfer and common practices of knowledge transfer behavior. The finding contributes to the individual and business in understanding the nature of knowledge transfer behavior.

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1. Introduction

There are limited studies done on knowledge transfer behavior in Malaysia. There are a few landmark studies (e.g., Abd-Mutalib, Muhammad Jamil, Mohamed, & Ismail, 2023; Fahteha et. al., 2016; Syajurratuddur, 2017; and Syed et. al., 2009). However, scholars are interested in doing research on knowledge transfer behaviour in private organizations. Despite these differences, it can be argued that knowledge transfer behaviour is practised inversely in a different context. Ryan

and Kristof-Brown (2003) stated that it is vital to understand the different elements of knowledge transfer behaviour in a different working environment.

Knowledge transfer behaviour is the act of a person who tends to transfer knowledge with the organization's members (Aktharsha, Anisa & Ali, 2012; Mladkova, 2012; Mohamad, Mokhtar, Rahman, & Othman, 2023). A brilliant step should be implemented to encourage positive behaviour that meets the challenges of the career path of public sector employees other than benefits and incentives (Hsin, 2020). While the research highlighted the importance of knowledge transfer behaviour in Malaysia, few scholars supported the idea that KTB could be sustained through increased awareness of the importance of intellectual capital management in the organization (Abbas, 2020; Ali & Qasim, 2018; Adam, Tomas, Kristina, & Jeremy, 2014; Edi, et, al., 2022). Sustaining KTB among Malaysian organizations has become the need of the hour and has been emphasized immensely because the increased awareness of knowledge sharing and transfer will affect or influence employees' behaviour in the organization. Therefore, this paper discusses the understanding of knowledge transfer behavior in organizations

2. Literature Review

The essence of Knowledge Management (KM) began in the 1950s, through the development of electronic data in organizations and the management model namely management by objective (MBO). In the 1980s, management was seen as a competitive aspect, and the way people paid more attention to the corporate culture, Total Quality Management (TQM) and downsizing (Ain, 2013; Ali, & Johl, 2023). By the 1990s, the focus on human resources became interesting in managing organizations. Drucker (1999) for example emphasised knowledge growth as important for organization performance. Staff's knowledge and experience are perceived as an asset to the organization. Yet, the management was more interested in learning and organization learning process. The growing literature shows the attention on organizational learning which is the dimension of knowledge management.

The study done by Nonaka and Takeuchi (1995) underlines how Japanese companies create knowledge and innovation. Thus, in the early 2000s, knowledge management has risen as an important organisational goal. Knowledge management has been identified as an important element for an organization to last in the industry (Norfadzilah, Abdul, Pangil & Zin, 2016; AlQershi, Ali, Al-Rejal, Al-Ganad, Farhan Busenan, & Ahmed, 2023). Knowledge management is essential in the management of an organization with the aim of improving performance. Knowledge should be managed inside the organization because it is a renewable resource that is accumulated by the staff with the combination of experience. (Narges, Hossein, Hamidreza & Kamal, 2017). Therefore, the most important feature in the knowledge management process is knowledge. There was also an intention to deploy and exploit the knowledge of staff in an organization can be done through knowledge sharing (Ain, 2013). Improving knowledge management is important in improving the value creation of the organization.

Knowledge management appears to have common personalities, Davenport and Prusak (1998) found that most knowledge management approaches have three aims: i) to make knowledge visible and show the role of knowledge in an organization; ii) to develop a knowledge-intensive culture by encouraging and aggregating behaviours such knowledge sharing; iii) to build a knowledge infrastructure not only a technical system, but a web of connections among people given space, time, tools, and encouragement to interact and collaborate. All at once, Champika, Taha, Tabarak and Quijing. (2005) remark KM is significant in promoting integration and empowering the employees to constantly improve and share knowledge within the organization. Knowledge management is seen as a tool to improve decision-making, engender learning,

facilitate collaboration and encourage innovation. Knowledge Management is described as the process of gathering, managing and sharing individual knowledge capital within the organization (Bhojaraju, 2005). Knowledge management is also paramount to the operation of modern organizations and to retaining the valuable intangible asset in organization (Nonaka, 1994; Saide, 2016).

A few scholars highlighted the differentiation between knowledge sharing and knowledge transfer (Jiang, Liu, & Li, 2023; Gaur, Ma, & Ge, 2019; Madhavan, & Grover, 1998). Knowledge sharing (KS) is known as an activity to help other employees complete work and solve problems (Narges et. al. 2017). According to Ling (2011), knowledge sharing is a social phenomenon including personal interaction and relationships. Knowledge sharing can be reflected as one of the essential knowledge management processes in an organization (Alavi & Leidner, 2001; Bock, Robert, Kim & Yee, 2005). Willingness to share or the voluntary act of making information available to others is defined as knowledge sharing by Davenport and Prusak (1998). Instead, the knowledge-sharing process is comprised of knowledge externalization through knowledge resources and internalization of its receiver (Liu & Liu, 2008). Knowledge sharing may be viewed as the behaviour by which an individual voluntarily provides other employees with access to his or her knowledge and experience (Gupta, Bhattacharya, Neelam & Kunte, 2012). Agreeing with that, Ramayah, Yeap and Ignatius (2013) define knowledge sharing as the exchange of knowledge between at least two parties in a reciprocal process and allowing the restructuring of knowledge in the new context.

Encouraging employees to share knowledge could enable team members to create new knowledge (Hooff & Hendrix, 2004; Jäger-Roschko, & Petersen, 2022). Despite its importance, there is no consensus on the definition of knowledge sharing. Scholars have applied a few terms such as knowledge exchange, knowledge diffusion, knowledge distribution, and knowledge transfer to describe knowledge sharing (Dixon, 2000). Connelly and Kelloway (2001) defined knowledge sharing as a set of behaviour counting the exchange of knowledge with other colleagues. Knowledge sharing is also characterized as behaviour by which employees voluntarily extant knowledge and experience to other people (Hansen, 2002).

Knowledge sharing is also described as the act of making the required knowledge manageable to team members within the organization. However, individuals indicate whether to get into knowledge sharing and how much knowledge and experience they want to allocate. Knowledge sharing is the joint sharing of knowledge between two knowledge holders in maintaining a healthy relationship in the context which could guide the performance of the organization (Gupta et. al, 2012). A few scholars mentioned that knowledge sharing becomes the most important knowledge management tool for an individual to exchange ideas and share (Bock et. al, 2005; Alavi & Leidner, 2001, Narges et. al, 2017).

Dixon (2000) highlighted various terminologies for KS, namely, knowledge exchange, knowledge diffusion, knowledge distribution, and knowledge transfer. However, one common characteristic of KS is the transmission of knowledge between the sender and the receiver of knowledge. Connelly and Kelloway (2001) defined KS as a set of behaviours, including the exchange of knowledge with another colleague. KS is also characterised as the behaviour by which an employee's voluntarily extant knowledge and experience are shared with another person (Hansen, 2002). Zhou and Li (2012) outlined knowledge sharing as making the required knowledge manageable for team members within an organisation. Vuori and Okkonen (2012) stress that individuals control how and when they exercise KS. Therefore, the amount and depth of their knowledge depend on their behaviour. Gamarotto, Bolisani and Scarso (2011) further stated that KS transpires when there are healthy relationships and mutual expectations in the joint sharing

process that can lead to better organisational performance. In essence, KS has become an important KM tool for developing a voluntary- behaviour system to share and exchange expertise in the working environment (Ahmad, Khoso, Zubair, & Ahmed, 2014; Lui, Raahemi, & Benyoucef, 2011). Therefore, KS is considered an act of sharing. Thus, KS is successfully exercised when employees are not being coerced or co-opted to participate. Besides, KS can only be accomplished in a formal work environment (Jalili & Ghaleh, 2019). A scholar also highlighted that the Malaysian government and private companies are still searching for a solution to difficulties associated with knowledge management practices, especially knowledge-sharing issues (Norzanah et al., 2020). Knowledge could be shared when the employees have the correct behaviour and intend to share the knowledge, known as knowledge-sharing behaviour. Knowledge-sharing behaviour is defined as voluntarily sharing related information with other individuals (Lin, 2007). Therefore, knowledge sharing is identified as vital because it provides views and perspectives, especially in the task implementation stage (Norashikin, Mohamad, & Mazlina, 2015).

Over the past fifteen years, knowledge transfer (KT) has been discussed in both depth and breadth (Argote & Fahrenkopf, 2016). Recently, the interest in papers related to knowledge transfer behaviour has been increasing in organizations (Hinna, Nito & Mangia., 2010; Tomo, 2020). Knowledge transfer is recognised as a core process in knowledge management and it appears to be the learning of an organizational unit from another unit's experience (Darr, Argote & Epple, 1995). Knowledge transfer also considers as the subset of knowledge (Cabrera & Cabrera, 2002; Yang & Wang, 2022). The findings by Gangeswary, Roziah, Bahaman and Maimunah (2015) portray that, knowledge transfer has a broader concept as compared with knowledge sharing which knowledge transfer is more personalised (people-to-people process). Sveiby (2000) claimed that knowledge that is transferred between employees not only benefits the organization but also tends to expand the employees' performance. However, it is very important to transfer the knowledge to the right place and the right person where it is needed (Alavi & Leidner, 2001). Successful knowledge transfer is not easy to achieve.

Research has shown that leveraging knowledge occurs through knowledge transfer activities (Dahiyat, Khasawneh, Bontis, & Al-Dahiyat, 2023; Liebowitz, 2019; Penning & Harianto, 1992; Garud & Nayyar, 1994; Gilbert & CordeyHayes, 1996; Szulanski, 1996). Therefore, knowledge transfer can be concluded as a process that in addition to sharing knowledge, involves ensuring the captivation of knowledge by the recipient and evaluating knowledge, and is more conceptual than process knowledge sharing (Narges et. al., 2017). In essence, knowledge transfer is defined as a process of copying, dyadic exchange and convergence of knowledge, information and skills from one entity to another (Szulanski, 1996; Roger, 1983 (cited in Zyl, 2006)). Other scholars described knowledge transfer as the flow of knowledge and a learning process in an organisation which could be transported, interpreted, absorbed and modified practice to fit the perspective (Argote & Ingram, 2000; Carlile, 2004; Hamel, Doz, & Prahalad, 1989; Kalling, 2003; Rashman & Hartley, 2008; Saka-Helmhout, 2009).

Furthermore, a number of studies have found that knowledge transfer is the active communication and sharing among employees in the organization for mutual benefit (Arsawan, Koval, Rajiani, Rustiarini, Supartha, & Suryantini, 2022; Hoff & Ridder, 2004; Syed-Ikhsan & Rowland, 2004). In a further study by Szulanski (2000), knowledge transfer refers to a formally organized activity and involves the process of containing source, channel, message, recipient, and context. Recent literature recognized knowledge transfer as a process of capturing knowledge, skills, and information and sharing them among employees and between parts of the organization.

Knowledge transfer also offers the potential to increase productivity and retain the intellectual capital of an organization. Although some literature highlighted studies on knowledge-sharing behaviour (KSB), very few scholars relate knowledge transfer with employees' behaviour or knowledge transfer behaviour (Osterloh and Frey, 2000; Szulanski, 2000; Tsai, 2001). Furthermore, over the past fifteen years, knowledge transfer has been discussed in-depth and in breadth (Argote & Fahrenkopf, 2016) and has shown the growing importance of knowledge transfer behaviour (KTB). Behaviour is defined as an individual action based on certain situations or events that can be observed, measured, and repeated (Shafaei, & Nejati, 2023; Norfadzilah et al., 2016). The behaviour is different in each situation and the immediate need for knowledge will affect the behaviour of an individual in the organisation (Stephen & Matthew, 2017). The researcher identified the factors that can influence knowledge transfer and the outcome, including the antecedents, process, mechanism, and barriers of knowledge (Hooff & Ridder, 2004; Syed-Ikhsan & Rowland, 2004; Rashman, Whithers & Hartley, 2008; Saka-Helmout, 2009).

Despite that, knowledge-sharing behaviour (KSB) concepts provide a different perspective for a decade. Knowledge-sharing behaviour is more about a 'share' manner from everybody to share what they know (Salamzadeh, Tajpour, Hosseini, & Brahmi, 2023; Ain, 2013). Davenport and Prusak (1998) have defined knowledge-sharing behaviour as involving knowledge exchange between persons and groups of people. In comparison, Connelly and Kelloway (2001) believe knowledge sharing is a behaviour set, which involves exchanging information or assistance with others. The summary of these characteristics is shown in Table 1.1. Based on a rigorous literature review, knowledge sharing behaviour (KSB) and knowledge transfer behaviour (KTB) are identified to have different characteristics and elements in terms of mode, structure, measurement, scope, behaviour, and objective and communication channel. Knowledge-sharing behaviour occurs in the informal mode as such employees share their knowledge in a flexible time base while knowledge transfer behaviour is known to be exercised in a formal mode of interaction. The structure of KSB is unorganised compared to KTB whereby the types of knowledge being transferred are in a structured manner. Besides, KTB is measured based on the quality of the work performance but KSB is more toward societal-based knowledge sharing within the organisation. The behaviour of employees is known as unplanned in sharing knowledge, yet, employees have to plan properly on the types of knowledge when it is involved in KTB activities. In addition, exercising KTB is more focused on certain category of knowledge compared to KSB merely unfocused knowledge. Another argument is that KTB comprises two-way communication among employees, whereas KSB can be communicated in a multidirectional communication channel because it is based on a voluntary mode of sharing. In summary, a few elements mentioned above pinpoint the differences in how to apply the terms knowledge sharing behaviour and knowledge transfer behaviour. Those terms will contribute to more discussion in the literature for future research.

As Malaysia steadily transitions into a knowledge-based nation, most organisations, including the public and private sectors, are moving towards quality service. The Knowledge Sharing Behaviour Scale (KSBS) introduced by Yi (2009) focused on knowledge-based industries and has been tested in many studies (Aizpurua et. al., 2011; Ozbebek & Toplu, 2011; Palcious, Supiah, & Sandhu, 2011). Further, Ramayah, Yeap, and Ignatius (2014), in the study, established and validated the KSBS introduced by Yi (2009). The scale was originally developed and validated in the United States. Yi's KSBS has been validated in business organisations and academia. Bartol and Srivasta (2002) originally contributed to the development of KSBS by highlighting that, knowledge sharing behaviour includes (1) contributing knowledge to an organisational database; (2) sharing knowledge in formal integration within or across teams or work units; (3) sharing knowledge in informal interactions; and (4) sharing knowledge within communities of practices.

Table 1
Knowledge Sharing Behaviour VS Knowledge Transfer Behaviour

Elements	Knowledge Sharing Behaviour (KSB)	Knowledge Transfer Behaviour (KTB)
Mode	Informal process	Formal
Structure	Un-organized (voluntary)	Organized/Forced
Measurement	Societal	Quality of work
Scope	Non-institutionalize	Institutional
Behaviour	Unplanned	Planned
Objective	Unfocused	Focus
Communication	Multidirectional	Two-way

However, this Knowledge Sharing Behavior Scale (KSBS) could be replicated using a larger sample size and a different context to generalize the scale (Ramayah et al., 2014). Since its introduction, KSBS has gained momentum among researchers who have used the full scale of the KSBS incomplete form (Ramayah, Yeap, & Ignatius, 2013; Sanjari, & Soleimani, 2023). KSBS consists of 28 items measuring four dimensions of KSB: written contribution (5 items), organisational communication (8 items), personal interaction (8 items), and communities of practice (7 items). Hence, the study adapts KSBS as the measured dimension for knowledge transfer behaviour. In summary, this study investigates the relationship between intellectual capital management and the four dimensions of knowledge transfer behaviour; written contribution, organisational commitment, personal interaction, and communities of practice. Hence, the application of KSBS could be generalised to test the knowledge transfer behavior (Aizapurua & Saldana, 2011; Ramayah et. al., 2014).

3. Discussion

There has been a very thin line of demarcation between the concepts of knowledge transfer (KT) and knowledge sharing (KS) (Johnsson, 2008; Liyanage, 2009; Riege, 2007; Schwart, 2006). Pauline and Suneson (2012) indicate that these concepts need to be understood from different perspectives. Nonaka and Takeuchi (1995) argued that KS is like KT. However, these two terms do not share the same characteristics. Argote and Ingram (2000) emphasise that KS is usually focused on the individual level, while knowledge transfer is used for groups, departments, and organisations. Although several studies have highlighted studies on knowledge sharing behaviour (KSB), very few scholars relate knowledge transfer with employees' behaviour or knowledge transfer behaviour (Osterloh & Frey, 2000; Szulanski, 2000; Tsai, 2001). Furthermore, over the past fifteen years, knowledge transfer has been discussed in-depth and breadth (Argote & Fahrenkopf, 2016) and has shown the growing importance of knowledge transfer behaviour (KTB). Behaviour is defined as an individual action based on certain situations or events that can be observed, measured, and repeated (Norfadzilah et al., 2018). The behaviour is different in each situation (Chatzoqlou & Vraimaki, 2009; Shafaei, & Nejati, 2023), and the immediate need for knowledge will affect the behaviour of an individual in the organisation (Stephen and Matthew, 2017).

Many researchers have identified the factors that can influence KT and its outcome, including the antecedents, processes, mechanisms, and barriers of KT (Hoff & Ridder, 2004; Syed-Ikhsan & Rowland, 2004; Rashman et. al., 2008; Saka-Helmout, 2009). Despite that, knowledge-sharing behaviour (KSB) concepts provide a different perspective. KSB is more about a 'share' manner, which means it is a form of behaviour to disclose information that gives benefits to the

organisations (Ain, 2013). Davenport and Prusak (1998) have defined KSB as involving knowledge exchange between people and groups of people. In comparison, Connelly and Kelloway (2001) believe KSB is a behaviour set that involves exchanging information or assistance with others.

In this research, the author points to several reasons why understanding the applicability of KT and practising KS are crucial, especially in challenging public sector organizations. Referring to Table 1.1, firstly, the modes of theory and practice for KT and KS are different. Theories of KT are based on processes that have been institutionalized and formalized in the organization. Thus, many KT practices and approaches are bound by the organization's structure and processes. However, KS is based on the sharing concept. This concept emphasizes that informal relationships lead to a more natural form of disclosure among members. Secondly, knowledge transfer is known to be organized and structured, compared to KS. Structure implies that there is a system that outlines how certain transferred activities are directed to achieve the goal of the organization. In a KT environment, the organization determines how information flows between levels within the organization. Namely, the clearer the structure in activities involving employees, the more transfer activities could take place. It is contradictory with KS, while the sharing session could happen anytime and anywhere. It allowed employees to share information and knowledge without guidelines.

*Table 2
Definition of Knowledge Transfer (identified from literature)*

Author	Year	Definitions and Perspective of KT	Element
Hamel	1989	KT is a process that depends on how easily knowledge can be transported, interpreted, and absorbed	Process
Szulanski	2000	KT had been described a process comprising source, channel, message, recipient, and context and its refer to a formally organised activity with specific boundary	Action
Argote	2003	KT as a process involved using knowledge acquired from another unit and possibly applying it on other situations	Process
Kalling	2004	KT as a convergence of knowledge from one place, person, ownership etc., to another and organisation learn from each other	Process
Syed-Ikhsan, Wang & Noe Carlile	2010	KT involved individual working together to share knowledge to mutual benefits	Action
Hoff & Ridder	2004	KT as process systematically organised exchange of information and skills between entities.	Action
Rashman	2004	The flow of knowledge within organisation is most commonly referred to as transfer of knowledge.	Process
Government of Alberta	2008	KT is involves either actively communicating to others what one knows, or actively consulting others in order to learn what they know.	Action

Kang	2012	KT is an active process that includes reading the context and culture and modifying practise to fit the new context.	Action
Mladkova	2016	KT is the process of capturing skills and information and sharing them between employees and also between parts of an organisation	Process
Narges	2017	KT is a tenure difference between knowledge source and a recipient categorized in three types (i.e downward, lateral and upward).	Process
Kang	2017	KT Involves ensuring the captivation of knowledge by the recipient and evaluating knowledge, and is more conceptual than process knowledge sharing	Action

Thirdly, knowledge transfer is known as the quantifiable approach. Quantifiable means the index of the transfer level of employees could be recorded and awarded accordingly. For instance, the organisation could exercise the KPI (Key Performance Index), which takes into consideration certain levels of information transfer among employees. That is why knowledge transfer can be measured in comparison to knowledge sharing. The nature of knowledge sharing, which is more flexible and relaxed, will not permit the organisation to count the level of sharing among employees in the organisation. Furthermore, KT is also acknowledged as an institutional-based activity. Szulanski (2000) highlighted that KT is a process comprising source, channel, message, recipient, and context and refers to a formally organised activity with specific boundaries. On the other hand, KS will not have to compile for specific boundaries because, its nature is more voluntary (Hensen, 2002). Thus, knowledge transfer terms are more appropriate to be used throughout the study as they involve the public sector organisation, which is a standard of procedure and boundaries in performing tasks. KS is more suitable for non-institutional sharing sessions.

The next element of KT is a knowledge transfer activity that should be properly planned. KT cannot be done if no proper guidelines are given. According to Hoff and Ridder (2004), KT is known as a process that systematically organises the exchange of information and skills between entities. Therefore, KT should be deliberated by the organisation to empower employees and transfer intellectual capital. Unlike knowledge sharing, the sharing activities could be done spontaneously based on the willingness of employees to share their experiences and knowledge. Knowledge transfer is also described as a focused activity involving employees in an organisation. KT involves ensuring the captivation of knowledge by the recipient and evaluating knowledge conceptually (Kang, 2017). Compared to knowledge sharing, it is more flexible and unfocused. Knowledge sharing is usually focused on the individual level, while knowledge transfer is focused on groups, departments, and organisations (Argote & Ingram, 2000).

The other difference between KT and KS is the communication style. Knowledge transfer generally involves two-way communication, while knowledge sharing tends more toward a multidirectional style of communication. Based on scholars' views, KT involves either actively communicating to others what one knows, or actively consulting others to learn what they know (Alberta, 2012). However, KS communicate the knowledge to multiple groups or levels of employees in a voluntary manner. Typically, KS is known for sharing the session in a multidirectional communication way. Therefore, the author insists on using knowledge transfer (KT) instead of knowledge sharing (KS) as

the dependent variable in this study because knowledge transfer was seen to be more appropriate for evaluating formal and structured activities among public sector employees.

4. Conclusion

The paper aims to identify the different meanings between knowledge-sharing behaviour and knowledge-transfer behaviour. Both terms are essential to assist the researcher in knowledge-based study. Knowledge-sharing behaviour among employees is more voluntary compared to knowledge transfer behaviour. The terms are used in various perspectives and research, whether in the public or private sector. The research also illustrated the differentiation between the terms knowledge management (KM), knowledge sharing (KS) and knowledge transfer (KT). In this regard, this conceptual paper attempts to shed some light on the body of literature, especially in knowledge management, knowledge transfer, knowledge sharing and behaviour areas.

Acknowledgments

The author is very thankful to all the associated personnel in any reference that contributed in/for the purpose of this research. Further, the research holds no conflict of interest and is not funded through any source.

Funding Details

This work was not supported by any authority.

Authors Contributions

Contribution of each author is equally distributed

Conflict of Interest

No conflict of interest associated with this publication.

References

- Alavi, M. & Leidner, D. E., (2001) Review: Knowledge management and knowledge management systems: Conceptual foundation and research issues, *MIS Quarterly Minneapolis*, 25(1), 107-137
- Ain, Z. Z.A. (2013) Requirement for knowledge sharing behaviour: a review of empirical finding. *Journal of Asian Scientific*, 3(6), 517-526
- Argote, L., Ingram, P., Levine, J. M., & Moreland, R. L. (2000). Knowledge Transfer in Organisations: Learning from the Experience of Others, *Organizational Behavior and Human Decision Processes*, 82(1), 1–8. <http://doi.org/10.1006/obhd.2000.2883>
- Argote, L., & Fahrenkopf, E. (2016). Organisational Behaviour and Human Decision Processes Knowledge transfer in organisations: The roles of members, tasks, tools, and networks. *Organisational Behaviour and Human Decision Processes*, 136, 146–159. <http://doi.org/10.1016/j.obhdp.2016.08.003>

- Blau, P. 1994. Exchange and power in Social Life. New York: Wiley and Sons.
- Bock G., Robert W. Z., Kim Y. & Lee J. (2005) Behavioural intention Formation in Knowledge Sharing : Examining the roles of Extrinsic Motivator, Social-Psychologica Forces, and Organisational Climate. *MIS Quarterly*. Vol 20. No 1 pp. 87-111
- Bhojaraju, G. (2005) Knowledge Management: Why do we need it for corporates? *Malaysian Journal of Library & Information Science*, 10(2), 37-50
- Carbrera A., & Cabrera, E. (2002). Knowledge-sharing dilemmas. *Organization studies*, 23, 687-710
- Carlile P.R. (2004) Transferring, Translating, and Transforming: An Integrative Framework For Managing Knowledge across Boundaries. pp. 555 – 568.
<http://dx.doi.org/10.1287/orsc.1040.0094>
- Champika, L., Taha, E., Tabarak, B., & Quiping, L. (2005) Knowledge communication and translation : A knowledge Transfer Model.
- Connelly, C. E. & Kelloway, E. K. (2001) Predictors of employees' perception of knowledge sharing cultures. Queen's centre for knowledge-base enterprise.
<https://www.business.queensu.ca/kbe>
- Darr E. D., Argote L., Epple D., (1995) The acquisition, Transfer, and Depreciation Knowledge in Service Organization: Productivity in Franchises
<doi.org/10.1287/mnsc.41.11.1750>
- Davenport, T., Prusak, L. (1998). Working knowledge: How organization manage what they know, Boston, MA: *Harvard Business School Press*.
- Dixon, N.M. (2000) Common Knowledge: How companies thrive by sharing what they know. *ACM Digital Library*.
- Drucker, P. F. (1999). Knowledge-worker productivity: The biggest challenge. *California Management Review*, 41, 2, 79-95.
- Garut, R. & Nayar, P.R. (1994) Transformative Capacity: Continual Structuring by Intertemporal Technology Transfer. *Strategic Management Journal*, 15(5) 365-385
- Gilbert, M. & Cordey-Hayes, M. (1996) Understanding the process of knowledge transfer to achieve successful technological innovation. *Technovation*, 16(6), 301-312
- Gangeswari T., Roziah M.R, Bahaman A. S. &Maimunah I. (2016) Knowledge sharing is knowledge transfer: A misconception in the literature. *Journal of Knowledge Management* Vol.20. Iss 4. <http://dx.doi.org/10.1108/11-2015-0427>

- Gupta, P., Bhattacharya, S., Neelam, N., & Kunte, M. (2016). Boomers Like to Confront, Generation Y Is Okay with Withdrawal, But They All Love to Negotiate in India, 33(4). <http://doi.org/10.1002/crq.21163>
- Hamel G., Doz Y. L & Prahalad C.K. (1989) Collaborate with Your Competitors and Win *Harvard Business Review*. January-February. pp 133-139
- Hansen, M.T. (2002) Knowledge network: explaining effective knowledge sharing in multiunit companies. *Organization Science*, 13, 232-249
- Hinna, A., Nito, E. D., Mangia, G. (2010) Board of Directors within public organisations: A literature review. *International Journal of Business Governance and Ethics*, 5(3), ISSN 1741-802X
- Hooff B. & Ridder J.A. (2004) Knowledge sharing in context : the influence of Organisational Commitment, communication climate and CMC use on knowledge sharing. *Journal of Knowledge Management*, 8(6), 117-130
- Kalling T. (2003) Knowledge Management and the occasional link with performance. *Journal of Knowledge Management*. ISSN 1367-3270
- Lai, J., Lui, S. S., & Tsang, E. W. K. (2016). Intra-firm Knowledge Transfer and Employee Innovative Behaviour: The Role of Total and Balanced Knowledge Flows, 33(1), 90–103. <http://doi.org/10.1111/jpim.12262>
- Ling C. T.N. (2011). Culture and trust in fostering knowledge-sharing. *Electronic journal of Knowledge Management*, 9(4), 328-339. <http://doi.org/10.1057/kmrp.2011.37>
- Liu, M. & Liu, N. (2008) Source of Knowledge acquisition and patterns of knowledge-sharing behaviours- An empirical study of Taiwanese high-tech firms. *International Journal of Information Management*, 28(5), 423-432
- Narges, G. Hossein, K. Hamidreza, Y. & Kamal, D. (2017) The effective contributing factors in knowledge sharing and knowledge transfer among academics case study: Tehran University of Medical Sciences). *Journal of Medical Education Spring*, 16(2), 71-88
- Nonaka I. & Takeuchi H. (1995). The knowledge –creating company. How Japanese companies create the dynamics of innovation. Published by Oxford University. <https://book.google.com.my/>
- Norfadzilah A.R, Abdul, N., Pangil, F. & Zin, L. (2016) Theories of Knowledge Sharing Behaviour in Business Strategy. *Procedia Economics and Finance*, 37(16), 545–553. [http://doi.org/10.1016/S2212-5671\(16\)30163-0](http://doi.org/10.1016/S2212-5671(16)30163-0)

- Osterloh, M. & Frey, B. S. (2000) Motivation, Knowledge Transfer, and Organizational Form. *Organization science*. 11 (5), 538-550
- Penning, J. M., & Harianto, F. (1992). Technological networking and innovation implementation. *Organization Science*, 3(3), 356-382
- Ramayah, T., Yeap, J.A.L., & Ignatius, J. (2013). An Empirical inquiry on knowledge sharing among academicians in higher learning institutions. *Minerva: A Review of Science, Learning and Policy*, 51, 131-154
- Rashman L., Withers E. & Hartley J. (2008) Organisational learning and knowledge in public Service organisations: A systematic review of the literature
- Saka-Helmhout A. (2009) Agency-Based View of Learning within the Multinational Corporation <http://www.sagepub.co.uk/journalsPermissions.nav>
<http://mlq.sagepub.com> Vol. 40(3): 259–274 1350–5076
- Schneider, A. & Samkin, G., (2008) Intellectual Capital Reporting by the New Zealand Local Government Sector, *Journal of Intellectual Capital*, 9, 456.
- Stephen & Matthew, D. (2017) Emerging power and emerging trends in global governance. *Global Governance*, 23(3) 483-502
- Sveiby, K. (2000) Measuring intangible assets – an emerging standard. In Morey, D., Mayburry, M. & Thuraishingham B. (Eds) *Knowledge Management –classic contemporary work*, Cambridge MA, MIT Press.
- Syed-Ikhsan S. O. & Rowland F. (2004) Knowledge management in a public organisation: A Study on the relationship between organisational elements and the performance of Knowledge transfer. *Journal of Knowledge Management*. ISSN 1367-3270
- Szulanski G. (1996) Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*. 10.1002/smj.4250171105
- Szulanski, G. (2000). The Process of Knowledge Transfer: A Diachronic Analysis of Stickiness, 82(1), 9–27. <http://doi.org/10.1006/obhd.2000.2884>
- Tomo, A. Mangia, G. & Consiglio, S. (2020) Information system and information technologies as enablers of innovation and knowledge creation and sharing in professional service firms. *Technology Analysis & Strategic Management*, 32(9)
- Tsai W. (2001) Knowledge Transfer in intra organisational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*. Vol 44. No 5 pp. 996-1004

Zyl A. V. (2006) Drivers of knowledge transfer between universities and industry R&D partners in South Africa. *Thesis Disertation*. University of Pretoria.



ISSN: : 1985-5079