
SUSTAINING KNOWLEDGE MANAGEMENT DEVELOPMENT THROUGH THE *ULŪ AL-ALBĀB* APPROACH

Suhaimi Mhd Sarif
International Islamic University Malaysia
Email: albanjari@gmail.com

Yusof Ismail
International Islamic University Malaysia
Email: yusof.edu@gmail.com

ABSTRACT

Knowledge management development enables organizational learning to sustain competitive advantage and performance in the competitive world. There have been many ways to sustain knowledge management development. This paper postulates contingency approach of knowledge management development through the *Ulū al-Albāb* approach as a mean to achieve organizational sustainable innovation and competitive advantage. The knowledge-based view offers an integrative framework to achieve sustainable knowledge management and organizational learning that are driven by knowledge-based view of firm innovation. The KBV view lacks of spirituality foundation to sustain intellectual contribution from knowledge workers. An opinion survey with knowledge workers who are familiar with conventional knowledge management perceived that the *Ulū al-Albāb* approach is commendable insights into dynamism, uncertainty and complex business contexts. The current stage of the *Ulū al-Albāb* approach has to be operationalized to fit into the contemporary business models and processes. However, the views of the knowledge workers are not comprehensive and rigorous without the views from other stakeholders. Nevertheless, managers can apply the *Ulū al-Albāb* approach into its communities of practice and social network. The *Ulū al-Albāb* approach contributes to the theoretical and practical understanding of knowledge management development.

Keywords: Knowledge management development, knowledge-based view, organizational learning, the *Ulū al-Albāb* approach.

INTRODUCTION

The contemporary business world is full with uncertainty due to the globalization process. Rapid changes are rampant due to the fast paced of technological development, high mobility of society, and high intensity in competition (Mahutga & Smith, 2011; Vergragt, 2012). This situation makes the business world competitive due to the increasing of enterprises that are competing on the uniqueness (Liu, Chen, & Tsai, 2004). Knowledge and innovation become increasingly important assets for firms in facing their competitors (Karim & Hussein, 2008).

The contemporary business model is no longer focusing on the factors of production, but means to create and sustain competitive advantage. There is increasing need to go back to the root of intellectual development, which lies in the soul of human. Lewis (2006) argues that the current business world can gain and sustain its competitive advantage when it is imbued with the soul (spirituality). Osman-Gani and Sarif (2011) argued that the excellence in spirituality leads to better worldview, far sighted and continuous improvement that guided by commendable values.

Sustainable method for knowledge management is necessary. According to Al-Faruqi (1992, p.5), the subscription to Tawhidic paradigm manifests the readiness and willingness to fulfill the Divine trust (*al amānah*) and obligatory duties (*al farā'id*) that are accompanied by the Divine guidance and human unique capability (Qur'an, Surah Hud, 11: 6 and *Sura Az Zumar* 39: 41).

This study is significant from theoretically as well as practice when it offers a contingency insight from Islamic perspective on various conventional theories of the firms and organizations that business organizations can continue to gain and sustain competitive advantage via Tawhidic-based knowledge management. Tawhidic-based knowledge management is based Islamic monotheism worldview that the dynamism is actually part of the process to attain ultimate victory in this worldly and the hereafter life. Mohd Kamal Hassan (2010, p.187) explains that Tawhidic paradigm is about Islamic monotheism thinking to serve as the true servant of Allah (*'ibād al-Rahmān*), vicegerents (*khulafā' fī al-ard*), true believers (*al-mu'minūn*) for the sake of betterment of mankind (*khayra ummatin ukhrijat lil-Nās*) (Qur'an, 3:110) and 'balanced community' (*ummatan wasatan li-takūnū shuhadā' 'alā al-nās*) (Qur'an, 2:143).

The discussion of this paper is divided into several sections. Firstly, it provides critical review on the literature of knowledge management development with human potentials. Secondly, the paper explains the methodology on how the data being collected and analysed. Thirdly, it presents the findings and discussion. Finally, the paper concludes the study.

LITERATURE REVIEW

Given the dynamic contents of the business world, managers need comprehensive and rigorous knowledge management development model to make the business continues to make profit on sustainable basis. The production-based economy provides the competencies to maximize profit through cost minimization and resources optimization. Resources in today's world are not only physical and organizational resources, but also human potentials that are transformed into competencies and capacity building.

Realizing the need for human potential in the business and economy, business strategists are gradually subscribing knowledge-based economy that are capable of responding to fast paced globalization. In other words, organizations must be able to advance their technology and competencies so that they can cope with the knowledge-intensive business services, very fast acceleration of product cycles, and changes of customers' tastes and preferences. In facing the competitors, knowledge about the industry, market and customers is essential.

Organizations must always acquire knowledge and continuously learn from various stakeholders to gain competitive advantages. The knowledge intensive business requires the unique competencies to be innovative. Innovation capability is not with the organizations, but with the individual knowledge workers and who possess knowledge and other intellectual derivatives. The classical innovation works on linear basis, less interactive and within the formal organizational network. Unlike the contemporary innovation, it works on dynamic mode, highly interactive and hybrid organizational network.

TAWHIDIC PARADIGM

This section elaborates on the *Tawhidic* paradigm perspectives. Mohd Kamal Hassan (2010, p.187) explains that Tawhidic paradigm is about Islamic monotheism thinking to serve as the true servant of Allah (*'ibād al-Rahmān*), vicegerents (*khulafā' fī al-ard*), true believers (*al-mu'minūn*) for the sake of betterment of mankind (*khayra ummatin ukhrijat lil-Nās*) (Qur'an, 3:110) and 'balanced community' (*ummatan wasatan li-takūnū shuhadā' 'alā al-nās*) (Qur'an, 2:143).

According to Al-Faruqi (1992, p.5), the subscription to Tawhidic paradigm manifests the readiness and willingness to fulfill the Divine trust (*al amānah*) and obligatory duties (*al farā'id*) that are accompanied by the Divine guidance and human unique capability (Qur'an, Surah Hud, 11: 6 and *Sura Az Zumar* 39: 41).

According to Zarkasyi (2010), based on Al-Ghazālī's approach of knowledge development, knowledge can be divided into religious and rational knowledge. Religious knowledge includes the science of the practical religion (*'ilm al-mu'amālah*), God's guided

knowledge on how the religion can be executed (*'ilm al-shar'iy*), and knowledge that derived from human intellect (*'ilm al-'aqliyy*). The scope of the practical religion (*'ilm al-mu'amālah*) is available in two forms, exoteric (*zāhir*) and esoteric (*bātin*) sciences.

The exoteric (*zāhir*) sciences include the act of worship (*'ibādāt*), social ethics (*'ādat*), and matters pertaining to dangerous act (*muhlikāt*). As for esoteric (*bātin*) sciences, it is about spirituality dimension. The second category of knowledge is the rational knowledge (*'ulūm al-'aqliyyah/ulūm ghayr shar'iyah*). This type of knowledge can be divided into fundamental (*usūl*) and subsidiary (*furū'*).

The fundamental knowledge includes mathematics/logic, natural science (observation and experiment), and investigation science of existence. The theoretical classification of knowledge allows organizations to identify priorities, resources, and efforts to convert the knowledge into absorptive capability. Zarkasyi (2010, pp.162-164) argued that there are two ways knowledge can be acquired by individuals, namely through human teaching (*al-ta'lim al insaniyy*) and Divine teaching (*al-ta'lim al rabbāniyy*).

People learn from other people via face-to-face and other instructional ways (Zabeda, 2004, 2008) with monetary or non-monetary rewards (Zabeda, 2008). However, the Divine teaching is highly spiritual when the learners acquiring knowledge based on Divine revelation (*al-wahy*), inspiration (*ilhām*), reflection and contemplation (*al-ishthighal bi al-tafakkur*).

The absorptive capacity to acquire human and divine teaching is through five capabilities (power), namely common sense (*al-hiss al-mushtarak*), representative power (*al-quwwah al-khayāliyyah*), estimate power (*al-quwwah al-wahmiyyah*), retentive power (*al-quwwah al-hāfidah wa al-dhakirah*), imaginative power (*al-quwwah al-mutakhayyilah/ al-quwwah al mutafakirrah*).

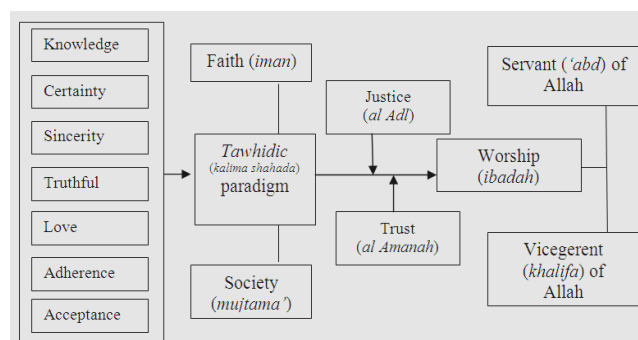
TAWHIDIC PARADIGM (TP) AND KNOWLEDGE MANAGEMENT DEVELOPMENT SYSTEMS (KMDS)

This section elaborates Tawhidic paradigm can be integrated with knowledge management development systems because Islamic knowledge management system is built upon the foundation of Islamic faith. The Islamic faith is based on *kalima shahaada*, which is to recognise Allah as the only universal God and Prophet Muhammad (Peace Be Upon Him) as the messenger of Allah. With this foundation, the ultimate aim of Islamic management system is to gain the pleasure of Allah by executing all of the duties prescribed by Him.

The discussion of this paper begins with the explanation on the major components of *Tawhidic* paradigm. Next, the paper discusses the role of firms in providing platform for managers to use their skill and talent to develop knowledge management system based on *Tawhidic* perspective to achieve the organizational goals. Then, the paper discusses the components of managerial functions together with managerial roles. A critical section of this paper presents the integration between *Tawhidic* paradigms and managerial functions together with illustrations how to make the integration work.

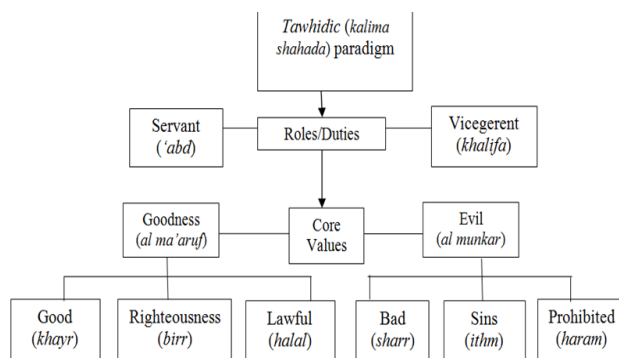
According to *Tawhidic* paradigm, man's multiple relationships revolve around *Tawhid*. The next section explains Islamic worldview which links the prerequisites to *Tawhid* and the roles of the believers of the paradigm. Figure 1 depicts the integrative linking role of *Tawhid* with worship (*'ibādāt*), submission of mankind to Allah for the sake of securing His Pleasure vis-à-vis the roles of mankind as servant (*'abd*) and vicegerent (*khalifa*) of Allah.

Figure 1: KMDS with *Tawhid*



Knowledge management development is in line with the main reason the creation of man, which is to worship (*'ibādāt*) Allah, in which it has to be performed with trust and justice is depicted in Figure 2 to be consistent with the job description of vicegerent (*khalifa*) as stated in *Sura al Baqarah* 2: 30. This assignment is in line with the purpose that Allah has created mankind to be His servant and also His vicegerent on earth.

Figure 2: Fundamental Principles of *Duniawi-Ukhrawi* View



ESSENCE OF KNOWLEDGE MANAGEMENT DEVELOPMENT SYSTEM (KMDS)

This section elaborates KMDS nature from organizational perspectives. Debowski (2006) contended that contemporary knowledge management development includes the organizational process and support. Five phases of knowledge development are knowledge sourcing, knowledge abstraction, knowledge conversion, knowledge diffusion and knowledge refinement. Knowledge sourcing involves organizational task to identify relevant information from the market and feedback from stakeholders. Knowledge abstraction is about making sense of the information obtained from the market into theories and assumptions. The next step will be knowledge conversion, to codify tacit and embodied knowledge into explicit and codified knowledge. The codified knowledge is transferred, transmitted and diffuse for greater use.

Firms develop KMDS in order to mobilise economic scarce resources and transform them into goods and services to benefit mankind. Gibbons (2005) said that firm is basically a vehicle for entrepreneur to mobilise resources to create wealth sustainably. Williamson (1971, 1979, and 1985) argued that firm is used to generate continuous income for the owners of the firm; he called this activity as 'rent-seeking' behavior of the firm. Similar observations are made by Klein (1988, 1996). Firm is also being used as formal vehicle to own resources or 'property-rights' so that it can continue to be the beneficiary of the resources (Hart & Moore, 1990, and Hart, 1995). Other scholars argued that firm provides 'incentives' to economic system to generate wealth (Holmstrom, 1982, 1999).

Cyert and March (1992) argued that firm sets the foundation for organisation to create goals, provide expectations and choices. Goals are very important for members of organisation to make commitment and shape the required behavior in order to achieve desired outcomes. Expectations are related to the potential benefits or advantages in the future that can be envisaged so that people can adjust the present behaviour in order to fulfil the future target. The firm makes its choices or solve problems based on its goals and expectation so that the choices maximize the potential goals (Cyert & March, 1992; Cyert, Dill & March, 1958).

Firms could attain objectives and goals if they are managed efficiently and effectively. Management can be defined as the process of working with and through people via planning (P), organizing (O), leading (L), and controlling (C) - P-O-L-C - the people and other resources to achieve the objectives or goals (Daft, 2010; Dyck & Neubert, 2009). This definition is based on the classical theory of scientific management (Dyck & Neubert, 2009). In other words, there are four functions involved when managing firms or any organizations, i.e. to determine the goals, to arrange the task and structure, to work with other people collectively, and to ensure results are achieved (Daft, 2010; Dyck & Neubert, 2009).

Daft (2010) argued that managers apply management functions of planning, organizing, leading and controlling to achieve goals of their organization. Planning is defined as the process to formulate goals for future performance together with the resources required. Organizing refers to the arrangement of tasks, responsibilities, accountability, and resources allocation to enable the organization to execute activities that attaining the goals. Leading is about the use of influence on employees so that they are motivated, willing and ready to perform the tasks assigned to them. As for controlling, it is about monitoring employees and resources so that they are on the right track to achieve the goals of the organization. Managers perform the management functions on daily basis by carrying out various activities to achieve organizational goal of their organization. In other words, managers perform certain roles in carrying out the management functions – P-O-L-C.

METHODOLOGY

The study examines the perceptions of managers and knowledge workers pertaining to the incorporation of *Ulū al-Albāb* approach into organizational process and knowledge management systems as a mean to achieve organizational sustainable innovation and competitive advantage. The study approached technology-based firms located in Technology Park Malaysia, Selangor Science Park, and Cyberjaya. It interviewed twenty (10) informants, who included three (3) managers and seven (7) knowledge workers executives of technology-based firms in Malaysian technology parks.

The data collection method is a qualitative research method. The qualitative method enables the study to explore a context deeply, which could not be done adequately by quantitative methods, such as survey (Wainwright, 1997; Patton, 1990).

FINDINGS

This section presents the findings based on the views of three managers (M1, M2 and M3) and seven knowledge workers (KW1-KW7) pertaining the incorporation of *Tawhidic* paradigm KMS *Ulū al-Albāb* approach into managerial roles which can be divided into interpersonal, information and decisional roles (Mintzberg, 1980). According to Mintzberg (1980), interpersonal roles include figurehead, leadership, and liaison activities. As figureheads, managers perform ceremonial and symbolic duties, such as presenting a letter of appreciation at the company's dinner. In leadership, managers are involved in the hiring process, appraisal, motivation, and training. Finally, managers provide a bridge for contacting external sources (i.e. individuals or groups) to obtain information for the organisation. M1 and M2 used to attend training on Islamic management at their own initiatives and are actually applying the concepts into their work.

Secondly, managers perform information roles in their daily tasks. Informational roles include monitoring, disseminating, and spokesperson activities. In monitoring, managers organise, search and collect information from outside organisations, e.g. talking with others about competitors for the organisations. Then, the managers will disseminate the relevant information to the employees. In formal communication with outsiders, managers will speak on behalf of the organisations with outsiders.

Finally, it is very necessary for managers to perform decision roles. Decisional roles include the managers' role as entrepreneurs, disturbance handlers, resource allocators, and negotiators. As entrepreneurs, managers create, organise and supervise new projects that are packaged with risks and uncertainties for their organisations. In the meantime, managers as disturbance handlers take corrective actions on all high impact problems that occur. Nevertheless, more importantly, managers have to face a very tough job when they have to allocate resources and negotiate with stakeholders that are in line with their organisations' objectives (Daft, 2010; Dyck & Neubert, 2009).

Dyck and Neubert (2009) argued that there are some overlap between the managerial functions and managerial roles. In planning, organizations identify goals and determine resources. Based on managerial roles, the planning stage involves decisional roles because managers assume the role as entrepreneurs in examining the external and internal environment to maximize the opportunities. Then, managers also assume as negotiators when changes are required to be made on the plans. For example, managers need to negotiate with unions, employees, suppliers on the wages and prices. At the same time, managers also play spokesperson role in disseminating and transmitting information to the public. In short, planning involves decision making process, establishing goals, and to formulate strategies that can sustain competitive advantage.

According to Dyck and Neubert (2009), in organizing, it is vital for managers to ensure tasks are clarified, assigned and explained to the employees in systematic manner to achieve goals. At this stage, managers are required to allocate resource so that members of organization can work within the resources allocated. This function is dynamic as it is involved in structuring the organization, assigning employees with tasks, responsibility and accountability. In leading, its main function is to motivate and influence others to perform their tasks that can result in the achievement of organizational goals. In fact, Mintzberg (1980) argued that managers spent about 75 percent of their time in this function. The essential roles that managers actually do in leading include leader, liaison, and disseminator. Finally, the controlling function is to ensure all the activities are consistent with goals of the organizations.

From conventional perspectives, there are two approaches of management functions, namely mainstream and multi-stream (Dyck & Neubert, 2009). The mainstream approach emphasises on maximizing productivity and profitability by inducing individual for self-interest. In contrast, multi-stream emphasises on the nurturing values and virtues. Due to different approaches, the key ideas of management functions are also different. The multi-stream uses 'moral sentiment' and 'stakeholders approach' (Smith, 1982).

As for KW3, KW5 and KW7, they supported the effort to use KMS *Ulū al-Albāb* approach. M3, KW1, KW2, KW4, and KW6 have positive perception about the approach, but need to attend more training in order to understand them.

DISCUSSION

This part discusses KMS *Tawhidic* paradigm (TP) provides the philosophy or purpose of doing things that is solely for Allah; to secure His Pleasure. Management functions (MF) are related to the specific activities and roles that managers perform to achieve the goals of their organization effectively and efficiently. TP lays down the guiding principles for mankind so that they perform the duties as servant and vicegerent of Allah. As for MF, it can be guided by any principle, as long as it is able to satisfy the owners or shareholders of company.

Thus, TP stresses that that it is Divine duty of mankind to serve Allah. Besides human beings, other creatures are also the servants of Allah and are created to worship Him. Allah says in *Sura Adh Dhariyat* 51: 56:

We (Allah) have not created jinns and mankind except to worship Me (Allah).

A person becomes more resourceful and humble by worshipping Allah. These two qualities are essential to balance human's physical and spiritual aspects in facing the challenges of life. In contrast, one who does not worship Allah will be punished in the form of distracting affairs and timidity. It is the power of *Tawhid* that motivates man to worship (perform '*ibadat*'), submitting himself to the Commandments of Allah in order to secure His Pleasure. He accepts the dual role specified by Allah, i.e. to be servant ('*abd*') and vicegerent (*khalifa*) of Allah.

The execution of these roles requires man to uphold certain principles: (a) *Tawhidic* paradigm, (b) vicegerency (*khilafah*), (c) servant ('*abd*'), (d) trust (*amanah*) and (e) justice ('*adalah*') (Haneef, 1997, pp.44-49). As servant and vicegerent of Allah, man is commanded to establish *ma'aruf* and forbid *munkar*, as reflected in the following verse (*Sura Ali Imran* 3: 110):

You are the best nation which has ever been raised for guidance of mankind. You enjoy good, forbid evil, and believe in Allah.

"The best nation," according to Ibn Kathir (2003), refers to the best of peoples for the people. With the best qualities, "the best of peoples" are able them to encourage fellow men to do good deeds and to prevent them from committing sins. This can be interpreted as a collective responsibility towards worshipping Allah. In fact, one's level of faith, whether increasing or decreasing, is very much dependant on the individual's initiatives in enjoining goodness and forbidding evil.

TP must permeate the entire management functions. Daft (2010) identified four management functions, namely planning, organizing, leading and controlling to achieve goals of organization that can please Allah and satisfy the shareholders. Planning is defined as the process to formulate goals for future performance together with the resources required.

Organizing refers to the arrangement of tasks, responsibilities, accountability, and resources allocation to enable the organization to execute activities that attaining the goals. Leading is about the use of influence on employees so that they are motivated, willing and ready to perform the tasks assigned to them. As for controlling, it is about monitoring employees and resources so that they are on the right track to achieve the goals of the organization. The linkages between TP and MF are workable because both are not conflicting and could be complementing. In fact, TP serves as the 'software,' whereby MF provides the platform or 'hardware' for TP to activate.

CONCLUSION

Knowledge management development through the *Ulū al-Albāb* approach is appropriate with the new managerial paradigm to achieve organizational sustainable innovation and competitive advantage. *Tawhidic*-based knowledge view offers an integrative framework to achieve sustainable knowledge management and organizational learning for innovation.

With the *Ulū al-Albāb* approach that ingrained with *Tawhidic* paradigm, The KBV view contributes the spirituality foundation to sustain intellectual contribution from knowledge workers. Managers and knowledge workers who are familiar with conventional knowledge management perceived that the *Ulū al-Albāb* approach is commendable insights into dynamism, uncertainty and complex business contexts.

The current stage of the *Ulū al-Albāb* approach has to be operationalized to fit into the contemporary business models and processes. However, the views of the knowledge workers are not comprehensive and rigorous without the views from other stakeholders. Nevertheless, managers can apply the *Ulū al-Albāb* approach into its communities of practice and social network. The *Ulū al-Albāb* approach contributes to the theoretical and practical understanding of knowledge management development.

ACKNOWLEDGMENT

The authors acknowledged the research grant provided by International Islamic University Malaysia through Endowment Type A.

REFERENCES

- Al-Ashqar, U. (1992). *Manhaj al-Islām fi Tazkiyat al-Nafs*. Amman, Jordan: Dar al-Nafā'is.
- Al-Takhis, S. (1992). *Tazkiyat al-Nafs*. Riyadh: Dār al-Samici.
- Al-Ashqar, U. (1992). *Manhaj al-Islām fi Tazkiyat al-Nafs*. Amman, Jordan: Dar al-Nafā'is.
- Al-Takhis, S. (1992). *Tazkiyat al-Nafs*. Riyadh: Dār al-Samici.
- Al-Faruqi, I.R. (1992). *Al Tawhid: Its Implications for Thought and Life*. Herndon, Virginia: International Institute of Islamic Thought.
- Cyert, R.M. & March, J.G., (1992). *A behavioral theory of the firm* (2nd ed.). Oxford, UK: Blackwell.
- Cyert, R.M., Dill, W.R., & March, J.G. (1958). The role of expectations in business decision-making. *Administrative Science Quarterly*, 3, 309–340.
- Daft, R.L. (2010). *New era of management* (9th ed). Canada: South-Western Cengage Learning.
- Debowksi, S. (2006). *Knowledge Management*. Sydney: John Wiley.
- Dyck, B. & Neubert, M.J. (2009). *Principles of management* (2nd ed). Canada: South-Western Cengage Learning.
- Garrouste, P. & Saussier, S. (2005). Looking for a theory of the firm: Future challenges. *Journal of Economic Behavior & Organization*, 58 (2), 178-199.
- Gibbons, R. (2005). Four formal(izable) theories of the firm? *Journal of Economic Behavior & Organization*, 58 (2), 200-245.
- Hamid, A.W. (1999). *Islam the natural way*. London: MELS
- Haneef, M.A. (1997). Islam, the Islamic Worldview and Islamic economics. *IIUM Journal of Economics and Management*, 5 (1), 39-66.
- Hart, O. (1995). *Firms, contracts, and financial structure*. Oxford: Clarendon Press.
- Hart, O. & Moore, J. (1990). Property rights and the nature of the firm. *Journal of Political Economy*, 98, 1119–1158.
- Hartman, E.M. (1998). The role of character in business ethics. *Business Ethics Quarterly*, 8, 547-559.
- Holmstrom, B. (1982). Managerial incentive problems—A dynamic perspective. Republished in *Review of Economic Studies* (1999), 66, 169–182.
- Holmstrom, B. (1999). The firm as a subeconomy. *Journal of Law, Economics, and Organization*, 15, 74–102.
- Ibn Kathir, I. (2003). *Tafsir Ibn Kathir* (Abridged) (2nd ed.). Riyadh: Darussalam.
- Ismail, Y. (1991). *Mengurus Secara Islam*. Kuala Lumpur A. S. Noordeen.
- Ismail, Y. (1996). *Pengurusan Dalam Islam*. Kuala Lumpur: A.S. Noordeen.
- Karim, N.S. & Hussein, R. (2008). Managers' perception of information management and the role of information and knowledge managers: The Malaysian perspectives. *International Journal of Information Management*, 28 (2), 114–127.
- Laming, S. (2002). *Knowledge in human society (selected themes of Al Quran: universe, knowledge, khilafah, amanah, human rights)*. Kuala Lumpur: A.S. Noordeen.
- Lewis, H. (2006). *Excellence without a soul: how a great university forgot education*. New York: Public Affairs
- Mat, I. & Ismail, Y. (2011). Corporate governance: a theoretical analysis of triangular relationships between the shareholders, the board, and chief executive. In Ahmad, K., Islam, R. & Ismail, Y. (eds.) *Issues in Islamic Management: Theories and Practices* (pp.109-120), Kuala Lumpur: IIUM Press.
- Mawdudi, S. A. A. I. (1992). *Meaning of the Qur'an* (Vol. I-III). Lahore: Islamic Publications.
- Mohd Kamal Hassan (2010). A return to the Qur'ānic paradigm of development and integrated knowledge: The Ulū al-Albāb model. *Intellectual Discourse*, 18 (2), 183-210.
- Muslim, A. (1998). *Sahih Muslim b. al-Hajjāj al-Qushayri* (edited by Muhammad Fu 'ad 'Abd al-Bagi). Riyadh, Dār al-Salam.
- Mintz, S.M. (1996). Aristotelian virtue and business ethics education. *Journal of Business Ethics*, 15, 827-838.
- Mintzberg, H. (1980) *The nature of managerial work*, Englewood Cliffs, N.J.: Prentice Hall.
- Nawawi, A.Z.Y. (2003). *Imam an-Nawawi's forty Hadith : Arabic text, translation & explanatory notes*. Kuala Lumpur :A. S. Noordeen,
- Osman-Gani, A. & Sarif, S.M. (Eds), *Spirituality in Management from Islamic Perspective*, Kuala Lumpur, Malaysia: IIUM Press.
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.). Newbury Park, California: Sage Publications.
- Qardawi, Y. (2007). *Al-Halal wa-al-haram fi al-Islam (The lawful and the prohibited in Islam)*. Al-Qahirah : Maktabat Wahbah.
- Qutb, S. (1994). *This religion of Islam (hadha 'd-din)*. Riyadh International Islamic Publishing House.
- Rahman, A. (1995). *Islam: Ideology and the way of life*. Kuala Lumpur: A.S. Noordeen.
- Schumacher, E.F. (1973). *Small is beautiful: a study of economics as if people mattered*. London: Blond & Briggs.
- Smith, A. (1982 [1759]). *The theory of moral sentiments*. In Raphael, D.D. & Macfie, A.L (eds) (Glasgow ed.). Indianapolis, IN: Liberty Press.
- Wainwright, D. (1997). Can sociological research be qualitative, critical, and valid? *The Qualitative Report*, 3.
- Williamson, O. (1971). The vertical integration of production: market failure considerations. *American Economic Review*, 61, 112–123.
- Williamson, O. (1979). Transaction cost economics: the governance of contractual relations. *Journal of Law and Economics*, 22,

233–261.

Williamson, O. (1985). *The economic institutions of capitalism*. New York, NY: Free Press.

Williamson, O.E. & Winter, S. (eds.) (1991). *The nature of the firm: origins, evolution, and development*. Oxford, UK: Oxford University Press.

Zabeda, A.H. (2004). *Knowledge management: issues, process and outcomes* (Unpublished PhD thesis). University of Strathclyde, Glasgow, Scotland.

Zabeda, A.H. (2008). Identifying knowledge and creating knowledgeable employees. *Journal of Knowledge Management Practice*, 9 (2),

retrieved from <http://www.tlinc.com/articl154.htm>

Zabeda, A.H. (2011). Knowledge sharing in Islam: implications for practice in organisations. In A. Osman-Gani & S.M. Sarif (Eds),

Spirituality in Management from Islamic Perspective (pp.153-190), Kuala Lumpur, Malaysia: IIUM Press.

Zarkasyi. H.F. (2010). Al-Ghazālī's concept of causality with reference to his interpretation of reality and knowledge. Kuala Lumpur,

Malaysia: IIUM Press.

Vergragt, P.J. (2012). Technology, Globalization, and Sustainable Development. *Journal of Cleaner Production*, 24, 204-206