Firms' ability to manage in business networks: a review of concepts

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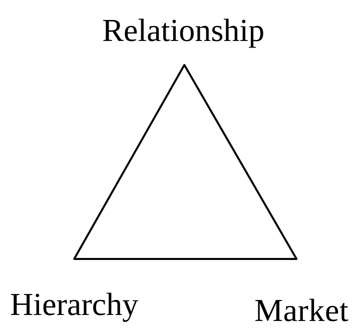
ABSTRACT

Several concepts have been suggested in the past to describe an actor's ability to manage in business relationships and industrial networks. These concepts pose two questions. Firstly, networks are loosely coupled systems and thus, the question arises as to which extent are industrial networks manageable? Secondly, these contributions vary in their level of analysis and thus, can results from different studies be compared? This paper addresses these two questions by reviewing the discussion on the management of networks and the contributions to managerial abilities in networks. The results of the reviews lead to a set of propositions describing the state of the art in this field of research.

INTRODUCTION

In order to organize the necessary exchange between different economic actors, three different modes can be distinguished. Reality is likely to be mixture of these (somewhere in the middle of the triangle)(Figure 1).

Figure 1. Economic exchange triangle



There is growing evidence, if not a general acceptance, that inter-firm relationships are an important part of this. Håkansson and Henders (1992, p. 32) report that surveyed firms had 10 business relationships on average. It is therefore not surprising that many authors describe an “interacted environment” (Ford et al. 1986) or the “network economy” (Achrol and Kotler 1999).

Given their empirical significance in business life and the manifold values relationships can create (Walter et al. 2001), “*relationships are one of the most valuable resources that a company possesses*” (Håkansson 1987a). Relationships can be defined as a process where two firms “*form strong and extensive social, economic, service and technical ties over time, with the intent of lowering total costs and/or increasing value, thereby achieving mutual benefit*” (Anderson and Narus 1991, p. 96). Hereby, relationships are not restricted to one type of partner – relationships are important modes of interaction in many if not all areas of economic exchange:

- Relationships with customers: In order to be truly customer-oriented, a firm needs to develop good working relationships with its customers because it is these relationships which allow a firm to understand customers’ needs and to serve them accordingly.
- Relationships with suppliers: No single firm produces products and services on its own for its own. Instead firms are embedded in complex value creating systems which only function competitively if good business relationships are developed.
- Innovation networks: Business networks are the locus of innovations because strong links to suppliers, customers, consultants, research institutions and governments are vital for knowledge creation and technology transfer.

Therefore, managing business relationships and being able to manage in industrial networks is very important. This importance can be further highlighted by the fact that 60% of partnerships fail (Spekman et al. 1999). Some authors have highlighted this ability as a core competence of a corporation:

1. “*The ability of a firm to create and maintain relationships with their most valuable customers is a durable basis for a competitive advantage*” (Day 2000, p. 24)
2. Collaborating is an essential competence for organizational survival (Dodgson 1993)
3. Firms with experience are more desirable partners and generate more value through relationships (Gulati 1995; Mitchell and Singh 1996).

Also it has been noted that firms differ in their ability to manage in business networks. Sivadas and Dwyer (2000, p.42) conclude: "*This suggests the possibility that, to some extent at least, some firms are better at fostering cooperative competency than others.*" This raises two questions:

1. Can firms manage relationships and networks?
2. How can such ability be conceptualized?

This papers tries to answers these two questions by reviewing recent contributions.

THE POSSIBILITY OF MANAGING IN NETWORKS

There has been much debate on the possibility to manage networks. Some authors have argued that firms are in control of themselves and even of their surrounding firms (Jarillo 1988). Such "controllers" have been termed "hub firms" and the networks labeled as "strategic networks".

Other authors have continuingly argued that firms do not have total control over their resources, as other actors influence or restrict the actions taken by a given firm (Ford 1997; Wilkinson and Young 1994). "*There is no 'invisible hand' creating a situation of efficiency and health. Instead there are several 'visible hands' that try to create situations that are beneficial to themselves*" (Håkansson 1987a, p. 89). Some even go as far as to argue that firms are the wrong level of analysis as networks occur and evolve. From this point of view, networks are unmanageable.

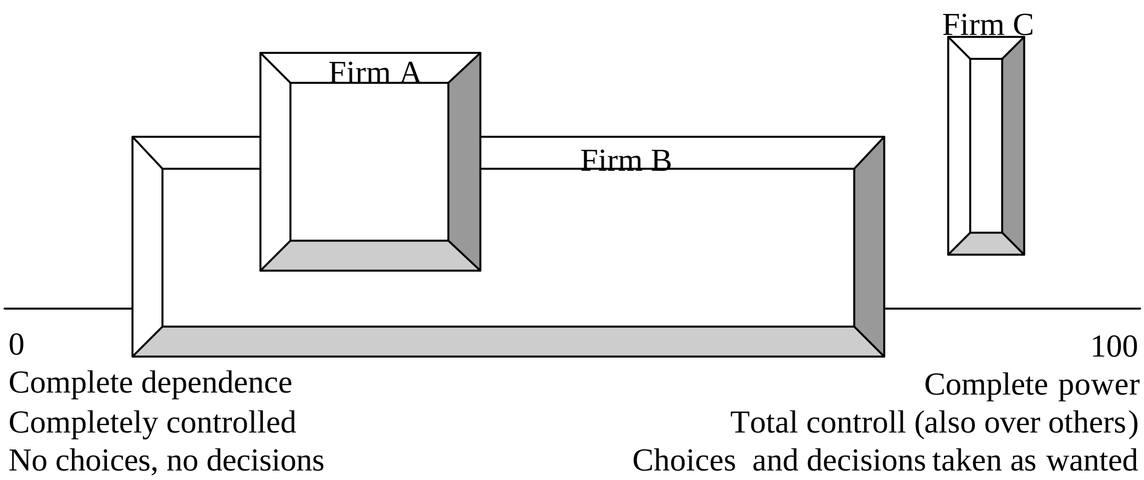
We argue that neither of the extremes, complete management and complete dependence, is realistic. Instead, we take the point of view that each and every firm has a strategic window in which it can shape its own future and the future of its network. There are differences in this window in its size and position on a 0 to 100 percent spectrum, e.g. a highly dependent sub-supplier to a car manufacturer has a smaller and lower window of opportunity than an innovative, entrepreneurial high-tech firm. As such, network management is as much about "being manageable" as it is about managing (Wilkinson and Young 1994, p. 76). Thus, elements of coping and strategic management will simultaneously coexist. We therefore wish to talk about managing in networks and not managing networks.

From a language perspective, Jens Geersbro recently made the point that the word "to manage" has two meanings, which nicely mirrors the situation we have when talking about networks. On the one hand, to manage means to lead, to determine, to organize ("I am managing this firm"); on the other side, to manage means one can cope with a given situation ("I can manage this situation").

"*The extent to which a company will allow others to influence its nominally internal activities and will seek to involve itself within others is an important issue of managerial decision-making and control*" (Ford and Saren 1996, p. 48). This becomes even more strategic, as an inherent paradox of networks is that its flexibility decreases with increasing control by one actor (Håkansson and Ford 2001). This leads us to conclude:

Proposition 1: There is a certain element of management involved in relationships and networks which ranges for individual firms between zero management (not control and influence) to complete management (total control and influence for the firms and the connected organizations) but never reaches the extremes.

Figure 2. Illustration of strategic windows



CONCEPTUALIZING A FIRMS' ABILITY TO NETWORK

In order to structure the various approaches made to this topic, we will distinguish three levels: individuals, teams and firms. An overview of contributions used in this paper is provided in the Appendix. As one can see, various contributions have been made which are either theoretically developed or empirically tested. Based on this evidence, we conclude:

Proposition 2: *Management in business networks is possible and occurs on the individual, the team and the firm level as well as on the dyadic and net level.*

Many studies also show empirically that such management leads to higher performance. This suggests:

Proposition 3: *Management in business networks has the potential to lead to better corporate performance.*

After these general propositions, the content of the different concepts is reviewed. The aim of this part is to establish a common ground, so that general assumptions on this networking ability can be made.

The tasks of managing in networks have been discussed under a variety of names using a number of different perspectives. In order to structure these contributions, it is helpful to distinguish between two management levels: one set of tasks is aimed at the individual relationship and the other one on managing a set of relationships. Mattsson (1997) describes the later one as the "extended interpretation" of relationship marketing. This division is actually quite common in the literature. Håkansson, Johanson and Wootz (1976, p.27) differentiate between a "limiting problem" (resource allocation to different customers) and a "handling problem" (interaction with one customer on a dyadic basis). Ford (1980) distinguishes between strategic management of the network and operational management of single relationships. Easton (1992) concludes that resource allocation among relationships and the management of individual relationships are key issues.

Mattsson (1985) and Johanson and Mattsson (1987; 1992) distinguish between micro and meso/macro positions, whereby the former deals with the dyadic level and the latter with the net and network level. Similarly, Möller and Halinen (1999) suggest four management levels, whereby level 1 is the individual relationship and levels 2-4 deal with several relationships simultaneous. In a similar fashion, Ford and McDowell (1999) split the impact of relationship actions (i.e. task performance) between, in and on the individual relationship on the one side and portfolio and network effects on the other.

Proposition 5: *Relationship-specific and cross-relational network management tasks can be distinguished.*

Relationship-specific tasks

Under this heading, we summarize all activities aimed at managing in one relationship. It is, as such, a dyadic perspective. Möller and Halinen (1999, p. 419) talk about "relationship management capability" which "*refers to a firm's competence in handling individual exchange relationships*". Walter (1999) suggests five tasks on this level: (1) searching for appropriate actors in the two firms; (2) bringing these actors together; (3) exchanging information; (4) coordinating activities between the two firms; and (5) getting negotiation results. Helfert and Gemünden (1998) develop a set of three relationship tasks: (1) exchange; (2) coordination; and (3) adaptation activities. Ling-yee and Ogunmokun (2001) operationalize "relational capabilities" in terms of substantial cooperation, communication and involvement. The importance of communication (i.e. exchange of information) and coordination is also highlighted by Sivadas and Dwyer (2000) as a "cooperative competency" of a relationship and by Day (2000).

Under the label "marketing capability", several authors have discussed, at least partly, relationship management. In their operationalization, Tuominen, Möller and Anttila (1999) relate to information exchange (share objectives and plans, operational interfaces).

Also, the literature on market orientation is relevant in this matter, as it suggests that the exchange and accumulation of information about customers and competitors is based on certain activities. More recently, market knowledge competence has been defined as a set of activities aimed at interacting with customers and competitors (Li and Calantone 1998). As relationships develop over time (Dwyer et al. 1987; Ford 1980), initiation of a relationship should be included. Recent contributions also stress the importance of relationship dissolution as a strategic issue in relationship management.

Proposition 6: Relationship-specific tasks are initiation, exchange, coordination and dissolution.

Cross-relational tasks

Even though the discussion of relationship-specific tasks is far from final, a great deal of effort has been aimed at this topic. In contrast, cross-relational tasks, (i.e. the simultaneous management of several relationships), have not been addressed to the same degree. Of course, many portfolio models have been derived. However, a major critique of these is that nearly all treat relationships as unconnected and derive strategies for the individual relationship and not for a net (Ritter 2000).

Based on general management literature, Ritter (1999) has suggested four cross-relational tasks: (1) planning; (2) organizing; (3) staffing; and (4) controlling (Ritter and Gemünden 2002; Ritter et al. 2002). Planning refers to the development of an overall strategy, keeping in mind the strategic window restrictions discussed above. The main argument for planning is that there is a need for integration of the contributions offered by different actors in the network. Only if there is a synergy between relationships can the full potential be achieved. Also, the relationships are connected and therefore, only a cross-relational plan is needed.

Organizing deals with the enactment of the plan. As such, the definition of particular aims for individual relationships and the allocation of financial resources to specific relationships is part of organizing. From our perspective, it is at the cross-relational level that these tasks need to be looked at, because decisions made do have an impact on other relationships. However, the fact is acknowledged that these issues need to be communicated and coordinated within the dyads.

Staffing is a twin task to both organize and deal with human resources. The allocation of personnel to relationships and management of responsibilities and conflicts between the people involved in relationships is part of this exercise.

In accordance to the management literature, controlling is seen as the final step of this cycle, as it reviews the results of the former steps. At the same time it is the starting point for the process, as the review results are inputs into the planning phase.

Proposition 7: Cross-relational tasks are planning, organizing, staffing and controlling.

Characteristics of these tasks

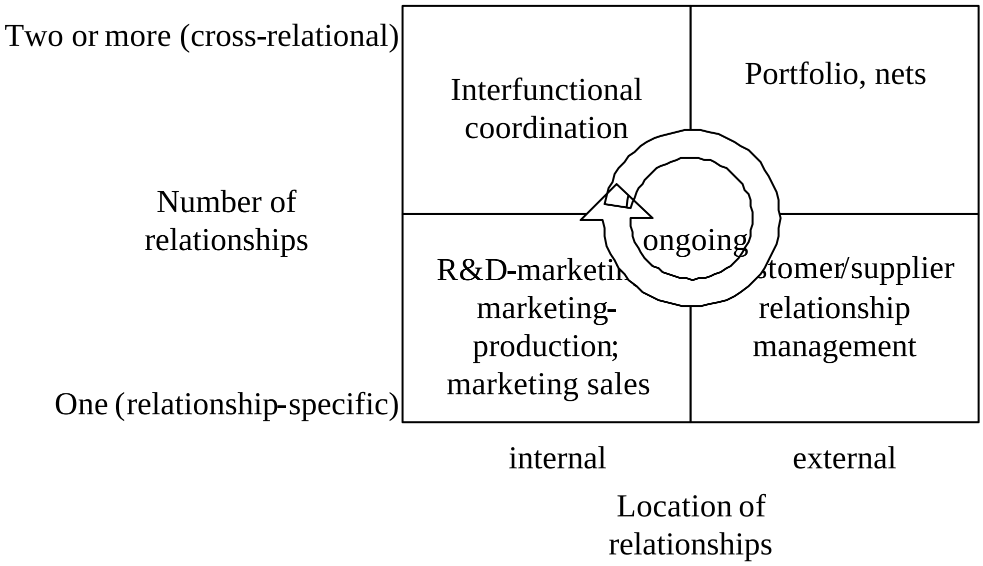
It is important to note that these tasks have to be fulfilled not once, but permanently, because networks are "living, ever-changing organisms" (Easton 1992). As such, network management should be seen as a continuous process or series of activities, which satisfies the definition of competence (Day 1994; Drucker 1985; Li and Calantone 1998; Prahalad and Hamel 1990). It is therefore suggested to label a firm's networking ability as its network competence, as it is a competence it can erode. Knight

(2000) argued that individuals and organizations could learn to collaborate – which implies that they can also unlearn.

Furthermore, the network around an organization can only be successfully enacted if the different links are connected inside the firm. Ritter and Gemünden (2002) highlight an integrated internal communication structure as an important part for the development of network competence. Also, the literature on market orientation highlights inter-functional communication as an integrated part. The discussed network management task issues are illustrated in Figure 3.

Proposition 8: Managing in networks is an ongoing, firm-wide process.

Figure 3. Overview of network management tasks



OUTLOOK

In this paper we offer a review of several contributions that were made to explain firm behavior in business networks. From our analysis, it becomes clear that there is a widespread assumption that firms have a specific ability to manage in networks. This ability varies between firms. Looking at the content of this ability, the picture is not as clear. Various authors have summarized different aspects into a firms networking ability. This makes the comparison of contributions difficult if not impossible. However, this paper offers some overall, inclusive ideas on how to structure the content of a firms networking ability.

REFERENCES

Achrol, Ravi S. and Philip Kotler (1999), Marketing in the Network Economy. Journal of Marketing 63 (special issue): 146-163.

Anderson, James C. and James A. Narus (1991), Partnering as a Focused Market Strategy. California Management Review 33 (3): 95-113.

Campbell, Alexandra, (2001) Achieving Customer Knowledge Competence: Managing Customer Relationship Management Programs Strategically. Working Paper.

Cohen, Wesley M. and Daniel A. Levinthal, (1990) Absorptive Capacity: A New Perspective on Learning and Innovation. Administrative Science Quarterly 35 (März): 128-152.

Cohen, Wesley M. and Daniel A. Levinthal (1989), Innovation and Learning: The Two Faces of R&D. The Economic Journal 99 (September): 569-596.

Day, George S. (1994), The Capabilities of Market-Driven Organizations. Journal of Marketing 58 (October): 37-52.

Day, George S. (2000), Managing Market Relationships. Journal of the Academy of Marketing Science 28 (1): 24-30.

Dodgson, Mark (1993), Learning, Trust, and Technological Collaboration. Human Relations 46 (1): 77-95.

Drucker, Peter F. (1985): Innovation and Entrepreneurship: Practice and Principles. New York: Harper & Row.

Dwyer, F. Robert, Paul H. Schur, and Sejo Oh (1987), Developing Buyer-Seller Relationships. Journal of Marketing 51 (April): 11-27.

Easton, Geoff, (1992) Industrial Networks: A Review, in Björn Axelsson and Geoff Easton, (eds) Industrial Networks: A New View of Reality,. London: Routledge. 3-27.

Ford, David (1980), The Development of Buyer-Seller Relationships in Industrial Markets. European Journal of Marketing 14 (5/6): 339-354.

Ford, David Ed. (1997), Understanding Business Markets (2ed.). London: The Dryden Press.

Ford, David, Håkan Håkansson and Jan Johanson (1986), How Do Companies Interact? Industrial Marketing and Purchasing 1 (1): 25-41.

Ford, David and Raymond McDowell (1999), Managing Business Relationships by Analyzing the Effects and Value of Different Actions. Industrial Marketing Management 28 (September): 429-442.

Ford, David and Mike Saren (1996): Technology Strategy for Business. London: International Thomson Business Press.

Gulati, Ranjay (1995), Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances. Academy of Management Journal 38 (1): 85-112.

Hansson, R. O. (1986), Relational Competence, Relationships, and Adjustment in Old Age. Journal of Personality and Social Psychology 50 (5): 1050-1058.

Helfert, Gabi and Hans Georg Gemünden (1998), Relationship Management by Team: Empirical Evidence for the Impact of Supplier Team Design Quality of the Effectivness of Supplier-Customer Relationships. ISBM report.

Hunt, Shelby D., C. Jay Lambe, and C. Michael Wittmann (2002), A Theory and Model of Business Alliance Success. Journal of Relationship Marketing 1 (1): 17-35.

Håkansson, Håkan (1987a): Industrial Technological Development: A Network Approach. London et al.: Croom Helm.

Håkansson, Håkan, (1997) Product Development in Networks, in Technological Development: A Network Approach. Wiederabgedruckt in David Ford (Hrsg.) In Håkan Håkansson (Hrsg.), Understanding Business Markets, 2. Auflage, London: Harcourt Brace & Company, 475-496., New York: Croom Helm. 1987b, 84-128.

Håkansson, Håkan and David Ford (2001), How Should Firms Interact? Journal of Business Research 50.

Håkansson, Håkan and Barbara Henders (1992), International Co-operative Relationships in Technological Development., in Mats Forsgren and Jan Johanson, (eds). Managing Networks in International Business, Philadelphia. Gordon and Breach. 32-46.

Håkansson, Håkan, Jan Johanson, and Björn Wootz (1976), Influence Tactics in Buyer-Seller Processes. Industrial Marketing Management 4 (6): 319-332.

Jarillo, J. Carlos, (1988) On Strategic Networks. Strategic Management Journal 9: 31-41.

Jaworski, Bernard J. and Ajay K. Kohli (1993), Market Orientation: Antecedents and Consequences. Journal of Marketing 57 (July): 53-70.

Johanson, Jan and Lars-Gunnar Mattsson (1987), Interorganizational Relations in Industrial Systems: A Network Approach Compared with the Transaction-Cost Approach. International Studies of Management and Organization 17 (1): 34-48.

Johanson, Jan and Lars-Gunnar Mattsson (1992), Network Positions and Strategic Actions: An Analytical Framework., in Björn Axelsson and Geoff Easton (eds), Industrial Networks: A New View of Reality, London: Routledge. 205-217.

Johnson, Jean L. and Ravipreet S. Sohi (2001), The Influence of Firm Predisposition on Interfirm Relationship Formation in Business Markets. International Journal of Research in Marketing 18: 299-318.

Kale, Prashant, Jeffrey H. Dyer, and Harbir Singh (2002), Alliance Capability, Stock Market Response, and Long-Term Alliance Success: The Role of the Alliance Function. Strategic Management Journal 23: 747-767.

Knight, Louise A. (2000), Learning to Collaborate: A Study of Individual and Organizational Learning, and Interorganizational Relationships. Journal of Strategic Marketing 8: 121-138.

Kohli, Ajay K. and Bernard J. Jaworski (1990), Market Orientation: The Construct, Research Propositions, and Managerial Implications. Journal of Marketing 54 (April): 1-18.

Lambe, C. Jay, Robert E. Spekman, and Shelby D. Hunt (2002), Alliance Competence, Resources, and Alliance Success: Conceptualization, Measurement, and Initial Test. Journal fo the Academy of Marketing Science 30 (2): 141-158.

Lane, Peter J. and Michael Lubatkin (1998), Relative Absorptive Capacity and Interorganizational Learning. Strategic Management Journal 19: 461-477.

Li, Tiger and Roger J. Calantone (1998), The Impact of Market Knowledge Competence on New Product Advantage: Conceptualization and Empirical Examination. Journal of Marketing 62 (October): 13-29.

Ling-yee, Li and Gabriel O. Ogunmonkun (2001), The Influence of Interfirm Relational Capabilities on Export Advantage and Performance: An Empirical Analysis. International Business Review 10: 399-420.

Mattsson, Lars-Gunnar (1985), An Application of a Networks Approach to Marketing - Defending and Changing Market Positions., in Nikhilesh Dholakia and J. Arndt (eds). Changing the Course of Marketing: Alternative Paradigms for Widening Marketing Theory, Greenwich, Conn. et al.: JAI Press. 263-288.

Mattsson, Lars-Gunnar (1997), Relationship Marketing in a Network Perspective, in Hans Georg Gemünden, Thomas Ritter and Achim Walter (eds). Relationships and Networks in International Markets, Oxford: Elsevier Science Ltd. 37-51.

Mitchell, W. and K. Singh (1996), Survival of Businesses Using Collaborative Relationships to Commercialize Complex Goods. Strategic Management Journal 17 (3): 169-195.

Möller, Kristian K. and Aino Halinen (1999), Business Relationships and Networks: Managerial Challenges of Network Era. Industrial Marketing Management 28 (5): 413-427.

Narver, John C. and Stanley F. Slater (1990), The Effect of a Market Orientation on Business Profitability. Journal of Marketing 54 (Oktober): 20-35.

Phan, Michel, Chris Styles, and Paul Patterson (2000), The Role of Relational Competence in Successful International Business Partnerships: A Southeast Asian Perspective. The University of New South Wales Working Paper Series (00/5).

Prahalad, Coimbatore K. and Gary Hamel (1990), The Core Competence of the Corporation. Harvard Business Review 68 (3): 79-91.

Ritter, Thomas (2000), A Framework for Analyzing Interconnectedness of Relationships. Industrial Marketing Management 29: 317-326.

Ritter, Thomas (1999), The Networking Company: Antecedents for Coping With Relationships and Networks Effectively. Industrial Marketing Management 28 (5): 467-479.

Ritter, Thomas and Hans Georg Gemünden (2002), Network Competence: Its Impact on Innovation Success and its Antecedents. Journal of Business Research forthcoming.

Ritter, Thomas, Ian F. Wilkinson, and Wesley J. Johnston (2002), Measuring Network Competence: Some International Evidence. Journal for Business and Industrial Marketing 17 (2/3): 119-138.

Sivadas, Eugene and F. Robert Dwyer (2000), An Examination of Organizational Factors Influencing New Product Success in Internal and Alliance-Based Processes. Journal of Marketing 64 (January): 31-49.

Spekman, Robert E., Lynn A. Isabella, and Thomas C. MacAvoy (1999): Alliance Competence: Maximizing the Value of Your Partnerships. New York: John Wiley.

Tuominen, Matti, Kristian Moller, and Mai Anttila (1999), Marketing Capability of Market Oriented Organizations. Proceeedings of the 28th EMAC conference. Berlin, Germany.

Walter, Achim (1999), Relationship Promotors: Driving Forces for Successful Customer Relationships. Industrial Marketing Management 28 (5): 537-551.

Walter, Achim, Thomas Ritter, and Hans Georg Gemünden (2001), Value-Creation in Buyer-Seller Relationships: Theoretical Considerations and Empirical Results from a Supplier's Perspective. Industrial Marketing Management 30 (4): 365-377.

Wilkinson, Ian F. and Louise C. Young (1994), Business Dancing: The Nature and Role of Interfirm Relations in Business Strategy. Asia-Australia Marketing Journal 2 (1): 67-79.

APPENDIX

Construct name	Definition	Level	B	XT	RT	NQ	SQ	Authors	Impact
Relational competence		I					X	(Hansson 1986) (Phan et al. 2000)	Relationship quality +
Relationship Manager		I						(Ford 1980, 351)	
Relationship promoter	Individuals in a relationship setting who both, fulfill relational performance contribution and possess relational power resources	I			X	X	X	(Walter 1999)	Sales +, Innovation +, Market access +
Capacity to collaborate		I/F	X		X			(Knight 2000)	
Alliance capability		R			X			(Kale et al. 2002)	
Alliance competence		R			X			(Hunt et al. 2002; Lambe et al. 2002)	
Cooperative competence		R	X		X			(Sivadas and Dwyer 2000)	
(Relative) absorptive capacity		F			X			(Lane and Lubatkin 1998)	
Absorptive capacity	"firm's ability to identify, assimilate, and exploit knowledge from the environment"	F		X	X			(Cohen and Levinthal 1990; Cohen and Levinthal 1989)	
Market Orientation	Business culture that most effectively and efficiently creates superior value for customers	F	X					(Narver and Slater 1990)	Business performance +
Market Orientation	Generation and dissemination of market intelligence and responsiveness to it	F		X	X			(Jaworski and Kohli 1993; Kohli and Jaworski 1990)	Business performance +
Marketing Capability	Customer linking and channel bonding ability	F		X	X			(Tuominen et al. 1999)	
Market-relating capability	Relationship orientation, customer knowledge, internal	F	X		X			(Day 1994; Day 2000)	

	and external integration								
Market Knowledge competence	Customer knowledge process. Competitor knowledge process	F		X	X			(Li and Calantone 1998)	
Network ability		F		X	X			(Håkansson 1987b)	
Network competence	Ability to initiate, maintain, and use business relationships and networks	F		X	X	X	X	(Ritter 1999; Ritter and Gemünden 2002; Ritter et al. 2002)	Higher level of embeddedness, higher innovation success, higher corporate success
Customer Knowledge competence	The process that generates and integrates knowledge about specific customers	F		X				(Campbell 2001)	
Interfirm relational capabilities	-/-	F			X			(Ling-yee and Ogunmonkun 2001)	
Relational predisposition		F	X					(Johnson and Sohi 2001)	