THE RELATIONSHIP BETWEEN INDIVIDUAL, ORGANIZATIONAL AND INTERPERSONAL FACTORS AND TACIT KNOWLEDGE SHARING WITH ICT USAGE AS THE MEDIATOR

By

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ABSTRAK

Terdapat dua fokus utama kajian ini. Pertama, kajian ini mengkaji hubungan langsung antara faktor individu (sikap individu, komitmen organisasi, dan efikasi kendiri berkaitan ilmu), organisasi (suasana organisasi, sokongan pengurusan, sistem ganjaran, dan struktur organisasi), danantara perorangan(kepercayaan antara perorangan dan jaringan sosial), dan perkongsian ilmu tasit. Kedua, ia mengkaji kesan perantara penggunaan teknologi informasi dan komunikasi (ICT) ke atas hubungan antara faktor-faktor individu, organisasi dan antara perorangan, dan perkongsian ilmu tasit. Sebanyak 400 borang soal selidik telah diedarkan kepada staf teknikal dalam sektor ICT di Jordan. Daripada 400 borang soal selidik yang diedarkan, sebanyak 375 soal selidik telah diterima semula. Walau bagaimanapun, hanya 365 soal selidik boleh digunakan untuk analisis selanjutnya, mewakili kadar maklum balas sebanyak 92.75%. Hipotesis berkaitan kesan langsung diuji dengan menggunakan analisis regresi berganda, manakala kesan perantara diuji dengan menggunakan analisis Preacher dan Hayes. Dapatan kajian menunjukkan bahawa sikap individu, efikasi kendiri berkaitan ilmu, suasana organisasi, struktur organisasi, sokongan pengurusan dan kepercayaan antara perorangan adalah berhubung secara signifikan dengan perkongsian ilmu tasit. Sementara itu, analisis perantara menunjukkan bahawa penggunaan ICT memainkan peranan sebagai perantara separa dalam perhubungan antara efikasi kendiri berkaitan ilmu, suasana organisasi, struktur organisasi, dan kepercayaan antara perorangan,dan perkongsian ilmu tasit. Terdapat beberapa implikasi dari kajian ini. Dari segi ilmu, ia memberikan kefahaman tentang faktor-faktor yang mempengaruhi perkongsian ilmu tasit. Dari segi amalan, ia mencadangkan bahawa pengurus harus fokus kepada menyediakan sokongan pengurusan, suasana organisasi dan struktur organisasi untuk perkongsian ilmu tasit.Di samping itu, amalan yang dapat meningkatkan komitmen organisasi, efikasi kendiri berkaitan ilmu, dan kepercayaan antara perorangan perlu dilaksanakan. Penggunaan ICT juga perlu dikuatkuasa bagi memudahkan perkongsian ilmu tasit. Selain itu, ia juga memberi cadangan untuk kajian akan datang untuk memperkembangkan lagi kajian dari segi pembolehubah kajian dan juga sampel kajian bagi mendapatkan kefahaman yang lebih baik tentang peranan sikap individu, kepercayaan antara perorangan dan organisasi berkenaan perkongsian ilmu tasit.

Kata kunci: Perkongsian Ilmu Tasit, Faktor Individu, Faktor Organisasi, Faktor Antara Perorangan, Penggunaan ICT

ABSTRACT

The main focus of this study is twofold. Firstly, the thesis attempts to examine the direct relationship between individual (individual attitude, organizational commitment, and knowledge self-efficacy), organizational (organizational climate, management support, reward system and organizational structure), and interpersonal (interpersonal trust and social network) factors, and tacit knowledge sharing. Secondly, it is to examine the mediating effect of information and communication technology (ICT) usage on the relationship between individual, organizational and interpersonal factors, and tacit knowledge sharing. A total of 400 questionnaires were distributed to the technical staff of ICT sector in Jordan. Out of 400, only 375 questionnaires were returned. However, only 365 were usable for further analysis, representing a response rate of 92.75%. Hypotheses for direct relationships were tested using multiple regression, while the mediating effect were tested using the Preacher and Hayes analyses. Results indicated that individual attitude, knowledge self-efficacy, organizational climate, organizational structure, management support and interpersonal trust were significantly related to tacit knowledge sharing. However, the mediating analysis showed that ICT usage only partially mediated the relationship between knowledge self-efficacy, organizational climate, organizational structure and interpersonal trust, and tacit knowledge sharing. The current research have several implications. Knowledge wise, it provides understanding on the factors that affects tacit knowledge sharing. Practise wise, it suggests to managers that they should focus on providing the right management support, organizational structure and climate for sharing tacit knowledge. In addition, any practices that could promote organizational commitment, knowledge self-efficacy and interpersonal trust should also be implemented. The use of ICT should also be enforced so as to facilitate tacit knowledge sharing. Besides that, suggestions were also made for further research to be conducted the exploration of the variables tested in this study on other settings, and with different sample frames, in order to achieve a more robust finding towards a better understanding of the role of individual, interpersonal and organizational factors on tacit knowledge sharing.

Keywords: Tacit Knowledge Sharing, Individual Factors, Organizational Factors. Interpersonal Factors, ICT Usage

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INTRODUCTION

1.1   Introduction

There is no doubt that the world is facing many changes in the information and communication technology domain, known as "information revolution". These changes have been competitively based on the effective exploitation of information and knowledge. Therefore, organizations need to change their internal structure and organizations need to recognize the importance of knowledge as a crucial factor for the success of an organization (Rezaie, Byat &Shirkouhi, 2009). Specifically, organizations need to understand that knowledge is power and it is also an important strategic resource of all organizations (Sung-Ho, Kim, & Kim, 2004; Alhawary & Al-Zegaier, 2009). Hence, knowledge should be the core competence of any organizations (Prahalad & Hamel, 1990).

Today, most economy depends mainly on knowledge, and for that reason today's economy is known as the knowledge economy or "k-economy" (Sunassee & Sewry 2003; Halawi, Aronson &McCarthy, 2005). Knowledge economy is shared worldwide (Civi, 2000). It is characterized by rapid development, does not depend on traditional capital assets, and it is dynamic. (Hijazi, 2005). As such, it is imperative for organizations to focus on investment in knowledge resources or intellectual capital (e.g. experience, skills, capabilities, patents) (Wei, Choy & Yew, 2009). This is because the importance of knowledge as an intangible asset for an organization is

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REFERENCES

Abrams, L. C., Cross, R., Lesser, E., & Levin, D. Z. (2003). Nurturing interpersonal trust in knowledge-sharing networks. *The Academy of Management Executive, 17*(4), 64-77.

Abric, J.-C. (1994a). Les représentations sociales, aspects théoriques *Pratiques sociales et représentations* (Vol. 1, pp. 312). Paris: Presses Universitaires de France.

Abric, J.-C. (1994b). *Pratiques sociales et représentations* (Vol. 1). Paris: Presses Universitaires de France.

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of management review, 27*(1), 17-40.

Ajmal, M., Helo, P., & Kekäle, T. (2010). Critical factors for knowledge management in project business. *Journal of Knowledge Management, 14*(1), 156-168. doi: doi:10.1108/13673271011015633

Al-Alawi, A. I., Al-Marzooqi, N. Y., & Mohammed, Y. F. (2007). Organizational culture and knowledge sharing: critical success factors. *Journal of Knowledge Management, 11*(2), 22-42. doi: doi:10.1108/13673270710738898

Alavi, M. (1997). *KPMG Peat Marwick US: one giant brain*. Boston, MA: Harvard Business School Pub.

Alavi, M., Kayworth, T. R., & Leidner, D. E. (2005). An empirical examination of the influence of organizational culture on knowledge management practices. *Journal of management information systems, 22*(3), 191-224.

Alavi, M., & Leidner, D. E. (1999). Knowledge management systems: issues, challenges, and benefits. *Communications of the AIS, 1*(2es), 1.

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS quarterly*, 107-136.

Alhalhouli, Z. T., Hasan, Z. B., & Der, C. S. (2014). Factors affecting knowledge sharing behavior among stakeholders in Jordanian hospitals using social networks. *International Journal of Computer and Information Technology*, 3(5), 919-928

Alhammad, F., Al-Faori, S., & Abu Husan, L. S. (2009). Knowledge sharing in Jordanian universities. *Journal of Knowledge Management Practice*, 10(3), 1–9.

Alhawary, F. A., & Al-Zegaier, H. (2009). The Successful Implementation of Knowledge Management Processes: The Role of Human Resource Systems "An Empirical Study in the Jordanian Mobile Telecommunication Companies". *Journal of Information & Knowledge Management, 08*(02), 159-173. doi:10.1142/S0219649209002300

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational psychology, 63*(1), 1-18.

Alotaibi, H., Crowder, R., & Wills, G. (2014). *Investigating factors for E-knowledge sharing amongst academic staff.* Paper presented at the The sixth International Conference on Information, Process, and Knowledge Management.

Ambrosini, V. (2003). *Tacit and Ambiguous Resources as Sources of Competitive Advantage*. New York: Palgrave Macmillan.

Ambrosini, V., & Bowman, C. (2001). Tacit knowledge: Some suggestions for operationalization. *Journal of Management studies, 38*(6), 811-829.

Anantatmula, V. S., & Kanungo, S. (2010). Modeling enablers for successful KM implementation. *Journal of Knowledge Management, 14*(1), 100-113.

Andrews, M. C., & Kacmar, K. M. (2001). Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior, 22*(4), 347-366.

Ardichvili, A. (2008). Learning and knowledge sharing in virtual communities of practice: Motivators, barriers, and enablers. *Advances in developing human resources*.

Arthur, J. B., & Aiman-Smith, L. (2001). Gainsharing and organizational learning: An analysis of employee suggestions over time. *Academy of Management Journal, 44*(4), 737-754.

Arthur, J. B., & Huntley, C. L. (2005). Ramping up the Organizational Learning Curve: Assessing the Impact of Deliberate Learning on Organizational Performance Under Gainsharing. *Academy of Management Journal, 48*(6), 1159-1170. doi: 10.5465/amj.2005.19573115

Ashkanasy, N. M. *Organizational Climate. International Encyclopedia of Organization Studies. SAGE Publications, Inc*. Thousand Oaks, CA: SAGE Publications, Inc.

Aslam, M. M. H., Shahzad, K., Syed, A. R., & Ramish, A. (2013). Social Capital and Knowledge Sharing as Determinants of Academic Performance. *Journal of Behavioral and Applied Management*, 15(25-41)

Augier, M., & Thanning Vendelø, M. (1999). Networks, cognition and management of tacit knowledge. *Journal of Knowledge Management, 3*(4), 252-261.

Avolio, B. J., Yammarino, F. J., & Bass, B. M. (1991). Identifying Common Methods Variance With Data Collected From A Single Source: An Unresolved Sticky Issue. *Journal of Management, 17*(3), 571-587. doi: 10.1177/014920639101700303

Awad, E. M., & Ghaziri, H. M. (2004). *Knowledge Management*. New Jersey: Pearson Education.

Babbie, E. R. (1995). *The Practice of Social Research, 7th ed*. Belmont, California.

Babcock, P. (2004). Shedding Light On Knowledge Management. *HR Magazine, 49*(5), 46.

Baker, W. E. (1990). Market Networks and Corporate Behavior. *American Journal of Sociology, 96*(3), 589-625. doi: 10.2307/2781065

Bakker, M., Leenders, R. T. A. J., Gabbay, S. M., Kratzer, J., & Engelen, J. M. L. V. (2006). Is trust really social capital? Knowledge sharing in product development projects. *The Learning Organization, 13*(6), 594-605. doi:10.1108/09696470610705479

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American psychologist, 37*(2), 122.

Bandura, A. (1985). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1989). Social Cognitive Theory. In R. Vasta (Ed.), *Annals of Child Development* (pp. 1-60). Greenwich, CT: Jai Press LTD.

Bandura, A. (1994). Social cognitive theory and exercise of control over HIV infection *Preventing AIDS* (pp. 25-59): Springer.

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*: Worth Publishers.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology, 51*(6), 1173.

Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies, 9*(1), 64-76.

Batra, J. (2010). Knowledge management: Emerging practices in IT industry in NCR. *IUP Journal of Knowledge Management, 8*(1/2), 57.

Bauer, M. W., & Gaskell, G. (1999). Towards a paradigm for research on social representations. *Journal for the theory of social behaviour, 29*(2), 163-186.

Becerra-Fernandez, I., González, A. J., & Sabherwal, R. (2004). *Knowledge Management: Challenges, Solutions, and Technologies*. Uppder Saddle Rvier, New Jersey: Pearson/Prentice Hall.

Bechky, B. A. (2003). Sharing meaning across occupational communities: The transformation of understanding on a production floor. *Organization science, 14*(3), 312-330.

Becker, T. E. (1992). Foci and bases of commitment: are they distinctions worth making? *Academy of Management Journal, 35*(1), 232-244.

Bennett III, R. H. (1998). The importance of tacit knowledge in strategic deliberations and decisions. *Management Decision, 36*(9), 589-597.

Berger, P. L., & Luckmann, T. (2011). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York: Open Road Media.

Bergeron, B. P. (2003). *Bioinformatics Computing*: Prentice Hall.

Bidault, F., & Cummings, T. (1994). Innovating through alliances: expectations and limitations. *R&D Management, 24*(1), 033-045.

Bircham-Connolly, H., Corner, J., & Bowden, S. (2005). An empirical study of the impact of question structure on recipient attitude during knowledge sharing. *Electronic Journal of Knowledge Management, 32*(1), 1-10.

Blue, C. L., Wilbur, J., & Marston-Scott, M. V. (2001). Exercise among blue-collar workers: application of the theory of planned behavior. *Research in nursing & health, 24*(6), 481-493.

Bock, G.-W., & Kim, Y.-G. (2001). Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing. *Pacis 2001 proceedings*, 78.

Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS quarterly*, 87-111.

Boisot, M. (1995). *Information Space: A Framework for Learning in Organizations, Institutions and Culture*: Routledge.

Boje, D. M. (1991). The storytelling organization: A study of story performance in an office-supply firm. *Administrative science quarterly*, 106-126.

Boland Jr, R. J., & Tenkasi, R. V. (1995). Perspective making and perspective taking in communities of knowing. *Organization science, 6*(4), 350-372.

Boumarafi, B., & Jabnoun, N. (2008). Knowledge management and performance in UAE business organizations. *Knowledge Management Research & Practice, 6*(3), 233-238.

Bourdieu, P. (1986). The Forms of Capital, in JG Richardson *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258): Greenwood Publishing Group.

Brace-Govan, J. (2004). Issues in snowball sampling: The lawyer, the model and ethics. *Qualitative Research Journal, 4*(1), 52.

Branscomb, L. M., & Thomas, J. C. (1984). Ease of use: a system design challenge. *IBM Systems Journal, 23*(3), 224-235.

Brockmann, E. N., & Anthony, W. P. (2002). Tacit knowledge and strategic decision making. *Group & Organization Management, 27*(4), 436-455.

Brockner, J., & Siegel, P. (1995). Understanding the Interaction Between Procedural cand Distributive Justice. In R. M. Kramer&T. R. Tyler,*Trust in Organizations: Frontiers of Theory and Research*. Thousand Oaks, CA: SAGE Publications.

Brown, J. S. (2005). *Storytelling in Organizations: Why Storytelling is Transforming 21st Century Organizations and Management*: Elsevier Butterworth-Heinemann.

Brown, J. S., & Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization science, 2*(1), 40-57.

Brown, J. S., & Duguid, P. (1998). Organizing knowledge. *California management review, 40*(3), 91.

Brown, J. S., & Duguid, P. (2001). Knowledge and organization: A social-practice perspective. *Organization science, 12*(2), 198-213.

Burke, M., Mohammed Fathi, N., Cyril Eze, U., & Guan Gan Goh, G. (2011). Key determinants of knowledge sharing in an electronics manufacturing firm in Malaysia. *Library Review, 60*(1), 53-67.

Butler, J. K. (1999). Trust expectations, information sharing, climate of trust, and negotiation effectiveness and efficiency. *Group & Organization Management, 24*(2), 217-238.

Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management, 17*(2), 245-264.

Cabrera, E. F., & Bonache, J. (1999). An expert HR system for aligning organizational culture and strategy. *People and Strategy, 22*(1), 51.

Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal of Human Resource Management, 16*(5), 720-735.

Calabrese, F. A. (2000). *A suggested framework of key elements defining effective enterprise knowledge management programs.* The George Washington University.

Caldwell, C., & Clapham, S. E. (2003). Organizational trustworthiness: An international perspective. *Journal of Business Ethics, 47*(4), 349-364.

Carlile, P. R. (2004). Transferring, translating, and transforming: An integrative framework for managing knowledge across boundaries. *Organization science, 15*(5), 555-568.

Carnevale, D. G. (1995). *Trustworthy government: Leadership and management strategies for building trust and high performance*: Jossey-Bass.

Carrig, M. (1999). Interpersonal skills are key in the office of the future. *Treasury Management Association Journal, 19*, 53.

Carrillo, F. J., Rivera-Vazquez, J. C., Ortiz-Fournier, L. V., & Rogelio Flores, F. (2009). Overcoming cultural barriers for innovation and knowledge sharing. *Journal of Knowledge Management, 13*(5), 257-270.

Carter, C., & Scarbrough, H. (2001). Towards a second generation of KM? The people management challenge. *Education+ Training, 43*(4/5), 215-224.

Chen, C.-J., & Huang, J.-W. (2007). How organizational climate and structure affect knowledge management—The social interaction perspective. *International Journal of Information Management, 27*(2), 104-118.

Chen, R.-S., & Hsiang, C.-H. (2007). A study on the critical success factors for corporations embarking on knowledge community-based e-learning. *Information Sciences, 177*(2), 570-586.

Chih-Chien, W. (2004). The influence of ethical and self-interest concerns on knowledge sharing intentions among managers: An empirical study. *International Journal of Management, 21*(3), 370.

Chin Wei, C., Siong Choy, C., & Kuan Yew, W. (2009). Is the Malaysian telecommunication industry ready for knowledge management implementation? *Journal of Knowledge Management, 13*(1), 69-87.

Chiu, C.-M., Hsu, M.-H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision support systems, 42*(3), 1872-1888.

Cho, N., zheng Li, G., & Su, C.-J. (2007). An empirical study on the effect of individual factors on knowledge sharing by knowledge type. *Journal of Global Business and Technology, 3*(2), 1.

Choi, B., & Lee, H. (2003). An empirical investigation of KM styles and their effect on corporate performance. *Information & Management, 40*(5), 403-417.

Choo, C. W. (1996). The knowing organization: How organizations use information to construct meaning, create knowledge and make decisions. *International Journal of Information Management, 16*(5), 329-340.

Chow, C. W., Deng, F. J., & Ho, J. L. (2000). The openness of knowledge sharing within organizations: A comparative study of the United States and the People's Republic of China. *Journal of Management Accounting Research, 12*(1), 65-95.

Chow, W. S., & Chan, L. S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & Management, 45*(7), 458-465.

Chowdhury, S. (2005). The role of affect-and cognition-based trust in complex knowledge sharing. *Journal of Managerial issues*, 310-326.

Civi, E. (2000). Knowledge management as a competitive asset: a review. *Marketing Intelligence & Planning, 18*(4), 166-174.

Coakes, S. J., & Steed, L. G. (2003). *SPSS: Analysis Without Anguish Using SPSS Version 11.0 for Windows*: Wiley.

Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*: Taylor & Francis.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, S95-S120.

Coleman, J. S. (1990). *Foundations of Social Theory*: Harvard University Press.

Collins, C. J., & Smith, K. G. (2006). Knowledge exchange and combination: The role of human resource practices in the performance of high-technology firms. *Academy of Management Journal, 49*(3), 544-560.

Cong, X., Li-Hua, R., & Stonehouse, G. (2007). Knowledge management in the Chinese public sector: empirical investigation. *Journal of Technology Management in China, 2*(3), 250-263.

Connelly, C. E., & Kevin Kelloway, E. (2003). Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organization Development Journal, 24*(5), 294-301.

Constant, D., Kiesler, S., & Sproull, L. (1994). What's mine is ours, or is it? A study of attitudes about information sharing. *Information systems research, 5*(4), 400-421.

Creed, W. D., & Miles, R. E. (1996). Trust in organizations. *Trust in organizations: frontiers of theory and research. Thousand Oaks, CA: Sage*, 16-38.

Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*: SAGE Publications.

Cross, R., & Cummings, J. N. (2004). Tie and network correlates of individual performance in knowledge-intensive work. *Academy of Management Journal, 47*(6), 928-937.

Cullen, J. B., Parboteeah, K. P., & Victor, B. (2003). The effects of ethical climates on organizational commitment: A two-study analysis. *Journal of Business Ethics, 46*(2), 127-141.

Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management science, 50*(3), 352-364.

Daft, R. L. (2001). *Organization Theory and Design*: South-Western College Publishing.

Dalkir, K. (2005). *Knowledge Management in Theory and Practice*: Elsevier Science.

Damodaran, L., & Olphert, W. (2000). Barriers and facilitators to the use of knowledge management systems. *Behaviour & Information Technology, 19*(6), 405-413.

Davenpoit, T. H., De Long, D. W., & Beers, M. C. (1998). Successful Knowledge Management Projects. *Sloan Management Review, 39*, 2.

Davenport, T., De Long, D., & Beers, M. (1999). Successful Knowledge Management Projects *The Knowledge Management Yearbook 1999-2000*: Butterworth-Heinemann.

Davenport, T. H. (1996). Some principles of knowledge management. *Strategy & Business, 1*(2), 34-40.

Davenport, T. H., & Prusak, L. (1998). *Working Knowledge: How Organizations Manage what They Know*: Harvard Business School Press.

Davidson, E. J. (2002). Technology frames and framing: A socio-cognitive investigation of requirements determination. *MIS quarterly*, 329-358.

Davis, B., & Riggs, B. (1999). Knowledge Management: Get Smart. *Information Week*, 40-46.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management science, 35*(8), 982-1003.

De Jager, M. (1999). The KMAT: benchmarking knowledge management. *Library management, 20*(7), 367-372.

De Long, D., & Fahey, L. (2000). Diagnosing Cultural Barriers to Knowledge Management. *Executive Ada Then Briercliff, 14*(4), 113-127.

De Vries, R. E., Van den Hooff, B., & de Ridder, J. A. (2006). Explaining knowledge sharing the role of team communication styles, job satisfaction, and performance beliefs. *Communication Research, 33*(2), 115-135.

DeCoster, J. (1998). Overview of factor analysis Retrieved 10 September, 2010, from http://www.stat-help.com/notes.html

Denning, S. (2012). How Storytelling Ignites Action in Knowledge-era Organizations *The Springboard*: Taylor & Francis.

Department of Management Information Thomas H. Davenport Professor, S. M. B. U., & Department of Management Information Laurance Prusak Professor, S. M. B. U. (1997). *Information Ecology : Mastering the Information and Knowledge Environment: Mastering the Information and Knowledge Environment*: Oxford University Press, USA.

Dervin, B. (1998). Sense-making theory and practice: an overview of user interests in knowledge seeking and use. *Journal of Knowledge Management, 2*(2), 36-46.

Dirani, K. M., & Ardichvili, A. (2005). Human capital theory and practice in Russian enterprises *The Global Diffusion of Human Resource Practices: Institutional and Cultural Limits* (pp. 125-144).

Du Plessis, M. (2007). The role of knowledge management in innovation. *Journal of knowledge management, 11*(4), 20-29.

Dulebohn, J. H. (2002). An investigation of the determinants of investment risk behavior in defined contribution pension plans. *Journal of Management*, 42(1), 1-25

Dulipovici, A. M. (2009). Exploring IT-based knowledge sharing practices: Representing knowledge within and across projects.

Eftekharzadeh, R. (2008). Knowledge management implementation in developing countries: An experimental study. *Review of Business, 28*(3), 44.

Ekeh, P. P. (1974). *Social exchange theory: the two traditions*: Harvard University Press.

Endress, A.D., G. Dehaene-Lambertz& J. Mehler (2007) Perceptual constraints and the learnability of simple grammars. Cognition 105, 577 – 614.

Engwall, M., & Westling, G. (2004). Peripety in an R&D drama: capturing a turnaround in project dynamics. *Organization Studies, 25*(9), 1557-1578.

Evans, K., & Kersh, N. (2004). Recognition of tacit skills and knowledge: Sustaining learning outcomes in workplace environments. *Journal of Workplace Learning, 16*(1/2), 63-74.

Farmer, S. J., Beehr, T. A., & Love, K. G. (2003). Becoming an undercover police officer: A note on fairness perceptions, behavior, and attitudes. *Journal of Organizational Behavior, 24*(4), 373-387.

Fernie, S., Green, S. D., Weller, S. J., & Newcombe, R. (2003). Knowledge sharing: context, confusion and controversy. *International Journal of Project Management, 21*(3), 177-187.

Ferrin, D. L., & Dirks, K. T. (2003). The use of rewards to increase and decrease trust: Mediating processes and differential effects. *Organization science, 14*(1), 18-31.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: an introduction to theory and research*: Addison-Wesley Pub. Co.

Fleck, M. M. (1996). The topology of boundaries. *Artificial Intelligence, 80*(1), 1-26.

Fong, P. S., Love, P., Fong, P., & Irani, Z. (2005). Managing knowledge in project-based professional services firms: an international comparison. *Management of knowledge in project environments*, 103-131.

Frazier, T. W., Demaree, H. A., & Youngstrom, E. A. (2004). Meta-analysis of intellectual and neuropsychological test performance in attention-deficit/hyperactivity disorder. *Neuropsychology, 18*(3), 543.

French, J. R., Raven, B., & Cartwright, D. (1959). The bases of social power. *Classics of organization theory*, 311-320.

Fukuyama, F. (1995). *Trust: the social virtues and the creation of prosperity*: Free Press.

Galletta, D. F., Marks, P. V., Polak, P., & McCoy, S. (2003). *What leads us to share valuable knowledge? An experimental study of the effects of managerial control, group identification, and social value orientation on knowledge-sharing behavior.* Paper presented at the System Sciences, 2003. Proceedings of the 36th Annual Hawaii International Conference on.

García-Marzá, D. (2005). Trust and dialogue: Theoretical approaches to ethics auditing. *Journal of Business Ethics, 57*(3), 209-219.

Garud, R. and Rappa, M. A. (1994), 'A Socio-Cognitive Model of Technology Evolution: The Case of Cochlear Implants', *Organization Science*,5, 344-362.

Ghani, K. A., Jayabalan, V., & Sugumar, M. (2002). Impact of advanced manufacturing technology on organizational structure. *The Journal of High Technology Management Research, 13*(2), 157-175.

Gist, M. E. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of management review, 12*(3), 472-485.

Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of management review, 17*(2), 183-211.

Gloet, M., & Terziovski, M. (2004). Exploring the relationship between knowledge management practices and innovation performance. *Journal of Manufacturing Technology Management, 15*(5), 402-409.

Gold, A. H., & Arvind Malhotra, A. H. S. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems, 18*(1), 185-214.

Gorry, G. A. (2008). Sharing knowledge in the public sector: two case studies. *Knowledge Management Research & Practice, 6*(2), 105-111.

Gottschalk, P. (2006). *Knowledge Management Systems: Value Shop Creation: Value Shop Creation*: IGI Global.

Gourlay, S. (2002). *Tacit knowledge, tacit knowing, or behaving?* Paper presented at the 3rd European Organizational Knowledge, Learning, and Capabilities conference, Athens, Greece.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal, 17*(2), 109-122.

Gupta, A.K. Govindarajan, V. (2000) 'Knowledge Flows within the Multinational Corporation', *Strategic Management Journal*, 21, pp. 473-496.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis: With Readings (4th ed.)*: Prentice Hall.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis (5th ed.)*: Prentice Hall.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2003). *Multivariate Data Analysis (5th ed.)*: Pearson Prentice Hall.

Hair, J. F., Black, W. C., Babin, B., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis (6th ed.)*: Pearson Prentice Hall.

Halawi, L., Aronson, J., & McCarthy, R. (2005). Resource-based view of knowledge management for competitive advantage. *The Electronic Journal of Knowledge Management, 3*(2), 75-86.

Halawi, L. A., McCarthy, R. V., & Aronson, J. E. (2006). Knowledge management and the competitive strategy of the firm. *The Learning Organization, 13*(4), 384-397.

Haldin-Herrgard, T. (2000). Difficulties in diffusion of tacit knowledge in organizations. *Journal of Intellectual capital, 1*(4), 357-365.

Hall, H. (2001). Input-friendliness: MotivatingKknowledge Sharing Across Intranets. *Journal of Information Science, 27*(3), 139-146.

Han, B. M., & Anantatmula, V. S. (2007). Knowledge sharing in large IT organizations: A case study. *Vine, 37*(4), 421-439.

Hansen, M., & Haas, M. R. (2002).*Different Knowledge, Different Benefits: Toward A Productivity Perspective On Knowledge Sharing In Organizations.* Paper presented at the Academy of Management Proceedings.

Hansen, M. T. (1999). The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly, 44*(1), 82-111.

Hansen, M. T. (2002). Knowledge networks: Explaining effective knowledge sharing in multiunit companies. *Organization science, 13*(3), 232-248.

Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's your strategy for managing knowledge? *Knowledge Management: Critical Perspectives on Business and Management* (pp. 106-116): Butterworth Heinemann Boston, MA.

Hargadon, A. (1998). Firms as knowledge brokers: Lessons in Pursuing Continuous Innovation. *California management review, 40*(3), 209-227.

Hartman, N. W. (2003). *Towards the definition and development of expertise in the use of constraint-based CAD tools: Examining practicing professionals.* North Carolina State University.

Helfat, C. E., & Raubitschek, R. (2000). *Product sequencing: co-evolution of knowledge, capabilities and products.* Paper presented at the Tuck-JFE Contemporary Corporate Governance Conference.

Hendriks, P. (1999). Why share knowledge? The influence of ICT on the motivation for knowledge sharing. Knowledge and Process Management, *6*(2), 91-100.

Heslin, P. A., & Klehe, U. C. (2006). Self-Efficacy *Encyclopedia of Industrial Organizational Psychology* (Vol. 2, pp. 705-708): SAGE Publications.

Hibbard, J., & Carrillo, K. M. (1998). Knowledge Revolution. *Information Week, 663,* 49-51.

Hirschheim, R., Heinzl, A., & Dibbern, J. (2006). Information Systems Outsourcing: Enduring Themes. *New Perspectives and Global Challenges, Springer-Verlag New York, Inc., Secaucus, NJ*.

Hislop, D. (2003). Linking human resource management and knowledge management via commitment: A review and research agenda. Employee Relations, *25*(2), 182-202.

Hisyam Selamat, M., & Choudrie, J. (2004). The diffusion of tacit knowledge and its implications on information systems: the role of meta-abilities. *Journal of Knowledge Management, 8*(2), 128-139.

Hitt, M. A., Biermant, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. *Academy of Management Journal, 44*(1), 13-28.

Hoegl, M., Parboteeah, K. P., & Munson, C. L. (2003). Team-Level Antecedents of Individuals' Knowledge Networks*. *Decision Sciences, 34*(4), 741-770.

Hofmann, D. A., Morgeson, F. P., & Gerras, S. J. (2003). Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: safety climate as an exemplar. *Journal of Applied Psychology, 88*(1), 170.

Holman, D., Wall, T. D., Clegg, C. W., Sparrow, P., & Howard, A. (2003). *The New Workplace: A Guide to the Human Impact of Modern Working Practices*: Wiley.

Holsapple, C. W., & Whinston, A. B. (1987). Knowledge-based organizations. *The Information Society, 5*(2), 77-90.

Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. *Journal of Knowledge Management, 14*(1), 128-140.

Hong, J. F., Easterby-Smith, M., & Snell, R. S. (2006). Transferring Organizational Learning Systems to Japanese Subsidiaries in China*. *Journal of Management studies, 43*(5), 1027-1058.

Hong, P., Doll, W. J., Nahm, A. Y., & Li, X. (2004). Knowledge sharing in integrated product development. *European Journal of Innovation Management, 7*(2), 102-112.

Housel, T. J., & Hom, S. C. (1999). *Knowledge Management for the Telecommunications Industry*: Intl. Engineering Consortiu.

Howells, W. (1996). Howells' craniometric data on the internet. *American Journal of Physical Anthropology, 101*(3), 441-442.

Hsu, I.-C. (2006). Enhancing employee tendencies to share knowledge—Case studies of nine companies in Taiwan. *International Journal of Information Management, 26*(4), 326-338.

Huang, Q., Davison, R. M.,Liu, H., & Gu, J. (2006). The Impact of Management Style on the Intention to Share knowledge in China. *Pacific Asia Conference on Information Systems*(pp. 82-98). Kuala Lumpur: Association for Information Systems.

Husted, K., & Michailova, S. (2002). Diagnosing and Fighting Knowledge Sharing Hostility. *Organizational Dynamics, 31*(1), 60-73.

Hutchings, K., & Michailova, S. (2004). Facilitating knowledge sharing in Russian and Chinese subsidiaries: the role of personal networks and group membership. *Journal of Knowledge Management, 8*(2), 84-94.

Huysman, M., & Wulf, V. (2006). IT to support knowledge sharing in communities, towards a social capital analysis. *Journal of information technology, 21*(1), 40-51.

Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equations models perform better than regressions. *Journal of Consumer Psychology, 17*(2), 139-153.

Igbaria, M., Iivari, J., & Maragahh, H. (1995). Why do individuals use computer technology? A Finnish case study. *Information & Management, 29*(5), 227-238.

Iles, P., Yolles, M., & Altman, Y. (2001). HRM and knowledge management: responding to the challenge. *Research and Practice in Human Resource Management, 9*(1), 3-33.

Ipe, M. (2003). Knowledge sharing in organizations: A conceptual framework. *Human Resource Development Review, 2*(4), 337-359.

Jackson, S. E., Chuang, C.-H., Harden, E. E., & Jiang, Y. Toward Developing Human Resource Management Systems for Knowledge-Intensive Teamwork *Research in Personnel and Human Resources Management* (Vol. 25, pp. 27-70).

Jacobs, E., & Roodt, G. (2008). Organisational culture of hospitals to predict turnover intentions of professional nurses: research. *Health SA Gesondheid, 13*(1), 63-78.

Janz, B. D., Colquitt, J. A., & Noe, R. A. (1997). Knowledge worker team effectiveness: The role of autonomy, interdependence, team development, and contextual support variables. *Personnel Psychology, 50*(4), 877-904.

Jarvenpaa, S. L., & Staples, D. S. (2000). The use of collaborative electronic media for information sharing: an exploratory study of determinants. *The Journal of Strategic Information Systems, 9*(2), 129-154.

Jarvenpaa, S. L., & Staples, D. S. (2001). Exploring perceptions of organizational ownership of information and expertise. *Journal of Management Information Systems, 18*(1), 151-183.

Jaspars, J., Fraser, C., Farr, R., & Moscovici, S. (1984). Attitudes and Social Representations *Social Representations* (pp. 101-123): Cambridge University Press.

Jaw, B.-S., Ling, Y.-H., Yu-Ping Wang, C., & Chang, W.-C. (2007). The impact of culture on Chinese employees' work values. *Personnel Review, 36*(5), 763-780.

Jennex, M. E. (2005). *Case Studies in Knowledge Management*: Idea Group Pub.

Jennex, M. E., & Zakharova, I. (2005). *Knowledge Management Critical Success Factors*. Unpublished Master Thesis. San diego State University.

Jill, A., McKinnon, L., & Harrison, G. L. (2003). Organizational Cultural: Association with Commitment, Job Satisfaction, Propensity to Remain, and Information Sharing in Taiwan. *Journal of Development Studies, 39*(6), 1-22.

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.

Johannessen, J.-A., & Olsen, B. (1999). Information and Communication Technology: Tacit Knowledge and Innovation *Synergy Matters* (pp. 565-570): Springer.

Joia, L. A., & Lemos, B. (2010). Relevant factors for tacit knowledge transfer within organisations. *Journal of Knowledge Management, 14*(3), 410-427.

Jones, M. C. (2005). Tacit knowledge sharing during ERP implementation: a multi-site case study. *Information Resources Management Journal, 18*(2), 1.

Jordan Enterprise Development Corporation. (2012). *About JEDCO*, from www.jedco.gov.jo

Jordan Investment Board. (2012). *About JIB* from www.jordaninvestment.com

Jordan, J., & Jones, P. (1997). Assessing your company's knowledge management style. *Long range planning, 30*(3), 322-398.

Joseph, B., & Jacob, M. (2011). Knowledge sharing intentions among IT professionals in India *Information Intelligence, Systems, Technology and Management* (pp. 23-31): Springer.

Judd, C. M., & Kenny, D. A. (1981). Process analysis estimating mediation in treatment evaluations. *Evaluation review, 5*(5), 602-619.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1), 80.

Kalman, M. E. (1999). *The Effects of Organizational Commitment and Expected Outcomes on the Motivation to Share Discretionary Information in a Collaborative Database: Communication Dilemmas and Other Serious Games*: University of Southern California.

Kalpic, B., & Bernus, P. (2006). Business process modeling through the knowledge management perspective. *Journal of Knowledge Management, 10*(3), 40-56.

Kankanhalli, A., Tan, B. C., & Wei, K.-K. (2005). Contributing knowledge to electronic knowledge repositories: an empirical investigation. *MIS quarterly*, 113-143.

Kankanhalli, A., Tanudidjaja, F., Sutanto, J., & Tan, B. C. (2003). The role of IT in successful knowledge management initiatives. *Communications of the ACM, 46*(9), 69-73.

Karlsen, J. T., & Gottschalk, P. (2004). Factors affecting knowledge transfer in IT projects. *Engineering Management Journal, 16*(1), 3-11.

Kazi, A. S. (2005). *Knowledge Management in the Construction Industry: A Socio-technical Perspective*: Idea Group Pub.

Kazi, M. A., & Wilson, J. (1996). Applying single-case evaluation in social work. *British Journal of Social Work, 26*(5), 699-717.

Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, 51-60.

Kerlinger, F. N. (1986). *Foundations of Behavioral Research (3rd ed.)*. New York: Holt, Rinehart and Winston.

Kikoski, C. K., & Kikoski, J. F. (2004). *The Inquiring Organization: Tacit Knowledge, Conversation, and Knowledge Creation : Skills for 21st-century Organizations*: Praeger.

Kim, S., & Lee, H. (2006). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public Administration Review, 66*(3), 370-385.

Kim, Y.-G., Yu, S.-H., & Lee, J.-H. (2003). Knowledge strategy planning: methodology and case. *Expert systems with applications, 24*(3), 295-307.

The King Abdullah II Award for Excelence in Government Performance and Transparency. (2010). *The Award's Estaplishment*, from www.kaa.jo

King, W. R. (1999). Integrating knowledge management into IS strategy. *Information Systems Management, 16*, 70-72.

King, W. R., Chung, T. R., & Haney, M. H. (2008). Knowledge Management and Organizational Learning. *Omega, 36*(2), 167-172.

King, W. R., & Marks, P. V. (2008). Motivating knowledge sharing through a knowledge management system. *Omega, 36*(1), 131-146.

Knowledge Stations. (2011). *Objectives of Knowledge Stations*, from www.ks.gov.jo

Ko, D.-G., Kirsch, L. J., & King, W. R. (2005). Antecedents of knowledge transfer from consultants to clients in enterprise system implementations. *MIS quarterly*, 59-85.

Koskinen, K. U. (2001). *Tacit knowledge as a promoter of success in technology firms.* Paper presented at the System Sciences, 2001. Proceedings of the 34th Annual Hawaii International Conference on.

Koskinen, K. U., Pihlanto, P., & Vanharanta, H. (2003). Tacit knowledge acquisition and sharing in a project work context. *International Journal of Project Management, 21*(4), 281-290.

Kreiner, K. (2002). Tacit knowledge management: the role of artifacts. *Journal of Knowledge Management, 6*(2), 112-123.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educ Psychol Meas*.

Kubo, I., Saka, A., & Pan, S. L. (2001). Behind the scenes of knowledge sharing in a Japanese bank. *Human Resource Development International, 4*(4), 465-485.

Kulkarni, U. R., Ravindran, S., & Freeze, R. (2006). A knowledge management success model: Theoretical development and empirical validation. *Journal of Management Information Systems, 23*(3), 309-347.

Kumar, R. (1996). *Research Methodology: A Step-by-Step Guide for Beginners*. London: Material.

Kuo, F.-Y., & Young, M.-L. (2008). Predicting knowledge sharing practices through intention: A test of competing models. *Computers in Human Behavior, 24*(6), 2697-2722.

Kwok, S. H., & Gao, S. (2005). Attitude towards knowledge sharing behavior. *The Journal of Computer Information Systems, 46*(2), 45.

Lakshman, C. (2007). Organizational knowledge leadership: a grounded theory approach. *Leadership & Organization Development Journal, 28*(1), 51-75.

Lam, A. (1996). Engineers, Management And Work Organization: A Comparative Analysis Of Engineers'work Roles In British And Japanese Electronics Firms*. *Journal of Management Studies, 33*(2), 183-212.

Lam, A. (2000). Tacit knowledge, organizational learning and societal institutions: an integrated framework. *Organization Studies, 21*(3), 487-513.

Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*: Cambridge University Press.

Lawson, C., & Lorenz, E. (1999). Collective learning, tacit knowledge and regional innovative capacity. *Regional studies, 33*(4), 305-317.

Leach, D. J., Wall, T. D., & Jackson, P. R. (2003). The effect of empowerment on job knowledge: An empirical test involving operators of complex technology. *Journal of Occupational and Organizational Psychology, 76*, 27.

Lee, H., & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems, 20*(1), 179-228.

Lee, J.-H., Kim, Y.-G., & Kim, M.-Y. (2006). Effects of managerial drivers and climate maturity on knowledge management performance: Empirical validation.

Lee, P., Gillespie, N., Mann, L., & Wearing, A. (2010). Leadership and trust: Their effect on knowledge sharing and team performance. *Management Learning*.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research: Planning and Design*: Prentice Hall.

Leonard-Barton, D. (1995). *Wellsprings of knowledge: building and sustaining the sources of innovation*: Harvard Business School Press.

Leonard, D., & Sensiper, S. (1998). The Role of Tacit Knowledge in Group Innovation. *California Management Review, 40*(3), 112-132.

Leonard, N., & Insch, G. S. (2005). Tacit knowledge in academia: a proposed model and measurement scale. *The Journal of Psychology, 139*(6), 495-512.

Levina, N., & Vaaste, E. (2004). The Emergence of Boundary Spanning Competence in Practice: Implications for Information Systems' Implementation Use. *Information Systems Working Papers Series, Vol*.

Levinthal, D. A., & March, J. G. (1993). The myopia of learning. *Strategic Management Journal, 14*(S2), 95-112.

Li, L., & Zhao, X. (2006). Enhancing competitive edge through knowledge management in implementing ERP systems. *Systems Research and Behavioral Science, 23*(2), 129-140.

Liao, L.-F. (2008). Impact of manager's social power on R&D employees' knowledge-sharing behaviour. *International Journal of Technology Management, 41*(1-2), 169-182.

Liao, L. (2006). A Learning Organization Perspective on Knowledge Sharing Behavior and Firm Innovation. *Human Systems Management, 25*(4), 227-236.

Liebowitz, J. (2003). A Knowledge Management Strategy for the Jason Organization*: A Case Study. *The Journal of Computer Information Systems, 44*(2), 1.

Liebowitz, J. (2004). *Addressing the human capital crisis in the federal government: A knowledge management perspective*: Routledge.

Liebowitz, J., & Megbolugbe, I. (2003). A set of frameworks to aid the project manager in conceptualizing and implementing knowledge management initiatives. *International Journal of Project Management, 21*(3), 189-198.

Lin, C.-P. (2007a). To share or not to share: modeling knowledge sharing using exchange ideology as a moderator. *Personnel Review, 36*(3), 457-475.

Lin, C.-P. (2007b). To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. *Journal of Business Ethics, 70*(4), 411-428.

Lin, C.-P. (2007C). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of information science*.

Lin, C.-P.(2007d). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower, 28*(3/4), 315-332.

Lin, C.-Y., Kuo, T.-H., Kuo, Y.-K., Ho, L.-A., & Kuo, Y.-L. (2007). The KM chain-empirical study of the vital knowledge sourcing links. *The Journal of Computer Information Systems, 48*(2), 91.

Lin, H.-F. (2006). Impact of organizational support on organizational intention to facilitate knowledge sharing. *Knowledge Management Research & Practice, 4*(1), 26-35.

Lin, H.-F., & Lee, G.-G. (2004). Perceptions of senior managers toward knowledge-sharing behaviour. *Management Decision, 42*(1), 108-125.

Lin, H.-F., & Lee, G.-G. (2006). Effects of socio-technical factors on organizational intention to encourage knowledge sharing. *Management Decision, 44*(1), 74-88.

Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology, 86*(1), 114.

Lopez-Nicolas, C., & Molina-Castillo, F. J. (2008). Customer Knowledge Management and E-commerce: The role of customer perceived risk. *International Journal of Information Management, 28*(2), 102-113.

Lubit, R. (2001). "Tacit Knowledge and Knowledge Management: The Keys to Sustainable Competitive Advantage," *Organizational Dynamics*, 29 (4), 164–178.

Luthans, F., & Avolio, B.(2003),Authentic leadership: A positive developmental approach,in K. Cameron, J. Dutton & R. Quinn (eds), Positive organizational scholarship (pp. 241-261), Barrett-Koehler, San Francisco, CA.

Lynch, N. (2007). My Early Days in Distributed Computing Theory. *Distributed Computing, 4731*, 579.

Lynch, N., Segala, R., & Vaandrager, F. (2007). Observing branching structure through probabilistic contexts. *SIAM Journal on Computing, 37*(4), 977-1013.

Lynch, N. A. (2007). *Distributed computing theory: algorithms, impossibility results, models, and proofs.* Paper presented at the Proceedings of the thirty-ninth annual ACM symposium on Theory of computing.

MacKenzie, S. B., Podsakoff, P. M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *The Journal of Marketing*, 87-98.

MacKinlay, E., Ellor, J.W., & Pickard, S. (Eds.), (2001). *Aging, spirituality and pastoral care: A Multi-National Perspective*. Binghamton, NY: Haworth Press.

MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology, 58*, 593-614.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological methods, 7*(1), 83.

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research, 39*(1), 99-128.

MacKinnon, D. P., Warsi, G., & Dwyer, J. H. (1995). A simulation study of mediated effect measures. *Multivariate behavioral research, 30*(1), 41-62.

Macneil, C. (2001) "The supervisor as a facilitator of informal learning in work teams", *Journal of Workplace Learning*, Vol. 13 Iss: 6, pp.246 - 253

Madeuf, B. (1984). International technology transfers and international technology payments: Definitions, measurement and firms' behaviour. *Research Policy, 13*(3), 125-140.

Malhotra, N. K. (1988). Self concept and product choice: An integrated perspective. *Journal of Economic Psychology, 9*(1), 1-28.

Malhotra, Y., & Galleta, D. (2003). *Role of commitment and motivation in knowledge management systems implementation: Theory, conceptualization, and measurement of antecedents of success.* Paper presented at the System Sciences, 2003. Proceedings of the 36th Annual Hawaii International Conference on.

Manar, A. (2010). Brief on Al-Manar Project, 2015, from www.almanar.jo

Markov, I. (2000). Amédée or how to get rid of it: Social representations from a dialogical perspective. *Culture & Psychology, 6*(4), 419-460.

Mary MacNeil, C. (2004). Exploring the supervisor role as a facilitator of knowledge sharing in teams. *Journal of European Industrial Training, 28*(1), 93-102.

Mat Isa, R., Abdullah, N.L.,&Che Senik, Z. (2010). Social Capital Dimensions For Tacit Knowledge Sharing: Exploring The Indicators, *Journal Pengurusan*,30, 75-92. Scopus cited publication.

McAdam, R., Mason, B., & McCrory, J. (2007). Exploring the dichotomies within the tacit knowledge literature: towards a process of tacit knowing in organizations. *Journal of Knowledge Management, 11*(2), 43-59.

McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of management journal, 38*(1), 24-59.

McKeen, J. D., & Staples, D. S. (2001). Knowledge Managers: Who They Are and What They Do *Handbook on Knowledge Management 1*(Vol. 1, pp. 21-41): Springer Berlin Heidelberg.

McKenzie, J., Truch, A., & Winkelen, C. (2001). Winning commitment for knowledge management initiatives.*Journal of Change Management*, 2(2), 115-127.

McKinlay, A. (2002). The limits of knowledge management. *New Technology, Work and Employment, 17*(2), 76-88.

McNabb, D. E. (2006). *Knowledge Management in the Public Sector: A Blueprint for Innovation in Government*: M. E. Sharpe Incorporated.

Meng, Y. C., Wei, F. S., Wong, P. K., & Singh, M. (1998). The impact of organisational characteristics on the outcome of new product development projects in singapore-based firms. *Singapore Management Review, 20*(1), 25.

Mesmer-Magnus, J. R., & DeChurch, L. A. (2009). Information sharing and team performance: a meta-analysis. *Journal of Applied Psychology, 94*(2), 535.

Meso, P., & Smith, R. (2000). A resource-based view of organizational knowledge management systems. *Journal of knowledge management, 4*(3), 224-234.

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the Workplace: Theory, Research, and Application*: SAGE Publications.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of applied psychology, 78*(4), 538.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20-52.

Michailova, S., & Husted, K. (2003). Knowledge-sharing hostility in Russian firms. *California management review, 45*(3), 59-77.

Michalisin, M. D., Smith, R. D., & Kline, D. M. (1997). In search of strategic assets. *The international journal of organizational analysis, 5*(4), 360-387.

Ministry of Information and Communications Technology. (2012). *e-Government Program Overview*, from www.moict.gov.jo.

Mooradian, T., Renzl, B., & Matzler, K. (2006). Who trusts? Personality, trust and knowledge sharing. *Management learning, 37*(4), 523-540.

Morgan, N. A., Zou, S., Vorhies, D. W., & Katsikeas, C. S. (2003). Experiential and informational knowledge, architectural marketing capabilities, and the adaptive performance of export ventures: A cross-national study. *Decision Sciences, 34*(2), 287-321.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *the journal of marketing*, 20-38.

Moscovici, S. (1963). Attitudes and opinions. *Annual review of psychology, 14*(1), 231-260.

Moscovici, S. (1984). The Phenomenon of Social Representations *Social Representations: European Studies in Social Psychology* (pp. 3-70): Cambridge University Press.

Moscovici, S. (2001). Why a theory of social representations. *Representations of the social*, 8-35.

Moscovici, S., & Marková, I. (1998). Presenting social representations: A conversation. *Culture & Psychology, 4*(3), 371-410.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: the psychology of commitment, absenteeism, and turnover*: Academic Press.

Myers, M. B., & Cheung, M.-S. (2008). Sharing global supply chain knowledge. *MIT Sloan Management Review, 49*(4), 67.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review, 23*(2), 242-266.

Naif Marouf, L. (2007). Social networks and knowledge sharing in organizations: a case study. *Journal of Knowledge Management, 11*(6), 110-125.

National Information Technology Center (NITC). (2012). *About NITC*, from www.nitc.gov.jo.

Nelson, A., Sabatier, R., & Nelson, W. (2006). Toward an understanding of global entrepreneurial knowledge management (EKM) practices: A preliminary investigation of EKM in France and the US. *Journal of Aplied Management and Entrepreneurship, 11*(2), 70-89.

Nelson, R. R., & Winter, S. G. (1982). *An Evolutionary Theory of Economic Change*: Belknap Press of Harvard University Press.

Newman, B. D., & Conrad, K. W. (2000). *A Framework for Characterizing Knowledge Management Methods, Practices, and Technologies.* Paper presented at the PAKM.

Nickols, F. (2000). The Tacit and Explicit Nature of Knowledge: The Knowledge in Knowledge Management *The Knowledge Management Yearbook 2000-2001*: Taylor & Francis.

Nicolopoulou, K., Karatas-Ozkan, M., Tatli, A., Forstenlechner, I., & Lettice, F. (2007). Cultural differences in motivating global knowledge workers. *Equal Opportunities International, 26*(8), 823-833.

Nielsen, L., & Madsen, S. (2006). *Storytelling as method for sharing knowledge across IT projects.* Paper presented at the System Sciences, 2006. HICSS'06. Proceedings of the 39th Annual Hawaii International Conference on.

Nissen, M., Kamel, M., & Sengupta, K. (2000). Integrated Analysis and Design of Knowledge Systems and Processes *Knowledge Management and Virtual Organizations* (pp. 214-244): IGI Global.

Nissen, M. E. (2005). Dynamic knowledge patterns to inform design: A field study of knowledge stocks and flows in an extreme organization. *Journal of Management Information Systems, 22*(3), 225-263.

Nita, B. (2008). *Identifying organizational and interpersonal relationship factors that promote knowledge sharing.* Alliant International University, San Diego.

Nonaka, I. (1991). The knowledge-creating company. *Harvard business review, 69*(6), 96-104.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization science, 5*(1), 14-37.

Nonaka, I. (2008). *The Knowledge-creating Company*: Harvard Business Press.

Nonaka, I., & Konno, N. (1998). The Concept of "Ba": Building a Foundation for Knowledge Creation. *California Management Review, 40*(3), 40-54.

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.

Norman, G. R., & Streiner, D. L. (2008). *Biostatistics: The Bare Essentials*: B.C. Decker.

Nunnally, J. C. (1978). *Psychometric theory*: McGraw-Hill.

O'dell, C. S., Grayson, C. J., & Essaides, N. (1998). *If Only We Knew What We Know: The Transfer of Internal Knowledge and Best Practice*: Free Press.

O'Leary, D. E. (1998). Using AI in knowledge management: Knowledge bases and ontologies. *IEEE Intelligent systems*(3), 34-39.

O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of applied psychology, 71*(3), 492.

OECD. (2011). *OECD Guide to Measuring the Information Society 2011*: OECD Publishing.

Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. *Research in organizational behavior, 12*(1), 43-72.

Orlikowski, W. J., & Gash, D. C. (1994). Technological frames: making sense of information technology in organizations. *ACM Transactions on Information Systems (TOIS), 12*(2), 174-207.

Pallant, J. (2007). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows (Version 15)*: McGraw-Hill Companies,Incorporated.

Pan, S. L., & Leidner, D. E. (2003). Bridging communities of practice with information technology in pursuit of global knowledge sharing. *The Journal of Strategic Information Systems, 12*(1), 71-88.

Parker, S. (2000). From passive to proactive motivation: The importance of flexible role orientations and role breadth self-efficacy. *Applied Psychology, 49*(3), 447-469.

Parker, S. K. (1998). Enhancing role breadth self-efficacy: the roles of job enrichment and other organizational interventions. *Journal of Applied Psychology, 83*(6), 835.

Parker, S. K., & Sprigg, C. A. (1999). Minimizing strain and maximizing learning: the role of job demands, job control, and proactive personality. *journal of Applied Psychology, 84*(6), 925.

Pawlowski, S. D., & Robey, D. (2004). Bridging user organizations: Knowledge brokering and the work of information technology professionals. *MIS quarterly*, 645-672.

Peterson, Suzanne J., and Fred Luthans. 2003. The positiveimpact and development of hopeful leaders. *Leadership and Organization Development Journal*24/1 (January): 26-31.

Polanyi, M. (1962) *Personal Knowledge*, Chicago: The University of Chicago Press.

Polanyi, M. (1966). *The Tacit Dimension*. London: Routledge and Kegan Paul.

Polanyi, M. (Ed.). (1969). *Knowing and Being. Essays by Michael Polanyi*. London: Routledge & Kegan Paul.

Portes, A. (1998) "*Social Capital: Its Origins and Applications in ContemporarySociology*"Annual Review of Sociology24: 1-24.

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of applied psychology, 59*(5), 603.

Portes, A. (2000). Social capital: Its origins and applications in modern sociology. *LESSER, Eric L. Knowledge and Social Capital. Boston: Butterworth-Heinemann*, 43-67.

Potter, J., & Edwards, D. (1999). Social representations and discursive psychology: From cognition to action. *Culture & Psychology, 5*(4), 447-458.

Prahalad, C. K., & Hamel, G. (1990). *The Core Competence of Corporation*: Harvard Business School Reprint.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers, 36*(4), 717-731.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of democracy, 6*(1), 65-78.

Quigley, N. R., Tesluk, P. E., Locke, E. A., & Bartol, K. M. (2007). A multilevel investigation of the motivational mechanisms underlying knowledge sharing and performance. *Organization Science, 18*(1), 71-88.

Ragsdell, G., & Remyni, D. (2007). *Inhibitors and enhancers to knowledge sharing: lessons from the voluntary sector.* Paper presented at the Proceedings of the 4th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning.

Rajiv, L., & Sarvary, M. (1999). Knowledge management and competition in the consulting industry. *Marketing Science*, 485.

Ramírez-Ortiz, G., Caballero-Hoyos, R., Ramírez-López, G., & Valente, T. W. (2012). The effects of social networks on tobacco use among high-school adolescents in Mexico. *salud pública de méxico, 54*(4), 433-441.

Ramirez, A., Coakes, E., Patrick, K., & Dotsika, F. (2007). Knowledge sharing: developing from within. *The Learning Organization, 14*(5), 395-406.

Ramirez, A., Coakes, E., Søndergaard, S., Kerr, M., & Clegg, C. (2007). Sharing knowledge: contextualising socio-technical thinking and practice. *The Learning Organization, 14*(5), 423-435.

Rastogi, P. (2000). Knowledge management and intellectual capital–the new virtuous reality of competitiveness. *Human systems management, 19*(1), 39-48.

Reagans, R., & McEvily, B. (2003). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative science quarterly, 48*(2), 240-267.

Renzl, B. (2008). Trust in management and knowledge sharing: The mediating effects of fear and knowledge documentation. *Omega, 36*(2), 206-220.

Rezaie, K., Byat, M., & Shirkouhi, S. N. (2009). *Evaluating effective factors of implementing knowledge management based on FAHP method.* Paper presented at the Modelling & Simulation, 2009. AMS'09. Third Asia International Conference on.

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of knowledge management, 9*(3), 18-35.

Riege, A., & O'Keeffe, M. (2003). *'Influences of human resources on knowledge management and its contributions on faster speed to market time.* Paper presented at the Annual Meeting of the European International Business Academy, Copenhagen.

Ringberg, T., & Reihlen, M. (2008). Towards a Socio-Cognitive Approach to Knowledge Transfer. *Journal of Management Studies, 45*(5), 912-935.

Robbins, S. P., & DeCenzo, D. A. (2001). *Fundamentals of Management: Essential Concepts and Applications.* New Jersey: Prentice Hall.

Robins, J. M., & Greenland, S. (1992). Identifiability and exchangeability for direct and indirect effects. *Epidemiology, 3*, 143-155.

Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative science quarterly*, 574-599.

Robison, L. J., Schmid, A. A., & Siles, M. E. (2002). Is social capital really capital? *Review of social economy, 60*(1), 1-21.

Rubenstein-Montano, B., Buchwalter, J., & Liebowitz, J. (2001). Knowledge management: A US social security administration case study. *Government Information Quarterly, 18*(3), 223-253.

Ruddy, T. (2000). Taking knowledge from heads and putting it into hands. *Knowledge and process management, 7*(1), 37.

Rüdiger, M., & Vanini, S. (1998). Das Tacit knowledge-Phänomen und seine Implikationen für das Innovationsmanagement. *Betriebswirtschaft-Stuttgart-, 58*, 467-480.

Ruggles, R. (1998). The State of the Notion: Knowledge Management in Practice. *California management review, 40*(3), 80-89.

Rupp, D. E., & Cropanzano, R. (2002). The mediating effects of social exchange relationships in predicting workplace outcomes from multifoci organizational justice. *Organizational Behavior and Human Decision Processes, 89*(1), 925-946.

Ruppel, C. P., & Harrington, S. J. (2001). Sharing knowledge through intranets: A study of organizational culture and intranet implementation. *Professional Communication, IEEE Transactions on, 44*(1), 37-52.

Ryu, S., Ho, S. H., & Han, I. (2003). Knowledge sharing behavior of physicians in hospitals. *Expert Systems with applications, 25*(1), 113-122.

Sabherwal, R., & Becerra-Fernandez, I. (2003). An empirical study of the effect of knowledge management processes at individual, group, and organizational levels*. *Decision sciences, 34*(2), 225-260.

Sabherwal, R., & Sabherwal, S. (2005). Knowledge Management Using Information Technology: Determinants of Short-Term Impact on Firm Value*. *Decision Sciences, 36*(4), 531-567.

Sabri, H. (2005). Knowledge management in its context: adapting structure to a knowledge creating culture. *International Journal of Commerce and Management, 15*(2), 113-128.

Salgado, J. (2000). Autoeficiencia y criterios organizacionales de desempeño. *Apuntes de Psicología, 18*(1), 179-191.

Sanchez, P. (2004). *Defining Corporate Culture.* Paper presented at the Communication World.

Santoro, M. D., Bierly III, P. E., Gopalakrishnan, S., Grevesen, C. W., & Damanpour, F. (2007). Performance implications of organisational structure and knowledge sharing in multinational R&D networks. *International Journal of Technology Management, 38*(1-2), 113-136.

Sapsed, J., & Salter, A. (2004). Postcards from the edge: local communities, global programs and boundary objects. *Organization studies, 25*(9), 1515-1534.

Schepers, P., & Van den Berg, P. T. (2007). Social factors of work-environment creativity. *Journal of Business and Psychology, 21*(3), 407-428.

Schneider, B., Brief, A. P., & Guzzo, R. A. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics, 24*(4), 7-19.

Seba, I., Rowley, J., & Delbridge, R. (2012). Knowledge sharing in the Dubai police force. *Journal of Knowledge Management, 16*(1), 114-128.

Seba, I., Rowley, J., & Lambert, S. (2012). Factors affecting attitudes and intentions towards knowledge sharing in the Dubai Police Force. *International Journal of Information Management, 32*(4), 372-380.

Seidler-de Alwis, R., & Hartmann, E. (2008). The use of tacit knowledge within innovative companies: knowledge management in innovative enterprises. *Journal of Knowledge Management, 12*(1), 133-147.

Sekaran, U. (2003). *Research Methods for Business: A Skill-building Approach*: Wiley.

Sekaran, U., & Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*: John Wiley & Sons.

Senker, J. (2008). The contribution of tacit knowledge to innovation *Cognition, Communication and Interaction* (pp. 376-392): Springer.

Serban, A. M., & Luan, J. (2002). Overview of knowledge management. *New Directions for Institutional Research, 2002*(113), 5-16.

Siemsen, E., Balasubramanian, S., & Roth, A. V. (2007). Incentives that induce task-related effort, helping, and knowledge sharing in workgroups. *Management science, 53*(10), 1533-1550.

Singh, J., Dilnutt, R., & Lakomski, G. (2004). Creating a Knowledge Sharing Capabilty in the Malaysian Cultural Context. *International Journal of Diversity in Organisations, Communities & Nations, 7*(6), 77-86.

Singh Sandhu, M., Kishore Jain, K., & Umi Kalthom bte Ahmad, I. (2011). Knowledge sharing among public sector employees: evidence from Malaysia. *International Journal of Public Sector Management, 24*(3), 206-226.

Sivadas, E., & Dwyer, F. R. (2000). An examination of organizational factors influencing new product success in internal and alliance-based processes. *Journal of marketing, 64*(1), 31-49.

Smith, P. A., & Coakes, E. (2006). Storing and sharing knowledge: Supporting the management of knowledge made explicit in transnational organisations. *The Learning Organization, 13*(6), 579-593.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological methodology, 13*(1982), 290-312.

Sobol, M. G., & Lei, D. (1994). Environment, manufacturing technology, and embedded knowledge. *International Journal of Human Factors in Manufacturing, 4*(2), 167-189.

Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological bulletin, 124*(2), 240.

Stankosky, M., & Baldanza, C. (2001). *A systems approach to engineering a knowledge management system. in 2003 Knowledge Management: Employing Proven Tools for Results*. Paper presented at the The Catalyst for Lectronic Government, Management Concepts, Vienna.

Stanskosky, M. (2005). Advances in Knowledge Management: University Research Toward an Academic discipline *reating the discipline of knowledge management. .* Washington: Elsevier Butterworth-Heinemann.

Staples, D. S., & Webster, J. (2008). Exploring the effects of trust, task interdependence and virtualness on knowledge sharing in teams. *Information Systems Journal, 18*(6), 617-640.

Stenmark, D., Lindgren, R., & Henfridsson, O. (2006). System Support for Knowledge Work: Bridging the Knowing-Doing Gap. *International Journal of Knowledge Management, 2*(2), 46-48.

Sternberg, R. J. (2000). *Practical Intelligence in Everyday Life*. Cambridge: Cambridge University Press.

Sternberg, R. J., & Horvath, J. A. (1999). *Tacit knowledge in professional practice: Researcher and practitioner perspectives*: Psychology Press.

Sternberg, R. J., Wagner, R. K., Williams, W. M., & Horvath, J. A. (1995). Testing common sense. *American psychologist, 50*(11), 912.

Storey, J., & Quintas, P. (2001). Knowledge management and HRM. *Human resource management: A critical text*, 339-363.

Stover, M. (2004). Making tacit knowledge explicit: The ready reference database as codified knowledge. *Reference Services Review, 32*(2), 164-173.

Sunassee, N. N., & Sewry, D. A. (2003). *An investigation of knowledge management implementation strategies.* Paper presented at the Proceedings of the 2003 annual research conference of the South African institute of computer scientists and information technologists on Enablement through technology.

Sveiby, K. E. (1997). *The New Organizational Wealth: Managing & Measuring Knowledge-based Assets*: Berrett-Koehler Publishers.

Svetlik, I., Stavrou-Costea, E., Jin Chang, T., Pao Yeh, S., & Yeh, I.-J. (2007). The effects of joint reward system in new product development. *International Journal of Manpower, 28*(3/4), 276-297.

Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic management journal, 17*(S2), 27-43.

Tagliaventi, M. R., & Mattarelli, E. (2006). The role of networks of practice, value sharing, and operational proximity in knowledge flows between professional groups. *Human Relations, 59*(3), 291-319.

Tan, H.-T., & Libby, R. (1997). Tacit managerial versus technical knowledge as determinants of audit expertise in the field. *Journal of Accounting Research*, 97-113.

Tan, H. H., & Zhao, B. (2003). Individual-and perceived contextual-level antecedents of individual technical information inquiry in organizations. *The Journal of psychology, 137*(6), 597-621.

Tanriverdi, H. (2005). Information technology relatedness, knowledge management capability, and performance of multibusiness firms. *MIS quarterly*, 311-334.

Taylor, E. Z. (2006). The effect of incentives on knowledge sharing in computer-mediated communication: An experimental investigation. *Journal of Information Systems, 20*(1), 103-116.

Taylor, W. A., & Wright, G. H. (2004). Organizational readiness for successful knowledge sharing: Challenges for public sector managers. *Information Resources Management Journal, 17*(2), 22.

Teece, D. J. (1998). Capturing value from knowledge assets: The new economy, markets for know-how, and intangible assets. *California management review, 40*, 55-79.

Telecommunications Regulatory Commission (TRC) (2012). *His Magesty's Vision for ICT Sector*, from www.trc.gov.jo.

The Hashmite Kingdom Of Jordan National Information System. (2010). *Brief on Information sector*, from www.nis.gov.jo.

The Information and Communication Technology Association of Jordan. (2011), from www.intaj.net

The Jordanian E-Government Portal. (2012). *About E-Government Program* from www.Jordan.gov.jo

The King Abdullah II Award for Excelence in private sector. (2010). *Brief on Award*, from www.kaaps.jo

Tohidinia, Z., & Mosakhani, M. (2010). Knowledge sharing behaviour and its predictors. *Industrial Management & Data Systems, 110*(4), 611-631.

Trochim, W. M. K. (2002). Reserch Method Knowledge Base Retrieved September 12, 2010, from http://www.socialresearchmethods.net/kb/

Truran, W. R. (1998). Pathways for knowledge: how companies learn through people. *Engineering Management Journal, 10*(4), 15-20.

Tsai, W. (2002). Social structure of "coopetition" within a multiunit organization: Coordination, competition, and intraorganizational knowledge sharing. *Organization science, 13*(2), 179-190.

Tsikriktsis, N. (2005). A review of techniques for treating missing data in OM survey research. *Journal of Operations Management, 24*(1), 53-62.

Tsui, E. (2005). The role of IT in KM: where are we now and where are we heading? *Journal of Knowledge Management, 9*(1), 3-6.

Ulrich, D. (1998). Intellectual capital= competence x commitment. *MIT Sloan Management Review, 39*(2), 15.

USAID Jordan Economic Development Program. (2012). *About USAID Jordan* from www.jordan.usaid.gov.

Van den Hooff, B., & de Leeuw van Weenen, F. (2004). Committed to share: commitment and CMC use as antecedents of knowledge sharing. *Knowledge and process management, 11*(1), 13-24.

Varun Grover, T. H. D. (2001). General perspectives on knowledge management: Fostering a research agenda. *Journal of management information systems, 18*(1), 5-21.

Villamizar Reyes, M. M., & Castañeda Zapata, D. I. (2014). Relation Between Organizational Climate and its Dimensions and Knowledge-sharing Behavior among Knowledge Workers. *International Journal of Psychological Research, 7*(2), 64-75.

Visser, M. (2007). Deutero-learning in organizations: A review and a reformulation. *Academy of management review, 32*(2), 659-667.

Voelklein, C., & Howarth, C. (2005). A review of controversies about social representations theory: A British debate. *Culture & Psychology, 11*(4), 431-454.

Voelpel, S. C., Dous, M., & Davenport, T. H. (2005). Five steps to creating a global knowledge-sharing system: Siemens' ShareNet. *The Academy of Management Executive, 19*(2), 9-23.

Von Hippel, E. A., & Von Krogh, G. (2006). Free revealing and the private-collective model for innovation incentives. *R&D Management, 36*(3), 295-306.

von Krogh, G., Ichijo, K., & Nonaka, I. (2000). *Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation*: Oxford University Press, USA.

Wagner, J. A. (1994). Participation's effects on performance and satisfaction: A reconsideration of research evidence. *Academy of management review, 19*(2), 312-330.

Wagner, R. K. (1987). Tacit knowledge in everyday intelligent behavior. *Journal of personality and social psychology, 52*(6), 1236.

Wagner, R. K., & Sternberg, R. J. (1986). Tacit knowledge and intelligence in the everyday world. *Practical intelligence: Nature and origins of competence in the everyday world*, 51-83.

Wagner, W., Duveen, G., Farr, R., Jovchelovitch, S., Lorenzi-Cioldi, F., Markova, I., et al. (1999). Theory and method of social representations. *Asian journal of social psychology, 2*(1), 95-125.

Wah, L. (1999). Making knowledge stick. *Management Review, 88*(5), 24.

Wallace, D. P. (2007). *Knowledge management: Historical and cross-disciplinary themes*: Libraries unlimited.

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review, 20*(2), 115-131.

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS quarterly*, 35-57.

Wasonga, T. A., & Murphy, J. F. (2006). Learning from tacit knowledge: the impact of the internship. *International Journal of Educational Management, 20*(2), 153-163.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal, 40*(1), 82-111.

Wei, C., Choy, C. And Yew, W. (2009). Is the Malaysian telecommunication industry ready for knowledge management implementation? *Journal of Knowledge Management*, 13 (1), pp. 69-87.

Weir, D., & Hutchings, K. (2005). Cultural embeddedness and contextual constraints: knowledge sharing in Chinese and Arab cultures. *Knowledge and process management, 12*(2), 89-98.

Weiss, L. M. (1999). Collection and Connection: The Anatomy of Knowledge Sharing in Professional Service Firms. *Organization Development Journal, 17*(4), 61-77.

Whitener, E. M., Brodt, S. E., Korsgaard, M. A., & Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behavior. *Academy of management review, 23*(3), 513-530.

Wiig, K. M. (1999). Introducing Knowledge Management into the Enterprise *Knowledge Management Handbook* (pp. 31-41): Taylor & Francis.

Wiig, Karl M. (1997). "Knowledge Management:Where did it come from and where will it go?"Expert Systems with Applications, 13, 1,1-14.

Wiig, K. M., De Hoog, R., & Van Der Spek, R. (1997). Supporting knowledge management: a selection of methods and techniques. *Expert systems with applications, 13*(1), 15-27.

Wilkesmann, U., Fischer, H., & Wilkesmann, M. (2009). Cultural characteristics of knowledge transfer. *Journal of Knowledge Management, 13*(6), 464-477.

Willem, A., & Buelens, M. (2007). Knowledge sharing in public sector organizations: The effect of organizational characteristics on

interdepartmental knowledge sharing. *Journal of public administration research and theory, 17*(4), 581-606.

Willem, A., & Buelens, M. (2009). Knowledge sharing in inter-unit cooperative episodes: The impact of organizational structure dimensions. *International Journal of Information Management, 29*(2), 151-160.

Willem, A., & Scarbrough, H. (2006). Social capital and political bias in knowledge sharing: An exploratory study. *Human Relations, 59*(10), 1343-1370.

Wong, C.-S., Wong, Y.-t., Hui, C., & Law, K. S. (2001). The significant role of Chinese employees' organizational commitment: Implications for managing employees in Chinese societies. *Journal of World Business, 36*(3), 326-340.

Wu, W.-L., Hsu, B.-F., & Yeh, R.-S. (2007). Fostering the determinantsof knowledge transfer: a team-level analysis. *Journal of information science*.

Yang, C., & Chen, L.-C. (2007). Can organizational knowledge capabilities affect knowledge sharing behavior? *Journal of information science, 33*(1), 95-109.

Yang, J.-T. (2009). Individual attitudes to learning and sharing individual and organisational knowledge in the hospitality industry. *The Service Industries Journal, 29*(12), 1723-1743.

Yang, S. C. & Farn, C. K. 2009. Social capital, behavior ural control, and tacit knowledge sharing--A multi-informant design. *International Journal of Information Management*,29,210-218.

Yao, L., Kam, T., & Chan, S. H. (2007). Knowledge sharing in Asian public administration sector: the case of Hong Kong. *Journal of Enterprise Information Management, 20*(1), 51-69.

Ye, S., Chen, H., & Jin, X. (2006). An empirical study of what drives users to share knowledge in virtual communities *Knowledge Science, Engineering and Management* (pp. 563-575): Springer.

Yih-Tong Sun, P., & Scott, J. L. (2005). An investigation of barriers to knowledge transfer. *Journal of Knowledge Management, 9*(2), 75-90.

Yilmaz, C., & Hunt, S. D. (2001). Salesperson cooperation: The influence of relational, task, organizational, and personal factors. *Journal of the Academy of Marketing Science, 29*(4), 335-357.

Yu, S.-H., Kim, Y.-G., & Kim, M.-Y. (2004). *Linking organizational knowledge management drivers to knowledge management performance: an exploratory study.* Paper presented at the System Sciences, 2004. Proceedings of the 37th Annual Hawaii International Conference on.

Zack, M. H. (1999). Managing codified knowledge. *Sloan Management Review, 40*(4), 45-58.

Zaim, H., Tatoglu, E., & Zaim, S. (2007). Performance of knowledge management practices: a causal analysis. *Journal of Knowledge Management, 11*(6), 54-67.

Zarraga, C., & Bonache, J. (2003). Assessing the team environment for knowledge sharing: an empirical analysis. *International Journal of Human Resource Management, 14*(7), 1227-1245.

Zárraga, C., & Manuel García-Falcón, J. (2003). Factors favoring knowledge management in work teams. *Journal of Knowledge Management, 7*(2), 81-96.

Zikmund, W. (2012). *Business research methods*: Cengage Learning.