

# 關係鑲嵌構形與網絡能耐對服務創新績效之影響

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## 摘要

本文從企業與各種外部夥伴關係鑲嵌連帶強弱，建立企業的關係鑲嵌構形，認為不同關係鑲嵌構形在不同的服務創新類型中，會對服務創新績效有不同的影響；從企業內部能力的觀點，企業的網絡能耐可提高服務創新成功的可能性。此外，本研究亦分析關係鑲嵌構形與網絡能耐的交互作用對服務創新績效的影響。本研究以台灣地區201家企業為有效樣本，以進行實證研究分析。根據企業與顧客、供應商、競爭者及研究機構間關係鑲嵌強度的差異，本研究區分三種不同的關係鑲嵌構形，包括顧客關係實踐者、交易關係導向者及商業關係實踐者。顧客關係導向者的服務創新績效最佳；在不同服務創新類型的情境中，最佳關係鑲嵌構形有所差異。網絡能耐對服務創新有正向影響；其中網絡管理任務對服務創新的內部績效有顯著的影響；網絡管理資格對服務創新的財務績效有顯著的影響。關係鑲嵌構形與網絡能耐二者的交互作用對服務創新的財務績效有顯著的影響。本研究最後根據研究結果提出理論與管理意涵，並針對未來研究方向提出建議。

關鍵詞：關係鑲嵌構形；網絡能耐；服務創新

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## 參考文獻

- 一、中文部份 方世榮，黃恆獎，江季芸(2005)，產業網絡鑲嵌與網絡動態性演化。關係管理研究，43-83。羅家德(1997)，為什麼矽谷能擊敗一八公路區：以人際關係網絡觀點探討網絡式組織的優勢，中山管理評論，5(2)，287-314。二、英文部份 Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1), 17-40. Afuah, A. (2003). *Innovation management: Strategies, implementation, and profits*. NY: Oxford. Ahuja, G. (2000). Collaboration Networks, Structural Holes, and Innovation: A longitudinal study. *Administrative Science Quarterly*, 45(3), 425-455. Anand, B. N., & Khanna, T. (2000). Do firms learn to create value? The case of alliance. *Strategic Management Journal*, 21(2), 295-315. Anderson, U., Forsgren, M., & Holm, U. (2001). Subsidiary embeddedness and competence development in MNCs- a multi-level analysis. *Organization Studies*, 22(6), 1013-1034. Anderson, J. C., Hakansson, H., & Johanson, J. (1994). Dyadic business relationships within a business network context. *Journal of Marketing*, 48(4), 62-74. Ansoff, I. (1965). *Corporate strategy*. Harmondsworth: Penguin. Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14(3), 396-402. Barclay, D., & Smith, B. (1997). The effects of organizational differences and trust on the effectiveness of selling partner relationships. *Journal of Marketing*, 16(1), 3-21. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. BarNir, A., & Smith, K. A. (2002). Interfirm alliances in the small business: The role of social networks. *Journal of Small Business*

Management, 40(3), 219-232. Batt, P. and Purchase, S. (2004). Managing collaboration within networks and relationships. *Industrial Marketing Management*, 33(1), 169-174. Bennett, R. C., & Cooper, R. G. (1981). *The Misuse of Marketing: An American Tragedy*. Business Horizons, 24(6), 51-61. Berghman, L. Matthysens, P., & vadenbempt, K. (2006). Building competences for new customer value creation: An exploratory study. *Industrial Marketing Management*, 35(4), 961-973. Betz, F. (1993). *Managing technology competing through new ventures, innovation, and corporate research*. NJ: Prentice Hall. Bessant, J., & Rush, H. (1995). Building bridges for innovation: the role of consultants in technology transfer. *Research Policy*, 24(1), 97-114. Bougrain, F., & Haudeville, B. (2002). Innovation, collaboration and SMEs internal research capacities. *Research Policy*, 31(6), 735-747. Brass, D. J., & Burkhardt, M. E. (1993). Potential power and power use: An investigation of structure and behavior. *Academy of Management Journal*, 36(3), 441-470. Bruce, M., & Beimans, W. G. (Eds)(1995). *Product development: Meeting the challenge of the design-marketing interface*. Chichester: John Wiley. Bryson, J. R., & Monnoyer, C. (2004). Understanding the relationship between services and innovation: The RESER review of the European service literature on innovation, 2002. *The Service Industries Journal*, 24(1), 205-222. Burt, R.S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, 42(2), 339-365. Burt, R. S. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge: Harvard University Press. Campbell, A. J., & Cooper, R. G. (1999). Do customer partnership improve new product success rates? *Industrial Marketing Management*, 28(4), 507-519. Capaldo, A. (2007). Network structure and innovation: The leveraging of a dual network as a distinctive relational capability. *Strategic Management Journal*, 28(4), 585-608. Clegg, C. (1990). The relationship between simplified jobs and mental health: A replication study. *Journal of Occupational Psychology*, 63(4), 289-296. Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(1), 95-121. Cooke, P., & Wills, D. (1999). Small firms, social capital and the Enhancement of business performance through innovation programmes. *Small Business Economics*, 13(3), 219-240. Coombs, R., & Miles, I. (2000). Innovation, measurement and services: the new problematique. In: S. Metcalfe, I. Miles, (Eds.), *Innovation Systems in the Service Economy*. pp.58-103. Kluwer Academic Publisher, Boston, Dordrecht, London. Craig, A., & Hart, S. (1993). Dimensions of success in new product development. In M. J. Baker(ed.). *Perspectives on Marketing Management*, 13(1), 207-243, London: Wiley. Daniel, E., & Storey, C. (1997). On-Line banking: Strategic and management challenges. *Long Range Planning*, 30(6), 890-898. Das, T. K. & Teng, B. T. (2000). A resource-based theory of strategic alliances. *Journal of Management*, 26(1), 31-61. Djellal, F., & Gallouj, F. (1999). Services and the search for relevant innovation indicators: a review of National and International surveys. *Science and Public Policy*, 26(2), 218-232. Djellal, F., & Gallouj, F. (2001). Patterns of innovation organization in service firms: Postal survey results and theoretical models. *Science and Public Policy*, 28(1), 57-67. Drejer, I. (2004). Identifying innovation in surveys of services: a Schumpeterian perspective. *Research Policy*, 33(3), 551-562. Draulans, J., deMan, A. P., & Volberda, H. W. (2003). Building alliance capability: Management techniques for superior alliance performance. *Long Range Planning*, 36(2), 151-166. Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *The Academy of Management Review*, 23(4), 660-684. Easingwood, C. J., & Percival, J. (1990). Evaluation of new financial services. *International Journal of Bank Marketing*, 18(6), 3-8. Edgett, S. (1993). Developing new financial service within UK building societies. *International Journal of Bank Marketing*, 11(3), 35-43. Edgett, S., Shipley, D., & Forbes, G. (1992). Japanese and British companies compared: contributing factors to success and failure in NPD. *Journal of Product Innovation Management*, 9(1), 3-11. Elg, U., & Johansson, U. (2001). International alliances: How they contribute to managing the interorganizational challenges of globalization. *Journal of Strategic Marketing*, 9(1), 93-110. Evangelista, R., & Sirilli, G., (1995). Measuring innovation services. *Research Evaluation*, 5(2): 207-215. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobserved variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. Freeman, C., & Soete, L. (1997). *The economics of industrial innovation*. London: Pinter. Gadrey, J., Gallouj, F., & Weinstein, O. (1995). New modes of innovation: How services benefit industry. *International Journal of Service Industry Management*, 6(3), 4-16. Gallouj, F. (2002). Innovation in the service economy: The new wealth of nations. Cheltenham: Edward Elgar. Gemunden, H. G., Ritter, T., & Heydebreck, P. (1996). Network configuration and innovation success: An empirical analysis in German High-tech industries. *International Journal of Research in Marketing*, 13(4), 449-462. Gnyawali, D. R., & Madhavan, R. (2001). Cooperative Networks and Competitive Dynamics: A Structural Embeddedness Perspective. *The Academy of Management Review*, 26(3), 431-445. Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380. Granovetter, M. S. (1985). Economic action and social structure: The problem of social embeddedness. *American Journal of Sociology*, 91(3), 481-510. Granovetter, M.S. (1992). Problems of explanation in economic sociology. In Nitin Nohria and Robert G. Eccles, (eds.), *Networks and Organizations*. Boston: Harvard Business School Press. Grant, R. M. (1998). *Contemporary strategy analysis*. Malden: Blackwell Publisher Inc. Griffin, A., & Page, A.L. (1996). PDMA success measurement project: recommended measures for product development success and failure. *Journal of Product Innovation Management*, 13(6), 478-496. Gronroos, C. (2000). *Service Management and Marketing*. NY: John Wiley & Sons. Gulati, R. (1999a). Network location and learning: the influence of network resources and firm capabilities on alliance formation. *Strategic Management Journal*, 20(5), 397-423. Gulati, R. (1999b). Where do interorganizational networks come from. *The American Journal of Sociology*, 104(5): 1439-1493. Gulati, R. (1998). Alliance and Networks. *Strategic Management Journal*, 19(4), 239-317. Gulati, R., Nohria, N., & Zaheer, A. (2000). Strategic networks. *Strategic Management Journal*, 21(3), 203-236. Hakansson, H. (1987). *Industrial technological development: Cooperation and Networks*. London: Croom Helm. Hakansson, H., Havila, V., & Pedersen, A. C. (1999). Learning in networks. *Industrial Marketing Management*, 28(3), 443-452. Halinen, A., & Tornroos, J. (1998). The role of embeddedness in the evolution of business networks. *Scandinavian Journal of Management*, 14(3), 87-205. Hamel, G., & Prahalad, C. K. (1992). Letter, *Harvard Business Review*, 75(May-June), 164-166. Hamel, G. & Prahalad, C. K. (1994). *Competing for the future-breakthrough strategies control of your industry and creating the markets of tomorrow*. NY: Harvard Business School

Press. Hanna, V. & Walsh, K. (2002). Small firm networks: a successful approach to innovation? *R&D Management*, 32(), 201-207. Hansen, M. T. (1999). The search-transfer problem: the role of weak ties in sharing knowledge across organizational subunits. *Administrative Science Quarterly*, 44(2), 82-111. Heimeriks, K. H., & Duysters, G. (2007). Alliance capability as a mediator between experience and alliance performance: An empirical investigation into the alliance capability development process. *Journal of Management Studies*, 44(1), 25-49. Hildebrandt, L. (1987). Consumer retail satisfaction in rural areas: A reanalysis of survey data. *Journal of Economic Psychology*, 8(1), 19-42. Hipp, C., & Grupp, H. (2005). Innovation in the service sector: The demand for service-specific innovation measurement concepts and typologies. *Research Policy*, 34(2), 517-535. Hoffmann, W. H. (2007). Strategies for managing a portfolio of alliances. *Strategic Management Journal*, 28(6), 827-856. Hollenstein, H. (2003). Innovation modes in the Swiss service sector: a cluster analysis based on firm-level data. *Research Policy*, 32(3), 845-863. Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204. Hunt, S. D. (1997). Resource-advantage theory: An evolutionary theory of competitive firm behavior? *Journal of Economic Issues*, 31(1), 59-77. Inkpen, A.C., & Tsang, E.W.K. (2005). Social capital, networks and knowledge transfer. *Academy of Management Review*, 30(1), 146-165. John, A., & Storey, C. (1998). New service development: a review of the literature and annotated bibliography. *European Journal of Marketing*, 32(3/4), 184-251. Kale, P., & Singh, H. (in press). Building firm capabilities through learning: The role of the alliance learning process in alliance capability and firm-level alliance success. *Strategic Management Journal*. Kale, P., Dyer, J. H., & Singh, H. (2002). Alliance capability, stock market response, and long-term alliance success: The role of the alliance function. *Strategic Management Journal*, 23(5), 747-767. Kandampully, J. (2002). Innovation as the core competency of a service organization: the role of technology, knowledge and networks. *European Journal of Innovation Management*, 5(1), 18-26. Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: measure that drive performance. *Harvard Business Review*, 70(1), 71-79. Kline, S., & Rosenberg, N. (1986). An overview of innovation. In Landau, R. and Rosenberg, N. (Eds), *The Positive Sum Strategy: Harnessing Technology for Economic Growth*. Washington: National Academic Press. Kotler, P. (2003). *Marketing Management*. NJ: Pearson Education Inc.. Krackhardt, D., & Hanson, J. R. (1993). Informal networks: The company behind the chart. *Harvard Business Review*, 71(4), 104-111. Krackhardt, D., & Stern, R. (1988). Informal networks and organizational crises: An experimental simulation. *Social Psychology Quarterly*, 51(1), 123-140. Krishnan, R., & Martin, X. (2006). When does trust matter to alliance performance? *Academy of Management Journal*, 49(5), 894-917. Laere, K. V., & Heene, A. (2003). Social networks as a source of competitive advantage for the firm. *Journal of Workplace Learning*, 15(6), 248-258. Lambe, C. J., Spekman, R. E., & Hunt, S. D. (2002). Alliance competence, resources, and alliance success: Conceptualization, measurement, and initial test. *Journal of the Academy of marketing Science*, 30(2), 141-158. Landry, R., Amara, N., & Lamari, M. (2002). Does social capital determine innovation? To what extent?. *Technological Forecasting and Social Change*, 69(5), 681-701. Lavie, D. (2006). The competitive advantage of interconnected firms: An extension of the resource-based view. *Academy of Management Review*. 31(3), 638-658. Luecke, R. (2003). *Harvard Business Essentials: Managing Creativity and innovation*. NY: Harvard Business School Publishing Corporation. MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, 29(2), 115-134. Magnusson, P. R. (2003). Benefits of involving user in service innovation. *European Journal of Innovation Management*, 6(4), 228-238. Magnusson, P. R., Matthing, J., & Kristensson, P. (2003). Managing user involvement in service innovation: Experiments with innovating end users. *Journal of Service Research*, 6(2), 111-124. Marsden, P.V., & Campbell, K.E. (1984). Measuring Tie Strength. *Social Forces*, 63(2), 482-501. McEvily, B., & Zaheer, A. (1999). Bridging ties: a source of firm heterogeneity in competitive capabilities. *Strategic Management Journal*, 20(12), 1133-1156. Miles, I. (1995). Services innovation, statistical and conceptual issues, working group on innovation and technology, Doc. DST1/EAS/STP/NEST1/(95)12. OECD, Paris. Mitchell, J. C. (1969). The concept and use of social network. In Mitchell, J. C. (Ed), *Social Networks in Urban settings*, Manchester, UK: Manchester University press. Moller, K. (2006). Role of competences in creating customer value: A value-creation logic approach. *Industrial Marketing Management*, 35(8), 913-924. Moran, P. (2005). Structural vs. relational embeddedness: Social capital and managerial performance. *Strategic Management Journal*, 26(6), 1129-1151. Morgan, R. M. & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(July), 20-38. Mort, G. S., & Weerawardena, J. (2006). Networking capability and international entrepreneurship: How networks function in Australian born global firms. *International Marketing Review*, 23(5), 549-572. Mulej, M., Kajzer, S., Treven, S., & Jur?e, K. (1997). Sodobna ekonomija med odpori do inovacij in ?ivljenjem od njih ' (Contemporary economy between refusing innovation and living on it). *Na?e gospodarstvo*, 43(3/4), 339-349. Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242-266. Nebus, J. (1998). International teams: Their social capital and its effects on MNE knowledge creation and knowledge transfer. Working paper, University of South Carolina, Columbia. Nelson, R. E. (1989). The strength of strong ties: social networks and intergroup conflict in organizations. *Academy of Management Journal*, 32(2), 189-212. Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company*. NY: Oxford. Normann, R. (1991). *Service management, strategy and leadership in service business*. Chichester: Wiley. Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly*, 25(1), 129-141. Parker, G. M. (1994). *Cross-Functional teams*. San Francisco: Jossey-Bass. Peppers, D., & Rogers, M. (1997). The \$15,000 rug. *Marketing Tools*, 25(May), 4-7. Perks, H., & Jeffery, R. (2006). Global network configuration for innovation: a study of international fibre innovation. *R & D Management*, 36(1), 67-83. Pittaway, L., Robertson, M., Munir, K., Denyer, D., & Neely, A. (2004). Networking and innovation: a systematic review of the evidence. *International Journal of Management Review*, 5/6(3), 137-168. Podolny, J. M., & Page, K. L. (1998). Network forms of organization. *Annual of Sociology*, 24(1), 57-76. Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531-544. Porter, M. (1980).

Competitive strategy. NY: Free Press. Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Network of learning in biotechnology. *Administrative Science Quarterly*, 41(1), 116-145. Prahalad C. K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91. Rindfleisch, A., & Moorman, C. (2001). The acquisition and utilization of information in new product alliances: A strength-of-ties perspective. *Journal of Marketing*, 65(2), 1-18. Ritter, T. (2006). Communicating firm competencies: Marketing as different levels of translation. *Industrial Marketing Management*, 35(8), 1032-1036. Ritter, T. (1999). The networking company: antecedents for coping with relationships and networks effectively. *Industrial Marketing Management*, 28(5), 467-479. Ritter, T., & Gemunden, H. G. (2003). Network competence: Its impacts on innovation success and its antecedents. *Journal of Business Research*, 56(6), 745-755. Ritter T., & Gemunden, H. G. (2004). The impact of a company ' s business strategy on its technological competence, network competence and innovation success. *Journal of Business Research*, 57(5), 548-556. Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2002). Measuring network competence: Some international evidence. *The Journal of Business & Industrial Marketing*, 17(2/3), 119-138. Rodan, S., and Galunic, C. (2004). More than network structure: How knowledge heterogeneity influences managerial performance and innovativeness. *Strategic management Journal*, 25(4), 541-562. Rowley, T. J., Baum, J. A. C., Shipilov, A. V., Greve, H. R., & Rao, H. (2004). Competing in groups. *Managerial and decision economics*, 25(3), 453 – 471. Ruef, M. (2002). Strong ties, weak ties and islands: Structural and cultural predictors of organizational innovation. *Industrial and Corporate Change*, 11(3), 427-449. Sanchez, R. (2004). Understanding competence-based management identifying and managing five modes of competence. *Journal of Business Research*, 57(5), 518-532. Schumann, P. A., Prestwood, D. C., Tong, A. H., & Vanston, J. H. (1994). *Innovation: Straight Path to Quality Customer Delight & Competitive Advantage*. NY: McGraw-Hill, Inc. Selznick, P. (1957). *Leadership in administration: A sociological interpretation*. NY: Harper & Row. Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social networks and the performance of individuals and groups. *Academy of Management Journal*, 44(2), 316-338. Stalk, G., Evans, P., & Shulman, L.E. (1992). Competing on capabilities: The rules of corporate strategy. *Harvard Business Review*, 81(Mar/April), 57-69. Stalk, G., Evans, P., & Shulman, L.E. (1992). letter, *Harvard Business Review*, 81(May-June), 170. Storey, C., & Kelly, D. (2001). Measuring the performance of new service development activities. *The Service Industries Journal*, 21(2), 71-90. Syson, F., & Perks, H. (2004). New service development: A network perspective. *Journal of Service Marketing*, 18(4), 255-266. Teece, D. (1986). Profiting from technological innovation: implications for integration, collaboration, licensing and public policy. *Research Policy*, 15(6), 286-305. Tether, B.S. (2002). Who co-operates for innovation, and why: A empirical analysis. *Research Policy*, 31(4), 947-967. Thomke, S. (2003). R&D comes to service: Banks of American ' s pathbreaking experiments. *Harvard Business Review*, 81(4), 70-79. Tsai, Y. C. (2006). Effect of social capital and absorptive capability on innovation in internet marketing. *International Journal of Management*, 23(1), 157-166. Tsai, W. (2001). Knowledge transfer in intraorganizational networks: effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, 44(5), 996-1004. Uzzi, B. (1999). Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review*, 64(3), 481-505. Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35-67. van der Aa, W., & Elfring, T. (2002). Realizing innovation in services. *Scandinavian Journal of Management*, 18(2), 155-171. Vandermerwe, S. (1993). *From tin soldiers to Russian dolls: creating added value through service*. London: Butterworth & Heinemann. Vanhaverbeke, W., & Noorderhaven, N. (2001). Competition between alliance blocks: the case of the RISC-microprocessor technology. *Organization Studies*, 22(1), 1-30. van Kleef, J. A. G., & Roome, N. J. (2007). Developing capabilities and competence for sustainable business management as innovation: a research agenda. *Journal of Cleaner Production*, 15(1), 38-51. Voos, C. A. (1992). Measurement of innovation and Design Performance in Services. *Design Management Journal*, 20(Winter), 40-46. Vorhies, D. W., & Morgan, N. A. (2003). A configuration theory assessment of marketing organization fit with business strategy and its relationship with marketing performance. *Journal of Marketing*, 63(1), 100-115. Walker, G., Kogut, B., & Shan, W. (1997). Social capital, Structural holes and the formation of an industry network. *Organization Science*, 8(1), 109-125. Walter, A., Auer, M. & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing*, 21(4), 541-567. Wasserman, S., & Faust, K. (1994). *Social network analysis: methods and applications*. Cambridge: Cambridge University Press. Wasserman, S., & Galaskiewicz, J. (1994). *Advances in social network analysis: research from the social and behavioral sciences*. CA: Sage. Witt, U. (1993). Evolutionary economics: some principles. In: Witt, U. (Ed.), *Evolution in Markets and Institutions*. pp.1-16. Physica, Heidelberg. Yli-Reniko, 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.