

**INVESTIGATING THE KNOWLEDGE SHARING  
ACTIVITIES AMONG POSTGRADUATE STUDENTS  
USING SOCIAL MEDIA TOOLS**



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## Abstrak

Perkongsian pengetahuan adalah satu proses di mana individu saling bertukar-tukar pengetahuan dan bersama-sama mencipta pengetahuan baharu. Pada masa kini, selain daripada berinteraksi secara bersemuka, para pelajar didapati turut berkongsi pengetahuan melalui perkakasan media sosial. Media sosial dianggap sebagai nilai utama bagi memudahkan perkongsian pengetahuan dan tugas-tugas utama bagi menyokong komunikasi harian dalam kampus. Masih terdapat banyak dimensi perkongsian pengetahuan dalam persekitaran media sosial yang belum dikaji. Banyak juga persoalan yang masih tidak terjawab dan perlu diterokai daripada keseluruhan perkakasan media sosial yang berbeza ini. Oleh itu, kajian ini bertujuan untuk meninjau aktiviti perkongsian pengetahuan dalam kalangan pelajar pasca siswazah tempatan dan antarabangsa di Universiti Utara Malaysia (UUM) serta mengenal pasti manfaat dan halangan dalam penggunaan perkakasan media sosial bagi tujuan perkongsian pengetahuan. Data dikumpulkan melalui pendekatan kualitatif. Seramai 12 orang pelajar pasca siswazah telah ditemuramah dan jawapan diterima melalui temu bual semi-struktur. Kaedah analisis tafsiran telah digunakan untuk mencari tema dengan menggunakan perisian NVivo. Keputusan kajian ini merangkumi empat seksyen berdasarkan teori Nonaka dan Takeuchi, dalam seksyen pemasyarakatan, dapatan kajian menunjukkan bahawa aktiviti-aktiviti pelajar termasuklah pertukaran pengalaman dan perspektif mengesahkan kepentingan media sosial dalam mengatasi masa, jarak geografi dan kos yang menghalang perkongsian pengetahuan serta menyediakan lebih keyakinan bagi para pelajar untuk berkongsi idea. Selain itu, beberapa halangan masih menjadi isu untuk berkongsi pengetahuan seperti kekurangan simbol matematik dan budaya. Dalam seksyen penzahiran (*externalization*), dapatan kajian menunjukkan mereka gambar rajah dan mendokumentasikan fail sebagai aktiviti pelajar serta menggambarkan kepentingan penggunaan media sosial dalam kerja mendokumentasi untuk menyimpan fail dan gambar rajah dalam talian serta meningkatkan penguasaan bahasa Inggeris dan melindunginya daripada virus. Sementara kekangannya pula ialah limitasi dalam kerja memuat turun. Dalam seksyen kombinasi dapatan kajian menunjukkan pengubahsuaian dan refleksi sebagai aktiviti dalam kalangan ahli kumpulan dan menggambarkan manfaat media sosial semasa menggabungkan kerja untuk menyiapkan tugas dan projek adalah mudah untuk digunakan dan menjimatkan kos kertas. Sementara kekangannya pula ialah limitasi dalam kerja memuat turun. Dalam seksyen penghayatan atau internalisasi dapatan kajian menunjukkan semakan semula dan refleksi sebagai aktiviti dalam kalangan pelajar. Manfaatnya termasuk mencipta idea baharu dan memperoleh pemahaman yang mendalam, manakala kekurangan interaksi peribadi dan kelewatan untuk menjawab merupakan kekangan dalam perkongsian pengetahuan. Kajian ini memberikan sumbangan melalui penggunaan model Nonaka dan Takeuchi dengan institusi-institusi pengajian tinggi. Dalam konteks yang sama, terdapat beberapa kajian empirikal yang memberikan tumpuan kepada penggunaan teknologi maklumat (IT) dengan perkongsian pengetahuan. Oleh itu, penyelidikan ini diperlukan sebagai tambahan kepada literatur dengan mengetengahkan kekangan dan manfaat melalui penggunaan teknologi baharu untuk berkongsi pengetahuan dalam kerja berpasukan.

**Kata kunci:** Perkongsian pengetahuan, media sosial, siswazah, kerja kumpulan, institusi pengajian tinggi



## ABSTRACT

Knowledge sharing is a process where individuals mutually exchange their knowledge and jointly create new knowledge. Recently, it is found that besides face-to-face interactions, students also share their knowledge through social media tools. Social media is considered as the key value in the campus to facilitate knowledge sharing and the main tasks in order to support the daily communication. Many dimensions of knowledge sharing in social media environments have not yet been examined. Also many questions are still unanswered and need to be explored across different social media tools. Thus, this research aims to explore the knowledge sharing activities among local and international postgraduate students at Univirsiti Utara Malaysia (UUM) as well as find the benefits and barriers through using social media tools during sharing knowledge. Data were collected through qualitative approach. A total of 12 postgraduate students were interviewed and received answers from them through semi-structure interview. Interpretive analysis method was used to find the themes by using Nvivo software. The results for this study included four sections based on Nonaka and Takeuchi theory, in the socialization section the findings show the activities for students include exchange experience and perspective as well as confirmed the important of social media in overcome time, geographical distance and cost that is a barriers to share knowledge as well as provide more confident to share ideas for students. As well as, some barriers that still issues to sharing knowledge such as lack of math-symbol and culture. In externalization section, the findings show the design the diagram and document the files as activities as well as show the important of using social media in documentation to save the files and diagram online as well as enhance English language and protect from viruses. While the barriers include uploading limitation. In combination section the findings show the modification and reflection as activities among group member and show the benefit of social media during combine the work for assignment and project is easy to use and saving paper cost. While, the barriers is downloading limitation. In internalization section the findings show the review and reflection as activities among student. The benefits include create new idea and acquiring in depth understanding while lack of personal interaction and late in answering as barriers to share knowledge. This study contributed by using the Nonaka and Takeuchi model with higher educational institutions. In the same context, there is few empirical studies focused on the IT with share knowledge, therefore this research sought to add information into the literature by shed light the barriers and the benefits through utilize the new technologies for share know among the team work.

**Keywords: Knowledge sharing, social media, postgraduate, group work, higher education institution**

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## **List of Abbreviations**

SOC: School of Computing

CMC: Computer Mediated Communication

IT: Information Technology

ICT: Information Communication Technology

KM: Knowledge Management

SECI: Socialization, Externalization, Combination, Internalization

SNS: Social Network Site

UUM: Universiti Utara Malaysia



# CHAPTER ONE

## INTRODUCTION

### 1.1 Introduction

Recently, there has been a growing attention in treating knowledge as an important institutional resource. Regardless of the knowledge forms, it has been increasingly recognized as an important asset in any modern organization (Saad & Haron, 2013). Knowledge is an essential factor and successful application that helps institution to create services and provide products (Adhikari, 2010). Knowledge can be defined as a combination of values, experience, expert idea and context of information that helps to assess and incorporate new information and experience (Akhavan & Hosnavi, 2010).

Since early 1990's, many institutions have been implementing Knowledge Management (KM) to achieve competitiveness (Suhaimi, Zaki, Bakar, & Alias, 2006). KM is known in general as a discipline for identification, collection, storage, and sharing of knowledge and its application. In addition, knowledge and KM have become increasingly the significant features of the management research literatures in recent years. Moreover, the importance of KM and learning subjects are increasing in many institutions to present opportunities and challenges for academic centers (Akhavan & Hosnavi, 2010). It helps the institutions to improve the teaching and learning environment (Adhikari, 2010).

Thus, over the past ten years, several institutions, including higher education institutions, have adopted KM effectively because it is considered as an essential tool

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## REFERENCES

- Adhikari, D. R. (2010). Knowledge Management in Academic Institutions. *International Journal of Educational Management*, 24(2), 94-104. doi:10.1108/09513541011020918
- Aghaee, N. M. (2010). *Social Media Use in Academia*. Unpublished Master Thesis, UPPSALA Universtet.
- Akhavan, P., & Hosnavi, R. (2010). *Developing a Knowledge Management framework based on Km cycle in non-profit educational centers: A multi case analysis*. IEEE International Conference on Management of Innovation & Technology, 889-893. doi:10.1109/ICMIT.2010.5492809
- Akhavan, P., Ramezan, M., & Moghaddam, J. Y. (2013). Examining the Role of Ethics in Knowledge Management Process: Case Study: An Industrial Organization. *Journal of Knowledge-Based Innovation in China*, 5(2), 129–145. doi:10.1108/JKIC-04-2013-0008
- Al-Gahtani, S. S., Hubona, G. S., & Wang, J. (2007). Information Technology (IT) in Saudi Arabia: Culture and the acceptance and use of IT. *Information & Management*, 44(8), 681-691.
- Alqahtani, F. H., Zakaria, M. H., & Watson, J. (2010). *Web 2.0 Applications in Enterprises and Education*. Paper Presented in the International Conference on e-Commerce, e-Administration, e-Society, e-Education, and e-Technology. Retrieved on 20 January 2015 from <http://fac.ksu.edu.sa/fhalqahtani/publication/83335#sthash.OoqD7G4V.dpuf>
- Amayah, A. T. (2013). Determinants of Knowledge Sharing in a Public Sector Organization. *Journal of Knowledge Management*, 17(3), 454-471.
- Analoui, B. D., Sambrook, S., & Doloriert, C. H. (2014). Engaging Students in Group Work to Maximise Tacit Knowledge Sharing and Use. *The International Journal of Management Education*, 12(1), 35–43. doi:10.1016/j.ijme.2013.08.002
- Atkinson, R., & Flint, J. (2001). Accessing Hidden and Hard-to-Reach Populations: Snowball Research Strategies. *Social Research Update*, 33(1), 1-4.

- Atkočiūnienė, Z. O. (2014). Knowledge Management: Collaborative Knowledge Management Aspect. *Electronic Learning, Information and Communication: Theory and Practice*, (1), 53-63.
- Bakhuisen, N. (2012). *Knowledge Sharing using Social Media in the Workplace*. Unpublished Master thesis, VU University Amsterdam.
- Banzato, M. (2012). Peer Reviewed Papers: A Case Study of Teachers' Open Educational Practices. *Journal of E-Learning and Knowledge Society*, 8(September), 153–163.
- Barczyk, C. C., & Duncan, D. G. (2013). Facebook in Higher Education Courses: An Analysis of Students' Attitudes. *Community of Practice, and Classroom Community*, 6(1), 1–11. doi:10.3968/j.ibm.1923842820130601.1165
- Barkley, C. (2012). *School Leader Use of Social Media for Professional Discourse*. Virginia Commonwealth University. Retrieved from [http://scholar.google.ca/scholar?start=10&q=weft+qda&hl=fr&as\\_sdt=0&as\\_ylo=2007#7](http://scholar.google.ca/scholar?start=10&q=weft+qda&hl=fr&as_sdt=0&as_ylo=2007#7)
- Baro, E. E., Ebiagbe, E. J., & Godfrey, V. Z. (2013). Web 2.0 Tools Usage: A Comparative Study of Librarians in University Libraries in Nigeria and South Africa. *Library Hi Tech News*, 30(5), 10–20. doi:10.1108/LHTN-04-2013-0021
- Begona Lloria, M., & Peris-Ortiz, M. (2014). Knowledge Creation: The Ongoing Search for Strategic Renewal. *Industrial Management & Data Systems*, 114(7), 1022-1035.
- Bhatt, G. D. (2001). Knowledge Management in Organizations: Examining the Interaction between Technologies, Techniques, and People. *Journal of Knowledge Management*, 5(1), 68–75. doi:10.1108/13673270110384419
- Bowen, G. A. (2008). Naturalistic Inquiry and the Saturation Concept: A Research Note. *Qualitative Research*, 8(1), 137–152. doi:10.1177/1468794107085301
- Brewer, P., & Brewer, K. (2010). Knowledge Management, Human Resource Management, and Higher Education: A Theoretical Model. *Journal of Education for Business*, 85(6), 330–335. doi:10.1080/08832321003604938
- Burns, N., & Grove, S. K. (2010). *Understanding Nursing Research: Building an Evidence-Based Practice* (5th Ed.). Elsevier Saunders.

- Casimir, G., Ng, Y. N. K., & Cheng, C. L. P. (2012). Using IT to Share Knowledge and the TRA. *Journal of Knowledge Management*, 16(3), 461–479. doi:10.1108/13673271211238779
- Chao, J. (2007). *Student Project Collaboration Using Wikis*. Paper Published in CSEET '07. 20th Conference on Software Engineering Education & Training, IEEE Xplore. Retrieved on 5th February 2015, from <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=4271613>
- Chen, H., Ragsdell, G., O'Brien, A., & Nunes, M. B. (2012). *A Proposed Model of Knowledge Management in the Software Industry Sector*. Seventh International Conference on Digital Information Management (ICDIM 2012), 291–296. doi:10.1109/ICDIM.2012.6360141
- Cheng, M., Ho, J. S., & Lau, P. M. (2009). Knowledge Sharing in Academic Institutions: A Study of Multimedia University Malaysia. *Electronic Journal of Knowledge Management*, 7(3), 313–324.
- Chipangura, B. (2013). *Categorizing the Provision of Mobile Centric Information Access and Interaction for Higher Educational Institutions*. Proceedings of the South African Institute for Computer Scientists and Information Technologists Conference on - SAICSIT '13, 101. doi:10.1145/2513456.2513460
- Choo, C. W., & Johnston, R. (2004). Innovation in the Knowing Organization: A Case Study of an e- Commerce Initiative. *Journal of Knowledge Management*, 8(6), 77-92.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education: The Higher Education Academy Innovation Way*. York Science Park, Heslington, York YO10 5BR.
- Cranfield, D. J., & Taylor, J. (2008). Knowledge Management and Higher Education: A UK Case Study. *The Electronic Journal of Knowledge Management*, 6(2), 85–100.
- Creighton, J. L., Foster, J. W., Klingsmith, L., & Withey, D. K. (2013). I Just Look It Up: Undergraduate Student Perception of Social Media Use in Their in Their Academic Success. *The Journal of Social Media in Society*, 2(2), 26-46.

- Creswell J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE.
- Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (2nd Ed.). New Delhi: Sage publishers.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design*. Thousand Oaks, CA: Sage.
- Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, Social Media, and Self-Regulated Learning: A Natural Formula for Connecting Formal and Informal Learning. *The Internet and Higher Education*, 15(1), 3–8. doi:10.1016/j.iheduc.2011.06.002
- Dalkir, K. (2013). *Knowledge Management in Theory and Practice*. Routledge. Retrieved from <http://books.google.com/books?hl=en&lr=&id=CU20AAAAQBAJ&oi=fnd&pg=PP2&dq=Knowledge+Management+in+Theory+and+Practice&ots=lw9IVsJIqn&sig=31mFKW5sff49MXRtMd8IQ7P9QaU>
- Davenport, T. H., & Hansen, M. T. (1999). *Knowledge Management at Andersen Consulting*. Harvard Business School Pub.
- DeAndrea, D. C., Ellison, N. B., LaRose, R., Steinfield, C., & Fiore, A. (2012). Serious Social Media: On the Use of Social Media for Improving Students' Adjustment to College. *The Internet and Higher Education*, 15(1), 15–23. doi:10.1016/j.iheduc.2011.05.009
- DeWitt, D., Alias, N., Siraj, S., & Zakaria, A. R. (2014). Interactions in Online Forums: A Case Study among First Year Undergraduate Students. *Frontiers in Education (FE)*, 2(1), 6–13. Retrieved from <http://eprints.um.edu.my/9489/>
- DeWitt, D., Naimie, Z., & Siraj, S. (2013). Technology Applications Used by First Year Undergraduates in a Malaysian Public University. *Procedia - Social and Behavioral Sciences*, 103, 937–945. doi:10.1016/j.sbspro.2013.10.416
- Du, Z., Fu, X., Zhao, C., & Liu, T. (2012). *University campus social network system for knowledge sharing*. In Systems and Informatics (ICSAI), 2012 International Conference on (pp. 2505-2508). IEEE.

- Duncan, D. G., & Barczyk, C. C. (2013). Facebook in the University Classroom: Do Students Perceive that it Enhances Community of Practice and Sense of Community? *International Journal of Business and Social Science*, 4(3), 1–14.
- Easa, N. F. H. (2012). *Knowledge Management and the SECI Model: A Study of Innovation in the Egyptian Banking Sector*. Doctoral dissertation, University of Stirling.
- Feller, J., Parhankangas, A., Smeds, R., & Jaatinen, M. (2013). How Companies Learn to Collaborate : Emergence of Improved Inter-Organizational Processes in R&D Alliances. *Organization Studies*, 34, 1–47.
- Fullwood, R., Rowley, J., & Delbridge, R. (2013). Knowledge Sharing amongst Academics in UK Universities. *Journal of Knowledge Management*, 17(1), 123–136. doi:10.1108/13673271311300831
- Garrison, D. R. (2000). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. *The internet and higher education*, 2(2), 87–105.
- Gendreau, O., & Robillard, P. N. (2013). *Knowledge Acquisition Activity in Software Development*. In *Advances in Information Systems and Technologies*, 206, 1–10. doi:10.1007/978-3-642-36981-0
- Gikas, J., & Grant, M. M. (2013). Mobile Computing Devices in Higher Education: Student Perspectives on Learning with Cellphones, Smartphones & Social Media. *The Internet and Higher Education*, 19, 18–26. doi:10.1016/j.iheduc.2013.06.002
- Goh, S. K., & Sandhu, M. S. (2013). Affiliation, Reciprocal Relationships and Peer Pressure in Knowledge Sharing in Public Universities in Malaysia. *Asian Social Science*, 9(7), 290–298. doi:10.5539/ass.v9n7p290
- Goh, S. K., & Sandhu, M. S. (2013). Knowledge Sharing Among Malaysian Academics: Influence of Affective Commitment and Trust. *The Electronic Journal of Knowledge Management*, 11(1), 38–48.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8(4), 597–606.

- Gordeyeva, I. (2010). *Enterprise 2.0: Theoretical Foundations of Social Media Tools Influence on Knowledge Sharing Practices in Organizations*. Master Thesis, University of Twente.
- Gruzd, A., Staves, K., & Wilk, A. (2012). Connected Scholars: Examining the Role of Social Media in Research Practices of Faculty Using the UTAUT Model. *Computers in Human Behavior*, 28(6), 2340–2350. Retrieved from doi:10.1016/j.chb.2012.07.004
- Harvey, W. S. (2011). Strategies for Conducting Elite Interviews. *Qualitative Research*, 11(4), 431–441. doi:10.1177/1468794111404329
- Hendriks, P. (1999). Why Share Knowledge? The Influence of ICT on the Motivation for Knowledge Sharing. *Knowledge and process management*, 6(2), 91–100.
- Hew, K. F. (2007). Knowledge Sharing In Online Environments: A Qualitative Case Study. *Journal of the American Society for Information Science and Technology*, 58(14), 2310–2324. doi:10.1002/asi
- Ho, R. C., Wah, S. K., Yi, C. W., To, B. K., & Kit, C. (2013). *Knowledge Management Using Social Media: A Comparative Study between Blogs and Facebook*. Proceedings of the American Society for Information Science and Technology, (2000), 1–9.
- Hooff, B. Van Den, & Ridder, J. A. De. (2004). Knowledge Sharing in Context: The Influence of Organizational Commitment, Communication Climate and CMC Use on Knowledge Sharing. *Journal of Knowledge Management*, 8(6), 117–130. doi:10.1108/13673270410567675
- Hrastinski, S., & Aghaee, N. M. (2011). How Are Campus Students Using Social Media to Support Their Studies? An Explorative Interview Study. *Education and Information Technologies*, 17(4), 451–464. doi:10.1007/s10639-011-9169-5
- Isika, N. U., Ismail, M. A., & Khan, A. F. A. (2013). Knowledge Sharing Behaviour of Postgraduate Students in University of Malaya. *The Electronic Library*, 31(6), 713–726. doi:10.1108/EL-02-2012-0021
- Ives, W., Torrey, B., & Gordon, C. (1997). Knowledge Management: An Emerging Discipline with a Long History. *Journal of Knowledge Management*, 1(4), 269–274.

- Jacob, S. A., & Furgerson, S. P. (2012). Writing Interview Protocols and Conducting Interviews: Tips for Students New to the Field of Qualitative Research. *The Qualitative Report*, 17(42), 1-10.
- Janssen, C. J. (2007). *Google Docs*. Retrieved from <http://www.techopedia.com/definition/14650/data-preprocessing>
- Jennex, M. E., Smolnik, S., & Croasdell, D. (2014). *Knowledge Management Success in Practice*. 47th Hawaii International Conference on System Science Knowledge. doi:10.1109/HICSS.2014.450
- Johannessen, J.-A., Olaisen, J., & Olsen, B. (2001). Mismanagement of Tacit Knowledge: The Importance of Tacit Knowledge, the Danger of Information Technology, and What to Do about It. *International Journal of Information Management*, 21(1), 3–20. doi:10.1016/S0268-4012(00)00047-5
- John W. Creswell, & Dana L. Miller. (2000). Determining Validity in Qualitative Inquiry. *Theory into Practice*, 39(3), 124–130.
- Kan, M. M., & Parry, K. W. (2004). Identifying Paradox: A Grounded Theory of Leadership in Overcoming Resistance to Change. *Leadership Quarterly*, 15(4), 467–491. doi:10.1016/j.leaqua.2004.05.003
- Keller, C. & Hrastinski, S. (2006). *Learning Styles, Age and Perceptions of Online discussions*. Proceedings of the 5th European Conference on e-Learning, Winchester.
- Korpman, R. a. (2004). Finding Common Ground. *Health management technology*, 25(12), 58.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Age International. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:No+Title#0>
- Kuzel, A. J., & Like, R. C. (1991). Standards of Trustworthiness for Qualitative Studies in Primary Care. *Primary care research: Traditional and innovative approaches*, 138-158.
- Laroche, M., Habibi, M. R., & Richard, M. O. (2013). To Be or Not to Be in Social Media: How Brand Loyalty Is Affected by Social Media? *International Journal of Information Management*, 33(1), 76–82. doi:10.1016/j.ijinfomgt.2012.07.003

- Lee, G., & Kwak, Y. H. (2012). An Open Government Maturity Model for Social Media-Based Public Engagement. *Government Information Quarterly*, 29(4), 492–503. doi:10.1016/j.giq.2012.06.001
- Lewis, B. K. (2009). *Social media and Strategic Communications: Attitudes and Perceptions among College Students*. Doctoral dissertation, Oklahoma State University.
- Li, W. (2010). Virtual Knowledge Sharing in a Cross-Cultural Context. *Journal of Knowledge Management*, 14(1), 38–50. doi:10.1108/13673271011015552
- Lipp, A., Davis, R., Peter, R., & Davies, J. (2014). The Use of Social Media among Health Care Professionals within an Online Postgraduate Diabetes Diploma Course. *Practical Diabetes*, 31(1), 14–17. doi:10.1002/pdi.1821
- López-Nicolás, C., Mero, Á. L., & No-Cerdán. (2011). Strategic Knowledge Management, Innovation and Performance. *International Journal of Information Management*, 31(6), 502–509. doi:10.1016/j.ijinfomgt.2011.02.003
- Lu, R., & Liu, J. (2008). *The Research of the Knowledge Management Technology in the Education*. International Symposium on Knowledge Acquisition and Modeling, 551–554. doi:10.1109/KAM.2008.123
- Malhotra Y. (1998). Deciphering the Knowledge Management Hype. *The Journal for Quality and Participation*, 21(4), 58.
- Mangold, W. G., & Faulds, D. J. (2009). Social Media: The New Hybrid Element of the Promotion Mix. *Business Horizons*, 52(4), 357–365. doi:10.1016/j.bushor.2009.03.002
- Martensson, M. (2000). A Critical Review of Knowledge Management as a Management Tool. *Journal of Knowledge Management*, 4, 204–216.
- Martín-de-Castro, G., López-Sáez, P. & Navas-López, J.E. (2008). Processes of Knowledge Creation in Knowledge-Intensive Firms: Empirical Evidence from Boston's Route 128 and Spain. *Technovation*, 28(4), 222-230.
- Marwick, A. D. (2001). *Knowledge Management Technology*. IBM System.
- McDonald, H., & Adam, S. (2003). A Comparison of Online and Postal Data Collection Methods in Marketing Research. *Marketing Intelligence & Planning*, 21(2), 85-95.



- McElroy, M. W. (2009). Integrating Complexity Theory , Knowledge Management and Organizational Learning. *Journal of Knowledge Management*, 4, 195–203.
- Mclean, L. D. (2004). *A Review and Critique of Nonaka and Takeuchi 'S Theory of Organizational Knowledge Creation*. Fifth International Conference on HRD Research and Practice across Europe by AHRD and UFHRD, Limerick, Ireland.
- Mehralian, G. A., Nazari, J., Akhavan, P., & Reza Rasekh, H. (2014). Exploring the Relationship between the Knowledge Creation Process and Intellectual Capital in the Pharmaceutical Industry. *The Learning Organization*, 21(4), 258-273.
- Meihami, B., & Meihami, H. (2014). Knowledge Management: A Way to Gain a Competitive Advantage in firms (Evidence of Manufacturing Companies). *International Letters of Social and Humanistic Sciences*, 3, 80–91.
- Menguc, B., Auh, S., & Uslu, A. (2012). Customer Knowledge Creation Capability and Performance in Sales Teams. *Journal of the Academy of Marketing Science*, 41(1), 19–39. doi:10.1007/s11747-012-0303-8
- Nokhal, A. M. S. S. (2013). *The Integration of Information Technology Skills in Accounting Curriculum at Public Universities in Egypt*. Doctoral dissertation, University Utara Malaysia.
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1). Retrieved from <http://pubsonline.informs.org/doi/abs/10.1287/orsc.5.1.14>
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford university press.
- Nonaka, I., Toyama, R., & Konno, N. (2000). SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. *Long range planning*, 33(1), 5-34.
- Nonaka, I., Umemoto, K., & Senoo, D. (1996). From Information Processing to Knowledge Creation : A Paradigm Shift in Business Management. *Technology in Society*, 18(2), 203–218.
- Noordhoek, A. (2013). A Research and Advice on How Events Can Contribute to Knowledge Sharing at Bureau NoorderRuimte.

- Panahi, S., Watson, J., & Partridge, H. (2012a). Social Media and Tacit Knowledge Sharing: Developing a Conceptual Model. *World Academy of Science, Engineering and Technology*, 64, 1095–1102.
- Panahi, S., Watson, J., & Partridge, H. (2013a). Towards Tacit Knowledge Sharing over Social Web Tools. *Journal of Knowledge Management*, 17(3), 379–397. doi:10.1108/JKM-11-2012-0364
- Parahoo, K. (1997). *Nursing Research: Principles, Process and Issues*. Palgrave Macmillan.
- Polkinghorne, D. E. (2005a). Language and Meaning: Data Collection in Qualitative Research. *Journal of Counseling Psychology*, 52(39). doi:10.1037/0022-0167.52.2.137
- Pookulangara, S. (2012). Culture and Social Media: Changing Service Expectations. *Service Management: the New Paradigm in Retailing*. doi:10.1007/978-1-4614-1554-1
- Popescu, E. (2012). Providing Collaborative Learning Support with Social Media in an Integrated Environment. *World Wide Web*, 17(2), 199–212. doi:10.1007/s11280-012-0172-6
- Qun, Z., & Weihua, X. (2013). *The Construction of Knowledge Sharing Platform in Universities under the Ubiquitous Network Environment*. Fourth International Conference on Emerging Intelligent Data and Web Technologies, 104–108. doi:10.1109/EIDWT.2013.23
- Raab, K. J., Ambos, B. ., & Tallman, S. (2014). Strong or Invisible Hands? Managerial Involvement in the Knowledge Sharing Process of Globally Dispersed Knowledge Groups. *Journal of World Business*, 49(1), 32–41. doi:10.1016/j.jwb.2013.02.005
- Ractham, P., & Firpo, D. (2011). *Using Social Networking Technology to Enhance Learning in Higher Education: A Case Study Using Facebook*. In 2011 44th Hawaii International Conference on System Sciences (1–10). Ieee. doi:10.1109/HICSS.2011.479
- Rai, R. K. (2011). Knowledge Management and Organizational Culture: A Theoretical Integrative Framework. *Journal of Knowledge Management*, 15(5), 779–801. doi:10.1108/13673271111174320

- Ramachandran, S. D., Chong, S.-C., & Wong, K.-Y. (2013). Knowledge Management Practices and Enablers in Public Universities: A Gap Analysis. *Campus-Wide Information Systems*, 30(2), 76–94. doi:10.1108/10650741311306273
- Rice, J. & Rice, B. (2005). The Applicability of the SECI Model to Multi-Organisational Endeavours: An International Review. *International Journal of Organisational Behaviour*, 8(8), 671-682.
- Riege, A. (2005). Three-Dozen Knowledge-Sharing Barriers Managers Must Consider. *Journal of Knowledge Management*, 9(3), 18–35. doi:10.1108/13673270510602746
- Rih, N., & Guedira, M. (2014). Entrepreneurship Education: Tacit Knowledge and Innovation Transfer - An Analysis through Nonaka's Model. *Academic Journal of Interdisciplinary Studies*, 3(1), 253–264. doi:10.5901/ajis.2014.v3n1p253
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (2013). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. Sage.
- Rodrigues, L. R., Gayathri, R. S., & Rao, S. (2006). Empirical Study Based Evaluation of KM Models in the IT Sectors: Implications for Quality Outcomes. *Journal of Knowledge Management Practice*, 7(3),
- Rowley, J. (2000). Is Higher Education Ready for Knowledge Management? *International Journal of Educational Management*, 14(7), 325–333. doi:10.1108/09513540010378978
- Rowley, J. (2012). Conducting Research Interviews. *Management Research Review*, 35(3/4), 260-271.
- Rus, I., & Lindvall, M. (2002). Knowledge Management in Software Engineering. *IEEE Software*, 19(3), 26–38. doi:10.1109/MS.2002.1003450
- Saad, A., & Haron, H. (2013). *A Case Study of Higher Education Academics' Shared Knowledge and Classification*. International Conference on Research and Innovation in Information Systems (ICRIIS), 2013, 439–444. doi:10.1109/ICRIIS.2013.6716750
- Sabbir Rahman, M., Highe Khan, A., Mahabub Alam, M., Mustamil, N., & Wei Chong, C. (2014). A Comparative Study of Knowledge Sharing Pattern among the Undergraduate and Postgraduate Students of Private Universities in Bangladesh. *Library Review*, 63(8/9), 653-669.

- Saldana, J. (2012). *The Coding Manual for Qualitative Researchers*. sage.  
doi:10.1109/TEST.2002.1041893
- Saleh, M. (2006). *Antecedents of Commitment to an Import Supplier*. Doctoral dissertation, Queensland University of Technology.
- Samoilenko, N., & Nahar, N. (2013). *Knowledge Sharing and Application in Complex Software and Systems Development in Globally Distributed High-Tech Organizations Using Suitable IT Tools*. In *Technology Management in the IT-Driven Services (PICMET), 2013 Proceedings of PICMET'13*: (pp. 1280-1294). IEEE. Retrieved from [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=6641744](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6641744)
- Saw, G., Abbott, W., Donaghey, J., & McDonald, C. (2013). Social Media for International Students: It Is Not All about Facebook. *Library Management*, 34(3), 156–174. doi:10.1108/01435121311310860
- Seidman, I. (2012). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. doi:10.4103/2229-3485.115389
- Sekaran, U. (2000). *Research Methods for Business: A Skill-Building Approach*. John Wiley & Sons.
- Selwyn, N. (2009). Faceworking: Exploring Students' Education-Related Use of Facebook. *Learning, Media and Technology*, 34(2), 157–174. doi:10.1080/17439880902923622
- Selwyn, N. (2012). Social Media in Higher Education. *The Europa World of Learning*, 1-10.
- Sharma, D. (2014). Knowledge Management & Organizational Structure :, 2(4), 585–593.
- Shoemaker, N. (2014). Can Universities Encourage Students' Continued Motivation for Knowledge Sharing and How Can This Help Organizations? *Journal of College Teaching & Learning (TLC)*, 11(3), 99–114.
- Shukor, N. S. A., Nawi, H. S. A., Basaruddin, S., & Rahim, N. M. (2013). *Assessment of Knowledge Sharing Readiness: An Institute of Higher Learning Case Study*. In *Proceedings of the 4th International Conference on Information Systems Management and Evaluation ICIME 2013* (p. 20).

- Sie, B., Aho, A., & Uden, L. (2014). *Communities of Practice as an Improvement Tool for Knowledge Share in a Multi-Cultural Learning Community*. The 2nd International Workshop on Learning Technology for Education in Cloud, 109–114. doi:10.1007/978-94-007-7308-0
- Siriwardana, Y. N. (2012). *A Framework to Improve the Usability of Web 2.0 Tools among IT Students in Tertiary Education*. Doctoral dissertation, Sri Lanka Institute of Information Technology.
- Sohail, M. S., & Daud, S. (2009). Knowledge Sharing in Higher Education Institutions: Perspectives from Malaysia. *Vine*, 39(2), 125–142. doi:10.1108/03055720910988841
- Song, J. H., Uhm, D., & Yoon, S. W. (2011). Organizational Knowledge Creation Practice: Comprehensive and Systematic Processes for Scale Development. *Leadership & Organization Development Journal*, 32(3), 243-259.
- Song, J. H., Yoon, S. W., & Jun Yoon, H. (2011). Identifying Organizational Knowledge Creation Enablers through Content Analysis: The Voice from the Industry. *Performance Improvement Quarterly*, 24(2), 71-88.
- Song, M., van der Bij, H., & Weggeman, M. (2005). Determinants of the Level of Knowledge Application: A Knowledge-Based and Information-Processing Perspective. *Journal of Product Innovation Management*, 22(5), 430–444. doi:10.1111/j.1540-5885.2005.00139.x
- Sousa, M. C. D. (2006). The Sustainable Innovation Engine. *Vine*, 36(4), 398–405. doi:10.1108/03055720610716656
- Steinheider, B., & Al-Hawamdeh, S. (2004). Team Coordination, Communication and Knowledge Sharing in SMEs and Large Organisations. *Journal of Information & knowledge management*, 3(03), 223-232.
- Steyn, G. (2004). Harnessing the Power of Knowledge in Higher Education. *Education*, 124, 615.
- Stieger, S., & Reips, U.D. (2010). What Are Participants Doing While Filling in an Online Questionnaire: A Paradata Collection Tool and an Empirical Study. *Computers in Human Behavior*, 26(6), 1488–1495. doi:10.1016/j.chb.2010.05.013

- Suhaimee, S., Zaki, A., Bakar, A., & Alias, R. A. (2006). Knowledge Sharing Culture in Malaysian Public *Institution of Higher Education: An Overview*, (September), 354–359.
- Tan, B., Wong, C., Lam, C., Ooi, K., & Ng, F. C. (2010). Assessing the Link between Service Quality Dimensions and Knowledge Sharing: Student Perspective. *African Journal of Business Management*, 4(6), 1014–1022.
- Teh, P., Yong, C., Chong, C., & Yew, S. (2011). Do the Big Five Personality Factors Affect Knowledge Sharing Behaviour? A Study of Malaysian Universities. *Malaysian Journal of Library & Information Science*, 16(1), 47–62.
- Tess, P. a. (2013). The Role of Social Media in Higher Education Classes (Real and Virtual): A Literature Review. *Computers in Human Behavior*, 29(5), 60–68. doi:10.1016/j.chb.2012.12.032
- Tongco, M. D. C. (2007). Purposive Sampling as a Tool for Informant Selection. *A Journal of Plants ,people and Applied Research*, 158, 147–158.
- Tuamsuk, K., Phabu, T., & Vongprasert, C. (2013). Knowledge Management Model of Community Business: Thai OTOP Champions. *Journal of Knowledge Management*, 17(3), 363–378. doi:10.1108/JKM-10-2012-0321
- Wang, R., Scown, P., Urquhart, C., & Hardman, J. (2012). Tapping the Educational Potential of Facebook: Guidelines for Use in Higher Education. *Education and Information Technologies*, 19(1), 21–39. doi:10.1007/s10639-012-9206-z
- Wankel, C. (2012). Management Education Using Social Media. *Organization Management Journal*, (April 2015), 37–41. doi:10.1057/omj.2009.34
- Wendling, M., Oliveira, M., & Carlos Gastaud Maçada, A. (2013). Knowledge Sharing Barriers in Global Teams. *Journal of Systems and Information Technology*, 15(3), 239-253.
- Wiig, K. M. (1999). Knowledge Management : An Emerging Discipline Rooted in a Long History. *Knowledge Horizons: The Present and the promise of Knowledge Management*, 3-26.
- Wiig, K. M. (2002). Knowledge management in Public Administration. *Journal of Knowledge Management*, 6(3), 224-239.
- Yin, R. K. (2009). *Case Study Research: Design and Methods*. Sage Publication.

- Yu, T.-K., Lu, L.-C., & Liu, T.-F. (2010). Exploring Factors that Influence Knowledge Sharing Behavior via Weblogs. *Computers in Human Behavior*, 26(1), 32–41. doi:10.1016/j.chb.2009.08.002
- Zheng, Y., Li, L., & Zheng, F. (2010). *Social Media Support for Knowledge Management*. In International Conference on Management and Service Science (pp. 1–4). Ieee. doi:10.1109/ICMSS.2010.5576725

