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The Effect of Organisational Culture and Knowledge Environment on Organisational Success: Directions for Future Research

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Abstract

Increasingly, organisations strive to shape their knowledge environment and organisational culture for improved performance and organisational success. Despite that, existing evidence recounts the individual role of organisational culture, knowledge management and intellectual capital towards organisational performance and success, a comprehensive explanation of the effect of multiple dimensions of these factors on organisational success remains unexplored. This paper adds to existing literature by proposing that an organisation's knowledge environment combines its knowledge sharing practices (i.e. knowledge types, knowledge sharing approaches and knowledge sharing processes) and its intellectual capital. This paper presents a conceptual model on the relationship between organisational culture, knowledge environment and organisational success. The model proposes the role of organisational culture in shaping knowledge sharing practices, intellectual capital and organisational success. This research-in-progress concludes with directions for future research on the effect of organisational culture, knowledge sharing practices and intellectual capital on organisational success.

Keywords: Organisation Culture, Knowledge Sharing, Intellectual Capital, and Organisational Success.

1 Introduction

Increasingly, knowledge has become a key factor for sustainability of an organisation (Al. Othman and Sohaib 2016). The organisation's knowledge management practices influence its innovation capability (Liao et al. 2007) and value creation (Kianto et al. 2014). Well-planned knowledge management practices supports organisational performance (Hussinki et al. 2017; Wang et al. 2014). Although knowledge management is a multi-dimensional aspect, existing literature mainly explores the role of knowledge sharing to an organisation. Unfortunately, there is limited explanation of the contribution of various knowledge sharing practices to organisational success. Organisational knowledge sharing practices may include, but not limits to, orientation nor to tacit or explicit knowledge (Wang et al. 2014), application of codification or personalisation strategy (Choi et al. 2008; Hansen et al. 1999) and knowledge sharing processes of donating knowledge and collecting knowledge (Van den Hooff and de Leeuw van Weenen 2004). Understanding knowledge sharing practices alone does not provide sufficient explanation of an organisation's knowledge environment that supports organisational success. One must realise that an organisation's knowledge environment constitutes both knowledge sharing practices as the flow of knowledge and intellectual capital as a knowledge stock or knowledge assets (Chatzkel 2002; Martín-de-Castro et al. 2011).

Culture is a basic element to knowledge management (Chen et al 2011). Organisational culture encourages employees to create and share their knowledge within an organisation. For this reasons, organisations seek to establish an appropriate culture that introduces and supports knowledge management (Chen et al 2011). Organisational culture is a critical success factor for a knowledge management infrastructure that supports organisational success (Ziam et al. 2007). This is simply because the success or failure of the complete organisation usually depends on its culture (Schein 2004; Schein 2010). In addition, the sphere of knowledge in any organisation gives birth to creativity and innovation, which are considered as the key components for sustainability and organisation's success (Argote 2013). Despite the growing number of studies relating to organisational culture and knowledge management, there are limited studies that have shown organisation improved their performance through organisational culture, knowledge sharing practices and intellectual capital. Considering organisational culture, knowledge sharing and intellectual capital is one way to understand how knowledge-based organisations drift towards success. This research-in-progress paper will present a conceptual model on the relationship between organisational culture, organisational knowledge environment and organisational success.

2 Theoretical Background

2.1 Organisational Culture

Organisational culture is out- rightly considered as the most fundamental and constant strength within an organisation (Schein 2004). Organisational culture is a pattern of shared basic assumptions learned by a group as it solves its problems through external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein 2004; Schein 2010). There are different dimensions used to describe organisational culture. Organisational culture may include the following dimensions – information systems, organisational structure, processes, leadership, communication, reward systems and trust (Gupta and Govindarajan 2000). The above factors have been founded to influence knowledge sharing in organisations (Al-Alawi et al. 2007). Among the organisational culture dimensions, *mutual trust*, *profound communication* and *IT support* provide the foundation of an organisation's culture (Schein 2004). Trust embodies the beliefs about the anticipated behaviour and intensions of the involved entities (Johnson and Cullen 2002). Trust is an element of social systems (Lewis and Weigert 1985), as a core factor for performance and cooperation (de Jong et al. 2015) and knowledge sharing (Holste and Fields 2010). Communication, on the other hand, relates to human interaction through verbal and non-verbal language (Al-Alawi et al. 2007). Communication style and satisfaction are critical for knowledge sharing especially in the donation and collection of knowledge (Gumus 2007). Lastly, IT support for knowledge sharing could be for intellectual capital development and improved performance; however, there is insufficient evidence to confirm its role. IT support resonates from a support oriented organisation culture (Van Muijen et al. 1999). Organisations that focus on IT support for knowledge sharing indirectly encourage employees to share knowledge (Lin and Lee 2006). Consequently, IT support builds knowledge sharing capacities thus improving the organisation's innovation capability (Dewett and Jones 2001) – i.e. product innovation, process innovation and management innovation (Liao et al. 2007).

2.2 Knowledge Sharing Practices

Knowledge sharing is the activity of transferring knowledge in various forms of one person, group or organisation to another (McAdam et al. 2012). It affects the overall performance of an organisation (Boehm 2012). Knowledge sharing enables employees to increase their working skills (Bock et al. 2005). Knowledge sharing allows individuals to create valuable knowledge contents that enhances the production of organisational intellectual property capital and growth (Nonaka and Konno 1998). Although knowledge sharing is linked to performance, it remains difficult for an organisation to identify the specific knowledge sharing practices that support's performance. There are various knowledge sharing practices that are core to the organisation's operational and financial strategy and must be planned diligently after considering all requisite factors (Akbar 2003). First, one must remember the fact that knowledge manifests in two common *types*, hence, knowledge can be shared as tacit or explicit (Wang et al. 2014). Secondly, knowledge intensive organisations should pursue either codification or personalisation as a dominant strategy (Hansen et al. 1999). Thirdly, the *knowledge sharing process* consists of two dimensions namely knowledge donating and knowledge collecting (Lin 2007; Van den Hooff and de Leeuw van Weenen 2004).

Tacit knowledge sharing and explicit knowledge sharing may differ in the way, which influence the performance and success of an organisation. For instance, sharing explicit knowledge has greater impact on financial performance than operational performance while sharing tacit knowledge has a greater impact on operational performance than financial performance (Wang et al. 2014). On the other hand, the organisation's view of knowledge – i.e. explicit-oriented approach (also known as codification or commodity view of knowledge) or tacit-oriented approach (also known as personalisation or community view of knowledge) may influence its operations and efficiency (Choi and Lee 2003; Choi et al. 2008; McMahan et al. 2004). Combining both approaches may increase the organisation's level of performance (Choi and Lee 2003; Choi et al. 2008). For success, organisations should seek to align their knowledge management strategy to the business strategy (Greiner et al. 2007). Lastly, knowledge sharing process – donating and/or collecting knowledge – commonly affect employee's job performance which in return affects the organisation's performance (Obeidat et al. 2015).

2.3 Intellectual Capital

Intellectual capital is the organisation's knowledge stock – knowledge assets (Martín-de-Castro et al. 2011). At one point, intellectual capital is a two-level concept – human capital (knowledge created by and stored in a firm's employees-human resource) and structural capital (the embodiment, empowerment, and supportive infrastructure of human capital) (Martín-de-Castro et al. 2011). Similar research has proposed different framework of intellectual capital, which has three major components human capital, structural capital, and relational capital (Edvinsson and Malone 1997). Relational capital constitutes organisation's relationships with stakeholders (Edvinsson and Malone 1997). Human, structural and relational capital offers a powerful approach to differentiating organisational financial and non-financial performance (Wang et al. 2014; Youndt et al. 2004). Therefore, organisations incorporating all aspects of intellectual capital in their overall business strategies will improve the way they share knowledge, and ultimately improved operational and financial performance (Wang et al. 2014). Organisations should seek to align their knowledge management practices with their intellectual capital to support their strategic goals (Zhou and Fink 2003). There is strong evidence to suggest that intellectual capital supports organisation's performance, in a number of aspects such as value creation (Kianto et al. 2014) and innovation capability (Cabrilo and Dahms 2018), operations and financial performance (Hussinki et al. 2017; Wang et al. 2014). Nonetheless, organisations cannot ignore the close relationship between knowledge management and intellectual capital development for improved performance, value and success of the organisation.

2.4 Organisational Success

There multiple measures of organisational success based on intangible performance indicators such as leadership, innovation, reputation, employee satisfaction, and client satisfaction and/or tangible performance indicators such as revenue, profit, growth etc. (Ng et al. 2011; Simon et al. 2011). This paper recognises organisational success in terms of operational and financial performance. Operational success here refers to the following performance indicators – customer satisfaction, cost management and productivity while financial success relates to the following performance indicators – growth of the organisation's annual profits (Wang et al. 2014).

3 Research Model and Hypotheses

The research model presented in Figure 1 below presents the hypothesised relationship between organisational culture, knowledge sharing practices and organisational success. An organisation's knowledge environment constitutes not only the knowledge flows (knowledge processes) but also knowledge stocks (intellectual capital) (Chatzkel 2002). Organisational culture is critical for knowledge management and performance (Al Saifi 2015). Further still, knowledge management may, without other influences, drive organisational performance and survival (Omotayo 2015). Exploring organisational success drives us towards examining the role of organisational culture, knowledge sharing practices and intellectual capital.

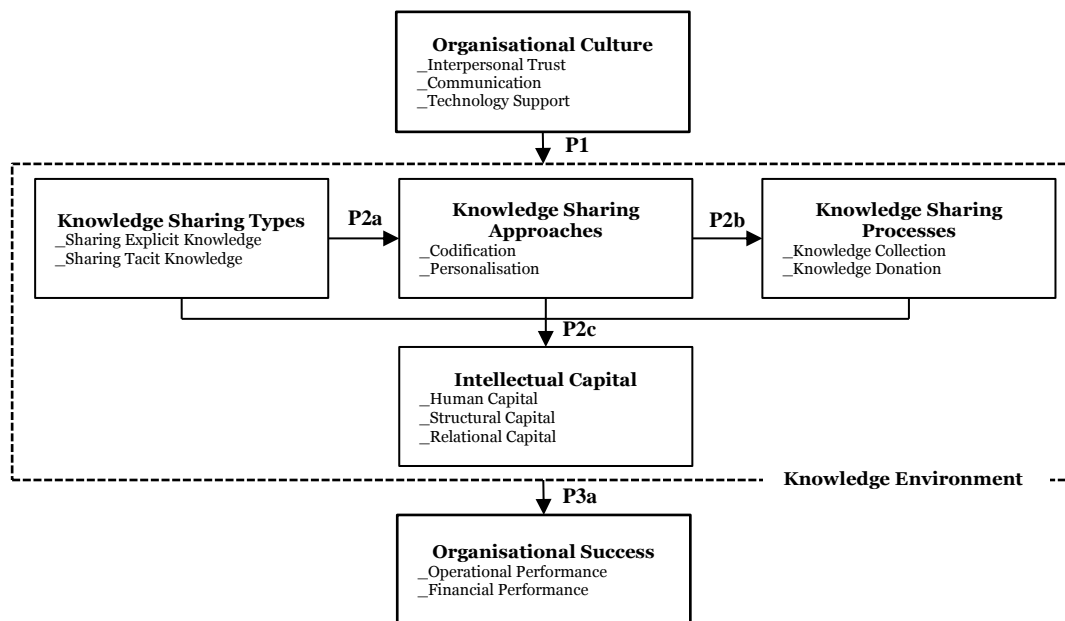


Figure 1. Research Model

Organisational culture tends to influence employee use of IT systems for knowledge sharing activities (Shao et al. 2015) and therefore affects knowledge sharing in an organisation (Al-Adaileh and Al-Atawi 2011; Al-Alawi et al. 2007; Shao et al. 2015; Suppiah and Singh Sandhu 2011). Ultimately, knowledge sharing supports both operational and financial benefits of an organisation (Wang et al. 2014), profitability and growth of an organisation (Wang and Wang 2012). In addition, knowledge sharing is significant in the development of intellectual capital (Kianto et al. 2014; Wang et al. 2016). A comprehensive exploration of knowledge sharing practices of an organisation, calls for a study of knowledge types (Lin 2007; Wang et al. 2014), knowledge management strategies (Hansen et al. 1999) and knowledge sharing processes of an organisation (Al Othman and Sohaib 2016; Lin 2007) as fundamental aspects for developing organisational intellectual capital (Wang et al. 2014). It is then likely that organisational culture that supports knowledge sharing enables an organisation to develop its intellectual capital for improved performance, which supports the organisational success.

Proposition 1: Organisational culture, such as trust, communication and IT support is positively related to the organisation's knowledge environment, whereby, organisational culture will positively affect knowledge sharing types, knowledge sharing approaches, knowledge sharing processes and intellectual capital.

Knowledge sharing is an essential intellectual capital development (Hsu and Sabherwal 2012; Wiig 1997; Zhou and Fink 2003). Knowledge sharing not only refers to the knowledge sharing processes – collection and donation – in an organisation, but also constitutes the organisation's knowledge sharing approaches and the type of knowledge shared widely across the organisation. In fact, there is a positive relationship between the knowledge sharing practices and intellectual capital (Hsu 2008; Karagiannis et al. 2008; Wang et al. 2014). Consequently, intellectual capital development enables the firm to perform better, especially when its knowledge management approaches are well developed (Hsu and Sabherwal 2012; Wang et al. 2016; Wang et al. 2014). Knowledge sharing practices improve organisational performance through the development of human capital (Hsu 2008), structural capital (Karagiannis et al. 2008), and relational capital (Bontis et al. 2007; Skaggs and Youndt 2004).

Proposition 2: The organisation's knowledge environment constitutes interrelated components such as knowledge sharing types, knowledge sharing approaches, knowledge sharing processes and intellectual capital. This interrelationship is such that;

Proposition 2a – c: Sharing a particular organisational knowledge type is positively related to organisation knowledge sharing approaches (i.e. personalisation and codification). Knowledge sharing approaches are positively related to knowledge sharing process (collection and donation) in organisations. The organisation's knowledge sharing practices (i.e. knowledge sharing types, knowledge sharing approaches and knowledge sharing processes) are positively related to intellectual capital.

Proposition 3: The organisation's knowledge environment, i.e. knowledge sharing types, knowledge sharing approaches, knowledge sharing processes and intellectual capital, is positively related to an organisation's operational and financial success.

Proposition 3a: Knowledge sharing practices affect an organisation's operational and financial success through its intellectual capital specifically, human, structural and relational capital.

4 Future Work and Research Method

Despite the growing number of research linking knowledge management and intellectual capital to organisational performance, there is limited explanation on the comprehensive nature of the knowledge environment and its antecedents and its role on organisational success. It is imperative to recognise knowledge sharing practices and intellectual capital as constitutive elements of an organisation's knowledge environment. Therefore, organisations have to shape their knowledge sharing practices towards intellectual capital development (Kianto et al. 2014) because these two factors are unavoidably interrelated in many ways (Zhou and Fink 2003). This paper thus provides the following questions as a direction for future research. How does organisational culture influence knowledge environment and organisational success? Is the effect of knowledge sharing practices on organisational success mediated by intellectual capital? We propose a mixed methods research design to study the research questions test and explain the propositions presented by the research model in Figure 1. A mixed method for this study may employ a cross sectional survey questionnaire and multiple case study interviews. Informed by Venkatesh et al. (2013), selecting a mixed methods approach for this study aims to corroborate the quantitative findings using qualitative explanations to improve the reliability of findings. While a cross sectional survey will enable a researcher to study the prevalence of the identified elements of organisational culture, knowledge sharing practices and intellectual capital development, a multiple case study will allow better generalizability and validity of findings (Yin 2018). A multiple case study will also offer richer and deeper explanation of the study variables and their interrelationship (Yin 2018).

5 Conclusion

To consider knowledge sharing as a factor for success, organisations will have to acknowledge that their knowledge environments constitute both knowledge flows – i.e. knowledge sharing practices and knowledge stocks – i.e. intellectual capital. Managing knowledge sharing practices requires the organisation to identify the core knowledge types shared among its employees, their suitable knowledge sharing strategy/approach and the flow of knowledge donation and collection between employees. Further still, it is important to realise that knowledge sharing facilitates intellectual capital development; therefore, organisations must carefully plan their knowledge sharing practices to support intellectual capital as a means to enabling organisational success. Lastly, organisations may consider shaping their organisational culture to support their knowledge environment, because organisational culture is critical in collaborative behaviour among people.

6 References

- Akbar, H. 2003. "Knowledge Levels and Their Transformation: Towards the Integration of Knowledge Creation and Individual Learning," *Journal of Management Studies* (40:8), pp. 1997-2021.
- Al-Adaileh, R. M., and Al-Atawi, M. S. 2011. "Organizational Culture Impact on Knowledge Exchange: Saudi Telecom Context," *Journal of knowledge Management* (15:2), pp. 212-230.
- Al-Alawi, A. I., Al-Marzooqi, N. Y., and Mohammed, Y. F. 2007. "Organizational Culture and Knowledge Sharing: Critical Success Factors," *Journal of knowledge management* (11:2), pp. 22-42.
- Al Othman, F. A., and Sohaib, O. 2016. "Enhancing Innovative Capability and Sustainability of Saudi Firms," *Sustainability* (8:12), p. 1229.

- Al Saifi, S. A. 2015. "Positioning Organisational Culture in Knowledge Management Research," *Journal of Knowledge Management* (19:2), pp. 164-189.
- Al. Othman, F., and Sohaib, O. 2016. "Enhancing Innovative Capability and Sustainability of Saudi Firms," *Sustainability* (8:12), pp. 1-16.
- Argote, L. 2013. *Organizational Learning: Creating, Retaining and Transferring Knowledge*. New York: Springer Science & Business Media.
- Boehm, E. 2012. "Improving Efficiency and Effectiveness in an Automotive R&D Organization," *Research-Technology Management* (55:2), pp. 18-25.
- Bontis, N., Seleim, A., and Ashour, A. 2007. "Human Capital and Organizational Performance: A Study of Egyptian Software Companies," *Management Decision* (45:4), pp. 789-801.
- Cabrilo, S., and Dahms, S. 2018. "How Strategic Knowledge Management Drives Intellectual Capital to Superior Innovation and Market Performance," *Journal of Knowledge Management*.
- Chatzkel, J. 2002. *Intellectual Capital*. Oxford, United Kingdom: John Wiley and Sons, Inc.
- Choi, B., and Lee, H. 2003. "An Empirical Investigation of Km Styles and Their Effect on Corporate Performance," *Information & Management* (40:5), pp. 403-417.
- Choi, B., Poon, S. K., and Davis, J. G. 2008. "Effects of Knowledge Management Strategy on Organizational Performance: A Complementarity Theory-Based Approach," *Omega* (36:2), pp. 235-251.
- de Jong, B. A., Dirks, K. T., and Gillespie, N. 2015. "Trust and Team Performance: A Meta-Analysis of Main Effects, Contingencies, and Qualifiers," *Academy of Management Proceedings: Academy of Management*, p. 14561.
- Dewett, T., and Jones, G. R. 2001. "The Role of Information Technology in the Organization: A Review, Model, and Assessment," *Journal of management* (27:3), pp. 313-346.
- Edvinsson, L., and Malone, M. S. 1997. "Intellectual Capital: Realizing Your Company'S True Value by Finding Its Hidden Brainpower,").
- Greiner, M. E., Böhmman, T., and Krcmar, H. 2007. "A Strategy for Knowledge Management," *Journal of knowledge management* (11:6), pp. 3-15.
- Gumus, M. 2007. "The Effect of Communication on Knowledge Sharing in Organizations," *Journal of Knowledge Management Practice* (8:2), pp. 15-26.
- Gupta, A. K., and Govindarajan, V. 2000. "Knowledge Flows within Multinational Corporations," *Strategic management journal*), pp. 473-496.
- Hansen, M. T., Nohria, N., and Tierney, T. 1999. "What's Your Strategy for Managing Knowledge," *Harvard business review* (77:2), pp. 106-116.
- Holste, J. S., and Fields, D. 2010. "Trust and Tacit Knowledge Sharing and Use," *Journal of knowledge management* (14:1), pp. 128-140.
- Hsu, I.-C. 2008. "Knowledge Sharing Practices as a Facilitating Factor for Improving Organizational Performance through Human Capital: A Preliminary Test," *Expert Systems with applications* (35:3), pp. 1316-1326.
- Hsu, I. C., and Sabherwal, R. 2012. "From Intellectual Capital to Firm Performance: The Mediating Role of Knowledge Management Capabilities," *IEEE Transactions on Engineering Management* (58:4), pp. 626-642.
- Hussinki, H., Ritala, P., Vanhala, M., and Kianto, A. 2017. "Intellectual Capital, Knowledge Management Practices and Firm Performance," *Journal of Intellectual Capital* (18:4), pp. 904-922.
- Johnson, J. L., and Cullen, J. B. 2002. "Trust in Cross-Cultural Relationships," in *The Blackwell Handbook of Cross-Cultural Management*, M.J. Gannon and K.L. Newman (eds.). Oxford UK: Blackwell, pp. 335-360.
- Karagiannis, D., Waldner, F., Stoeger, A., and Nemetz, M. 2008. "A Knowledge Management Approach for Structural Capital," in *Practical Aspects of Knowledge Management*, T. Yamaguchi (ed.). pp. 135-146.
- Kianto, A., Ritala, P., Spender, J.-C., and Vanhala, M. 2014. "The Interaction of Intellectual Capital Assets and Knowledge Management Practices in Organizational Value Creation," *Journal of Intellectual capital* (15:3), pp. 362-375.
- Lewis, J. D., and Weigert, A. 1985. "Trust as a Social Reality," *Social forces* (63:4), pp. 967-985.
- Liao, S.-H., Fei, W.-C., and Chen, C.-C. 2007. "Knowledge Sharing, Absorptive Capacity, and Innovation Capability: An Empirical Study of Taiwan's Knowledge-Intensive Industries," *Journal of information science* (33:3), pp. 340-359.
- Lin, C.-P. 2007. "To Share or Not to Share: Modeling Tacit Knowledge Sharing, Its Mediators and Antecedents," *Journal of business ethics* (70:4), pp. 411-428.
- Lin, H.-F., and Lee, G.-G. 2006. "Effects of Socio-Technical Factors on Organizational Intention to Encourage Knowledge Sharing," *Management decision* (44:1), pp. 74-88.

- Martín-de-Castro, G., Delgado-Verde, M., López-Sáez, P., and Navas-López, J. E. 2011. "Towards 'an Intellectual Capital-Based View of the Firm': Origins and Nature," *Journal of Business Ethics* (98:4), pp. 649-662.
- McAdam, R., Moffett, S., and Peng, J. 2012. "Knowledge Sharing in Chinese Service Organizations: A Multi Case Cultural Perspective," *Journal of Knowledge Management* (16:1), pp. 129-147.
- McMahon, C., Lowe, A., and Culley, S. 2004. "Knowledge Management in Engineering Design: Personalization and Codification," *Journal of Engineering Design* (15:4), pp. 307-325.
- Ng, H. S., Kee, D. M. H., and Brannan, M. 2011. "The Role of Key Intangible Performance Indicators for Organisational Success," *Proceedings of the 8th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning*.
- Nonaka, I., and Konno, N. 1998. "The Concept of 'Ba': Building a Foundation for Knowledge Creation," *California management review* (40:3), pp. 40-54.
- Obeidat, B. Y., Zyod, D. S., and Gharaibeh, A. a. H. 2015. "The Associations among Transformational Leadership, Transactional Leadership, Knowledge Sharing, Job Performance, and Firm Performance: A Theoretical Model," *Journal of Social Sciences (COES&RJ-JSS)* (4:2), pp. 848-866.
- Omotayo, F. O. 2015. "Knowledge Management as an Important Tool in Organisational Management: A Review of Literature,").
- Schein, E. H. 2004. *Organisational Culture and Leadership*. San Francisco, CA: Jossey-Bass.
- Schein, E. H. 2010. *Organizational Culture and Leadership*. John Wiley & Sons.
- Shao, Z., Wang, T., and Feng, Y. 2015. "Impact of Organizational Culture and Computer Self-Efficacy on Knowledge Sharing," *Industrial Management & Data Systems* (115:4), pp. 590-611.
- Simon, A., Kumar, V., Schoeman, P., Moffat, P., and Power, D. 2011. "Strategic Capabilities and Their Relationship to Organisational Success and Its Measures: Some Pointers from Five Australian Studies," *Management Decision* (49:8), pp. 1305-1326.
- Skaggs, B. C., and Youndt, M. 2004. "Strategic Positioning, Human Capital, and Performance in Service Organizations: A Customer Interaction Approach," *Strategic Management Journal* (25:1), pp. 85-99.
- Suppiah, V., and Singh Sandhu, M. 2011. "Organisational Culture's Influence on Tacit Knowledge-Sharing Behaviour," *Journal of knowledge management* (15:3), pp. 462-477.
- Van den Hooff, B., and de Leeuw van Weenen, F. 2004. "Committed to Share: Commitment and Cmc Use as Antecedents of Knowledge Sharing," *Knowledge and process management* (11:1), pp. 13-24.
- Van Muijen, J. J., Koopman, P., De Witte, K., and De Cock, G. 1999. "Organizational Culture: The Focus Questionnaire," *European Journal of Work and Organizational Psychology* (8:4), pp. 551-568.
- Venkatesh, V., Brown, S. A., and Bala, H. 2013. "Bridging the Qualitative-Quantitative Divide: Guidelines for Conducting Mixed Methods Research in Information Systems," *MIS quarterly* (37:1).
- Wang, Z., Wang, N., Cao, J., and Ye, X. 2016. "The Impact of Intellectual Capital-Knowledge Management Strategy Fit on Firm Performance," *Management Decision* (54:8), pp. 1861-1885.
- Wang, Z., Wang, N., and Liang, H. 2014. "Knowledge Sharing, Intellectual Capital and Firm Performance," *Management decision* (52:2), pp. 230-258.
- Wiig, K. M. 1997. "Integrating Intellectual Capital and Knowledge Management," *Long Range Planning* (30:3), pp. 399-405.
- Yin, R. K. 2018. *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage Publications, Inc.
- Youndt, M. A., Subramaniam, M., and Snell, S. A. 2004. "Intellectual Capital Profiles: An Examination of Investments and Returns," *Journal of Management Studies* (41:2), pp. 335-361.
- Zhou, A. Z., and Fink, D. 2003. "The Intellectual Capital Web: A Systematic Linking of Intellectual Capital and Knowledge Management," *Journal of intellectual capital* (4:1), pp. 34-48.
- Ziam, H., Taoglu, E., and Ziam, S. 2007. "Performance of Knowledge Management Practices: A Causal Analysis," *Journal of Knowledge Management* (11:6), pp. 54-67.