Effects of E-learning engagement on IT department performance : A dynamic capability perspective

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ABSTRACT

Information systems has been regarded as a vital tool to sense external changes by managers and IT department often playing a key role in supporting organization to consolidate competitiveness. How to foster IT staff's dynamic capability through e-learning initiatives has emerged as a critical issue for upgrading the IT department performance. This study aims to examine how e-learning engagement promotes IT staff's dynamic capability via knowledge transfer and knowledge creation and thus upgrading IT department performance. The subjects were targeted on IT staffs working at e-learning initiated organizations. A total of 155 effective samples were collected from web-based and paper-based questionnaires. Results from PLS analysis showed that e-learning engagement had a significant impact on transfer of learning and knowledge creation respectively. In turn, transfer of learning and knowledge creation had significant impacts on the dynamic capability. The dynamic capability had a significant impact on the department performance. E-learning engagement had a greater effect upon knowledge creation than that on transfer of learning. The findings inform that e-learning initiatives promote transfer of learning and knowledge creation among IT staffs thus their dynamic capability and department performance can be improved

Keywords : e-learning engagement   transfer of learning   knowledge creation   dynamic capability   IT department performance

Table of Contents

REFERENCES

            (1994)   (2005)
                                 (1993)   (2010)
                                                          (1995)
          (2004)   (2005)
                      (2003)
                    (1992)
                         (2009)   A
        Bossidy, L & Charan, R. (2003)   (Execution: The discipline of getting things done)
    (2001)
      (1999)   9   107-124   (2003)

http://www.cn21.com.cn/managetabloid/pager.php?id= 443.　　　　(2003)

(1999)

(2009)　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　11(2)　339-366

(1997)　　　　　　　　　　　　　　　　　　　38　42-46　　　(2003)

(1993)　MIS　　　　　　　　　　　　　　　　　　　　:　　　　　　　　3　73-94　　　(2007)

OpenOffice　Microsoft Office　　　　　　　　　　　(　)　　　　　　　　　　(2006)

(2002)

(2004)

(2002)　　　　　　　　　　51　65-71　　　(1996)

(1998)

165-178　　　　(2001)

(2007)　　　　　　　　　　　　　　　　　　　　　　　　　(2005)

(2004)

(1996)

(2006)　　　　　　　　　　　　　　　　　　　　　　(2003)

e-Learning　　　　　　　　　　　　　　　　　(2000)　E-Learning

81　　　　(2007)

(2006)

(2008)　　　　　　　　　　　　　　　　　　　　(2009)

-　H

Argyris, C. & Schon D. A. (1978). Organization learning: A theory of action perspective. Mass. Addison-Wesley. Argote, L. & Ingram, P. (2000). Knowledge transfer in organizations: learning from the experience of others. Organizational Behavior and Human Decision Processes, 82(1), 150-169. Alavi & Leidner, (1999). Knowledge management and knowledge management systems: Conceptual foundations and research issue. MIS Quarterly, 25(1), 107-136. Benner, M. J. & Tushman, M. L. (2003). Exploi-tation, exploration, and process management:The productivity dilemma revisited. Academy of Management Review, 28(2), 238-256. Ballantyne, D. " Reframing internal marketing for relationship marketing" AMA international Marketing Conference Buenos Aires, Argentina, Jul. 2000　Cepeda, G. & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. Journal of Business Research, 60: 426-437. Cohen, W. N. & Levinthal, D. A. (1990). Absorptive Capability: A New Perspective on Learning and Innovation. Administrative Science Quarterly, 35(1), 1128-1152. Cervantes, M. (1997). Diffusing technology to industry. OECD Observer, 207, 20-23. Cormier, S. M. & Hagman, J. D. (1987). Transfer of learning Contemporary research and applications. San Diego, CA: Academic Press, Inc. Davenport, T. & Pruask, L. (1998). Working knowledge: How organization manage what they know. Harvard Business School Press, Massachusetts. Downey, S., Cordova-Wentling, R. M, Wentling, T. L. & Wadsworth, A. (2005). The relationship between national culture and the usability of an e-learning system. Human Resource Development International, 8 (1). Daft L. Richard. (2001), Organization theory and design, 7e, Cincinnati, Ohio: South- Western College Publishing. 238-245. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they. Strategic Management Journal, 21(10), 1105-1121. Gotschall, M. (2000). E-learning strategies for executive education and corporate training. Fortune, 141(10), 5-59. Gupta, Y. P., Sundararaghavan, P. S., & Raghanathan, T. S. (1989). Assessing the Impact of IS Executive Critical Success Factors on the Performance of IS. Organization Information and Management, 157-168. Guimaraes, T. & Gupta, Y. (1988). Measuring Top Management Satisfaction with the MIS Department. Omega: The International Journal of Management Services, 16(1), 17-24. Hubber, G. P. (1997). Organizational learning: The contributing processes and literature, Organization Science, 2, 88-125. Leonard-Barton, D. (1995). Wellsprings of Knowledge: Building and Sustaining the Sources of Innovation. harvard Business School Press, 3-28. Hunter, M. (1971). Teacher for Transfer. El Segundo, California Tip Publications. Helfat, C. E. (1997). Know-how and asset complementarity and dynamic capability accumulation: The case of R&D. Strategic Management Journal, 18, 339-3 Hronce, S. M. (1997). Vital Signs: Using Quality, Time, and Cost Performance Measurements to Chart Your Company' s Future. Arthur Andersen, New York. Mendelson, H. (2000), "Organizational architecture and success in the information technologyindustry," Management Science, 46(4), 513-529. Jonassen, D. H. (1994). Thinking Technology, Educational Technology, 4, 34-35. James S. F. & Ben J. (2001). E-Learning Barriers and Educational Applications of Broadband Technologies, Seventh Americas Conference on Information Systems. Khan, E. H. (1991). Organization and Management of Information System Functions: Comparative Study of Selected Organization In Bahrain, Information and Management, 2 (21), 73-85. Kaplan, R. S. & Norton D. P. (1996). Linking the Balanced Scorecard to Strategy. California Management Review, 39(1), 53-79. Kast, F. E. (1985). Organization and Management, McGraw-Hill, New York. Koontz, H. (1985). Management. McGraw-Hill, New York. Luo, Y. (2000). Dynamic Capabilities in International Expansion. Journal of World Business, 35(4), 355-378. Laudon, K. C. & Laudon J. P. (2005), Management Information Systems:Organization and Technology in the Networked Enterprise, Prentice-Hall. Leavitt, H. & Whisler, T. (1958). Management in the 1980s. Harvard Business Review, 36(6), 41-48. Lee, W. Y. (2008). Empirical Research on Knowledge Creation Among Private Sector Employees in Malaysia, Submitted to the Graduate School of Business Faculty of Business and Accountancy University of Malaya, in partial fulfillment of the requirements for the Degree of Masters of Management. Miller, J. & Doyle, B. A. (1987). Measuring effectiveness of

computer-based information systems in the financial service sector, MIS Quarterly, 11(1), 107-125. Marc, J. R. (2001). E-Learning: Strategies for delivering knowledge in the Digital Age. Noe, R. A. & Wilk, S. L. (1993). Investigation of the factors that influence employees' participation in development activities. Journal of Applied Psychology, 78, 291-302. Nonaka, I. & Takeuchi, H. (1995). The Knowledge-Creating Company. New York: Oxford University Press. Noaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. Organization Science, 5(1), 14-37. Peterson, R.W., Marostica, M.A. & Callahan, L.M. (1999). E-learning:Helping Investors Climb the E-learning Curve, USA: U.S. Bancorp Piper Jaffray Equity Research. Prahalad, C. K. and Krishnan, M. S. (2008). The New Age of Innovation: Driving Co-created Value Through Global Networks. New York: McGraw-Hill. Perkins, D. N. & Salomon, G. 1988 . Teaching for transfer. Educational Leadership, 46(1), 22-35. Rushinek, A. & Rushinek, S. F. (1986). The Influence of Troubleshooting, Education and Documentation on Computer User Satisfaction. IEEE Transactions on Systems, Man and Cybernetics (16), 165-168. Robbins, S. P. (2001). Organizational Behavior, Prentice Hall International, New Jersey, U.S.A. Rhodes J., Hung, R., Lok P., Lien Y. B. & Wu C. M. (2008). Factors in?uencing organizational knowledge transfer: implication for corporate performance. Journal of Knowledge Management, 12(3), 84-100. Senge, P.M. (1990). The fifth discipline: The art and practice of the learning organizational, Doubleday, NY. Saunders, C.S. & Jones, J.W. (1992). Measuring Performance of the Information Systems Function, Journal of Management Information Systems, 8(4), 63-82. Santomero, A. M. & Trester, J. J. (1998). Financial innovation and bank risk taking. Journal of Economic Behavior and Organization, 35(1), 25-37. Saunders, C. S. & Jones, J. W. (1992). Measuring Performance of the Information Systems Function. Journal of Management Information Systems, (8)4, 63-82. Sohal, A. S. & Moss, L. S. (2001). Comparing IT success in manufacturing and service industries. International Journal of Operations & Production Management, 21(2), 30-45. Sedera, D. (2009). Knowledge Management for Enterprise Systems: Observations from Small, Medium and Large Organizations, in proceedings of the Pacific Asian Conference on Information Systems . Tsai, W. & Ghoshal, S. (1998). Social capital and value creation: The role of intra-firm networks. Academy of Management Journal, 41, 464-476. Teece, D. J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and Strategic Management. Strategic Management Journal, 1(18), 509-533. 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 Tsai, W. & Ghoshal, S. (1998). Social capital and value creation: The role of Intrafirm networks. Academy of Management Journal, 41, 464-476. Wiig, K. M. (1997). Knowledge management: where did it come from and where will it go. Expert System With Applications, 13(1), 1-14. Wiseman, C. & Macmillan, I. C. (1984). Creating Competitive Weapons from Information Systems. Journal of Business Strategy, 5, 42-49. Wang, F. K. (2002). Designing a case-based e-learning system: What, how and why. Journal of Workplace Learning. 14(1). 29-42. Yli-Renko, H., Autio, E. & Sapienza, H. J. (2001). Social Capital, Knowledge Acquisition, and Knowledge Exploitation in Young Technology-Based Firms. Strategic Management Journal, 22(6/7), 587-613. Zollo, M. & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. Organization Science, 13(3), 339-351. Zott, C. (2003). Dynamic capabilities and the emergence of intra-industry differential rm performance. Insights from a simulation study. Strategic Management Journal, 24, 97-125. Zack, M. H. (1999). Developing a knowledge strategy. California Management Review, 41(3) , 125-145