Leadership, trust, and knowledge management in relation to organizational performance: Developing an instrument

Joanna Paliszkiewicz, Warsaw University of Life Sciences, joanna_paliszkiewicz@sggw.pl

Jerzy Gołuchowski, University of Economics in Katowice, jerzy.goluchowski@ue.katowice.pl

Alex Koohang, Middle Georgia State, USA, alex.koohang@mga.edu

Abstract

This paper develops an instrument that can be used to a) measure the influence of organizational leadership on trust management and knowledge management separately; b) measure the effect of trust management on knowledge management; and c) measure the effect of knowledge management on organizational performance. The instrument is based on a proposed model that illustrates a sequential and interrelated process in achieving successful organizational performance with the essential elements of organizational leadership, trust management, and knowledge management. The instrument includes four constructs - organizational leadership, trust management, knowledge management, and organizational performance. Each construct in the instrument is defined and operationalized. Recommendations for future research are made.

Keywords: Organizational performance, organizational leadership, trust management, knowledge management, trust-based knowledge management model

Introduction

This primary objective of this paper is to develop an instrument that can be used to measure the influence of organizational leadership on trust management and knowledge management; the effect of trust management on knowledge management; and the effect of knowledge management on organizational performance. Consistent with its objective, this paper is organized in the following manner. First, a review of literature delineates the characteristics of leadership, trust, knowledge management, and organizational performance. Secondly, the paper asserts that the attainment of successful organizational performance depends upon organizational leadership, trust management, and knowledge management by presenting a sequential and interrelated model. Next, the paper attempts to develop the instrument with four constructs using the characteristics for each construct reported in the literature. The constructs are defined and operationalized. The conclusion and recommendations round out the paper.

Review of Literature

Leadership

The success of any organization depends upon effective leadership. According to Robbins (2004) leadership is the ability of leading a group of people or an organization. Effective leadership can impact employees' positive attitudes toward their jobs; influence positive work climate;

persuade employees' willingness to share information; and achieve positive team performance (e.g., Barling, Weber, & Kelloway, 1996; Charbonneau, Barling, & Kelloway, 2001; Grojean, Resick, Dickson, & Smith, 2004; Howell & Avolio, 1993; Wofford, Calabro, & Sims, 1975). Effective leadership can also create ethical norms that guide the moral behavior of individuals or groups within organizations (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Schaubroeck, Hannah, Avolio, Kozlowski, Lord, et al., 2012).

Effective leader possesses common characteristics that help them in advancing organizations and to gain the competitive advantage. Research has documented many characteristics that a leader must embrace. These are characteristics are leading change; leading innovation; motivating employees; being grounded in values/principles; leading conflict; listening; empowering; leading communication; influencing and being flexible; being self-aware; seeking feedback; managing time; learning; understanding individual differences; and building/sustaining relationship among people (Choen, 2008; Dooley & O'Sullivan, 2001; Gratton & Erickson (2007); Hesselbein, Goldsmith, & Somerville, 2002; Hrebiniak, 2005; Moment, 2007; Stansbury, 2009; and Weiss, 2000).

Trust

Research in the area of trust can be found in various disciplines such as psychology (Johnson-George and Swap 1982; Rotter, 1971; Simpson, 2007), sociology (Lewis and Weigert 1985; Molm et al., 2000; Yamagishi et al., 1998) and management (Colquitt et al., 2007; Dirks and Ferrin, 2002; Kramer and Lewicki, 2010; Lewicki et al., 2006; Mayer et al., 1995; McAllister, 1995; McEvily, 2011; Paliszkiewicz et al., 2014a). Most researchers see trust as a state, belief, or positive expectation. For example, in management sciences, Mayer et al. (1995, p. 712) characterized trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the [trustor's] ability to monitor or control that other party."

Paliszkiewicz (2010) described trust as the belief that another party a) will not act in a way that is harmful to the trusting firm, b) will act in such a way that it is beneficial to the trusting firm, c) will act reliably, and d) will behave or respond in a predictable and mutually acceptable manner.

Trust has been characterized in terms of relationships or congruency that can be beneficial and cooperative. Gambetta (1988) believed that a person's trustworthiness implies that his/her performance is constructive and not detrimental to anyone. Therefore, cooperative relationship can be established with that person that is beneficial to all, thus everyone enjoys the enthusiasm to associate with each other.

The importance of trust has been established in the literature. In organizations, trust is imperative because it influences the successful cooperation and efficiency in organizations (Lewis and Weigert, 1985; McAllister, 1995; Nooteboom, 2002; Rousseau et al., 1998; Zand, 1972); it contributes to innovation and learning within the organization (Bartsch et al., 2013; Jones and George, 1998); it builds friendships (Gibbons, 2004); and it facilitates bargaining and

negotiations (Olekalns and, Smith 2005). Other characteristics of trust are ability or competence (Barber, 1983; Luhmann, 1979; Mayer, Davis, & Schoorman, 1995; McKnight, Cummings, & Chervany, 1998), effective communication (Paliszkiewicz et al., 2014b); benevolence (Luhmann, 1979; Mayer, Davis, & Schoorman 1995; McKnight, Cummings, & Chervany, 1998), consistency (Butler and Cantrell, 1984), dependability (Smith and Barclay, 1997), integrity or honesty (Mayer, Davis, & Schoorman 1995; McKnight, Cumming, & Chervany, 1998), openness (Butler and Cantrell, 1984), reliability (Coote, Forrest, & Tam, 2003; Mishra, 1996; Dyer and Chu, 2000), and transparency (Pirson 2008).

Knowledge Management

In today's knowledge economy, enterprises must continuously adapt and update their organizational knowledge. Knowledge is usually described as a critical resource that should be managed strategically (Grant, 1996; Spender, 1996; Teece, 1998). The knowledge management concept has become very popular and has been the topic of research of many scholars (Davenport and Prusak, 1998; Liebowitz, 2008, 2012). Brooking (1999, p. 154) believed that the function of knowledge management is "... to guard and grow knowledge owned by individuals, and where possible, transfer the asset into a form where it can be more readily shared by other employees in the company."

Gold et al. (2001) and Nahapiet & Ghoshal (1998) asserted that knowledge management should address diverse characteristic of an organization such as structure, culture, and process. Knowledge management is connected with a specific framework to capture, acquire, organize, and communicate tacit and explicit knowledge within an organization. The knowledge then may be utilized by employees to effective and productive in their work, thus maximizing organization's competitive advantage (Davenport, Long, & Beers, 1998; Alavi and Leidner, 1999).

The objectives of knowledge management can be achieved by using different approaches as follows: establishing knowledge management processes (Gold et al., 2001); building a technical infrastructure for example: an Internet/Intranet, knowledge management systems, knowledge repositories, videoconferencing tools (Alavi & Leidner, 2001; Davenport & Prusak, 1998; Heijst, Spek, & Kruizinga, 1997; Wielinga et al., 1997) creating a learning organization (Kogut, 1996; Quintas, Lefrere, & Jones, 1997); and fostering a knowledge-friendly culture (Garvin, 1993; Lee & Kim, 2001).

Based on an thorough review of literature, Paliszkiewicz (2007) summarized the characteristics of knowledge management into 1) localization - refers to all activities that indicate where knowledge exists; 2) usage of knowledge - refers to creating a set of roles and skills to effectively use of knowledge; 3) knowledge acquisition and development - refers to the culture of embracing the knowledge that is acquired and developed; 4) knowledge codification - refers to the ability to successfully and continuously re-use the knowledge organizations capture, and 5) knowledge transfer - refers to transmission of knowledge and use of the transmitted knowledge.

Organizational Performance

Organizational performance is an analysis of a company's performance as compared to goals and objectives. "An organization that is performing well is one that is successfully attaining its objectives" (Otley, 1999, p. 364). A well-defined system of organizational performance measures can be a powerful means for prioritizing organizational goals and achieving them.

The literature has documented various performance indicators such as financial (Parmenter, 2009), flexibility (De Toni and Tonchia 2001; and White 1996), quality (De Toni and Tonchia, 2001; Gosselin, 2005; Badri et al., 1994), cost (De Toni and Tonchia 2001; Neely, Gregory, & Platts 2005), reliability (White, 1996), employees' satisfaction (Leong et al., 1990; Mapes, New, & Szwejczewski, 1997), customer satisfaction (Neely, Gregory, & Platts, 2005; Parmenter, 2009), environment/community (Neely, Gregory, & Platts 2005; Parmenter, 2009), safety (Parmenter, 2009), learning and growth (Parmenter, 2009; Sadler-Smith and Chaston, 2001; Utterback and Abernathy, 1975), productivity (Sinclair and Zairi, 1995), time (White, 1996), quality of work life (Rolstadås, 1998), and innovation (Rolstadås 1998).

Sink and Tuttle (1989) summarized the organizational performance by seven criteria. These criteria are:

- 1. "Effectiveness: an output measure the ratio of the expected output to the actual output.
- 2. Efficiency: an input measure the ratio of the expected input to the actual input.
- 3. Quality: Quality is the key to success of every organization. The quality is checked mainly at three levels input, output and throughput or process quality. It can include actual input/output versus the expected accuracy, timeliness, etc.
- 4. Productivity: the ratio of output to input.
- 5. Quality of work life: Employee attitudes to work;
- 6. Innovation: Measures the organization's success in creating change.
- 7. Profitability/budget ability: An outcome to input ratio." (Sink and Tuttle, 1989)

Purpose of the Study

The literature has documented that organizational performance depends upon sound knowledge management, and knowledge management depends upon trust management (Paliszkiewicz et al., 2014a). The vital element of organizational leadership that influences both trust and knowledge management to guide organizational performance cannot be overlooked and merits exploration.

The primary purpose of this paper is to develop an instrument that can be used to 1) measure the influence of organizational leadership on trust management and knowledge management separately, 2) measure the effect of trust management on knowledge management, and 3) measure the effect of knowledge management on organizational performance.

Consistent with the study purpose, we first propose a model that emphasizes 1) the critical need of organizational leadership in the effective attainment of trust management, 2) the critical need

of organizational leadership in the effective attainment of knowledge management, 3) the critical need of trust management in the effective attainment of knowledge management, and 4) the critical need of knowledge management that subsequently contributes to successful organizational performance within organizations (See Figure 1).

The model shows a sequential interrelated process in attaining successful organizational performance. Organizational leadership must be present for successful attainment of trust management and knowledge management. Subsequently, trust management depends upon effective knowledge management. Finally, effective knowledge management results in successful organizational performance.

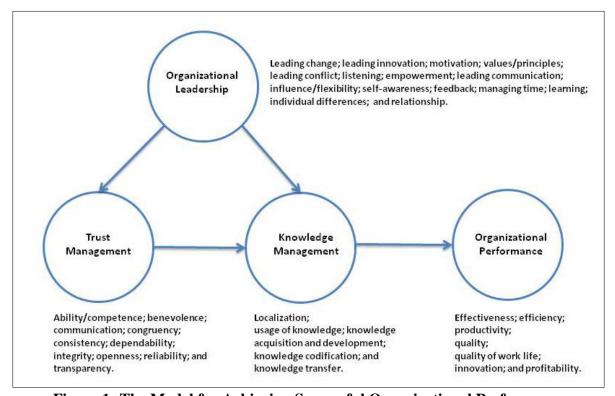


Figure 1: The Model for Achieving Successful Organizational Performance

Based on the proposed model, we then develop the instrument with four constructs that can be used to 1) measure the influence of organizational leadership on trust management and knowledge management separately, 2) measure the effect of trust management on knowledge management, and 3) measure the effect of knowledge management on organizational performance.

Defining the Instrument's Constructs

The Leadership Construct

We defined organizational leadership construct to include 15 characteristics. These characteristics were chosen from the review of the literature we discussed earlier in this paper. The characteristics are: leading change; leading innovation; motivation; values/principles; leading conflict; listening; empowerment; leading communication; influence/flexibility; self-awareness; feedback; managing time; learning; individual differences; and building relationship. The definitions of these characteristics are as follows:

- 1. **Leading Change**: Change is required, inevitable and continuous in any organizations. Organizational change requires sound leadership.
- 2. **Leading innovation**: Innovation moves an organization forward. Leading innovation is the ability of a leader to lead innovation within an organization.
- 3. **Motivation**: Motivating employees brings about productivity. A leader's task is to motivate and bring out the best in employees.
- 4. Values/Principles: A leader must be grounded in values and principles. He or she makes decisions and solve problems based on his/her values and principles.
- 5. **Leading Conflict**: A leader is not afraid of conflicts. A leader 's attitude toward conflict must be positive. A leader does not avoid conflict and considers conflict as an opportunity to improve a situation.
- 6. **Listening**: A leader has the ability to be a good listener. A good listener will put employees at ease and make them comfortable.
- 7. **Empowerment**: A leader has the ability to empower others to do their jobs. Empowering creates autonomy and responsibility, therefore, employees can participate in decision-making within organizations.
- 8. **Leading Communication**: A leader has the ability to communicate effectively. He or she is interpersonal savvy.
- 9. **Influence/Flexibility**: A leader has the ability to influence & be flexible.
- 10. **Self-awareness**: A leader has the ability to be self-aware. A leader must be conscious and mindful of everyone within an organization.
- 11. **Feedback**: A leader is comfortable to seek feedback from employees. A leader uses the feedback for self-improvement.
- 12. **Managing Time**: A leader has the ability to effectively manage time.
- 13. **Learning**: A leader continuously seeks opportunity to learn. A leader seeks new knowledge, modify existing knowledge, and apply what he/she learns to situations for the purpose of improvement.
- 14. **Individual Differences**: A leader has the ability to value individual differences. A leader respects and appreciates diversity and inclusion.
- 15. **Relationship**: A leader has the ability to build and sustain relationships among employees.

The Trust management Construct

We defined trust management construct to include 10 characteristics. These characteristics were selected from the review of the literature we discussed earlier in this paper. The characteristics are ability/competence; benevolence; communication; congruency; consistency; dependability; integrity; openness; reliability; and transparency. The definitions of these characteristics are as follows:

- 1. **Ability/Competence**: One's demonstration of ability and competence (knowledge, skills, aptitude, qualification) lead to improved trust.
- 2. **Benevolence**: One's expression of compassion and empathy.
- 3. **Communication**: One's ability to effectively and constantly communicate (verbal, non-verbal, written, and visual).
- 4. **Congruency**: Displaying the attitude and enthusiasm of partnership and association among people.
- 5. Consistency: One's demonstration of consistency in performing various tasks.
- 6. **Dependability**: Exhibiting dedication, truthfulness, responsibility, and trustworthiness.
- 7. **Integrity**: Displaying honesty and exhibiting moral & ethical principles.
- 8. **Openness**: Showing acceptance and broad-mindedness.
- 9. **Reliability**: Exhibiting the ability to be depended on in performing tasks.
- 10. **Transparency**: One's ability to be transparent (not to hide or block information that is needed to perform tasks).

The Knowledge Management Construct

We chose to select the knowledge management characteristics from a study by Paliszkiewicz (2007). We then defined knowledge management construct to include 5 characteristics. They are: localization; usage of knowledge; knowledge acquisition and development; knowledge codification; and knowledge transfer. The definitions of these characteristics are as follows:

- 1. **Localization**: Includes all activities that indicate where knowledge exists.
- 2. **Usage of knowledge**: Creating a set of roles and skills to effectively use knowledge.
- 3. **Knowledge acquisition and development**: The culture of embracing the knowledge that is acquired and developed.
- 4. **Knowledge codification**: Ability to successfully and continuously re-use the knowledge organizations capture.
- 5. **Knowledge transfer**: Transmission of knowledge and use of the transmitted knowledge. (Paliszkiewicz, 2007)

The Organizational Performance Construct

We chose to select the organizational performance characteristics from a study by Sink & Tuttle (1989). We then defined organizational performance construct to include 7 characteristics.

They are: effectiveness; efficiency; productivity; quality; quality of work life; innovation; and profitability. The definitions of these characteristics are as follows:

- 1. "Effectiveness: an output measure the ratio of the expected output to the actual output.
- 2. **Efficiency**: an input measure the ratio of the expected input to the actual input.
- 3. Quality: Quality is the key to success of every organization. The quality is checked mainly at three levels input, output and throughput or process quality. It can include actual input/output versus the expected accuracy, timeliness, etc.
- 4. **Productivity**: the ratio of output to input.
- 5. **Quality of work life**: Employee attitudes to work
- 6. **Innovation**: Measures the organization's success in creating change.
- 7. **Profitability/budget ability**: An outcome to input ratio." Sink & Tuttle (1989).

Operational Definition of the Instrument's Constructs

Operational definition means that each characteristic in a construct should be translated into a statement. The leadership construct consisted of 15 characteristics translated into 15 statements. The trust management construct comprised of 10 characteristics translated into 10 statements. The knowledge management construct included 5 characteristics that translated into 5 statements. Finally, the organizational performance that consisted of 7 characteristics were translated into 7 statements. See below the statements for each construct.

The Leadership Construct Statements

- 1. A leader must lead change within an organization.
- 2. It is necessary for a leader to lead innovation within an organization.
- 3. A leader must motivate and bring out the best in people.
- 4. To solve problems and make decisions, a leader must be grounded in values and principles.
- 5. A leader should not be afraid of conflicts (a leader 's attitude should be that conflict is "good" and should not be avoided.)
- 6. A leader must be a good listener and put people at ease.
- 7. A leader must empower others to do their jobs.
- 8. A leader must communicate effectively. He or she should be interpersonal savvy.
- 9. A leader must be open to influence & flexibility.
- 10. A leader must be self-aware (conscious and mindful of others).
- 11. A leader must seek and use feedback from others.
- 12. A leader must know how to effectively manage time.
- 13. A leader must seek opportunity to learn.
- 14. A leader must value diversity and inclusion.
- 15. A leader must build and maintain relationships with subordinates.

Trust Management Construct Statements

- 1. A manager/leader's ability and competence lead to improved trust among people.
- 2. Compassion & empathy demonstrated by a manager/leader, build trust among people.
- 3. A manager/leader's sound and constant communication (verbal, non-verbal, written, and visual) improve trust among people.
- 4. The attitude of partnership and association demonstrated by a manager/leader build trust among people.
- 5. Consistency in doing things by a manager/leader brings about trust among people.
- 6. Exhibiting dependability by a manager/leader, develops and creates trust among people.
- 7. A manager/leader's honesty and principle contribute to elevated trust among people
- 8. Acceptance and broad-mindedness demonstrated by a manager/leader contribute to increased trust among people.
- 9. Exhibiting reliability by a manager/leader, develops and creates trust among people.
- 10. A manager/leader's transparency is central to building trust among people.

The Knowledge Management Construct Statements

- 1. In any organization knowledge must be localized to include all activities that indicate where knowledge exists.
- 2. Successful usage of knowledge depends upon creating a set of roles and skills in organizations that encourages effective use of knowledge.
- 3. The culture of embracing the knowledge that is acquired and developed is important in gaining the competitive advantage.
- 4. Organizations must be able to successfully and continuously re-use the knowledge they capture.
- 5. Transmission of knowledge and use of the transmitted knowledge in any organization is vital to gaining the competitive advantage.

The Organizational Performance Construct Statements

- 1. The ability to produce a desired result should be an important part of any organization.
- 2. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations.
- 3. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization.
- 4. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital
- 5. The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage.
- 6. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival.

7. A financial profit or gain gives an organization the ability to do more to gain the competitive advantage.

A panel of experts consisting of three university professors from the USA and Poland determined the content validity of the instrument. A seven-point Likert-type scale from completely agree to completely disagree can be used. The instrument can be found in Appendix A.

Conclusion

Achieving successful organizational performance depends upon many elements. Most important are organizational leadership, trust management, and knowledge management. A sequential model was proposed that underlined the critical need of organizational leadership in the effective attainment of trust management and knowledge management separately; the critical factors of trust management in the effective attainment of knowledge management; and the critical need of knowledge management in achieving successful organizational performance within organizations. The model is sequential and interrelated. Based on the model an instrument was developed that can be used to measure the effect of organizational leadership on trust management and knowledge management separately. In addition, the instrument can be used to measure the effect of trust management on knowledge management and subsequently the effect of knowledge management on organizational performance. This is a first stride in developing an instrument that can measure organizational performance with the key interrelated elements of organizational leadership, trust management, and knowledge management. Therefore, it is recommended that the next attempt should be to empirically validate the instrument by administering it to all levels of management from various organizations.

References

- Alavi, M., & Leidner, D. (1999). Knowledge management systems: issues, challenges, and benefits, *Communications of the AIS*, *I*(Article #7).
- Alavi, M., & Leidner, D. E. (2001). Review: knowledge management and knowledge management systems: conceptual foundations and research issues, *MIS Quarterly*, 25(1), 107 136.
- Badri, Masood A., Davis, D., & Davis, D. (1994). A study of measuring the critical factors of quality management. International, *Journal of Quality & Reliability Management*, 12(2), 36–53.
- Barber, B. (1983). *The Logic and Limits of Trust*, Rutgers University Press, New Brunswick, NJ. Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment, *Journal of Applied*

Psychology, 81(6), 827–832.

Bartsch, V., Ebers, M., & Maurer, I. (2013). Learning in project-based organizations: The role of project teams' social capital for overcoming barriers to learning, *International Journal of Project Management*, 31(2), 239-251.

Brooking, A. (1999). Corporate memory: strategies for knowledge management, London: International Thomson Business Press

- Butler, J. K. & Cantrell, R. S. (1984). A Behavioral Decision Theory Approach to Modeling Dyadic Trust in Superiors and Subordinates, *Psychological Reports*, *55*(1), 19–28.
- Charbonneau, D., Barling, J., & Kelloway, E. K. (2001). Transformational leadership and sports performance: The mediating role of intrinsic motivation, *Journal of Applied Social Psychology*, 31(7), 1521–1534.
- Choen, W. (2008). Effective Leadership, Leadership Excellence, 25(8), 7.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance, *Journal of Applied Psychology*, 92(4), 909–927.
- Coote, L., Forrest, E. J., & Tam, T. (2003). An Investigation into Commitment in Non-Western Industrial Marketing Relationships, *Industrial Marketing Management*, *32*(7), 595-604.
- Davenport, T. H., Long, D. W. D., & Beers, M. C. (1998). Successful knowledge management projects, *Sloan Management Review*, *39*(2), 43–57.
- Davenport, T. H., & Prusak, L. (1998). Working knowledge, Boston, MA: Harvard Business School.
- De Toni, A., & Tonchia, S. (2001). Performance measurement systems-models, characteristics and measures. International, *Journal of Operations & Production Management*, 21(1/2), 46–71.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice, *Journal of Applied Psychology*, 87(4), 611–628.
- Dooley, L., & O'Sullivan, D. (2001). Structuring Innovation: A Conceptual Model and Implementation Methodology, *Enterprise and Innovation Management Studies*, 2(3), 177-194.
- Dyer, J. H., & Chu W. C. (2000). The Determinants of Trust in Supplier Automaker Relationships in the U.S., Japan, Korea, *Journal of International Business Studies*, 31(2), 259-285.
- Gambetta, D. (1988). *Can we trust trust?* In D. Gambetta (Ed.), Trust: Making and breaking cooperative relations (pp. 213–237). New York: Basil Blackwell.
- Garvin, D. A. (1993). Building a learning organization, *Harvard Business Review*, 71(4), 78 91.
- Gibbons, D.E. (2004). Friendship and advice networks in the context of changing professional values, *Administrative Science Quarterly*, 49(2), 238–259.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: an organizational capabilities perspective, *Journal of Management Information Systems*, 18(1), 185 214.
- Gosselin, M. (2005). An empirical study of performance measurement in manufacturing organizations, *International Journal of Operations & Production Management*, 54(5/6), 419–437.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm, *Strategic Management Journal*, 17(Special issue), 109 122.
- Gratton, L., & Erickson, T. J. (2007). Eight ways to build collaborative teams, *Harvard Business Review*, 85(11), 100–109.
- Grojean, M. W., Resick, C. J., Dickson, M. W., & Smith, D. B. (2004). Leaders, values, and organizational climate: Examining leadership strategies for establishing an organizational climate regarding ethics, *Journal of Business Ethics*, 55(3), 223–241.

- Heijst, G. van, Spek, R. van der, & Kruizinga, E. (1997). Corporate memories as a tool for knowledge management, *Expert Systems with Applications*, 13(1), 41 54.
- Hesselbein, F., Goldsmith, M., & Somerville, I. (2002). *Leading For Innovation and Organizing for Results*. San Francisco: Jossey-Bass.
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance, *Journal of Applied Psychology*, 78(6), 891–902.
- Hrebiniak, L. G. (2005). Making Strategy Work, New Jersey: Wharton School Publishing.
- Johnson-George, C., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other, *Journal of Personality and Social Psychology*, 43(6), 1306–1317.
- Jones, G. George, J. (1998). The Experience and Evolution of Trust: Implications for Cooperation and Teamwork, *Academy of Management Review*, 23(3), 531-546
- Kogut, B. (1996). What firms do? Coordination, Identity, and Learning, *Organization Science*, 7(5), 502 518.
- Kramer, R. M., & Lewicki, R. J. (2010). Repairing and enhancing trust: Approaches to reducing organizational trust deficits, *Academy of Management Annals*, 4(1), 245–277.
- Lee, J.-H., & Kim, Y.-G. (2001). A stage model of organizational knowledge management: a latent content analysis. *Expert Systems with Applications*, 20(4), 299 311.
- Leong, G. K., Snyder, D. L., Ward, P. T. (1990). Research in the process and content of manufacturing strategy, *Omega 18*(2), 109–122.
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions, *Journal of Management*, 32 (6), 991–1022.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality, Social Forces, 63(4), 967–985.
- Liebowitz, J. (ed.) (2008). *Making cents out of knowledge management*, The Scarecrow Press, INC., Lanhman, Maryland, Toronto, Plymouth, UK.
- Liebowitz, J. (ed.) (2012). Knowledge Management Handbook. Collaboration and Social Networking, CRC Press, Taylor and Francis Group, Boca Raton, London, New York.
- Luhmann, N. (1979). Trust and power, Chichester: John Wiley.
- Mapes, J. N., New, C., & Szwejczewski, M. (1997) Performance trade-offs in manufacturing plants, *Operations and Production Management*, 17(10), 1020–1033
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. B. (2009). How low does ethical leadership flow? Test of a trickle-down model, *Organizational Behavior and Human Decision Processes*, 108(1), 1–13.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust, *Academy of Management Review*, 20(3), 709–734.
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations, *Academy of Management Journal*, 38(1), 24–59.
- McEvily, B. (2011). Reorganizing the boundaries of trust: From discrete alternatives to hybrid forms, *Organization Science*, 22(5), 1266–1276.
- McKnight, D. H., Cummings, L., Chervany, N. L. (1998). Initial trust formation in new organizational relationships, *Academy of Management Review*, 23(3), 473–490.

- Mishra, A. K., (1996). *Organizational Response to Crisis: The centrality of trust* (pp. 261-287), in: R. M. Kramer, T. R. Tyler (eds.), Trust in Organizations: Frontiers of Theory and Research, Sage, Thousand Oaks, CA.
- Molm, L. D., Takahashi, N., & Peterson, G. (2000). Risk and trust in social exchange: An experimental test of a classical proposition, *American Journal of Sociology*, 105(5), 1396–1427.
- Moment, R. (2007, August 6). *Top 7 Leadership Skills for Business Success*. Retrieved January 19, 2015, from http://top7business.com/?Top-7-Leadership-Skills-for-Business-Success&id=3632
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage, *Academy of Management Review*, 23(2), 242 266.
- Neely, A., Gregory, M., & Platts, K. (2005). Performance measurement system design: a literature review and research agenda, *International Journal of Operations & Production Management*, 25(12), 1228–1263.
- Nooteboom, B. (2002). *Trust: Forms, foundations, functions, failures and figures*, Cheltenham: Edward Elgar.
- Olekalns, M., & Smith, P. L. (2005). Moments in time: Metacognition, trust, and outcomes in dyadic negotiations, *Personality and Social Psychology Bulletin*, 31(12), 1696–1707.
- Otley, D. (1999). Performance management: A framework for management control systems research. *Management Accounting Research*, 10(4), 363-382.
- Paliszkiewicz J. (2010). Organizational trust a critical review of the empirical research, in: Proceedings of 2010 International Conference on Technology Innovation and Industrial Management, 16-18 June 2010 Pattaya, Thailand.
- Paliszkiewicz J., (2007). Knowledge management: An integrative view and empirical examination, *Cybernetics and Systems*, 38(8), 825-836.
- Paliszkiewicz, J., Koohang, A., Gołuchowski, J., & Horn, Nord, J. (2014a). Management trust, organizational trust, and organizational performance: advancing and measuring a theoretical model, *Management and Production Engineering Review*, 5(1), 32–41.
- Paliszkiewicz, J., Gołuchowski, J., & Koohang, A. (2014b). Trust-based Knowledge Management Model. in: A. Skrzypek, *Knowledge, innovation and quality as factors of the success in the new economy*, Publisher University of Maria Curie-Skłodowska, Lublin, 2014, 153-161.
- Parmenter, D. (2009). Key Performance Indicators: Developing, Implementing, and Using Winning KPIs, Wiley, New Jersey, USA.
- Pirson, M. (2008). Facing the Trust Gap-Measuring and Managing Stakeholder Trust, SVH, Saarbrucken.
- Quintas, P., Lefrere, P., & Jones, G. (1997). Knowledge management: a strategic agenda, *Long Range Planning*, 30(3), 385 391.
- Robbins, S. P. (2004). Zachowania w organizacji [Behaviour in organization], PWE, Warsaw.
- Rolstadås, A. (1998). Enterprise performance measurement, *International Journal of Operations & Production Management*, 18(9/10), 989–999.
- Rotter, J. B. (1971). Generalized expectancies for interpersonal trust, *American Psychologist*, 26(5), 443–452.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust, *Academy of Management Review*, 23(3), 393–404.

- Sadler-Smith, E., Spicer, D.P., & Chaston, I. (2001). Learning orientations and growth in smaller organizations, *Long Range Planning*, *34*(2), 139–158.
- Schaubroeck, J., Hannah, S. T., Avolio, B. J., Kozlowski, S. W. J., Lord, R. L., Trevino, L. K., et al. (2012). Embedding ethical leadership within and across organization levels, *Academy of Management Journal*, *55*(5), 1053–1078.
- Simpson, J. A. (2007). Psychological foundations of trust, *Current Directions in Psychological Science*, 16(5), 264–268.
- Sinclair, D., & Zairi, M. (1995). Effective process management through performance measurement: part II-benchmarking total quality-based performance measurement for best practice, *Business Process Management Journal*, *I*(2), 58–72
- Sink, D., & Tuttle, T., (1989). *Planning and Measurement in Your Organization of the Future*, Industrial Engineering and Management Press: Norcross, GA.
- Smith, J. B. & Barclay, D. W. (1997). The Effects of Organizational Differences and Trust on the Effectiveness of Selling Partner Relationships, *Journal of Marketing*, 61(1), 3-21.
- Spender, J. C. (1996). Making knowledge the basis of a dynamic theory of the firm, *Strategic Management Journal*, 17(Special issue), 45-62.
- Stansbury, J. (2009). Reasoned Moral Agreement: Applying Discourse Ethics with Organizations, *Business Ethics Quarterly*, 33-56.
- Teece, D. T. (1998). Capturing value from knowledge assets: the new economy, markets for know-how, and intangible assets, *California Management Review*, 40(3), 55-79.
- Utterback, J. M., & Abernathy, W. J. (1975). A dynamic model of process and product innovation, *Omega* 3(6), 639–656.
- Weiss, W. (2000). Effective Leadership: What are the Requisites? Supervision, 61(8), 3-6.
- White, G.P. (1996). A survey and taxonomy of strategy-related performance measures for manufacturing, International *Journal of Operations & Production Management*, 16(3), 42–61.
- Wielinga, B., Sandberg, J., & Schreiber, G. (1997). Methods and techniques for knowledge management: what has knowledge engineering offer? *Expert Systems with Applications*, 13(1), 73-84.
- Wofford, J. C., Calabro, P. J., & Sims, A. (1975). The relationship of information sharing norms and leader behavior, *Journal of Management*, *1*(1), 15–23.
- Yamagishi, T., Cook, K. S., & Watabe, M. (1998). Uncertainty, trust, and commitment formation in the United States and Japan, *American Journal of Sociology*, 104(1), 165–194.
- Zand, D. (1972). Trust and managerial problem solving, *Administrative Science Quarterly*, 17(2), 229-239.

Appendix A

The Instrument

The purpose of this survey is to collect information about your opinion, as a manager/leader, regarding the characteristics of organizational leadership, trust management, knowledge management, & organizational performance within organizations. This survey consists of 4 parts. They are: Part 1: Organizational Leadership, Part 2: Trust Management, Part 3: Knowledge Management, and Part 4: Organizational Performance.

In each part, please read the statement indicate your response to the statement using the scale below:

7 = Completely Agree, 6 = Mostly Agree, 5 = Somewhat Agree, 4 = Neither Agree nor Disagree, 3 = Somewhat Disagree, 2 = Mostly Disagree, 1 = Completely Disagree

Part 1: The Leadership

I wit	1. The Leavership							
1	A leader must lead change within an organization.	7	6	5	4	3	2	1
2	It is necessary for a leader to lead innovation within an organization.	7	6	5	4	3	2	1
3	A leader must motivate and bring out the best in people.	7	6	5	4	3	2	1
4	To solve problems and make decisions, a leader must be grounded in values and	7	6	5	4	3	2	1
	principles.							
5	A leader should not be afraid of conflicts (a leader 's attitude should be that conflict	7	6	5	4	3	2	1
	is "good" and should not be avoided.)							
6	A leader must be a good listener and put people at ease.	7	6	5	4	3	2	1
7	A leader must empower others to do their jobs.	7	6	5	4	3	2	1
8	A leader must communicate effectively. He or she should be interpersonal savvy.	7	6	5	4	3	2	1
9	A leader must be open to influence & flexibility.	7	6	5	4	3	2	1
10	A leader must be self-aware (conscious and mindful of others).	7	6	5	4	3	2	1
11	A leader must seek and use feedback from others.	7	6	5	4	3	2	1
12	A leader must know how to effectively manage time.	7	6	5	4	3	2	1
13	A leader must seek opportunity to learn.	7	6	5	4	3	2	1
14	A leader must value diversity and inclusion.	7	6	5	4	3	2	1
15	A leader must build and maintain relationships with subordinates.	7	6	5	4	3	2	1

Part 2: Trust Management

	8							
1	A manager/leader's ability and competence lead to improved trust among people.	7	6	5	4	3	2	1
2	Compassion & empathy demonstrated by a manager/leader, build trust among	7	6	5	4	3	2	1
	people.							
3	A manager/leader's sound and constant communication (verbal, non-verbal,	7	6	5	4	3	2	1
	written, and visual) improve trust among people.							
4	The attitude of partnership and association demonstrated by a manager/leader build	7	6	5	4	3	2	1
	trust among people.							
5	Consistency in doing things by a manager/leader brings about trust among people.	7	6	5	4	3	2	1
6	Exhibiting dependability by a manager/leader, develops and creates trust among	7	6	5	4	3	2	1
	people.							
7	A manager/leader's honesty and principle contribute to elevated trust among people	7	6	5	4	3	2	1
8	Acceptance and broad-mindedness demonstrated by a manager/leader contribute to	7	6	5	4	3	2	1
	increased trust among people.							
9	Exhibiting reliability by a manager/leader, develops and creates trust among	7	6	5	4	3	2	1
	people.							
10	A manager/leader's transparency is central to building trust among people.	7	6	5	4	3	2	1

Online Journal of Applied Knowledge ManagementA Publication of the International Institute for Applied Knowledge Management

Volume 3, Issue 2, 2015

Part 3: The Knowledge Management

1	In any organization knowledge must be localized to include all activities that	7	6	5	4	3	2	1
	indicate where knowledge exists.							
2	Successful usage of knowledge depends upon creating a set of roles and skills in	7	6	5	4	3	2	1
	organizations that encourages effective use of knowledge.							
3	The culture of embracing the knowledge that is acquired and developed is	7	6	5	4	3	2	1
	important in gaining the competitive advantage.							
4	Organizations must be able to successfully and continuously re-use the knowledge	7	6	5	4	3	2	1
	they capture.							
5	Transmission of knowledge and use of the transmitted knowledge in any	7	6	5	4	3	2	1
	organization is vital to gaining the competitive advantage.							

Part 4: The Organizational Performance

r. The Organizational Lefformance							
	7	6	5	4	3	2	1
organization.							
The ability to accomplish a job/task with a minimum expenditure of time and effort	7	6	5	4	3	2	1
should be central to any organizations.							
The quality of a product (as a measure of excellence and state of being free from	7	6	5	4	3	2	1
defects, deficiencies and significant variations) brings about the competitive							
advantage to any organization.							
The ability to resourcefully generate, create, enhance, and/or produce goods and	7	6	5	4	3	2	1
services is vital							
The opportunity that is given to employees to enhance their personal lives through	7	6	5	4	3	2	1
their work environment and experiences can contribute to an organization's							
competitive advantage.							
The process of transforming an idea/invention into a product or service that creates	7	6	5	4	3	2	1
value is important to an organization's survival.							
A financial profit or gain gives an organization the ability to do more to gain the	7	6	5	4	3	2	1
competitive advantage.							
	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival. A financial profit or gain gives an organization the ability to do more to gain the	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival. A financial profit or gain gives an organization the ability to do more to gain the	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival. A financial profit or gain gives an organization the ability to do more to gain the 7 6	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival. A financial profit or gain gives an organization the ability to do more to gain the 7 6 5	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival. A financial profit or gain gives an organization the ability to do more to gain the 7 6 5 4	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates value is important to an organization's survival. A financial profit or gain gives an organization the ability to do more to gain the	The ability to produce a desired result should be an important part of any organization. The ability to accomplish a job/task with a minimum expenditure of time and effort should be central to any organizations. The quality of a product (as a measure of excellence and state of being free from defects, deficiencies and significant variations) brings about the competitive advantage to any organization. The ability to resourcefully generate, create, enhance, and/or produce goods and services is vital The opportunity that is given to employees to enhance their personal lives through their work environment and experiences can contribute to an organization's competitive advantage. The process of transforming an idea/invention into a product or service that creates 7 6 5 4 3 2 The process of transforming an idea/invention into a product or service that creates 7 6 5 4 3 2 A financial profit or gain gives an organization the ability to do more to gain the 7 6 5 4 3 2

Authors' Biographies

Joanna Paliszkiewicz is a specialist in management issues connected with knowledge management, intellectual capital and trust management. She holds the rank of University Professor of Warsaw University of Life Sciences and Polish-Japanese Institute of Computer Technologies. Prof. J. Paliszkiewicz is well recognized in Poland and abroad with her expertise in management issues. She has published over 122 original papers and 3 books. She serves on the editorial board of several international journals. She is the deputy editor-in-chief of Management and Production Engineering Review Journal. Prof. J. Paliszkiewicz has been awarded a number of grants sponsored by Polish Ministry of Sciences. In recognition in her outstanding teaching and research, Professor J. Paliszkiewicz has been the recipient of the two awards of excellence from the Rector of the Warsaw University of Life Sciences. Dr. Paliszkiewicz was named the 2013 Computer Educator of the Year by IACIS.

Jerzy Gołuchowski has spent more than 40 years in the academic and business community. Dr. Gołuchowski is Full Professor at University of Economics in Katowice, where is currently the Dean of Faculty of Informatics and Communication; and Head of Knowledge Engineering department. Since 2012 he has been serving as the President of Polish Society of Business Informatics. Dr. Gołuchowski's research is focused on knowledge management, semantic technologies, modeling of organizations, and new media analytics. He has published papers and books dedicated to management and business informatics.

Alex Koohang has spent more than twenty five years in the academic community. Dr. Koohang is Full Professor and Dean in the MGA's School of Information Technology. He has published and presented numerous papers. Additionally, his scholarly activities include serving as the editor-in-chief of the *Journal of Computer Information Systems* and serving on the editorial review board of several IS publications. Dr. Koohang is active in IS/IT curriculum design and has recently helped design a world-class IT program for Middle Georgia State's School of IT leading it to ABET accreditation and re-accreditation. He is the Peyton Anderson Eminent Scholar and Endowed Chair in Information Technology. Dr. Koohang is a Fellow at the Informing Science Institute. He was named the 2009 Computer Educator of the Year by IACIS.