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DEVELOPING NETWORK INSIGHT

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ABSTRACT

It is commonly argued that networks which include firms and organisations of different types, professional communities and public bodies provide the relevant context for actors' action and that it is important to distinguish between the network context itself and the *representation* of that context in actors' cognitive maps. Hence, it has been claimed that the subjective managerial cognition, i.e. the network pictures of organizations are the necessary representations that form the basis for the overall networking and the resulting outcomes of organisations. Network pictures are conceptualized as the perceived views of the network held by actors in that network. Thus, *network pictures* are an actor-centred, task-specific and atomised construct. In contrast, we propose the conceptual construct of *network insight*, which does not consist of the subjective views of individual players but is grounded in the practice of inter-organisational exchange in communities of practice. We argue that *developing network insight* is a managerial process of integrating dispersed pieces of atomised network pictures through multilateral interactions in communities of practice that leads to organisational learning and differential knowledge for positioning and acting within a network. Such a managerial activity is inter-subjective and transcends the task-specific knowledge base of managerial cognition. Organisations that develop network insight are able to mobilize other actors and create a competitive advantage that is crucial for their innovation and growth in their surrounding network.

INTRODUCTION

It is commonly argued that networks which include firms and organisations of different types, professional communities and public bodies provide the relevant context for organisational practice (Andersen *et al.*, 1994; Uzzi, 1997; Dyer and Singh, 1998;

Halinen *et al.*, 1999; Stevenson and Greenberg, 2000; Gnyawali and Madhavan, 2001; Kranton and Minehart, 2001; Uzzi and Lancaster, 2003). The challenge that organisations face within these “communities of practice” consists of amalgamating possibilities, which do not exist in a transparent and concentrated form but solely as dispersed individual pictures held by actors in a network. These atomised and often contradictory network pictures (Ford *et al.*, 2003) refer to the idiosyncratic understanding that different organisations and actors have of their surrounding network (Smircich and Stubbart, 1985; Hodgkinson and Johnson, 1994; Johnson *et al.*, 1998). One would be tempted to rush into an effortless and straightforward response to the challenge of integrating these atomised network pictures by claiming that organisations need to obtain several individual network pictures and compare them with each other. This, however, appears to be more like wishful thinking than a realistic response to this managerial challenge. Networking (Ford *et al.*, 2003) within communities of practice by itself, does not flow directly out of a multitude of network pictures but requires further managerial cognitions.

There are two reasons why the mere addition of network pictures will not address the challenge of amalgamating atomised network pictures. Firstly, organisations’ cognitive maps are continually re-configured through the negotiations undertaken by the organisations in their intermediate network to resolve inherent conflicts. Thus, organisations cannot fully construct and spell out in advance all individual views held by other actors. Secondly, differential knowledge for positioning and acting within a network which could lead to organizations’ innovation is not self-contained in network pictures but is emerging as a set of possibilities through tensions and discrepancies. Therefore, we propose in this paper the conceptual construct of *network insight*, which does not consist merely of the subjective views of atomistic players but comprises the unique and task-neutral knowledge for positioning and acting within a network. We have chosen the title *Developing Network Insight* deliberately to emphasize the inherently developmental and indeterminate nature of the network insight. Each inter-organisational network consists of pre-existing business relationships and dynamics that continually reshape what is feasible. Through the construct of network insight we describe the emergence of a set of possibilities open to each organization within that network and

argue that *network insight* can lead to a competitive advantage within a network as well as for the network itself. This paper presents a conceptual and procedural fundament for developing network insight, drawing on management theory from two different approaches: *networks* and *knowledge*. It defines the conceptual parameters of developing network insight and describes exemplary cases of how organisations develop or fail to develop network insight. Hence, the paper aims at theory development that explains and improves organisational practice. We finally present conclusions and managerial implications that are relevant to those concerned with strategizing and managing in networks.

NETWORK APPROACH

The network approach is ingrained in the recognition of markets as networks of exchange relationships (Uzzi, 1997; Dyer and Singh, 1998; Halinen *et al.*, 1999; Stevenson and Greenberg, 2000; Gnyawali and Madhavan, 2001; Kranton and Minehart, 2001; Uzzi and Lancaster, 2003). The view of markets as interconnected networks of exchange relationships prompted a whole generation of researchers to analyse and describe the characteristics of these networks (Andersen *et al.*, 1994; Håkansson and Snehota, 1995; Ford *et al.*, 2003). Network pictures were a central concept that was constructed to describe the mental representations, or cognitive maps, of relevant network characteristics as seen through the eyes of involved actors (Ford *et al.*, 2003). The attempt to portray network characteristics and provide a plausible narrative for past events and current positions can be traced back to Johanson's and Mattsson's (1992) 'network theory'. Network pictures are the actor's 'network theory' (Mattsson, 2002b). Like Weick's (1995) notion of sense-making, network pictures are vigorously contributing to the process of organisations' identity construction. Network pictures are retrospective in the sense that they provide a plausible representation of past events and current positions but also prospective in that they shape organisations' future options.

Notwithstanding the intellectual debate about network pictures, there has been no serious attempt to rigorously conceptualize the underlying dimensions of such network pictures

and to test their applicability in the real life of organisations. Henneberg *et al.* (2003) provide an extensive review of all previous work and propose a parsimonious set of interrelated dimensions. Their study demonstrates that the utilisation of the different dimensions is primarily determined by what it is that managers wish to represent, within a specific task-oriented environment. As there is no such thing as one abstract or ‘correct’ network picture, Ford *et al.* (2003) argue that the different managers involved will naturally have their own subjective interpretations. One way to overcome this problem is to follow Anderson’s *et al.* (1994) suggestion that multiple network pictures need to be collected in a more systematic and possibly longitudinal fashion. Their suggestion is to use case studies that capture longer time periods and gather material from different functions both within an organisation and from different organisations.

The problem with the active use of network pictures, however, is not a matter of numerical sufficiency. Network pictures are atomised constructions that are inferred and interpreted from a variety of cues rather than objectively given. All elements of network pictures, as well as their interpretations are subjective (Anderson *et al.*, 1994; Möller and Halinen, 1999) and linked to the tasks at hand that shape individual managers’ perceptions. They can be interpreted as a sign of what individual managers sense is important for them and their organisation, but not as a sign germane for the development of ‘network competences’ or an abstract grasp of network properties (Ritter, 1999; 2000). Due to their subjective character, network pictures are a personal interpretation of the network context and thus fuzzy and indeterminate (Gadde *et al.*, 2003; Mattsson, 2002b). Moreover, network pictures are enacted in the sense that existing business networks are interpreted and constructed by the organisations’ own initiatives. Their properties are actor-centred as they comprise elements such as the network horizon (Holmen and Pedersen (2003) or boundary, centrality, distance, actor, relevance information flow and exchange relationships (McLoughlin and Horan, 2000).

At the same time, the theoretical preoccupation with network pictures obscures one important point. There is a great difference between what is factually possible in a network and what is conceivable by an organisation or individual using their specific

network pictures. Concepts, such as those of network pictures, which ignore this distinction, are unsuitable for drawing a framework that explains practice beyond a mere subjective relativism. To be useful to managers, a theoretical construction needs to be grounded in a deep understanding of the practice of inter-organisational exchange (Biggart and Delbridge, 2004). Network pictures alone are not useful for organisational practice and those who use them might be blinkered. As atomised intellectual constructs, network pictures have not been developed and tested within an inter-organisational exchange processes, nor have they been linked to cognitive processes (Meindl *et al.*, 1994). They constitute an ad-hoc theorizing on cognitive structure divorced from reality. While network pictures are undeniably valuable as aspects of organisations' identity construction, their *appropriateness* for a thorough understanding of networks remains limited. As subjective representations, network pictures need proper 'translation' through several stages of inter-organisational exchanges before they become 'inter-subjectively' amalgamated (Mattsson, 2002a; Mattsson, 2003). As task and actor-centred constructs, they are inconsistent with the network-centred constructs of *networking* and *network outcomes*. This ontological scuffing destabilizes the analysis by discarding the proclaimed 'network perspective'. While the network approach qualifies our understanding of subjective representational constructs like network pictures, we need to look at the knowledge approach to understand the components of network insight.

KNOWLEDGE APPROACH

Developing a knowledge approach to economic problems, Hayek (1945) articulated in a forceful and clear way that the economic problem in a society is in fact a problem of the utilization of *knowledge not given to anyone in its totality*. Hayek formulated this problem in the following way:

“The peculiar character of the problem of rational economic order is determined precisely by the fact that knowledge of circumstances of which we must make use never exists in concentrated or integrated form, but solely as dispersed bits of incomplete and frequently contradictory knowledge which all separate individuals possess. The economic problem of society is thus not merely a problem of how to

allocate “given” resources. It is rather a problem of how to secure the best use of resources known to any of the members of society, for ends whose relative importance only these individuals know”. (1945, p. 519)

Moving on from the macro-realities of a whole society to the realities of individual firms, Tsoukas (1996) paraphrased Hayek’s problem by stating that “*the organizational problem firms face is the utilization of knowledge which is not, and cannot be, known by a single agent*” (p 11). This agent might be within the entity borders of the company or outside. In an attempt to refine our view of what organizations are about, Tsoukas (1996) considers organizations as being in constant flux and argues that at any point of time, a firm’s knowledge is the indeterminate outcome of actors attempting to manage the inevitable tensions between 1) normative expectations, 2) dispositions from the past and 3) local contexts. Therefore, the potential for the emergence of novel practices is never exhausted. Normative expectations, for example, could take the form of roles but also the form of internal or external pressures to act in a certain way, or of task-related contingencies. Dispositions will include sedimented experience but also the various forms such as plans, reviews, statistics and maps/matrices in which information appears. Finally, local context comprises all specific space-temporal conditions such as the maturity of industry, existing organisational and inter-organisational structures as well as the access to the *right* people at the *right* time.

Building on Giddens’ (1984) duality between structure and action, Hargadon and Fanelli (2002) suggest that organizational knowledge is the product of an ongoing and recursive interaction between knowledge as empirical action and knowledge as possibility. In their view, knowledge as action encompasses the factual physical and social artefacts that surround actors in organizations, while the knowledge as possibility comprises the schemata constructed and shaped from actors’ past experiences. The duality implies that actors’ knowledge of action is experienced through the lenses of existing cognitive schemata. Hargadon and Fanelli (2002) conclude that the generation of new knowledge or successful replication of old knowledge depends on the cyclic interaction between the ‘matter’ of the knowledge as action and the ‘energy’ that resides in knowledge of as

possibility. Hargadon and Fanelli's position is compatible with contemporary critical realist as well as social constructionist approaches. While the naïve realism of the past articulated the belief that that knowledge can be obtained with certainty directly from the real world, critical realism argues that "*all knowledge claims must be critically evaluated and tested to determine the extent to which they do, or do not, truly represent or correspond to the world*" (Hunt, 1990, p. 11). In Sayer's realist view of knowledge, objects may be simple or complex, social or material, abstract or concrete, and are characterized by their relations. However "*neither objects nor their relations are given to us transparently: their identification is an achievement and must be worked for*" (Sayer, 1984, p.88).

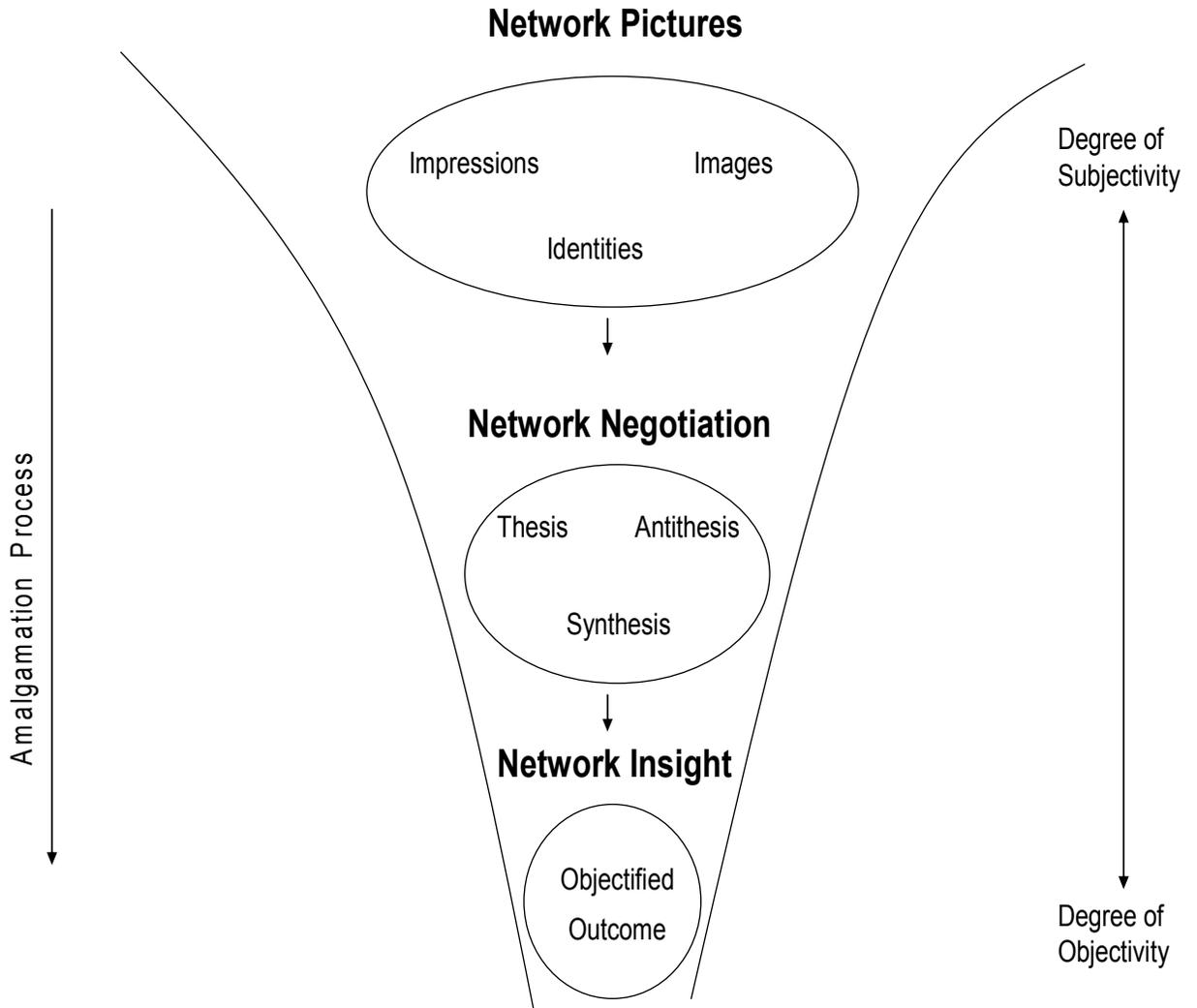
While meta-theoretical knowledge approaches emphasize the inherently imprecise and indeterminate nature of knowledge, the current management literature is rich with examples of how profitable business opportunities emerged as a by-product of actions with a different purpose rather than as intended outcomes of deliberate views and choices (Mintzberg, 1979; Mintzberg, and Waters, 1985). Furthermore, Denrell *et al.* (2003) provide evidence that business opportunities which organizations seize onto are usually specifically prepared for them. It appears, however, that the above line of thought misses out on a crucial attribute of this 'achievement' or 'preparation' process. The challenge of embracing the new opportunities which are dispersed in an organisation's surrounding network, requires a deep insight into what is feasible. This insight is grounded in the inherent network negotiations which are managerial activities embedded in exchanges (Spender, 1998).

NETWORK INSIGHT: A CONCEPTUAL FRAMEWORK

Having reviewed the theoretical foundation of this study, we now propose a framework for understanding the *development of network insight*. The proposed framework results from the conceptual tools of network and knowledge approaches. It is depicted as a funnel (see Figure 1), and illustrates a process of integrating dispersed pieces of incomplete and often contradictory impressions, images and identities. All of these

disperse and subjective views undergo an amalgamating process through the recurrent practice of negotiation. However, this amalgamation process which ultimately renders network insight can be managed by the company, i.e. it does not automatically occur but needs careful guidance.

Figure 1: Developing Network Insight



Based on network pictures, certain network-related activity options are created. However, these are usually not enacted unilaterally but embedded in an exchange process that begins with network negotiations. Network negotiations can be conceptualized as an iterative cycle of thesis, antithesis and synthesis that leads to a deeper understanding of what is possible for the organisations within a network. Thus, through the construct of network insight we describe the set of possibilities open to each organisation through the apperception of non-task related network properties. Network insight is not a subjective interpretation that is inferred from a variety of cues; it is rather inter-subjective and consists of data, information and knowledge that organisations can use practically for a differential positioning and action in the network. The ontological foundation of network insight rests on a) multilateral exchange, b) manifold rationality and c) recursive time which act as the three endemic functions in each network.

Multilateral Exchange

Network insight is the amalgamated outcome of multiple negotiations at many different levels within and among organisations. A typical network negotiation will comprise several exchanges at regional as well as at headquarter levels, plus a plethora of related information gathering activities, often with third parties such as professional communities and public bodies. Furthermore, exchanges could be task specific as well as non-task specific. Organisations' openness to move beyond existing task-specific exchanges is crucial for their ability to embrace new possibilities and develop alternative perspective of their surrounding network.

Manifold Rationality

The creation of network insight is based on a manifold organisational logic. Organisations' underlying logic is manifold in the sense that it emphasizes certain aspects that are important for them and diverts attention from other facets which might be important for other organisations. Moreover, individual actors might have personal issues

as reasons for doing things, over and above what is 'right' for the organisation. A manifestation of manifold rationality can be found in the distinction between instrumental rationality (“Zweckrationalität”) and value rationality (“Wertrationalität”) as described by Weber (1956). According to Elster (2000), value rationality is guided by its consequences or ends, whereas instrumental rationality is guided by means.

Recursive Time

Network insight comprises an indeterminate outcome of recurrent organisational practices. Time is not understood as a linear process but as recursive practice. Organisational habits and institutionalized forms of interactions such as periodic business reviews, periodic task reviews, annual operating plans or annual contractual agreements among firms are manifestations of a recursive time.

After describing the conceptual framework for network insight and establishing the activities and characteristics that are linked to the development of network insights, we will proceed with initially testing this framework in a qualitative case study setting. The next sections will describe the applied methodology as well as exemplify some case studies.

METHODOLOGY

The present research represents a continuation of a research project which started in November 2002 with the objective to identify how organisations mobilize other actors their existing surrounding network to work within the plans they develop (Mouzas and Naudé, 2003). One of the most intriguing empirical findings of that research, articulated as the ‘first challenge’, demonstrated a considerable lack of organisations’ *network insight*. We found that organisations of all different types were preoccupied with their own tasks and concerns and were not always able to develop the organizational capability to learn and mobilize other actors in their communities of practice. Their network pictures were consequently simplistically oriented towards immediate task satisfaction, allowing only a myopic view of the relevant network to penetrate into their cognitive

maps. This was evident in the companies' limited awareness about their supplier's existing concerns and the lack of knowledge about available options or the ignorance of where certain capabilities reside in a wider network.

Our research endeavours have continued during 2003 and 2004 with a critical revisiting of the empirical evidence and the formulation of further research questions. Our main research target was to understand how and why organisations develop or fail to develop network insight. The field work included in-depth interviews of senior managers such as key account managers, purchasing managers, sales managers, corporate lawyers and controllers who participated in the initial research, and a research workshop with managers from sales and purchasing, project management and general management, representing a variety of industries as well as some of the best known blue chip manufacturers such as consumer goods and pharmaceutical companies, producers of semiconductors but also service providers (telecommunication, grocery retailing, and water suppliers). Emphasis of the enquiry was based on written and verbal replies, multiple sources of information and triangulation of data (Janesick, 1994) in order to maintain a chain of evidence and develop converging lines of investigation. We employ descriptive case studies to exemplify certain aspects of the conceptual framework of network insights.

EXEMPLARY CASES

In the following we present three short exemplary cases that demonstrate how organisations develop or fail to develop a network insight.

Case Study: International Utility Company Aquarius

Aquarius is an international utility company, owned by two European waste disposal and utility conglomerates. Aquarius specializes in taking over utility companies from developing countries that want to privatize the sector, and was negotiating a deal with the government of M-Land (GoM). GoM invited tender offers for the majority of shares in the newly-privatized company MUS (M-land Utility Supply) that runs the countries

utility and waste services. Aquarius bid as part of the tender without having a clear network picture. For example, they did not know how many other bidders were involved, nor did they have an idea about crucial elements of the underlying business plan which related to the willingness of certain network actors (in this case final consumers) to pay for some necessary infrastructure investments. The only insight that they gained early on was the knowledge that the country's regulatory body, their main exchange and negotiation partner, was in fact weak and did what GoM told it to do. Apart from that, Aquarius impressions and images of the crucial issues were opaque. However, they were driven by pressure from their parent companies because Aquarius had not done a deal for 2 years. Therefore, their own identity was under threat if they could not clinch this deal.

During the negotiations and the subsequent information gathering, it became clear to Aquarius that they were the only serious bidder. However, they had started the negotiations with a very lucrative offer to GoM regarding the amount of investments that they intended to undertake. They now had to decrease these investment promises during the negotiations. However, GoM constantly used the original numbers as a negotiation ploy. While this was relatively successful at the beginning, Aquarius realized midway through the negotiations that GoM could not pull out of the deal anymore (however, Aquarius was in the same position). A negotiation equilibrium (synthesis) accrued which 'oiled' the subsequent negotiations.

Eventually, Aquarius got the deal (around three quarter of the overall shares). However, it transpired later that Aquarius had not reached the level of network insight in their understanding of the network: they realized that they could have got the deal for considerably less money as GoM urgently needed liquid cash because of the country's debt situation. Furthermore, the underlying business model for the share valuation was totally skewed: Aquarius did not recover any investment costs from final consumers due to a militant unwillingness to pay for these. As a consequence, the new business haemorrhaged money during its first year and a re-negotiation had to take place. This time, Aquarius had gained some additional insight into the general situation: they were

able to use threats of pulling out of the deal which would have destabilized the government. It was half a year before a general election and GoM actually had not made the privatisation deal public. Any revelations would have destroyed GoM's re-election chances. Consequently, Aquarius was able to negotiate better tariffs and investment condition. However, the insight information that Aquarius had were 'empty', although their threat to pull out sounded credible: they (but not the government) were aware that the actual contract would have left them with huge hidden liabilities which they could never have accepted. Although the renegotiation ended in a viable business model for both sides, the Aquarius director in charge lost his job because of the management of the initial negotiations and the missing of any abstract understanding of the important motivations, key drivers, and interactions of actors and processes underlying the deal.

Case Study: Retailer Consum

Consum is a major European retailer with annual sales of £20.5bn and with a particular strong position in convenience and small supermarkets. The retailer is planning to invest up to €890m in the refurbishment of its stores over the next five years, in order to improve layout, shelving and merchandising. As a category buyer, Consum has established long-term business relationships with manufacturers and is now considering plans to create a network of franchised supermarkets, in order to accelerate expansion and reduce costs. However, the increasing price-sensitivity of consumers and the evolving price competition among retailers has significantly burdened the existing business relationships with manufacturers. Moreover, it has prompted Consum to launch retailer brands produced by selective manufacturers which not only offer lower prices to consumers, but also better trade margins. Therefore, during the annual trade negotiations, Consum has repeatedly expressed resistance towards the higher prices of branded products and asked manufacturers to support the declining trade margins which are driven by the intensified price competition. Supporting lower prices takes the form of an ongoing investment on market shares and Consum is constantly confronted with the following task-specific options:

- 1) Negotiate with suppliers an improvement in trade margin
- 2) Move business another suppliers who are willing to invest

3) Maintain the status quo, i.e. Consum continues to lose margin

Following an ongoing negotiation and adjustment of agreements, a number of manufacturers agreed in principle to drive more sales volume at reduced investment levels but were reluctant to make a significant investment in supporting Consum's declining margins. Furthermore, other branded manufacturers were unsupportive and disinterested in contributing to Consum's initiatives by expressing a more assertive decision to move business towards more profitable business. Manufacturers' manifold rationalities had no impact on Consum. Instead of considering multilateral exchanges with manufacturers, the retailer was increasingly committed to cutting retail prices on more than 1,000 items, prompting concern over a new price war in the retail market. Hence, Consum made the task of securing declining trade margin a company's priority and established an internal task force to gain a better picture of all available options. The challenge, as formulated by Consum, was to scrutinize the existing value chain and identify cost-reduction opportunities and arguments which support the task of securing margins.

Case Study: Global Metal Specialist BetaMet

BetaMet is a global player in a particular segment of the specialist metals industry, and is part of a larger industrial conglomerate. While the company has its headquarters in central Europe, it also has production facilities in the USA, China, and in numerous other European countries, and sales offices or distributors acting on its behalf throughout the world. The company's products are used in the manufacture of machinery that in turn is used in just about every form of manufacturing world-wide. BetaMet has enjoyed considerable success over the past three decades. Based upon a tradition of innovation whereby 2% of turnover has always been spent on Research and Development, the company has been the source of numerous technological innovations that have allowed it to maintain both its margin and also its leading global share of some 30% of the specialist metals market.

This traditional recipe for financial and competitive success is now under considerable threat from a variety of sources. On the one hand, traditional industries, such as the automotive in particular, are demanding ever-increasing performance in terms of standards, prices, and delivery from second or even third tier suppliers. In addition, there are radically new product forms being offered to the market that, while orders of magnitude more expensive, offer radically improved performance in terms of life-time cost-in-use and hence value. Finally, there are a number of new suppliers of BetaMet's traditional offering from both the former USSR countries and also China. While their quality does not match that of BetaMet, their costs are so much lower that their offering is attractive to certain elements of the marketplace. These three factors have combined to see BetaMet's sales drop by some 15% over the past two years, with a concomitant drop in profit margins.

The company's failure to react to these competitive changes can be traced back to its lack of ability to integrate dispersed pieces of individual knowledge. In terms of multilateral exchange, the company's traditional stance as a peerless innovator with no direct competitor led to a lack of willingness to talk and to listen. Insufficient attention was paid to organisational forms that would facilitate communication both within the company's different levels and also between the company and its external network: not just their customers, but their customers' customers. While the company was innovative in certain directions, it displayed little willingness to move beyond existing task-specific exchanges. The company was driven by high overheads and a desire to ensure maximum capacity utilization in its factories in order to drive down their unit costs. Technological innovation focussed on process as much as product developments, without attention to understanding how the manifold rationality of their customers was changing as the external economic conditions changed. Finally, time was indeed seen as a linear process, driven by quarterly and annual reports to the head office. There was no obvious attempt to indulge in any recursive data gathering in order to understand the network's evolving needs.

CONCLUSIONS AND IMPLICATIONS

The exemplary cases demonstrate that the organizational process of integrating dispersed pieces of subjective, task-related network views is a real challenge for any organisation and that a better understanding of *developing network insight* can provide three significant advantages.

Firstly, a wider perspective that rests on a multilateral exchange, manifold rationality and recursive time helps us understand the essential role of negotiation to resolve inherent conflicts in every aspect of organizational life. It seems that organisations are not only unable to fully construct and spell out in advance individual views held by other actors but these views are continually re-configured through the ongoing negotiations undertaken within communities of practice. Secondly, moving out of the boundaries of task-related actions, we can increase our understanding of organisations' potentials and their perceived options. These existing potentials do not come only from the idiosyncratic capabilities of a firm but are derived from the firm's membership in networks of business relationships. Thirdly, an understanding of the process of developing network insight helps us to understand the creation of competitive advantage within a network as well as for the network itself. Thus developing network insight can lead to a better assessment of the *appropriateness* of an organization's action.

Despite the relevance of developing network insight, our empirical findings demonstrate a considerable and widespread lack of network insight by many organisations, be it in specific situations regarding clinching a deal, or in non-specific situations regarding an assessment of the driving forces within a network. The evidence hitherto is that organisations face tremendous difficulties in integrating dispersed pieces of specialized knowledge held by various actors in their surrounding networks. However, building on the conceptual framework of *developing network insight*, organisations can recognize that the process of amalgamating dispersed pieces of incomplete and often contradictory impressions, images and identities is possible, if they take the recurrent practice of negotiation seriously.

Organizations or organized groups need to understand that the process that ultimately renders network insight does not occur automatically but needs to be guided carefully and it needs to be managed. Therefore, we propose a set of guiding principles which could be used in understanding, developing and improving network insight. Organizations and groups could carry, champion and mediate the following set of guiding principles:

- Subjective knowledge that is inferred from cues is an inherent trap that can be avoided by testing and improving it through several layers of exchanges.
- Exchanges need to take place at all possible levels, at regional units and at headquarters, internally between different departments and individuals as well as externally between organizations and other groups and public bodies.
- Organisations' openness to emerging business opportunities requires the inclusion of non-task related exchanges and the ability to embrace new possibilities.
- Actors' underlying rationales should not divert their attention from other rationales which might be important for other actors and organisations.
- Organizations could distinguish between value rationality guided by its consequences and instrumental rationality guided by its means.
- Knowledge needs to become objectified in form of shared data and shared information so that it can be used practically for differentiating positioning.
- Actors could think about time as recurrent practice of periodical reviews, negotiation episodes or contractual agreements.

Following these guiding principles, organizations' network insight becomes inter-subjective and transcends the narrow task-specific knowledge base of individual

cognition. Hence organizational actors and groups may develop a network insight what creates a competitive advantage for their own organisation in its surrounding network.

REFERENCES

- Anderson, J. C.; Håkansson. H. and Johanson, J. (1994) Dyadic Business Relationships Within a Business Network Context, *Journal of Marketing*, Vol. 58, pp. 1-15
- Axelsson, B. (1992) Corporate Strategy Models and Networks - Diverging Perspectives. In B. Axelsson and G. Easton (Eds.), *Industrial Networks: a New View of Reality*, Routledge, pp. 184-204
- Biggart N. W. and Delbridge, R. (2004) Systems of Exchange, *Academy of Management Review*, Vol.29, N. 1, pp. 28-49
- Denrell J.; Fang C. and Winter S. (2003) The Economics of Strategic Opportunity, *Strategic Management Journal*, Vol. 24, pp. 977-990
- Dyer J. D. and Singh, H. (1998) The Relational View: Cooperative strategy and Sources of Interorganizational Competitive Advantage, *Academy of Management Review*, Vol. 23, N. 4, pp. 660-679
- Easton, G. (1992) Industrial Networks: A Review, in Axelsson, B. and Easton, G. (Eds.) *Industrial Networks: A New View of Reality*, Routledge, London, pp. 3-27
- Easton, G. and Araujo, L. (1997). Interfirm Responses to Heterogeneity of Demand over Time, in Mark Ebers (ed.), *The Formation of Interorganisational Networks*, , Oxford University Press, Oxford, pp.66-94
- Elster, J. (2000) Rationality, Economy and Society. in S. P Turner (Ed.) *The Cambridge Companion to Weber*, Cambridge University Press, Cambridge, pp. 21-41
- Ford, D., (1978). Stability Factors in Industrial Marketing Channels, *Industrial Marketing Management*, Vol. 7, No. 4, pp. 410-22
- Ford, I. D.; Gadde, L.E.; Hakansson, H. and Snehota I. (2003), *Managing Business Networks*. John Wiley, Chichester.
- Gadde, L.E., Huemer, L. and Håkansson H. (2003) Strategizing in Industrial Networks, *Industrial Marketing Management.*, Vol. 32, N. 5, pp. 357-365

- Giddens, A. (1984) *The Constitution of Society*. Cambridge: Polity Press,.
- Gnyawali D. R. and Madhavan, R. (2001) *Cooperative Networks and Competitive Dynamics: Structural Embeddedness Perspective*, *Academy of Management Review*, Vol. 26, N. 3, pp. 431-445
- Håkansson, H. and Johanson, J. (1992) *A Model of Industrial Networks*, in Axelsson, B. and Easton G. (Eds.), *Industrial Networks: A New View of Reality*, Routledge, London, pp. 28-34
- Håkansson, H., and Snehota, I.,(1989). *No Business is an Island: The Network Concept of Business Strategy*, *Scandinavian Journal of Management*, Vol. 4, N. 3, pp. 187-200
- Håkansson, H. and Snehota, I., (1995) *Developing Relationships in Business Networks*, Routledge, London
- Halinen, A.; Salmi, A. and Havila, V. (1999) *From Dyadic Change to Changing Business Networks: An Analytical Framework*, *Journal of Management Studies*, Vol. 36, N. 6, pp. 779-795
- Hargadon A., and Fanelli A. (2002) *Action and Possibility: Reconciling Dual Perspectives of Knowledge in Organizations*, *Organization Science*, Vol.13, N. 3, pp. 290-302
- Hayek, F.A.,(1945) *The Use of Knowledge in Society*. *American Economic Review*, Vol. 35, N. 4, pp. 519-531
- Henneberg, S. C.; Mouzas, S and Naudé, P. (2003) *Network Pictures – Concepts and Representations*, Paper presented at the 1st ESRC Seminar on Relational Marketing, Norwich, 12 Dec. 2003
- Hodgkinson, G. P. and Johnson G. (1994) *Exploring the Mental Maps of Competitive Strategists : The Case for a Processual Approach*, *Journal of Management Studies*, Vol. 31, N. 4, pp. 525-551
- Holmen, E. and Pedersen, A. C. (2003) *Strategizing through Analyzing and Influencing the Network Horizon*, *Industrial Marketing Management*, Vol. 32, N. 5, pp. 409-418
- Hunt, S. D., (1990) *Truth in Marketing Theory and Research*. *Journal of Marketing*. 54, July, pp 1-15
- Janesick, V. J. (1994) *The Dance of Qualitative Research Design*, in N. K. Denzin and Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*, Sage, Thousand Oaks, pp. 209-219

- Johnson, P.: Daniels, K. and Asch, R. (1998) Mental Models of Competition, in C. Eden and J.-C. Spender (Eds.), *Managerial and Organizational Cognition*, Sage, London, pp. 130-146
- Johanson, J. and Mattsson, L. G., (1992) Network Positions and Strategic Action – An Analytic Framework, in B. Axelsson and G. Easton (Eds.), *Industrial Networks : a New View of Reality*, Routledge
- Kranton, R. E. and Minehart, D F. (2001) A Theory of Buyer-Seller Networks, *American Economic Review*, Vol. 91, N. 3 pp. 485-509
- Mattsson, L.-G. (2002a) Dynamics of Markets: How ‘Actor-Network Theory’ and ‘Markets-as-Networks’ can Learn From Each Other, Paper presented at the Nordic Workshop on Interorganizational Studies, August 2002, Kolding.
- Mattsson, L.-G. (2002b) Reorganisation of Distribution in Globalisation of Markets, Keynote Paper presented at the 18th IMP Conference, Dec. 2002, Perth
- Mattsson, L.-G. (2003) Understanding Market Dynamics – Potential Contributions to Market(ing) Studies from Actor-Network-Theory, Paper presented at the 19th IMP Conference, Sept. 2003, Lugano
- McLoughlin, D. and Horan, C. (2000) Business Marketing: Perspectives from the Markets-as-Networks Approach, *Industrial Marketing Management*, Vol. 29, pp. 285-292
- Meindl, J. R.: Stubbart, C. and Porac, J. F. (1994) Cognition Within and Between Organizations: Five Key Questions, *Organization Science*, Vol. 5, N. 3, pp. 289-293
- Mintzberg, H., (1979). An Emerging Strategy of "Direct" Research, *Administrative Science Quarterly*, Vol. 24, pp. 582-589
- Mintzberg, H., and Waters, J. A., (1985). Of Strategies, Deliberate and Emergent, *Strategic Management Journal*, Vol. 6, N. 3, pp. 257-272
- Möller, K. K. and Halinen, A. (1999) Business Relationships and Networks: Managerial Challenge of Network Era, *Industrial Marketing Management*, Vol. 28, pp. 413-427
- Mouzas, S. and Naudé, P. (2003) Network Mobilizer. Paper presented at the 19th IMP Conference, Sept. 2003, Lugano
- Ritter T. (2000) A Framework for Analyzing Interconnectedness of Relationships. *Industrial Marketing Management*, Vol. 29, N. 4, pp. 317-327

- Ritter, T. (1999) The Networking Company. *Industrial Marketing Management*, Vol. 28, pp. 467-479
- Sayer, A. (1984). *Method in Social Science*. London: Routledge.
- Smircich, L. and Stubbart, C. (1985) Strategic Management in an Enacted World, *Academy of Management Review*, Vol. 10, N. 4. pp. 724-738
- Spender, J.-C. (1998) The Dynamics of Individual and Organizational Knowledge, in C. Eden and J.-C. Spender (Eds.), *Managerial and Organizational Cognition*, Sage, London, pp. 13-39
- Stevenson W. B. and Greenberg, D. (2000) Agency and Social Networks: Strategies of Action in a Social Structure of Position, Opposition and Opportunity, *Administrative Science Quarterly*, Vol. 45, pp. 651-678
- Tsoukas, H. (1996) The Firm as a Distributed Knowledge System: A Constructionist Approach, *Strategic Management Journal*, Vol. 17, pp. 11-25
- Uzzi, B. (1997) Social Structure and Competition in Interfirm Networks: The Paradox of embeddedness, *Administrative Science Quarterly*, Vol. 42, N. 1, pp. 37-70
- Uzzi, B. and Lancaster, R. (2003) Embeddedness and Learning: The Case of Bank Loan Managers and Their Clients, *Management Science*, Vol. 49, N. 4, pp. 383-400
- Weber M. (1956) *Wirtschaft und Gesellschaft*, 2 Bände, J.C. B.Mohr (Paul Siebeck Verlag), Tuebingen
- Weick, K. E. (1995) *Sensemaking in Organizations*. Thousand Oaks, Sage