

Actors changing the network

The first four papers in this issue have one question in common – to what extent is it possible for a single actor or a group of actors to influence and change established business networks? The question is relevant, for instance, in the case of policy interventions or when an established business attempts to assert or change its role and position in the existing business network. The first four papers in this issue of the journal are based on empirical studies of such attempts. The papers identify various reasons behind attempts to influence the form and content of business networks and the direction of their development. In particular, the papers discuss policy makers who want to establish an important node (company) in a business network in a specific space and location. The discussion also includes the case of a known and respected business that wants to see a new technological solution embedded into established producer-user interfaces. Another case is one of a start-up that strives to establish relationships with significantly more resourceful customers. Regardless of the underlying motivation, the actors involved in or just wanting to be involved in a business network face a common challenge: what can and must be done to alter established exchange processes in order to make established solutions more efficient or to replace existing solutions with new innovative solutions.

The other four papers that follow address developing conceptual schemes and frameworks to capture phenomena that characterize the dynamics of business networks. A common thread in these papers is the focus on how IMP research has dealt with different systemic aspects of business networks. The papers address the issues of setting network boundaries, effects of interdependencies and chain-like features, the possibility of combining different ontological stances when approaching network analysis, and the task of management in a complex interactive context.

The first paper, “Innovation networks or innovation within networks?” by Synnøve Rubach, Thomas Hoholm and Håkan Håkansson, is based on a longitudinal study of regional policy measures that aim to facilitate innovation over time and increase positive returns for the policy investing community. The paper’s aim is to examine how “policy constructed” innovation networks and established industrial networks, respectively, may influence innovation processes. The empirical study reports on four regional innovation projects, all funded by the Norwegian National Research Council. Based on an “ideal type” distinction between “constructed” networks (i.e. contrived innovation networks or cluster projects) and “emerging” networks (i.e. networks of businesses), the authors outline their respective features and roles in innovation processes. The innovation networks studied were constructed with the ambition to create new interfaces between businesses, researchers and policy makers. Even though the construction of such interfaces has sometimes been successful, there were no guarantees that these interfaces and connection have been of use for the business actors involved. Rather, the innovation outcomes were influenced largely by the way in which the two types of networks were configured and related. In the concluding discussion, the authors argue that rather than trying to initiate a new network around a supposedly interesting network, which in reality is a dubious and weak business network, far greater potential exists in supporting and challenging already established business networks.

The second paper, “Creating relationship continuity across projects in the construction industry: deliberate, emergent and deliberately emergent strategies,” by Malena Ingemansson Havenvid, Elsebeth Holmen, Åse Linné and Ann-Charlott Pedersen, starts out from the



strategic dimension of deliberate adaptations made in business relationships over time. The question the authors explore is how such adaptations, made to achieve renewal and improved efficiency, are dealt with in project-based industries. The paper examines why and how relationship continuity appears in the construction industry and on the forces that affect the persistence or transience of relationships. The paper, which presents four case studies of construction companies intending to bring about relationship continuity across different construction projects, incorporates Mintzberg and Waters' (1985) concepts of "deliberate" and "emergent" strategies. It also deals with the ARA model as a tool for outlining forces that facilitate or constrain the continuity of relationships across projects. The authors argue that although the construction industry generally is depicted as "fragmented," relationship continuity is clearly visible. The four cases show that contractors and their counterparts actively seek relationship continuity wherever and whenever possible. The actors appear to strive for continuous in-depth relationships for several reasons; to establish efficient planning, production and standardization, but also to increase the use of innovative solutions and new work processes. Strategies for relationship continuity, whether emergent, deliberate or deliberately emergent, appear to arise between counterparts, particularly when there is a relationship history.

The third paper, "Start-ups initiating business relationships: process and asymmetry," by Lise Aaboen and Leena Aarikka-Stenroos, starts out from the empirical observation that many start-ups, despite substantial engagement, do not generate revenue for many years, and some never. The authors argue that to shed light on this common tendency, it is important to understand the connection between the initiation of a business relationship and the interaction between resource elements and entities. An initial customer relationship is seen as necessary to transform an idea into a first version of a product. The paper aims to help increase understanding of how start-ups initiate such business relationships with counterparts that generally are much "bigger players." Such asymmetry is investigated in a multiple-case study, where seven initial customer relationship developments by start-ups are analyzed. The authors found that the relationship-initiating process is characterized by vagueness, due to its informal, indirect and interrelated characteristics. They conclude that it is important for the start-up to be an active partner in the search for a technical fit in joint projects.

The fourth paper, "Coping with friction during technology commercialisation," by Malla Mattila, is based on a longitudinal qualitative empirical case study concerning the struggle to embed a radical technological invention called "intelligent paper" with novel "intelligent functionalities" in the production and use of printed materials. The paper's aim is to contribute to a better understanding of the sociomaterial and processual aspects of innovation by describing and analyzing disalignment processes between actors with regard to what resources are required for commercializing a radical invention. A theoretical point of departure is Callons' (1991) concept of disalignment, which is related to Håkansson and Waluszewski's (2002) concept of friction. Friction is approached as performative tension between actors and networks during technology commercialization and is (re)performed/(re)solved through various (re)negotiations. The study covers three technology commercialization phases that involve both destructive and constructive situations of disalignment, namely actors' multiplexity, punctualised actorial roles and "not-programmatic" behaviors.

The fifth paper, by Lars Huemer, "Strategizing in horizons and verizons: distinguishing between mediators and firms' mediating functions," is a conceptual paper that starts out from IMP scholars' interpretations of the boundaries of firms and networks. The paper focuses on how perceptions of network boundaries influence firms' strategizing in business networks. The author makes a distinction between firms' mediating functions and firms as mediators – organizations that fundamentally create value through mediating services. Conceptually, the study builds on the work of Thompson (1967) and prior IMP research as

well as research in the strategy field. The author explores the scope for action following on multifaceted network boundaries. The conclusion drawn is that the notion of a network horizon promotes a perspective on relevant boundaries that deserves to be supplemented because the idea of network horizon is not enough to promote an understanding of “the depth” that characterizes activities and resource interfaces of businesses as mediators, i.e. business organizations that create value by facilitating connections between other actors. While a two-dimensional network horizon space is seen as relevant for manufacturing industries, the author develops the notion of a network horizon that better captures the case of mediators. The paper shows that the scope for action and the degree to which an actor’s network is extended vary more than is commonly perceived.

The sixth paper, “Customer-driven supply chains under IMP lens: a systematic literature review and conceptual framework,” by Elisa Martina Martinelli, Annalisa Tunisini and Simone Guercini, discusses the recent contributions on this topic and relates these to the basic findings concerning the content and consequences of business interdependencies made in the IMP setting. The paper identifies three streams of research on customer-driven supply chains. These propose three different strategies/approaches in the supply chain: customer closeness strategy, relational strategy and intra-organizational strategy. The three strategies are then analyzed, with the ARA model as conceptual underpinning. In the concluding discussion, the authors underline that the ARA model facilitates a more holistic understanding of the three different streams of research on “Customer-Driven Supply Chains” and also permits more effective identification of the specific strategic and operational implications of the three alternative strategic approaches.

The seventh paper, “Understanding business networks from a mixed network and system ontology position: a review of the research field,” by Frans Prenkert, examines the connection between the IMP approach and complexity theory. The paper aims to contribute to a systematic discussion on how network and system ontologies can be combined to produce better understanding of business networks. The author’s ambition is to highlight the ontological implications of combining network and system ontologies to conceptualize industrial networks as the empirical manifestations of complex adaptive economic systems. State-of-the art literature on research on the topic is reviewed as a point of departure for a discussion of first, the boundary issue and how we can conceptualize boundaries in networks, and second, the causation issue and how we can conceptualize causal mechanisms in networks. The concluding section discusses the implications of a mixed network and system ontology for our understanding of business networks as complex adaptive economic systems. The author argues that while this research field is small and scattered, studies in this area direct attention to the question of the formation of network patterns as well as to generative explanations of these.

The eighth paper, “The business actor and business management,” by Kristin B. Munksgaard and David Ford, starts out from the IMP literature to examine how the IMP research tradition has approached the concept of actor. It begins by highlighting the complex environment in which business management operates and how such complexity limits managerial knowledge and discretion. The paper discusses what it means to be a manager in an interactive and complex business landscape. The paper examines the concepts of the business company, the business manager and the process of management presented within the IMP literature using Leximancer software for content analysis. Relying on Leximancer, the authors examine how the notion of business manager has changed over 40 years in IMP publications. Four influential IMP monographs are analyzed for that purpose. The authors then discuss the challenge of applying the concept of actor simultaneously at individual and corporate level. The conclusion the authors reach is that Leximancer analysis shows the

four books have not addressed explicitly and systematically the connections between these concepts, and that remains an underdeveloped aspect of the actor dimension in the IMP literature.

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