Relationship Management and Institutional Interplay in Business Networks -

Essays on Case Studies from the Pharmaceutical Industry and Healthcare Markets



Pirjo Lukkari

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Abstract

The aim of this explorative dissertation, consisting of four essays and a summary, is to increase understanding of: 1) business networks as the structure of exchange in the healthcare market, 2) related relationship-management practices and 3) their interplay with the institutional environment. This is of topical interest in that Western European and especially the Nordic Beveridge-style healthcare systems, have repeatedly been subject to reform and deregulation in recent years. The public sector is opening up its service production to other providers, and abandoning its monopoly and hierarchical exchange structure. Emerging new technologies, increasing innovation and commercial pressures are changing the constituent relations in the pharmaceutical industry. Business networks are emerging as the new structure of exchange in the healthcare market.

So far, environmental conceptualizations have not attracted major interest among researchers investigating the healthcare market, business networks or relationship management. The task-environment view has dominated and the impact of the institutional environment on relationship-management practices and relational structures has not been in focus. Further, neo-institutional theory is conceptually rich, but poor in managerial implication. Research on how institutions, business networks and relationship-management practices interpenetrate and influence each other could enhance understanding of the healthcare industry and its marketization.

Industry-specific rules, norms and cognitive templates legitimate the codes of conduct and structures for interaction in markets characterized by knowledge-intensive co-operation and strong institutional order. As a result, various relationships with existing and emerging institutions are crucial to the business, and form the basis of customer-relationshipmanagement practices and the building up of customer portfolios. Relationships in the pharmaceutical business are typically managed across customer-facing functions as portfolios. These functions tend to operate under business-specific institutional rules in the form of legislation and explicit codes of conduct, and with systemic relational structures.

Dynamic institutional environment, the associated disruptions and institutionalization processes exert pressure on economic actors. This results in changing business networks, and transient perceptions of legitimacy and isomorphism to which the actors adapt by changing their relationship-management practices and restructuring their relationship portfolios. On the other hand, institutional dynamism could create new business opportunities. This study thus underlines the importance of understanding the influence of the dynamics of the institutional environment on business relationships. It also sheds light on how companies can utilize this influence to some extent by acting as institutional entrepreneurs while driving their business aspirations and interests through collective action via strategic networks, for example.

However, management can never know for sure or fully control what the counterpart will or can do. Certain types of reactions can only be anticipated especially in the case of business relationships in the public interest with all the potential socio-political aspirations and economic gains (e.g., unmet medical needs and their public funding) involved. The findings of this study indicate that when there is mutual interest and intention, and the ability to jointly develop and utilize relationships as channels of influence and adaptation, it is easier to foresee the reactions of counterparts. The network could then be cooperationally managed, to a certain degree, with reciprocal relationship-management activities drawn from institutionalized mechanisms and arrangements that coordinate and control the market.

Keywords: business networks, relationship management, institutional environment, healthcare and the pharmaceutical industry.

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Helsinki 5th November, 2010 Pirjo Lukkari

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List of original papers

Essay 1: Parvinen, P. and Lukkari P. (2010) Marketisation and the orchestration of healthcare networks in Finland Journal of Management & Marketing in Healthcare, 3 (3), 208-223 Essay 2: Järvensivu, T., Lukkari, P. and Järvensivu, P. (2010) Strategic networks and the institutional environment: A case study of Pharma Industry Finland (PIF) International Journal of Pharmaceutical and Healthcare Marketing, 4 (3), 265-281 Essay 3: Lukkari, P. and Parvinen, P. (2008) Pharmaceutical marketing through the customer portfolio: Institutional influence and adaptation Industrial Marketing Management, 37, 965-976 Essay 4: Lukkari, P. Merger: Institutional interplay with customer relationship management Management Research Review, forthcoming



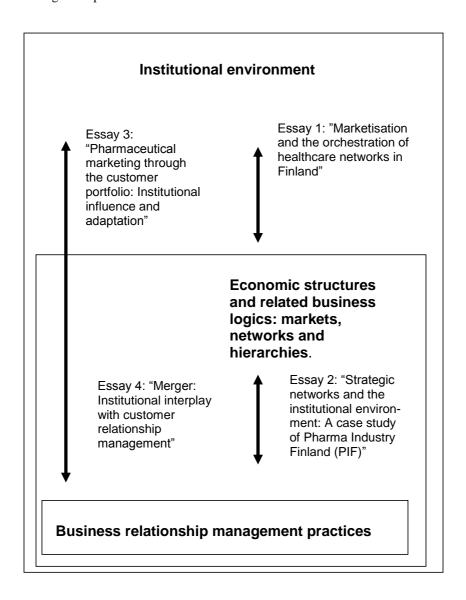
1. Introduction

1.1. Background

Western European healthcare systems have been subject to repeated and thorough market-driven and market-style reforms in recent years (see Lister, 2005; EHMA, 2000). Finland's Beveridge-style system (the public provision of services with financing from general revenues, for more details see the appendix of essay 1) is no exception to this development: marketization proceeds through the contracting out of tax-funded services, or shifting service-provision responsibility toward insurance-funded private providers. As a result, the basic institutional elements of our healthcare system are changing (Häkkinen and Lehto, 2005; Häkkinen, 2005). Quasi-markets are created when the public sector opens up its service production to other providers by abandoning its monopoly and the hierarchical production process. Research on these reforms typically investigates quasi-markets as intermediate hierarchical and market forms (e.g., Kähkönen, 2007). Over time, the emphasis has shifted to contractual relationships presumably relatively well-informed actors, and then to performance monitoring and information sharing within complex networks (Touhy, 2003).

Networks as a third form of economic structure have received less attention in research on the healthcare business (e.g., Stremersch and Van Dyck, 2009; Zollkiewski, 1999). There is a knowledge gap in terms of how the evolution of the basic institutional elements and the market forces influences the formation of business networks as an economic structure in the healthcare and how this influence is reflected in relationship-management practices and vice versa. The aim of this explorative dissertation, which comprises four essays and this summary, is to increase understanding of business networks as the structure of exchange in the healthcare market, and of related relationship-management practices and their interplay within the institutional environment. Figure 1. illustrates this interplay.

Figure 1. Institutional interplay between healthcare business networks and relationshipmanagement practices



The development of companies and their businesses can be studied from different explanatory perspectives on economic structures: markets, hierarchies and networks (e.g., Ebers, 1999; Powell, 1990). Markets are transactional and are characterized by atomistic actors, whereas networks are co-operational and are characterized by connected actors and reciprocal business practices. Despite this contradiction, both perspectives are competitive. They emphasize the importance of adopting genuine strategies and acquiring the underlying organizational capabilities and resources required for survival and long-term performance. In other words, being different helps companies to avoid excessive competition from their rivals (Laurila and Lilja, 2002). In the case of networks it could be argued that unique resources or capabilities also enhance actor connectivity and co-operation with others. Yet, companies still confront institutional pressures, the outcome of which is an isomorphic tendency; they become similar in order to secure legitimacy. This set-up constitutes an interesting field of research concerning how business practices and processes in networks are influenced by institutional forces, and how companies cope with isomorphic pressures and legitimacy, and simultaneously differentiate themselves with unique resources and capabilities.

Stremersch and Van Dyck (2009) point out in their resent meta-analysis of life-sciences marketing and the pharmaceutical companies involved, that some industries require industry-specific knowledge development because they have unique characteristics that yield specific challenges for marketers. In the case of healthcare and the pharmaceutical business institutions could be seen as such unique characteristics. They have an influence on the economic structure: institutional bases are imported into business networks and companies or other service-production organizations as underlying invisible assumptions that shape their performance (e.g., Häkkinen and Lehto, 2005; Touhy, 2003; Järvelin, 2002) and management practices (Lukkari and Parivinen, 2007). A review of major academic marketing journals revealed a gap in the literature on institutional influence on healthcare, pharmaceutical business networks, and the relationship-management practices involved. The major medical and health-economics and management journals do not address this phenomenon either.

The key findings of this study indicate that relationships and networks mediate institutional forces into business-practice processes. The outcome is isomorphism in relationshipmanagement practices and relational structures. Institutional disruptions have an impact on perceptions of legitimacy and the tendency to change organizational fields, and this creates new business and institutional-entrepreneurship opportunities for agile actors in healthcare and pharmaceutical business networks. On the other hand, network heterogeneity creates the structural potential for partial optimization. The marketization of the Finnish Beveridgestyle healthcare system is a spontaneous change process that is fuelling habits of partial optimization. There is a need for orchestration across levels, given that heterogeneity and spontaneity create significant inefficiencies (e.g., Lauridsen et al., 2007; Nguyen and Häkkinen, 2005; Häkkinen and Joumard 2007; Lister, 2005, Häkkinen and Järvelin, 2004). Theory building in this field could therefore support socio-political decision-making concerning the orchestration of networked business in our Beveridge-style healthcare system.

1.2. Research gap

Until the introduction of the institutional concept, organizations were viewed primarily as production and/or exchange systems, and their structures as being shaped largely by their technologies and transactions, or the power-dependency relations growing out of such interdependencies (Scott, 1987). Accordingly business organizations were typically modeled as entities embedded in task environments, which operated in varying exchange contexts. Some researchers have questioned this mainstream view, suggesting that an institutional environment is an inherent feature of business organizations and their networks, and influences not only their economic and socio-political structures and processes but also their strategic choices (e.g., Zucker, 1986; Salmi, 1995; Oliver, 1997, Hoffman, 1999; Grewal and Dharwadkar, 2002; Jansson, Johanson and Ramström, 2007). Oliver (1997) compared the differences between task and institutional environments (see Table 1 below). Her comparison is a compact presentation of the relevant dimensions of and differences between these approaches. Supplementing the environmental context in this

research is the network approach, conceived of as a distinctive form of coordinated economic activity.

Table 1. A comparison of the relevant dimensions of the institutional and task environments (Oliver, 1997, p. 102).

Relevant dimensions	Institutional environment	Task environment
Environmental context	Political and legal	Market
Key demand factor	Legitimacy	Resources
Type of pressure	Coercive, mimetic, normative	Competitive
Key constituents	State agencies and professional associations	Sources of scarce production factors
Mechanisms of external control	Rules, regulations, inspections	Critical exchange dependencies
Organizational success factors	Conformity to institutional rules and norms	Acquisition and control of critical resources
Dominant threat to autonomy	Government interventions	Resource-exchange
Dominant timeat to autonomy	Interventions	partners

Conceptualizations of the environment have not thus far constituted a major field of interest among researchers focusing on business networks and relationship-management. Task-environment considerations (e.g., the resource-based view as presented in Pfeffer and Salancik, 1978 and Parolini's (1999) value-net approach) have dominated the research on industrial business networks and the exchange context. What does this mean? The majority of these approaches fail to give a fully formed picture of business networks and partner activities in dyadic relationships characterized by strong institutional order and influence (e.g., healthcare and the pharmaceutical business) in that the analysis of relationship management tend to focus on access to resources and on how actor positions influence this access, for instance. The impact of the institutional environment on relationship-management practices and processes is often ignored in these types of study or modeled as a secondary function (Anderson, Håkansson and Johanson, 1994; Hadjikhani and Thilenius,

2009). There is thus a need for management-oriented theory-building research that extends neo-institutional theory to the realms of strategic management and marketing.

There is a vast amount of research on industrial business networks and relationships, and it has been shown on the general level that there is interplay between institutions and enterprises (e.g., Hadjikhani, Lee and Ghauri, 2008; Low and Johnston, 2008; Jansson, Johanson and Ramström, 2007; Keillor and Hult, 2004; Salmi, 1995) and that relationships other than those established for the exchange of resources should be integrated into the business network (e.g., Easton and Araujo, 1992; Halinen and Törnroos, 1998; Araujo, Dubois and Gadde, 2003; Welch and Wilkinson, 2004; Mouzas, 2006). It is typically assumed in these studies that companies rely on the fact that socio-political actors or ancillaries do not engage in direct economic transactions, because by virtue of their legitimate position in the society they may support or act against them (e.g., better or worse trading conditions). Socio-political actors depend on companies because their investments tend to have a positive influence on society and the economy. When such a view is applied to analyses of industrial business networks it typically relies on the perception that dyadic relationships in a business-network setting involve either 1) two markets: the business and the socio-political market (e.g., Hadjikhani and Ghauri, 2001; Ghauri and Holstius, 1996), or 2) two functions: the primary and the secondary (e.g., Anderson, Håkansson and Johanson, 1994; Hadjikhani and Thilenius, 2009). There is nothing wrong with such views, but they are somewhat lacking in comprehensiveness in that institutions and actors in specific institutional settings could be seen as an inherent feature of the primary healthcare business (Simon, Mandjak and Szalkai, 2009). They have an influence on the economic structure (e.g., marketization has resulted in complex business networks in Finnish healthcare), which further influences management practices: a physician could have multiple roles as a customer for a pharmaceutical company, for example - prescriber, shareholder, opinion leader in a medical society, and/or authority in a government office.

This dissertation explores the reasons for and the means of reciprocal influence between the institutional environment, economic structures and relationship-management practices. The theoretical approach is built on marketing theories of industrial networks, amended in

accordance with neo-institutional theory and conceptualizations of the institutional environment. The focus is on the interplay between institutions and both networks and relationships, and the interaction between the actors involved. Analysis of this interplay is based on a combination of neo-institutional theory, and theories of business networks and the management of inter-organizational relationships as portfolios. Neo-institutional theory comprises three tenets (the organizational field, isomorphism and legitimacy) and three pillars (the regulative, the normative and the cognitive), together with the respective institutional processes (regulating, validating and habitualizing). The aim is to extend marketing theory by adopting the concepts of institutional theory in the analysis of qualitative data. Further, this should shed light on the complex relationship between management practices and related business networks in the form of an economic structure.

The healthcare market and the pharmaceutical business are thus modeled as networks of actors embedded in a social system of economic and socio-political forces, which jointly operate to condition the actions of actors, their relationships, and the outcomes they may achieve (Low and Johnston, 2008; Håkansson and Ford, 2002; Halinen and Törnroos, 1998; Håkansson, 1992). The actors are typically organizational entities, such as multinational pharmaceutical corporations (MNCs), trade association and healthcare organizations, all of which operate in business networks and healthcare markets. Accordingly, institutions and institutional arrangements are considered an inherent feature of these business networks and industrial markets. Institutional aspects are imported into the business networks in the form of underlying assumptions, codes of conduct (e.g., Greenwood and Suddaby, 2006), and roles with specifically designated rights and duties (Hurwicz, 1993).

1.3. Research questions, levels of analysis and structure

The aim of this dissertation is to increase the theoretical understanding of business networks as a market structure, the related relationship-management practices, and their interplay with the institutional environment. The approach is explorative and descriptive, and the research addresses following research questions:

- 1) Why and how does the institutional environment influence and is influenced by market structures at the healthcare system level (essay 1 "Marketisation and the Orchestration of Healthcare Networks in Finland")?
- 2) Why and how does the institutional environment influence and is influenced by business-relationship-management practices (essay 3 "Pharmaceutical Marketing through the Customer Portfolio: Institutional Influence and Adaptation")?
- 3) Why and how do institutionalized market structures (strategic networks and network organizations) influence and are influenced by business-relationship-management practices (essay 2 "Strategic networks and the institutional environment: A case study of Pharma Industry Finland (PIF)" and essay 4 "Merger: Institutional interplay with customer relationship management")?

These research questions are deliberately broad in scope in order to incorporate micro-, meso-, and macro- levels of analysis. They allow flexibility in terms of conducting theory-building research in an unexplored area (Eisenhardt and Graebner, 2007). As argued above, the phenomenon under study is complex. The existing research inadequately explains the institutional interplay: how the institutional environment (macro level of analysis) interpenetrates business networks (meso level of analysis) and relationship-management practices in companies (micro level of analysis), and vice versa. The justification for the study rests on its novel insight into complex events, which are re-described and conceptualized in the light of neo-institutional and business-network theories. The aim is thus to develop existing theory by extending neo-institutional theory into the field of strategic management and marketing.

This dissertation comprises two parts. Part I summarizes the four essays presented in Part II. The summary introduces the scientific problem addressed in the dissertation and the goals of the research, reviews the subject, the research methods and the findings, and discusses the results. The subject review includes an analysis of prior theories of business networks and the management of inter-organizational relationships as portfolios. The focus in the latter is on the influence of the dynamic institutional environment (institutional mechanisms, entrepreneurship and deinstitutionalization). Each essay (Part II) examines the institutional interplay between market structures and relationship-management practices

from somewhat varying perspectives, but with an overlapping theoretical focus. Further, the levels of analysis and the empirical foci differ. Table 2 below summarizes these aspects.

Table 2. The theoretical bases, levels of analysis and empirical foci of the essays comprising Part II.

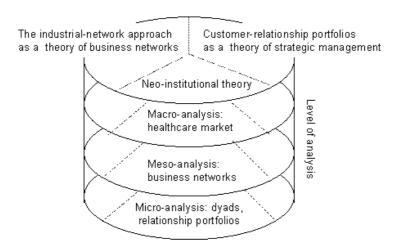
Theoretical basis	Level of analysis	Empirical focus
Essay 1: Dynamism and market order, institutional entrepreneurship, orchestration of networks	Linking the macro- level (institutional environment) with the meso-level (business network)	The Finnish healthcare market
Essay 2: Strategic networks, institutional disruptions and entrepreneurship	Linking the meso- level (strategic network) with the macro-level (institutional environment)	The pharmaceutical industry in Finland
Essay 3: Relationship portfolios, institutional disruptions and entrepreneurship	Linking the micro- level (focal actor) with the meso-level (business network)	Pharmaceutical companies
Essay 4: Merger: Institutional interplay with customer relationship management	Linking the micro- level (focal actor) with the macro- level (institutional environment)	A multinational pharmaceutical company

2. Theoretical perspectives: relationship management in business networks, the institutional environment and their interplay

The study at hand draws from both business-network and neo-institutional theory. This chapter comprises a literature review, which positions the study in the field of academic research in terms of the theory content, the research context and the key concepts. The review begins with a presentation of the interaction and network approach from the perspective of industrial marketing management, and considers the literature on management of interorganizational relationships as portfolios. The focus then shifts to the application of institutional theory in business-relationship management. The chapter ends

with a review of the literature on dynamic institutional environments, entrepreneurship, and deinstitutionalization. This interpenetration of theories and relationship-management practices at different levels of economic structures is modeled in Figure 2 below.

Figure 2. Theoretical model: the theoretical perspectives covered in the dissertation



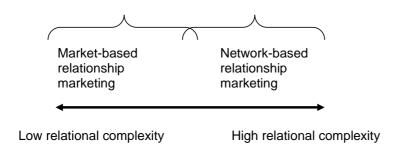
2.1. The industrial-network approach as a form of marketing management in healthcare business networks

Powell (1990) argues that if economic exchange is embedded in a particular social-structural context, then networks could be seen as a distinctive coordinated form of economic activity. In particular, when the items exchanged between buyers and sellers posses qualities that are not easily measured (e.g., improvement in the quality of life in the case of new medicines), and when the mutual obligation is such that the actions are interdependent (e.g., purchasers and providers of healthcare services which are caught in long-term, symbiotic relationships), the relations are so long-term and recurrent that it is difficult to speak of the parties as separate entities (e.g., purchasers and providers of healthcare services, caught in long-term symbiotic relationships). (Powell, 1990)

Möller and Halinen (2000) follow Powell's line of thinking and propose that there is a relationship between relational complexity and the characteristics of the exchange context, and this has an influence on relationship marketing. They distinguish between market- and network-based relationship marketing, which are needed in more market-like and respectively in more network-like contexts, respectively. Figure 3 below illustrates their view, which is acknowledged in this research. The regulative, normative and cognitive dimensions of institutional environment typically call for different kinds of relationships-management practices in network-like contexts in which the relational complexity is high. For example, pressures created on the regulative dimension could be coercive and call for immediate adaptive measures, whereas normative or cognitive pressures may be less coercive and give actors more time to adapt themselves in network-like contexts.

Nevertheless, all institutional pressures could potentially induce environment-influencing measures, instances of institutional entrepreneurship when actors exploit the high relational complexity in order to exert influence via some relationships and to adapt via others.

Figure 3. Market- and network-based relationship marketing (Möller and Halinen, 2000, 43)



The industrial network approach focuses on connectedness and exchange in industrial markets, relationships being understood as reciprocal processes that develop and evolve over time (e.g., Batt and Purchase, 2004; Ford et al., 1998; Möller and Wilson, 1995). In other words, the interaction sheds light on the interdependencies in dyadic and connected

business relationships between businesses and non-business organizations (Waluszewski, Hadjikhani and Baraldi, 2009). Accordingly the notion of a relationship covers the 'total' interaction between actors in networks - the material, economic and social content (Ellis and Higgins, 2006). As Håkansson and Snehota (1998, p. 24) observe, 'It is the means of handling the texture of interdependencies that shape the very existence and development of companies...'. This perspective is close to the tenet of neo-institutional theory, which underlines that organizational survival is subject to its alignment with its environment.

The literature on the industrial-network approach typically conceptualizes and models business networks in line with the seminal work of Håkansson and Snehota (1995) and their "ARA model". According to the model business networks have three dimensions: actors, resources and activities. The actors are restricted by the resource constellations and activity patterns that make up the industrial network. The present research extends this line of thinking in positing that institutions are an inherent feature of healthcare business networks as they have on influence on actors through pressures coming from the institutional environment, for example. Institutional thinking is imported into companies and other service-production organizations in the form of underlying invisible assumptions that shape their performance (e.g., Häkkinen and Lehto, 2005; Touhy, 2003).

The industrial-network approach fits well with the healthcare market and its business networks, especially in Beveridge-style healthcare systems that combine public provision, ownership and financing from general revenues in order to provide universal coverage with limited user contributions (for further details of the Finnish Beveridge-style healthcare system see the appendix of essay 1). The purchasers and providers are typically long-term partners caught in symbiotic long-term relationships that develop because of 1) the nature of the product (e.g., sizable, long-term investments on facilities and/or R&D), or 2) the wishes of the partners (e.g., the political will for public financing and ownership), or 3) a combination of both of these factors. (EHMA, 2000)

The industrial-network approach evolved from the interaction approach. It could be described as a broad school of thought originating in and borrowing ideas from various other interaction-focused theories such as Austrian economics (e.g., Hayek, 1937 and 1945; Schumpeter, 1942; Foss, 1997), social exchange (e.g., Hallén, Johanson and Seyed-Mohamed, 1991; Rao, Morrill and Zald, 2000) and new economic sociology (e.g., Granovetter and Svedberg, 1992; Ferlie, 1992), resource dependency (e.g., Pfeffer and Salancik, 1978), political economics (e.g., Stern and Reve, 1980; Achrol, Reve and Stern, 1983) and transaction-cost theory (e.g., Williamson 1975, 1981 and 1985). Two distinct streams have emerged in contemporary research of industrial-networks, namely the Industrial Marketing and Purchasing Group (IMP) and the social-exchange school of thought (e.g., Möller and Wilson, 1995). They both aim at enhancing understanding of inter-organizational interaction: how it develops and what constitutes it.

Research on social exchange has contributed to the development of social-network theory within business relations in addressing such important issues such as structural holes, closed networks and bridging ties (e.g., Uzzi, 1997; Andersson, Forsgren and Holm, 2002). The IMP group, on the other hand, have contributed significantly to the development of theories concerning the nature and development of inter-firm relations and networks in business markets, as well as to the production of methodologies for researching such phenomena (Wilkinson, 2001). The theories emanating from this group and associated researchers have also drawn widely on developments taking place in sociology, business, history and politics (Araujo and Easton, 1996), the aim being to advance understanding of exchange and buyer-seller relationships in industrial settings (Håkansson, 1992; Håkansson and Snehota, 1998). However the majority of this research has adopted the taskenvironment approach in the analysis of relationship management, and the influence of the institutional environment has received surprisingly little attention. The purpose of this research is to narrow this gap in knowledge through the exploration of relationshipmanagement practices and their interplay with the institutional environment in the healthcare business.

In the present research networks are defined as "modes of organizing economic activities through inter-firm coordination and cooperation" (Grandori and Soda, 1995, p. 184). This approach "provides networks an instrumental role; they are instruments of organizing activities and as such the behavior of actors is intentional and goal oriented" (Järvensivu and Möller, 2008, 4). The instrumental role is highlighted in this dissertation. For example, in essay 2 (p.268) strategic network is defined as an intentionally developed and managed interorganizational cooperation between organizations for the pursuit of mutually beneficial strategic business goals.

According to the industrial-network approach, the unique and vital resources actors possess, are activated during reciprocal interaction with other actors, thereby creating interdependence and connectedness and resulting in the formation of networks in business markets (Håkansson and Snehota, 1998; Turnbull, Ford and Cunningham, 1996; Johanson and Mattsson, 1991). The core assumption in this study is that the reciprocal interaction and the network formation are subject to the influence of the institutional environment. It is meaningless or impossible to disconnect a network actor from the relational context given that interdependence plays a major role and organizational boundaries are blurred (Ritter, Wilkinson and Johnston, 2004). In other words, relationships are perceived to form the context in which actors act and environmental changes are transmitted through them (Halinen, Salmi and Havila, 1999). Relationships function as the channels of adaptation and influence for actors in networks. This view is highlighted throughout this research.

The concept of embeddedness in this research refers to an actor's relations with and dependence upon networks, which exist in various spheres of social life including the economic and the political. These networks form the environment and operate to condition the actions of the actor (an individual or an organizational entity, such as a company or an institution, with an active role in the network), its relationships, and the possible outcomes (Håkansson and Ford, 2002; Halinen and Törnroos, 1998; Håkansson, 1992). Institutions are seen as the fabric or frame, shaping, constraining, facilitating and allowing actions and interactions including those of an economic nature in these networks (Djelic and Quack, 2003; Granovetter, 1985 and 1992). Hence, in the context of studying changes in the

healthcare market and pharmaceutical industry the focus is on the institutional disruption, and pressure, that restrict but also orientate and facilitate interaction in these industrial networks, and also on the interplay between networks and both local / national and transnational institutional settings. These national and transnational institutional structures and pressures could conflict, converge or interact, leading to mixed responses on that actor and network levels.

There are contradictory views within the industrial-network approach on the manageability of business networks and inter-organizational relationships. This dissertation highlights the functional view of management in networks (e.g., Brito and Roseira, 2005) and how cooperational network-level manageability is built on organizational functions, institutional arrangements and the related activities the actors carry out. A trade association, for example, functions as a strategic network and carries out institutional entrepreneurship activities (essay 2), and pharmaceutical companies build their customer-relationship portfolios across organizational functions (essay 3 and 4). As such, management is about coordinating and controlling (e.g. Westerlund, 2009). The following section examines various conflicting views on the manageability of business networks, placing them in three different categories, and considers the institutional influence.

The manageability of healthcare business networks

Given the nature of intra-network dynamics (e.g., Westerlund, 2009) and the variety of inter-organizational connections (e.g., Hadjikhani and Thilenius, 2009), researchers in the fields of business networks and inter-organizational relationships hold contradictory view on the opportunities and control they bring to a company. There is controversy about 1) what constitutes management and 2) to what degree networks can be managed. Typically these views are built on the task-environment approach: the management challenge concerns the actors involved, their resources, and the skills, activities or organizational functions whereby these resources could be utilized within a network of inter-organizational relationships (e.g., Möller and Svahn, 2003; Batt and Purchase, 2004). The influence of the institutional interplay is often ignored, and some constituent parts of

management are unaddressed. How, for example, could institutional influence change the prevailing business norms or standards, and build up institutional capacity among the actors in order to enhance the co-operational management of relationships and to a certain extent the management of business networks?

Some researchers argue that network organization or manageability is contingent on having clear boundaries and a focal "hub actor" (i.e. Jarillo, 1988). Others build their arguments on opposing views: network organizations and networks cannot be managed or controlled by a single actor or group of actors because they represent the outcome of the deliberations, aims and actions of some of the members, and no single actor is likely to have complete control (i.e. Håkansson and Ford, 2002). It is proposed in this study that in the pursuit of shared goals or outcomes (Klint and Sjöberg, 2003) and/or with particular institutional arrangements some relationships could be co-operationally managed to a certain extent (Möller, Rajala and Svahn, 2005). This latter view is based on contingency theory: there is no universal best way to enact the management function (Järvensivu and Möller, 2008). In other words, the performance of management is contingent upon the organizational environment and its subsystems (Miles and Snow, 1978). Management is understood in this study as a co-operational activity coordinated by an actor or actors in particular network. It is deliberate and purposeful action where by networked actors seeks to create and extract value. This is close to Dhanaraj's and Parkhe's (2006) definition of network orchestration as the set of deliberate, purposeful actions undertaken by the hub firm as it seeks to create value and extract value from the network, although this study emphasized the co-operational and reciprocal characteristics of the management function.

Different types of norms and related sanctions have been suggested as potential mechanisms for plural forms of governance in industrial marketing. Ott and Ivens (2009) propose a link between marketing management and two norm dimensions: 1) rule norms, which are called into existence by an authority structure based on agreement making, and 2) social norms, which are centered on mutual belief (Tuomela, 1995; Tuomela and Bonnevier-Tuomela, 1995). Their suggestion is based on the idea that the type of exchange considered (relational versus discrete) is subject to the expectation and sanctioning

characteristics of norms (Opp, 2001; Williamson, 1996; Macneil, 1980). Further, Japp and Ganesan (2000, 241-242) found in their study that relational norms are particularly important control mechanisms during the transition phases of business relationships (i.e., buildup and decline), because "these norms act as emotional and procedural buffers that minimize the stresses associated with change in these phases", whereas explicit contracts as rule norms could reduce flexibility and subsequently lower relationship performance in the exploration and buildup phases.

Much has been written about the theoretical basis of the governance and manageability of healthcare networks, and their special features (e.g., Maguire, Hardy and Lawrence, 2004; Touhy, 2003). Lunt, Mannion and Smith (1996) provide a comprehensive review of change and manageability in their research on primary care. They suggest that four schools of thought contribute to our understanding: neoclassical economics (e.g., Culyer, Maynard and Posnett, 1990), transaction cost theory (e.g., Propper, 1993), Austrian economics (AE) and the new economic sociology (e.g., Ferlie and Pettigrew, 1996). The last two lie close to the industrial-network approach with their focus on social-network relations, interaction processes, and non-price competition as the influencing factors of network change (Easton and Poad, 2003). This line of thinking is referred to in essay 1, which discusses the coordination of change and manageability in the Finnish healthcare market, organized in six national networks according to service provision. The aim of this study is to enrich the conceptual understanding about the mechanisms of planned order in spontaneously evolving contexts by drawing from the similarities between the AE and the industrialnetwork approaches. It is presented that the Finnish healthcare is tentatively categorized as a layered system with individual, organizational, network and institutional levels. Further, there are various trajectories of change between these levels. Institutional-entrepreneurship activities and the weaving of strategic nets represent planned order, and are carried out in order to orchestrate change in the management of service-provision networks.

Conflicting views on the manageability of industrial networks also characterize the M&A literature. Relationship connectivity and reciprocity create ambiguity among scholarly views. There are various answers to the question of whether the relationships can be

governed and managed by one party, merged or acquired (Dhanaraj and Parkhe, 2006; Havila and Salmi, 2002; Anderson, Havila and Salmi, 2001; Lubatkin et al., 1998; Sudarsanam, 1995). As stated above, it is suggested in this research that networks and network organizations could be co-operationally managed to a certain extent. Accordingly, it is argued that some relationships could be taken over during an M&A process. Firstly, some institutional arrangements, such as the ownership of property rights, could put some actors in a position to manage the network, the network organization and some relationships to certain extent, for example, through the exercise of coercive power or by inducing a certain type of behavior by means of rewards. Secondly, the capability to manage relationships and network organizations could derive from the unintended (Miller, 2007) or purposeful utilization of the free actions of actors who are motivated by an implicit and/or a latent collective end. For example, members of healthcare network organizations might be committed to a certain collective good (i.e. the improvement of public health and the advancement of pharmaceutical science) as an explicit collective end, which could put some actors in a position to manage the networks to a certain extent through the exploitation of the commitment to the collective good.

2.2. The management of inter-organizational relationships as portfolios

The literature on inter-organizational relationships is vast and represents various schools of thoughts (e.g., Payne and Frow, 2005). As argued above exchanges involving a range of complexity and duration could be understood as a relationship. A relationship is broadly defined in this research as "mutually oriented interaction between two reciprocally committed parties" (Håkansson and Snehota, 1995, 25). As Blois (2002) points out, however, the exchanges that relationships seek to facilitate are built up of numerous attributes, which might be different on the micro and macro levels. The norms that apply to these attributes within a given exchange may also differ significantly, some being more relational than others (Blois, 2002).

The focus of this research is on how interorganizational relationships are managed as portfolios, and how the pressures of the institutional environment influence them. In order

to keep focused, literature of general relationship management is not review in this part I. Relationship management is assumed to be context dependent, for example with regard to how disruptions in the institutional environment affect the form and content of customer-relationship portfolios in the pharmaceutical case companies. Practices of customer portfolio analysis in different task environment exchange contexts, for example, are not covered (Terho and Halinen, 2007; Srivastava, Shervani and Fahey, 1998), because the analyses concern the institutional environment and its pressures.

The theoretical framework of this research is built on the view that relationships are reciprocal channels of interaction, which evolve and take time to develop. Moreover, as Hunt (2002) points out, there is significant ambiguity surrounding relationship and customer-portfolio management: the portfolios are not selected at a particular point in time, and take time to develop. Much of the research on business networks highlights the time aspect of relationship management. Relationships form over time, and both the history and the future expectations of the parties involved are seen as factors influencing how they evolve (Anderson et al., 1998). There is another side to this time aspect, however. As pointed out thorough this research the healthcare market is characterized by strong institutional order and institutional processes tend to stabilize in them (e.g., Greenwood, Suddaby and Hinings, 2002; Garud, Sanjay and Kumaraswamy, 2002). Industry-specific rules and norms begin to take the form of legislation as explicit codes of conduct emerge covering interaction and legitimate relationship management, such as between pharmaceutical MNCs and physicians. Essays 3 and 4 highlight 1) how institutional interplay influences relationship-management practices, and 2) how institutional disruptions are potential moments for relational changes in networks. For example, it is being argued that cognitive institutions preserve existing practices within the network and slow down the process of restructuring relationship portfolios during disruptions.

Portfolio models were widely introduced in the context of relationship management in the early 1980s and so far over 20 models are reported in the marketing literature (Terho 2008, 45). The aim in all them is to achieve efficient resource allocation among various relationships by differentiating between the business relationships in the company's

customer base and the value of the customer for the focal company (ibid.). Even though some authors (e.g., Ryals, 2002; Cunningham and Homse, 1982) emphasize the fact that in general not all relationships are equally profitable and therefore attention should be paid to the resource allocation, they do not specifically refer to institutionalization, which could significantly influence value and profitability estimations.

Johnson and Selnes (2004) argue that investments in a customer portfolio should be a function of the underlying firm and industry characteristics. Further, they separate the economic, sociological, psychological and operational perspectives on relationship-portfolio management in their task-environment approach (Johnson and Selnes, 2005). This line of thinking is applied in this research, but from the institutional-environment perspective. The pharmaceutical and healthcare industries are typically 1) highly regulated, 2) tightly and highly organized by normative professions and 3) fundamentally influenced by industry-specific actor cognitions (e.g., pharmacotherapy will not develop in the absence of knowledge flow between the drug industry and the physicians' professional body). These industry characteristics have an influence on how pharmaceutical companies structure their relationship portfolios (see essays 3 and 4) and on how they value the single relationship as part of the overall portfolio. As Terho and Halinen (2007, 723) point out that "...Different kinds of customer portfolio analysis are likely to take place in different contexts."

So far the majority of empirical studies on customer-relationship and portfolio management lean on B-to-C context or B-to-B context derived from supplier management literature, concentrating almost entirely on company-internal factors of performance and ignoring the role of other contexts (Terho, 2008; Reinartz, Kraft and Hoyer, 2004; Payne and Frow, 2005; Plakoyiannaki and Tsokas, 2002). As Terho (2008) points out, most of these studies concern individual relationships and their view of customer value is fairly narrow, focusing on customer satisfaction, profitability and strongly on lifetime monetary value. It is argued in this research that analysis of the contextual substance, and of the pressures created by the institutional environment, could increase understanding of relationship-management practices and how they create value (see also Storbacka, Strandvik and Grönroos, 1994). Various types of relationships and their utilization as channels of influence or adaptation to

institutional entrepreneurship activities could contribute in different ways to current and future value. As discussed in essay 3, these could be actions of a single actor in a network that are beneficial in themselves, or they could be collective in nature (see essay 2: activities in a strategic network).

2.3. Applications of institutional theory in business-relationship management

Institutional theory has been widely applied in studies on the adoption of particular organizational practices or strategies (e.g., Scott, 1995 and 2001). Contemporary research, especially on multinational corporations (MNCs), has been dominated by neo-institutional theory, which could be described as a school of thought originating from the wider realm of older institutional conceptions (Dacin, Goodstein and Scott, 2002). Neo-institutional theory aptly amends marketing theories of relationship management well. It allows considerations of institutions as social constructs outside of traditional economics (e.g., Munir, 2005; Munir and Philips, 2005; Berger and Luckmann, 1966), explaining, for example, how social reality becomes reinforced through regulatory processes involving state agencies and professional bodies. Such processes normatively and/or coercively impose conformity upon constituent communities resulting in isomorphism (Greenwood, Suddaby and Hinings, 2002) and alignment with the institutional environment (Kostova, Roth and Dacin, 2008).

Neo-institutional theory has been criticized for placing too much emphasis on "statics, outcomes, cognition, and the dominance and continuity of the environment" and for losing the focus on "old" institutional theory which emphasizing a more subjective, agency-dominated view (Hirsch and Lounsbury, 1997, p. 406). However, in the case of healthcare and pharmaceutical businesses there is a growing body of literature in both academic and policy-making circles tracing a "new governance" paradigm. The emphasis is on the ability of the state to hold providers accountable through either agency agreements (requiring long-term relationships and trust) or contracting (requiring the provision and verification of detailed information), and not only through the traditional exercise of hierarchical authority (Tuohy, 2003). There has also been criticism of the neo-institutional model, which essentially holds that

organizational survival is determined by the extent of alignment with the institutional environment; hence, companies have to comply with external institutional pressures (Kostova, Roth and Dacin, 2008, p. 997). Institutions are conceived of in this study as the outcomes of social processes in which companies are actively involved, and not merely as exogenous constraints on pharmaceutical companies, for example. Companies shape and build them by acting as institutional entrepreneurs. A prerequisite of institutional entrepreneurship is sufficient institutional capacity among the actors: the availability of the instruments required to take action (White, 2003) and the capability to utilize them in response to a defined problem.

The other two key tenets of neo-institutional models referred to in this analysis of relationship-management practices, in addition to the above-mentioned isomorphism, are the organizational field and legitimacy. These three together provide a rich theoretical basis for a marketing-theory based analysis of relationship-management practices in the healthcare and pharmaceutical business. They are considered separately and in some detail below.

Legitimacy

Suchman (1995) points out in his extensive analysis of the literature on organizational legitimacy that the conceptual basis in surprisingly fragile and seems to follow two distinct paths – the strategic and the institutional. The strategic tradition follows the thinking of Dowling and Pfeffer (1975) and adopts a managerial perspective, "emphasizing the way in which organizations instrumentally manipulate and deploy evocative symbols in order to garner societal support" (Suchman, 1995, 572). The seminal works by DiMaggio and Powell (1983), Scott and Meyer (1983) and Zucker (1983), on the other hand, characterize the institutional tradition: structuration dynamics generate cultural pressures, and these pressures over-ride any single organization's purposive control.

This research leans on both of the above-mentioned traditions. Organizational legitimacy is broadly defined as the acceptance, approval and congruence of organizational actions in

accordance with an external, socially constructed system of norms, values, beliefs, and definitions (e.g., Low and Johnston, 2008; Kostova and Zaheer, 1999; Suchman, 1995). Therefore, in the case of business organizations legitimacy could be understood as a generalized perception or assumption that the actions of a business entity are desirable, proper and appropriate. Inherent in this assumption of alignment with the context is the notion that companies have to cope and comply with institutional and socio-political pressures in order to survive (Hadjikhani and Ghauri, 2001; Hillman and Wan, 2005). On the other hand, interorganizational relationships are perceived in this study to be the media through which companies cope and comply with institutional pressures, thereby functioning as channels of communication and co-operation. A proper relational structure and related interaction processes thus provide the means to build legitimacy in the eyes of social stakeholders.

From a business-network perspective, this process of legitimation refers to the generation of business, social, technological, and political activities connecting the companies' resources with other resources in the network (Low and Johnston, 2008; Savage et al., 1991). Resources have neither value nor inbuilt legitimacy. The ability to transform them directly or indirectly through network activities adds value and generates profits, and the quality of transforming actions lends legitimacy. The management of these activities involves numerous tasks (e.g., the sourcing of materials and participating in value-adding R&D or other types of investment programs) and interactions (e.g., influencing public opinion, lobbying for key social and political initiatives). Over time these activities and related interactions become accepted as legitimate, provided that they confirm to the socially constructed system of norms, values, beliefs, and definitions in a given institutional setting.

Companies are typically judged according to what they accomplish, and consequential effectiveness is celebrated. In the case of the pharmaceutical industry, it should be emphasized that its outputs and innovative achievements are socially defined and valued (e.g., in the areas of fertility and contraception). Further, some of the outputs are inherently difficult to measure at the time of their inception (e.g., improvements in public health and

increased life expectancy as a result of new innovative products). As Suchman (1995, 580) points out, "in such settings, consequential claims may serve primarily as signals of disposition." The industry therefore tends to foster procedural legitimacy in the eyes of its social stakeholders by embracing socially accepted procedures in its relationship management.

On the other hand, it is difficult for pharmaceutical MNCs to achieve and maintain legitimacy because of the multiplicity and complexity of the legitimating environments, intra-organizational complexity, and ambiguity in the whole process (Kostova and Zaheer, 1999). They have to conform to the myriad of regulatory, normative and cognitive institutional pressures coming from multiple socio-political sources and a variety of healthcare systems. These pressures may be conflicting. Public interest and globalized economic activity are at stake, evidenced in the competing social, political and functional pressures that jointly influence the construction of legitimacy. Under such conditions, a political process of interaction, communication, and exchange could jointly create socially constructed perceptions and a legitimate status for MNCs and their subunits (Kostova and Roth, 2002; Mittra, 2006) in industrial networks of various healthcare systems and markets.

Isomorphism

According to the neo-institutional school of thought, legitimacy is primarily achieved through isomorphism: organizations become similar to other organizations in their field (DiMaggio and Powell, 1983), which are open to structuration (Giddens, 1979) and involvement in the common domain (Hoffman, 2001). In his recent review of large-scale pharmaceutical M&As Mittra (2007) analyzes the merger waves and changes in the industry. He refers to the concept of "institutional isomorphism" (Kondra and Hinings, 1998; Scott, 1987; DiMaggio and Powell, 1983), and the mimetic process through which bureaucratic organizations come to appear increasingly similar as rational actors adopt standard responses to uncertainty, suggesting that they nicely capture the ongoing third wave of mergers. According to him, this wave of "corporate imitation" became evident when all the major pharmaceutical companies invested heavily in promissory genomic

technologies in order to match their competitors in facing unexpected industry shocks resulting from the emerging new technologies and deregulation. The outcome was a rash of oligopolistic mergers (Goldberg, 1983; Allen, Ramlogan and Randles, 2002), which "are defensive response to internal weakness, particularly the innovation deficit and managerial concerns about R&D efficiency and productivity" (Mittra, 2007, p. 283).

Mittra's account of the concept of institutional isomorphism is amended in this research with reference to competitive isomorphism, which as a constraining process could result in the homogenization of organizational (Kostova, Roth and Dacin, 2008; Hannan and Freeman, 1977) and managerial practices. Market competition, investors' expectations and fitness measures for publicly listed companies characterize decision-making in the global pharmaceutical business. Decision makers have learned the appropriate responses and have adjusted their behavior accordingly, as evidenced in the search for emerging technologies in research-based industries. On the other hand, Laurila and Lilja (2002) suggest in their study of the Finnish-based forest industry that in order to achieve competitiveness on the company level, companies need to deviate from some institutionally legitimate practices on the functional level. For example, strategic repositioning aimed at enhancing growth opportunities and future earnings, or at cutting costs through reorganization, tends to supersede functional-level isomorphic pressures (ibid.). There is a dominance of companylevel competitive pressures over functional-level institutional pressures, resulting in company-specific practices that help companies to avoid excessive competition from their rivals. In the case of the research-based pharmaceutical industry and with regard to prevailing patent regulations, there tends to be a clear first-mover advantage in a market that is typically built on unique company-specific practices and functions, which are nonisomorphic. As the findings of this study indicate, these practices and functions are nevertheless constrained by tight institutional order and isomorphic pressures. Still, agile actors manage to realize their company-level competitive interests and to differentiate themselves from their rivals.

Organizational field

DiMaggio and Powell define an organizational field as "those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies and other organizations that produce similar services or products" (1983, p. 148). This definition highlights the functional aspects in particular areas of institutional life, where distinct patterns of organizational action emerge and become institutionalized. It also encompasses both competing organizations and interorganizational relationships (Powell and DiMaggio, 1991).

Neo-institutional models typically conceptualize the environment as organizational fields in which organizational action is subject to institutional pressures, and legitimacy is granted to environmental alignment. Increasing the interaction and the development of mutual awareness of coalitions and inter-organizational patterns define the field boundaries and create a common domain (Hoffman, 2001; Meyer, Scott and Deal, 1981). Theoretical modeling on these premises is somewhat problematic in the case of MNCs given the multiple and sometimes conflicting institutional environments of their sub-units (Kostova, Roth and Dacin, 2008). For example, according to neo-institutional thinking, sufficient inter-organizational interaction is fundamental to the formation of the organizational field, which could be precluded by the spatial, economic, cultural and socio-political conditions of healthcare. Inconsistencies between these conditions could hinder the emergence of shared patterns, which is necessary in order to define a consistent field.

Kostova, Roth and Dacin (2008) suggest that it might be more instructive in the case of MNCs to conceive of social environments as evolving rule systems that are the products of a continuous process of sense making, enactment, and negotiated sociopolitical interactions. Their approach conceptualizes organizational fields as systems of shared meaning, which emerge as actors coalesce around issues and shared logics or ideologies. Field boundaries are illuminated and differentiated via observed conflicts (e.g., research-based vs. generic companies). Furthermore, central to this

institutional process are social agents that are internal and external to the organization (e.g., the strong healthcare professions or the cultural aspects of care).

In sum, it could be stated that the tenets of neo-institutionalism provide a rich theoretical foundation for the examination of a wide variety of critical issues, and allow theorizing on multiple levels: this is essential in business research (Djelic, Nooteboom and Whitley, 2005). The neo-institutional premise that organizational success depends on factors beyond technical efficiency, and that these other factors are essentially socially constructed, fits well with the interaction and business-network approaches. Nevertheless, in spite of their wide acceptance, the tenets of neo-institutionalism and their meaningful application in studies on relationship-management practices and business networks should be critically reviewed. For example, the neo-institutional model essentially holds that organizational survival is determined by the extent of alignment with the institutional environment and well-defined organizational fields. The outcome of this emphasis on environmental dominance and continuity is the development of models incorporating a nominal amount of agency: organizations have to comply with external institutional pressures, and legitimacy is achieved through isomorphism (Hirsch and Lounsbury, 1997). However, rather than emphasizing the static and deterministic view of an environment with well-defined fields, in which legitimacy and isomorphism prevail over economic interests, one could also conceptualize business networks and their actors as active social agents who shape their environment. As merely exogenous constraints that business organizations have to consider, institutions could be viewed in terms of enacted and socially constructed shared understandings, and outcomes of processes in which business-network actors are actively involved as institutional entrepreneurs, especially during times of institutional disruption.

2.4. The dynamic institutional environment and institutional entrepreneurship

The institutional environment is broadly defined here as a dynamic entity within the institutionalization process, as corresponding institutions, or as the mechanisms and channels of influence (control and co-ordination) that relate to legitimacy in a particular

market; a network of actors embedded in a social system of economic and socio-political forces (e.g., Anderson, Håkansson and Johanson, 1994; Hurwicz, 1993). It comprises three pillars: the regulative, the normative and the cognitive (Scott, 1995).

Dynamism is conceptualized as the process of constant change, the outcome of which is that things are perceived to be different than before (Hargrave and Van de Ven, 2006). This process of change in markets and networks could be either 1) orchestrated or otherwise coordinated, managed, planned or 2) spontaneous. Accordingly, the outcomes of the process could be markets characterized by planned or spontaneous order (Hayek, 1937; Castells, 1996; Tikkanen and Parvinen, 2006). As discussed in essay 1, change in networks and in their characteristics (orchestrated by institutional entrepreneurs, for example, or otherwise coordinated and planned) is subject to 'rivers of activity' and actors' managerial cognitions. Such mechanisms influenced the emergence of planned order and challenged the orchestration of changes in the marketization of Finnish healthcare networks.

Contemporary institutional theory favors a dynamic approach, according to which institutions and the institutional environment gradually evolve over time and the role of individual and organizational activity is highlighted (Meyer and Scott 1992). Moreover, it is assumed in this research that business networks and their actors tend to adapt to institutional pressures through renewing their governance logics, forms and practices (Grewal and Dharwadkar, 2002). For instance, essay 1 posits that there are different marketization rivers (managerial perceptions of dynamisms and change) within the different Finnish healthcare networks. Essay 2 describes how the Pharma Industry Finland strategic network struggled to adapt and to find cohesiveness following changes in the regulations and according to the findings reported in essays 3 and 4, the specific connectivity of the institutional context in the pharmaceutical business affected the restructuring of relationship patterns following the institutional disruptions. In sum, it is concluded that relationship-management practices in industrial networks are closely related to the dynamism of the institutional environment.

The dynamics of the institutional environment and of organizational change are mainly analyzed in this research in terms of institutionalization processes: regulating, validating and habitualizing (Grewal and Dharwadkar, 2002). This approach is well suited to the analysis of relationship management and customer portfolios in that such processes influence management decisions and induce change when actors adapt to environmental pressures. This adaptation to environmental dynamism reflects the underlying firm and industry characteristics, and should motivate investment in a particular customer portfolio (Johnson and Selnes, 2004).

Regulatory processes represent evident interaction with regulatory institutions that exist to ensure the stability, order and continuity of societies and social welfare. Such processes are manifested in a market as imposition and inducement mechanisms, which influence different market mechanisms. Regulatory institutions can impose direct constraints in the form of authoritative orders, or indirect constraints in the form of rigorous rules and regulations (Grewal and Dharwadkar, 2002). If they do not possess the institutional capacity to initiate constraints, they may provide strong incentives and thereby induce the desired performance. This exercising of coercive power or will is often beneficial to society at large (Oliver, 1991; Baron, 1989), but is likely to force actors in business networks to make changes in their relationship patterns and interaction processes. The impact of regulatory processes is the central theme in all of the four essays, but essays 2 and 3 in particular analyze these disruptions and highlight them as potential drivers of institutional-entrepreneurship activities.

Validation processes involve interaction with normative institutions and give rise to standards of socially acceptable behavior (Baum and Oliver, 1991; Pfeffer, 1972; Pfeffer and Salancik, 1978), and are manifested via authorization mechanisms and mimicking behavior (Grewal and Dharwadkar, 2002). Mimicking occurs through the organizational imitation or modeling of norms or practices: it is shown in essay 1, for instance, how in recent years Finland has followed the general European-wide convergence towards "new public management" (NPM) through imitation on the health-care-network level, and through modeling in accordance with the norms of "quasi-markets". Authorization involves

the development of rules and codes of conduct that are deemed appropriate and require companies to voluntarily seek the approval of the authorizing agents (see essay 2 on the role of the Pharma Industry Finland trade association).

Habitualizing processes are the base-level institutional processes that give rise to cognitive institutions: shared cognitive templates (Meyer and Rowan, 1991) in which repeated actions are cast in a pattern, reproduced with minimal effort, and recognized by the actors as that particular pattern (Pentland and Rueter, 1994; Zucker, 1983 and 1977; Gill and Stern, 1969; Berger and Luckman, 1966). The two primary mechanisms that facilitate these processes are imprinting and bypassing (Grewal and Dharwadkar, 2002). Imprinting refers to the preservation of structures and processes over time. According to Baum and Oliver (1991), organizations acquire characteristics at the time of their inception, and subsequent inertia preserves these features and results in particular structures and processes. As the organizations mature they may find it difficult to change or to understand the need for change, given that some of the structures and processes will have become "sacrosanct", or even symbolic. Cultural control is often used as a substitute for structural control in highly institutionalized organizations and environments, which may result in the bypassing of formal structures and processes (e.g., Zucker, 1977). These issues are addressed in essay 4 through an analysis of the deinstitutionalization of relationship-management practices in the pharmaceutical division of a global corporation undergoing fundamental change during the merger and acquisition (M&A) process. The customer is redefined, relationship portfolios are restructured, and some relationship-management practices are questioned and possibly terminated. As a result, some habitualized practices are deinstitutionalized.

Institutional entrepreneurship

DiMaggio's (1988, 14) definition of institutional entrepreneurship is widely used: "New institutions arise when organized actors with sufficient resources (institutional entrepreneurs) see in them an opportunity to realize interests that they value highly." Garud, Sanjay and Kumaraswamy (2002) refer to institutional entrepreneurship as the active formation of institutions as they emerge (see also Fligstein, 1997). This literature

discusses systems of meaning that tie the functioning of institutions (Aldrich and Fiol, 1994) with the socialized, macro-biased perspective. On the other hand, some authors highlight individual actors as the creators of new institutions (Zucker and Darby, 1997; Déjean, Gond and Leca, 2004; Dorado, 2005). These studies typically focus on actors who break with the rules and practices associated with the dominant institutional logic(s), creating legitimacy among diverse stakeholders and thereby developing alternative rules and practices (Sundin and Tillmar, 2008; Battilana, 2006).

Studies on institutional entrepreneurship typically address the "paradox of embedded agency" (Battilana, 2006; Giddens, 1984 and 1990). This implies that the actor as the entrepreneur is both constrained and enabled by the institutional environment, and at the same time contributes to changing it (Sundin and Tillmar, 2008; Ritvala, 2007; Ritvala and Granqvist, 2006). Lowndes (2005) proposes that embeddedness is not always a constraint on institutional entrepreneurs in that the environment may provide resources that make institutional change possible, for example. On the individual level, entrepreneurs must have the ability to foster co-operation, forge alliances and partnerships, and attract sponsors (e.g., socio-political decision makers and opinion leaders). On the organizational level it is not only the prevailing rules and practices, but also the degrees of turbulence at the specific time and place that have an impact on the institutional entrepreneur's contribution to change (Sundin and Tillmar, 2008). Disruptions such as emergent industry rules and new legislative norms have been identified as facilitating change in institutional systems (Selznick, 1957), and therefore potentially provide the momentum for institutional entrepreneurs.

Institutional-entrepreneurship activity is described in essay 1 as a form of orchestration in networks resulting in some sort of planned order. It is pointed out that orchestration is traditionally considered an organization-level issue related to matching the competitive and societal strategies of firms in competitive environments (Karreman and Alvesson, 2004; see also Miller and Whitney, 1999). Planned order, on the other hand, is mostly related to the planning of structures, norms and rules on the societal and institutional levels. There is a gap in the research, which the modest study reported in essay 1 addresses by exploring

institutional entrepreneurship as the orchestration of change processes on the network level (e.g., the intentional weaving of strategic nets).

Institutional processes tend to stabilize in mature and regulated industries (Greenwood, Suddaby and Hinings, 2002) as institutional rules begin to take the form of legislation, explicit codes of conduct or systemic structures. Where there are heavy institutional regulations and constraints marketing success is contingent not only on adhering to current rules, but also on reacting to opportunities created by institutional disruptions. Institutional entrepreneurs can yield results through partaking in institutional (re)formation and reacting to the changes in order to establish new institutions around the changed setting (e.g., Hensman, 2003). It is pointed out in essay 3 that marketing success through institutional entrepreneurship requires incorporating two value-creation perspectives. Both relate to the fact that, on the relationship level, marketing-oriented institutional-entrepreneurship activities are subject to the influence of a diverse network of actors (Maguire, Hardy and Lawrence, 2004). Firstly, such activities need a degree of legitimacy among the actors in order to prevail. One way of increasing perceived legitimacy is to form a strategic network and to utilize the power of collective action to promote a joint good and/or a collective end. Again, this is particularly true in the case of marketing-oriented activities, given the aggravated sense of agency in the high-powered and politically flavored healthcare and pharmaceutical business contexts. Maintaining legitimacy could be a constraint, but it could also add to the value creation by revealing the need to visibly expand the market to be divided among the actors. Secondly, as emphasized in prior marketing research (e.g., Salmi, 1995; Garud, Sanjay and Kumaraswamy, 2002), institutional-entrepreneurship activities need to correspond with actor cognitions. Actors and their actions are critically dependent on the surrounding processes of structuration, and this favors emergent strategies and practices (Lawrence, 1999; Lawrence and Phillips, 2004). Both marketing and institutional entrepreneurship are 'regulated' by the way socially constructed realities perceive efforts, and thus institutional interplay needs to be sensitive to actor cognitions.

However, the institutional environment may be fairly turbulent, as described in this research (essays 1-3), and give rise to institutional-entrepreneurship activities either as a

form of collective action (essay 2) or as an activity of a single company (essay 3). Both forms of action were found to be potentially successful in serving business interests, but as proposed in essay 2, legitimacy traps and the maintenance of collective institutional entrepreneurship are strongly linked to strategic cohesiveness in networks. If the Pharma Industry Finland network had been strategically cohesive – i.e. if its members had had a mutual understanding of and had accepted a future vision and game plan – it would have been able to initiate and maintain collective action. However, legitimacy traps undermined the strategic cohesiveness (e.g., generic companies viewed some of the proposed entrepreneurship activities as self-interested and not in the best interests of the field as a whole).

2.5. Deinstitutionalization and the restructuring of relationship portfolios

Much of the neo-institutional literature relies on a punctuated equilibrium model that builds on the premise of long periods of institutional stasis periodically disrupted by some sort of exogenous, spontaneous shock (Hargrave and Van De Ven, 2006; Streeck and Thelen, 2005). The possibility of endogenously generated change that is more than just an adaptive measure is often ignored because institutions and institutional arrangements are seen as self-enforcing equilibria (De Figueiredo Jr., Rui and Weingast, 2005). The majority of these types of models describe how new institutions or arrangements emerge in consecutive stages in which deinstitutionalization results in re-institutionalization. However, these theoretical frameworks pay hardly any attention to the relational outcomes of deinstitutionalization, which may be an important precondition for the development of new institutional initiatives influenced by the planned order through interaction in the network (Easton and Poad, 2003; Tikkanen and Parvinen, 2006). Moreover, there is a tendency in this literature to understate the extent of the change for an actor, or alternatively to code all observed changes as minor adaptive adjustments to altered circumstances in the service of the continuous reproduction of existing practices and institutional paths (e.g., Häkkinen and Lehto, 2005; Streeck and Thelen, 2005). These older frameworks are thus fairly ill equipped to capture the deinstitutionalization processes triggered by the M&A and their

relational outcomes, and this may fundamentally affect the connectivity, the relationship structure, and management practices. Essay 4 addresses this gap in the existing research.

Several authors have formulated explanations of organizational change on the basis of changing interpretive schemes and/or institutional resistance to organizational transformations influenced by a set of environmental pressures (e.g., Barley, 1986 and 1990; Tushman and Romanelli, 1985; Zucker, 1988; Greenwood and Hinings, 1988; Oliver, 1992; Seal, 2003). Although these frameworks have contributed significantly to our understanding of fundamental transformations, they shed less light on how businessnetwork organizations cope with changing actor connectedness emanating from an M&A process (in terms of changed perceptions of the market and the customer due to the increased know-how and product range, for example). In addition, prior literature typically conceptualizes de- and institutionalization processes on the institutional-field or market level, but in this research (essay 4) they are used as concepts for the analysis of a network organization and its fundamental change during M&A. As pointed out, it is essential to recognize the impact of institutional mechanisms in the analysis. For example, imprinting could have a substantial effect on the success of the M&A process and on the future performance of the new organization. It could also have a negative influence on integration processes. When organizations mature they may find it difficult to change, or to understand the need for change, given that some of the relational structures and processes could be taken for granted or have even become symbolic. Furthermore, bypassing practices could lead to the preservation of existing interaction practices and relationship patterns.

The restructuring of relationship portfolios in the M&A is conceptualized in essay 4 as deinstitutionalization. The integration of resources resulted in a redefinition of the customer and consequent targeting. In addition, a set of organizational factors related to institutional processes were identified as institutionalized relationship-management practices, which challenged the notion of the isolated building up of practices across related functions in the new organization. The outcome was that some management practices began to deinstitutionalize, some habitual processes and related actor roles were re-classified, and

new activities and positions were associated with various types of actors (internal network members, customers and other related actors).

3. Research methodology

This chapter discusses the research approach and the related methodological issues and concerns of the study. It begins with an explanation of how the chosen research strategy addresses the research questions in the context of critical realism, and goes on to describe the semi-structured interview method reported in essay 1 and the case studies on the pharmaceutical industry from essays 2-4.

3.1. Research approach

The research strategy is built on critical realism. As a philosophical position critical realism seeks to re-describe objects of explanation in a theoretically sound way by postulating the existence of generative mechanisms that are potentially responsible for the workings of real social structures and their potential causal capabilities rather than regularities (Tsoukas, 1989; Easton, 2002). Three research issues are addressed in the four essays: 1) a description of events, 2) the identification of entities that are embedded in a theoretical framework, and 3) a description of possible causal mechanisms. Table 3 below gives examples of the events, entities, and possible causal mechanisms identified in the essays.

Table 3. Examples of the events, entities and possible causal mechanisms identified in the essays.

Research questions:	Essays:	Events:	Entities:	Possible causal mechanisms:
Why and how does the institutional environment influences and is being influenced by market structures on the healthcare- system level?	Essay 1 "Marketisation and the orchestration of health care networks in Finland"	A changing market structures in the Finnish healthcare system.	The business networks and institutions of the Finnish healthcare system.	Influence of the institutional mechanisms (imposition, inducement, authorization, mimicking, imprinting and bypassing) on business networks.
Why and how does the institutional environment influences and is being influenced by business-relationship-management practices? Why and how do institutionalized market structures (strategic networks and network organizations) influenced and are being influenced by business-relationship-	Essay 3 "Pharmaceutical marketing through the customer portfolio: institutional influence and adaptation." Essay 2 "Strategic networks and the institutional environment: a case study of Phama Industry Finland (PIF)"	Institutional influence and adaptation through business-relationshipmanagement practices. Institutional influence and adaptation thorough the strategic network.	Pharmaceutical companies and institutions as actors in business networks. The trade association as a strategic network. Institutions.	Institutional entrepreneurship and the influence of institutional mechanisms on connected actors. Institutional entrepreneurship with collective action and the influence of the institutional mechanisms on connected actors.
management practices?	Essay 4 "Merger: institutional interplay with customer relationship management"	Interplay between institutionalized market structures and business-relationship-management practices in the network organization.	Actors in the network organization and related institutions.	Deinstitutionalization, formation of procedural legitimacy and the influence of the institutional mechanisms on the network organization.

Underpinning the above propositions is Bhaskar's (1978) transcendental argument. The premise is that something called science exists, and in order for it to exist the world/reality must be observed in a particular, stratified way – that is, through mechanisms as casual powers governing the level of events (the actual) and experience (the empirical) (Easton, 2010). In other words, the social phenomena under study are real, existing and concept-dependent, since the researcher can only know these real things under particular concepts, or descriptions of them (Fawcett and Hearn, 2004). This study is thus built on theory (the development of concepts and descriptions) and empirical data (experiences, interpretations of the events), and the theory and particular concepts are developed prior to the data collection. For example, the explorative research process described in essay 1 started with a pure theoretical treatment of the phenomenon: marketization and the orchestration of healthcare networks. The core propositions were formed on the basis of the selected theories and then reflected in the findings from a round of interviews.

There are three core assumptions on which a layered ontology is built (Contu and Willmott, 2005). First, the phenomena to which research and explanation are directed are the underlying structures and mechanisms that produce empirical events (Bhaskar, 1978). Second, these underlying structures or mechanisms are not directly accessible to sense experience and have to be theoretically constructed and modeled through a process of conceptual abstraction (Blakie, 2000). Third, as theoretically reconstructed models and explanations of underlying structures or mechanisms that contingently generate actual evens and outcomes, scientific theories offer provisional descriptions and accounts of phenomena that are always open to revision and reformulation (Bhaskar, 1978). These ontological assumptions have guided the research strategy of this dissertation: the four essays with somewhat different theoretical bases, levels of analysis, and empirical focuses generate the theoretical modeling and descriptions of the phenomena under study. The theory, the interpretations of the empirical data and the conclusions presented in the essays have been subject to revision and reformulation during the research process. For example, they have been thoroughly debated and discussed among our community of researchers, and the alternative explanations evaluated.

The epistemology of this study could be summarized in the statement that there is a process of interpretation that intervenes between two domains: 1) the empirical (in which observations are made and experienced by researchers) and 2) the actual (in which events occur and may or may not be observed by researchers, or may be differently understood) (Easton, 2010). All theoretical descriptions, explanations and evaluations are grounded in knowledge-generating and diffusion processes that are temporally and spatially located in historical and social settings that make them fallible, contested and revisable (Reed, 2005). As with this research, it is unlikely to reveal completely or lead to a full understanding of the phenomena under study and the related research questions, given that the theory building is for analytic generalization according to which "the investigator is striving to generalize a particular set of results to a broader theory" (Yin, 1994, p. 36). The aim is to provide some evidence that supports a theory but does not necessarily prove it (Perry, 1998; Halinen and Törnroos, 2005): the social world exists in open systems in which events do not invariably follow a determined and recurrent pattern, and are subject to diverse causal variation (Harrê, 1986). Causality is therefore considered to refer to the inherent powers or capacities of mechanisms or structures to generate certain tendencies or regularities, which may or may not be contingently observed in empirical events or outcomes (Reed, 2005). Accordingly, the research strategy of this study is built on the relation between theory and empirical data. The process could be described as retroduction: "a mode of inference that aims at discovering the underlying structures or mechanisms that produce tendencies or regularities under certain conditions through a process of model building, testing and evaluation" (Reed, 2005, p. 1631). Although researchers following the critical-realist path tend to differentiate between retroduction and abduction as methodological logics (e.g., Reed, 2005), the ideas presented by Danermark et al. (2002, 96) are adopted in this research, whereby the two are considered to be closely connected - even to that extent that they seem almost indistinguishable in concrete research practice.

All the cases in this study call for inductive theory building in their analysis. The principles of prior theory are difficult to apply outright because the accepted constructs of business networks within task-environment modeling seem to be inadequate. Prior theory is therefore viewed as evidence that can be used to triangulate the external reality and to re-

describe it (Lewis and Grimes, 1999; Perry, 1998; Olsen and Ellram, 1997). It is recognized that pure induction without theoretical reference might prevent the researcher from benefiting from previous work, just as pure deduction might prevent the development of new and useful theory (Carson et al., 2001; Miles and Huberman, 1994). Therefore the more prominent inductive theory building was systematically combined with deduction from prior theory (Dubois and Gadde, 2002; Coffey and Atkinson, 1996) in the case research. As such, the process involved moving from the conception of a given phenomenon to the conception of a different kind of phenomenon that could have generated it. The process was "moving backwards" (retroduction: Easton, 2010).

Given these ontological and theoretical presuppositions, a number of methodological consequences follow. The phenomena (inter-organizational relationships and nets of connected organizations) under study are relatively clearly bounded, but complex. The three research questions call for the analysis of the associated events that take place as a result of actors acting in networks. The research method therefore needs to be flexible, a vehicle for collecting multi-source data and extensive protocols for analysis on different levels (e.g., the network level in essay 2 and the focal-actor level in essays 3 and 4). A case approach was chosen as the main mode of inference. It is an intensive method (Sayer, 2000) that "...focuses on individual agents in context using interviews, ethnography and qualitative analysis, asks the question of "what produces change?", employs causal groups, produces causal explanations which are, however, limited to the situation studied so that testing is by corroboration" (Easton, 2010, p. 123).

3.2. Semi-structured interviews on marketization

The modest aim of the semi-structured interviews reported in essay 1 was to explore whether the theory-based propositions of marketization and orchestration would emerge spontaneously in dialogue, and therefore the propositions were not presented to the interviewees. According to Holstein and Gubrium (1997), a dual interest in the 'hows' and the 'whats' of meaning production implies an appreciation of the constitutive activeness of the interview process. The 'hows' refer to the interactional, narrative procedures of

knowledge production, not merely to interviewing techniques, whereas the 'whats' pertain to the issues covered in the interview, the content of the questions, and the substantive information communicated by the respondent. The focus in essay 1 was more on the 'whats', and on the marketization information communicated by 39 key decision makers in Finnish health-care service organizations or closely related professional organizations. The choice of interviewing as a research method could be characterized as an attempt to better understand the patterns of meanings that "guide managers in their interactions with others in the increasingly complex networks in which they operate" (Turnbull, Ford and Cunningham, 1996, p. 59).

3.3. Case studies of the pharmaceutical business

The case studies that constitute part of this dissertation (essays 2-4) addressed research questions two and three. The aim was to give the reader an objective and commensurable picture of how institutions and institutional processes influence the strategic choices in pharmaceutical companies by shaping economic structures and relationship-management practices, and vice versa. This calls for rich data from multiple sources covering themes such as organizational decision-making (mechanisms influencing the strategic choices involved in relationship management), relationship patterns (structures), and interorganizational interaction (relational processes). The studies presented in essays 2-4 feature different numbers of cases. The selection of the cases and the determination of their number for this research were guided by theoretical considerations: replication and contrary replication (Eisenhardt, 1989; Eisenhardt and Graebner, 2007), and information richness enabling deeper exploration of the research questions and theoretical elaboration (Patton, 1990; Yin, 1994). The theoretical sampling for the single case (essay 4) was straightforward. It was chosen because it is unusually revelatory and there was a unique opportunity for research access (Yin, 1994).

Pharma Industry Finland

Essay 2 comprises a study on the trade association Pharma Industry Finland (PIF), which looks after the policy interests of the research-based pharmaceutical industry in Finland. The Finnish pharmaceutical market was fairly "closed" during the 1980s, and personal trust in and the power of local opinion leaders were notable. Since then, however, the market has opened up in accordance with EMEA (the European Medicines Agency), the EEA agreement and EU membership. Pharmaceutical companies have also recently developed great industry concentration (see Mittra 2006 and 2007), and this cohesion of information and interest reveal an increasing capacity to face regulators with system trust and power (Studdert, Mello and Brennan, 2004; Bachmann 2001; Luhman, 1979). As a result, the pharmaceutical industry has created a "mandate" to participate in the dialogue, and the capability to act as an institutional entrepreneur. However, regulators and normative institutions in the business are also subject to unavoidable political endowment and the cognitions inherent in healthcare systems (e.g., the control of costs in publicly financed Beveridge-type systems (Leppo, 2002). PIF's mission is therefore to develop the competitiveness of the industry and the relevant research, as well as the operating environment both in Finland and in the EU. Its main target of influence is the economic, industrial, and sociopolitical legislation that governs the pharmaceutical industry.

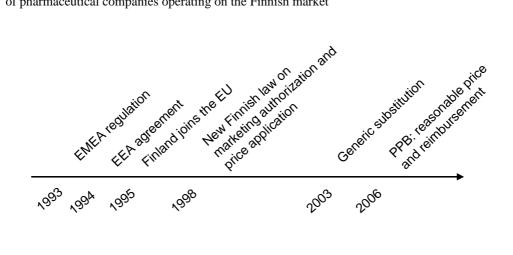
In accordance with the ideas of Jarillo (1988), Gulati, Nohria and Zaheer (2000), and Möller, Rajala and Svahn (2005), PIF is defined as a horizontally aligned strategic business network, which promotes intentionally developed and managed inter-organizational cooperation between pharmaceutical companies in pursuit of mutually beneficial strategic business goals. The pursuit of such goals and benefits motivated its establishment, and it acts as an institutional entrepreneur. It adapts to institutions, modifies them, and seeks an advantageous network position in order to fulfill its members' aspirations (Maguire, Hardy and Lawrence, 2004; Garud, Sanjay and Kumaraswamy, 2002; Lawrence, 1999; Lawrence and Lorsch, 1967).

Data was collected during 2004-2005. The primary data comprises interviews with 25 key persons from PIF's internal and external networks, including representatives of pharmaceutical companies, patient organizations, physician's associations, and government agencies. Secondary material was also collected, such as memos, annual reports, and company-specific information. The data analysis involved finding themes and patterns (Miles and Huberman, 1994), and theories of business networks and the institutional environment comprised the theoretical framework and the analytical lens (Gioia and Pitre, 1990). The expertise of the researcher following 12 years in the industry, including working with PIF and in institutional relationships with regulative authorities in Finland, facilitated access to the informants and documents, as well as helping to deepen the analysis.

Pharmaceutical companies and their relationship portfolios

The focus in essay 3 is on the pharmaceutical market in a fairly turbulent institutional context. Institutional disruptions, such as new legislative norms, have been identified as facilitating system changes (Selznick, 1957). As such, they are potential moments of adaptation and influence for institutional entrepreneurs. Figure 4 on the next page depicts the recent major disruptions that have had a significant effect on the marketing practices of pharmaceutical MNCs operating in Finland.

Figure 4. Disruptions in the institutional environment influencing the marketing practices of pharmaceutical companies operating on the Finnish market



Essay 3 covers three cases of pharmaceutical MNCs, all of which operate in Finland. The cases concern how the managers structure their relationship portfolios and how various industry- and firm—specific characteristics drive the dimensions on which they are developed across evolving economic and socio-political structures and processes. The focus is on the interdependencies between various management decisions, with an emphasis on an integrated approach to the management of the company's various business units in the achievement of its long-term objectives (Turnbull, 1990). As in the case of ethical pharmaceuticals, the product pipeline and the current product range drive customerportfolio management, which functions as a prescriptive guide to the development and maintenance activities of relationship management under institutional disruption.

An explicit sampling strategy was adopted in order to identify three comparative cases of pharmaceutical MNCs and institutional actors in the Finnish market. The unit of analysis was the case company and its network-customer portfolios, and the boundaries were limited to the organizational field: organizations that, on the aggregate, constituted a recognized area of institutional life (DiMaggio and Powell, 1983). The virtue of this unit of analysis is

that it directs attention to the totality of relevant actors and incorporates both connectedness and the structural aspects of influence and adaptation via intentional networking.

The case companies were deliberately selected on the basis of the postulated theory, and could be characterized as:

- (1) major players in the Finnish market (active actors with a joint market share of 26.3% in 2005) with
- (2) somewhat different product portfolios and company profiles and
- (3) an interest in the focal study.

This selection was considered sufficiently representative in that the companies shared some homogeneous (they were all members of PIF and followed the same normative code for the marketing of medicinal products, for example) and some contrasting characteristics: one was strong in generics and was largely owned by local health-care professionals, the second dominated certain therapeutic fields, and the third covered all major therapeutic sectors. This type of combination is believed to produce information of greater depth than would be the case with homogeneous selection (Knodel, 1993), and some generalizing is justified when general phenomena are under investigation (Stake, 2000; Mason, 1996).

In business studies, the "asymmetrical encounter" of the interview (Green and Thorogood, 2004; Hiller and DiLuzio, 2004; Facett and Hearn, 2004; Holstein and Gubrium, 1995) is in imbalance with the research object, which is usually relatively more powerful than the researcher and strictly controls access to the data. The management's interest in this case facilitated access to the primary and secondary data and provided the basis for the interviewing. The interviews were encounters characterized by the interviewees' descriptions and perceptions of 1) inter-organizational relationships, 2) management-relationship practices, and 3) the impact of the institutional environment and its changes on customer portfolios and their management practices. Thirty-seven interviews were conducted between November 2005 and February 2006, all of which were recorded for analysis. Typically, the dialogue was opened by the interviewer with a short presentation of the framework of the study (approximately three-and-a-half minutes of the average 44-

minute sessions). Then the lead was given to the interviewees, although the interviewer asked questions when necessary in order to ensure that all three themes were adequately covered.

The data-analysis process constituted five phases: 1) interpretation and coding, 2) categorization and thematization, 3) the identification of patterns and the drawing of preliminary conclusions, 4) generalizing the conclusions within the data, and 5) considering the generalizations in the light of existing knowledge (Miles and Huberman, 1994). It was a reasoned decision not to build the analysis on the use of a software program as a technical tool for pursuing arguments about data, since it did not yield any new insights or value. The significance of the data was typically established throughout the whole interview dialogue in the diverse examples and descriptions of practices, which were intertwined and rich in descriptive key words, multilingual phrases and metaphors. It was therefore appropriate to preserve the flow of the dialogue in this analysis and not to break it up too much.

In taking this approach, it was advisable to build various devices into the research design in order to ensure the accuracy of the data interpretation (Silverman, 2005). The interviews took in "both sides of the dyads". The first interviewees were representatives of pharmaceutical companies and included 29 members of senior and middle management, chosen according to their position and responsibilities in the organizational structure, and the function and/or area of pharmacotherapy they represented: eight interviews in company A, seven in company B, and 14 in company C. Secondly, eight interviews were conducted with institutional representatives, including the CEOs of patient organizations, presidents of associations and senior civil servants and directors from government agencies.

The merger of two MNCs

Essay 4 reports an explanatory, single case study of the merger of two pharmaceutical MNCs. It addresses the third research question, "How do institutionalized market structures influence and are influenced by business-relationship-management practices?", but the level of analysis is different than the network level of analysis in essay 2. A focal-actor

perspective was adopted and the focus was on the change in and the outcomes of CRM practices arising from the merger, rather than on the merger process per se.

Various types of strategic alliances, collaborative agreements and licensing strategies are increasingly driving contemporary innovation and marketing management in the pharmaceutical industry and related application areas, thereby creating complex relationship networks (Luukkonen, 2005). There are 150 countries in which the case company's products are commercialized by subsidiaries and marketing-authorization agreements with other companies. Accordingly, the focal case, which operates in a therapeutic area of the pharmaceutical division of a global chemical and pharmaceutical corporation, is conceptualized as a business network. The integration process primarily involves coping with a variety of customer relationships (Anderson et al., 2003) and their management as portfolios (Lukkari and Parvinen, 2008).

An explicit sampling strategy was adopted, since the opportunity to access the data opened up shortly after the launch (January 2007), when the processes of integration and reorganization were under construction. The pharmaceutical business of the case corporation was spread over six therapeutic areas. The unit of analysis used in the study was one of these areas, in which the product ranges of the merging corporations were considered complimentary and synergies were expected in terms of the integration of relationship management and other sales and marketing activities (e.g., cross-selling). Particular reliance was placed on the interviews. Nevertheless, in order to decrease dependence on the whims of the organizations' gatekeepers in the asymmetrical encounter, who could potentially seek to limit and control what could be investigated (Silverman, 2005; Green and Thorogood, 2004; Hiller and DiLuzio, 2004; Facett and Hearn, 2004; Holstein and Gubrium, 1995), information was acquired from a variety of sources.

The marketing management in the focal therapeutic area is organized under a global team, which is responsible for the marketing strategies of various product franchises, and supports the subsidiaries and other business partners with their regional or country-specific marketing activities. The interviews with members of the global marketing team covered

the participants' descriptions and perceptions of 1) customer relationships, 2) related management practices, and 3) the impact of the merger on both. Six interviews were conducted at the end of October and in early November 2007, all of which were recorded and transcribed for analysis. In each session the interviewer opened the dialogue by giving a brief presentation of the study and describing the institutional context, which was not familiar to the interviewees. (This description of the main concepts might have biased the study somewhat, but on the other hand it helped the subjects to describe and present their perceptions of habitualized practices, for example.) The floor was then given to the interviewees, and questions were asked only when necessary in order to ensure that all three themes were covered. The interviews lasted 36 minutes on average.

All seven interviewees were members of the global marketing team and senior managers with extensive experience (10-20 years) of marketing in the merging corporations. They were chosen on the basis of their position and responsibilities in the organizational structure, and the function and/or area of pharmacotherapy they represented. Consequently, all major product franchises in the therapeutic area were covered. Isomorphism was identified from the interview data in the form of descriptions of mimicking the behavior and/or adoption of CRM practices and relational patterns that were perceived to be a standard in the business or which resembled competitors' CRM behavior.

Deinstitutionalization was identified from the interviewees' responses to questions concerning why some relationships or practices had been terminated. Additional information came from corporation documents and personal correspondence with some key persons involved in relationship-portfolio management and related actor-facing functions in the HQs and in the Nordic subsidiaries (e.g., R&D, medical information and regulatory affairs). This verified some conclusions drawn on the basis of the interviews, and filled in some of the gray areas that remained.

4. Research explanations and key findings

This dissertation consists of four essays, which are either published or forthcoming in refereed international journals. Following chapters present the summary of their contributions: conceptual findings and the key aspects of managerial recommendations. The original papers are in the part II.

4.1. Conceptual findings

Contemporary neo-institutional theory and industrial network approach favor dynamic approach to environment. This dynamism and constant change are analyzed by focusing on the institutionalization processes and how they create pressures toward economic actors, dynamisms in the organizational field and changing perceptions of legitimacy and isomorphism. The conceptual findings of this study describe how business networks and interorganizational relationships function as mechanisms which mediate institutional pressures into management practices and economic structures. In addition, the findings of this study highlight how relationships function as channels of influence for institutional entrepreneurs.

The examples given in Table 4 on the following pages illustrate the outcomes of this institutional interplay along two conceptual dimensions, namely: 1) the three types of institutionalization process and the related pressures (regulating, validating and habitualizing), and 2) the tenets of neo-institutional theory (see Chapter 2.3). These findings contribute to marketing theory in describing how business networks as economic structures are influenced and shaped by institutional pressures. In addition, they are particularly relevant to applied research on business networks in that they are examples of management practices that could be generalized in the form of some moderate managerial recommendations.

ons Practical examples	nn be EMEA and the European context for of new pharmacovigilance.	s have Finnish regulations covering the factorization of marketing-authorization and price-application processes.	Transparent interaction and CME co- zing operation between the industry and to professional associations.	works response to innovation deficit and managerial concerns about in-house R&D efficiency and productivity.	Constant knowledge flow and CME co-operation between the industry and the professions. s, ithin
Managerial recommendations	New channels of influence can be utilized with the emergence of new authorities in the expanding organizational field.	Local socio-political interests have an impact on the regulation of the healthcare business, and it is therefore essential to have cooperative channels of communication with local authorities.	Forging strong reciprocal relationships with the authorizing actors can enable companies to create value and shape their institutional environment.	Take an active role and foster cooperation within research networks of emerging technologies. Develop pharmacotherapy as an institutional entrepreneur.	Consolidate interaction with normative institutions and thereby shape and preserve existing collective cognitive templates, which in turn will preserve favorable existing interaction processes and relationships within dynamic organizational fields.
Findings	An expanding organizational field creates turbulence along the regulative dimension.		Authorizing agents play a notable role in an expanding knowledge-intensive business.	Emerging technologies change R&D practices and constituent relations in the organizational field.	Cognitive institutions preserve existing relational patterns and interaction habits in expanding organizational fields.
Table 4	Organizational field				

Table 4	Findings	Managerial recommendations	Practical examples
Legitimacy	Changes of legislation pave the way for marketization and business networks as economic structures.	The orchestration of the marketization and management of service-provision networks should include processes of managing knowledge, monitoring the legitimacy of appropriation, and ensuring network stability for the provision of essential services by hub actors.	Partial optimization and other inefficiencies in Finnish healthcare networks due to spontaneous ordering.
	The imposition of regulation can erode actors' institutional capacity and create pressure to form co-operative relationships in business networks.	The negative influence of imposition on business can be changed through negotiation and consensus if co-operative relationships exist.	The utilization of institutional capacity to settle the new rulings on the issue of factory licensing.
	Cohesion in industrial and strategic networks can support the legitimacy of action. It can also strengthen the institutional capacity of actors and their role as normative institutions, and create a mandate to negotiate with / face regulative authorities	Build capabilities: • to sense change and assess their impact • to evaluate network-wide or stand-alone entrepreneur strategies and feasibilities, • to mobilize other network members.	The Pharma Industry Finland (PIF) trade association as a strategic network and normative institution
	The legitimacy of actors' objectives and value creation in business networks is subject to the acceptance and approval of the constituents of society.	Build co-operational relationships with the external and internal socio-political actors in the business networks who legitimize action.	The preservation of the traditional role system and the action scripts of the business network comprising the industry and the physicians' profession during institutional disruption.

Table 4	Findings	Managerial recommendations	Practical examples
Isomorphism	Regulative pressures to reduce the public burden of pharmacotherapy enhance isomorphic customer-targeting strategies.	Focus on specialists who typically are the first-tier prescribers of innovative medical substances that have patent protection and higher margins. Develop the life-cycle management of products and customer relationships in the ambulatory market.	The de-institutionalization of some long-term CRM practices, the termination of some customer relationships, and the restructuring of CRM portfolios during the M&A process.
	The auto-regulation of pharmaceutical marketing with a tight normative order harmesses marketing measures, relational patterns and	Evaluate the feasibility of cohesiveness in the industry and respect for common rules versus gains by breaking the normative order	The auto-regulation of pharmaceutical marketing by means of the codes created on a voluntary basis.
	interaction processes in isomorphic practices.		
	Habitualizing pressures create rigid, change-resistant business networks on the	Recognize the institutionalization and isomorphism and their	The institutional impact on CRM practices and the restructuring of relationship norrfolios during the
	international (macro) and national or regional (meso)	influence on CRM practices. Assess and utilize the different	M&A.
	levels characterized by isomorphism.	layers of CRM practices mandated by the meta and meso institutions.	

4.1.1.An expanding organizational field shapes relationships and CRM portfolios

The issue at stake in the healthcare and pharmaceutical business is the relationship between public interests and globalized economic activity, which jointly define the organizational field: What are these organizations that constitute an area of institutional life interplaying with business? Dynamism in this organizational field and the interplay with business are characterized by: 1) changing regulations and the authorities' institutional arrangements, 2) a strong normative order in terms of co-operation between the pharmaceutical industry and the professions, and 3) slowly changing actor cognitions.

The regulative dimension

On the regulative dimension the EMEA, the EEA agreement, and the EU have had a profound influence on the business networks of pharmaceutical companies in terms of expanding the organizational field. Their procedures and processes of marketing authorization, wholesale and factory licenses, pharmacovigilance and the provision of medical information became the subjects in the wider European context. The organizational field expanded as new authorities and novel institutional arrangements emerged, resulting in the restructuring of relational patterns in healthcare and pharmaceutical business networks. In addition, new channels of influence for institutional entrepreneurs were created. For example, the following comment was made by a medical director who had worked for 28 years on regulatory assignments in the industry (for more details see essay 3):

"The Finnish pharmaceutical market was fairly "closed" during the 1980s and local physicians' associations had strong control over publicly accepted pharmacotherapy practices. Personal trust in and the power of opinion leaders were notable. Since then, however, the market has "opened up" in accordance with EMEA, the EEA agreement and EU membership... The business has changed."

However, social and healthcare are national issues in the EU. Local socio-political interests have an impact on the regulation of business and economic structures. Business networks are still strongly shaped by the local authorities, and some of them have enough institutional capacity to enable them to exercise coercive power over other actors in the

field. For example, Finnish regulations on the factorization of marketing-authorization and price-application processes raised the expertise in the local institutional environment and in relationship-management practices in MNCs. Nevertheless, the importance of co-operative relationships and interactive channels of communication is highlighted in the findings of this research. One of the interviewees from the regulative, institutional side (a National Health Insurance (NHI) director quoted in essay 3) stated:

"It is essential that we have channels of communication, so that we hear the arguments of others in this field. Otherwise we could easily make decisions that could harm the whole business..."

The normative dimension

The development of healthcare and pharmacotherapy is extremely knowledge-intensive. The business is characterized by interactive marketing measures and constant knowledge flow between the industry and the physician's profession in the fields of clinical research and further occupational education, for example. Professional associations in Finland are traditionally considered objective, scholarly opinion leaders and therefore carry weight as far as recommendations for pharmacotherapy are concerned. State agencies ask for their expert opinions on marketing authorization and reimbursement issues, for example, which have a direct impact on market penetration and sales volumes. One of the interviewees (see essay 3) described the contemporary customer-portfolio-management practices of the company she worked for as follows:

"Today the relationship portfolio is a management tool for us, which was not the case earlier... We have organized ourselves in teams by therapeutic sectors, and in these teams some people are responsible for the customers, and other people for the products [refers to clinical research and medical information]. We try to define what needs the customers have and, respectively, what needs our products have. Then we combine these needs so that our information is synchronized and take advantage of these subfields jointly. It is extremely challenging to manage this kind of network, since you can't be quite certain who the decision maker is and what [institutional] position he or she has."

Advances in biotech and promissory genomic technologies have profoundly changed R&D practices and expanded the organizational fields in the pharmaceutical business. The rapid development of new technologies boosted the growth of innovative, highly specialized

R&D companies in the industry, which challenged the traditional in-house R&D functions of research-based organizations. Constant pressure to innovate and make risky investments resulted in a wave of mergers (for further details see e.g., Mittra, 2007) and the emergence of co-operational research networks in the industry.

Changing constituent relations in the business resulted in the mimicking of relational structures with research collaboration. One of the interviewees analyzing the relational outcomes of the merger (see essay 4) describes this change in the industry and the mimicking as follows:

"In the biotech field people are working much more with - for example - small external research groups. We were not doing this enough within X [refers to the acquiring corporation] in the past. We were relying more on our own research capacity...I think we will go more and more external as well. I think this is a general trend in the pharmaceutical industry, because it is so difficult to find a NP [new product] or NC [new compound] and everybody is looking and shopping around for them and that is why companies are targeting some start-ups..."

The cognitive dimension

The pharmaceutical case companies systematically organize and sponsor various training programs and frequent detailing, which are considered CME for health-care professionals. This sponsored CME co-operation consolidates interaction with normative institutions (e.g. co-operation with the leading Finnish scientific Medical Society Duodecim) and thereby shapes or preserves existing collective, professional cognitive templates. As a result, cognitive institutions emerge and repeated prescribing actions are cast into a pattern by means of habitual action. Existing relational structures and processes are preserved despite institutional disruptions and the expanding organizational field. For example, the interview data of the third essay indicates that the imprinting mechanism preserves the structures and processes of prescribing, and the bypassing mechanism preserves habitual prescribing by physicians. These mental processes of enactment create stability and stagnation in the expanding organizational field. Research-based companies have more time to adapt to the generic substitution by re-evaluating their strategic relationships and restructuring the customer portfolios, since it takes time for the new, generic actors to build the relationship due to imprinting and bypassing. The following statement by a medical director from one

of the case companies studied in the essay three describes the habitual action and preservation of structures and processes well:

"Our drug market was split in two when generic substitution started: the generic market and the branded market, on which our business rests ... A change is on the way. But, for time being, the majority of physicians have ignored the whole issue of substitution..."

The interview data presented in the essay 1 provides other examples of the relevance of actor cognitions for the relationship management practices and performance of networks. The on-going marketization of Finnish healthcare expands the existing organizational fields by new private actors. The interviews indicated that prevailing cognitions of change and related decision making are heterogenic; especially there is much heterogeneity in the way management perceives the changes in the network level.

The governance of health care networks is decentralized and has parallel arrangements for service production and funding at the municipal level. This arrangement is preserved by imprinting and is sacrosanct. The outcome is 1) increased variety of regional normative order resulting in the quality and dynamics of relationships which can be controlled by patterns of personal trust and/or power, and 2) enhanced spontaneous order, resulting in diversity in methods of delivering services, which hinders possibilities of orchestration and creates production overcapacity (a partially optimal outcome at the national level).

The influence of the expanding organizational field could be summarized as an increasing trend towards the use of business networks as the economic structure in the pharmaceutical and healthcare business. Due to institutional disruptions, old hierarchical structures are assuming more and more network-like characteristics. Constituent relationships between actors are changing, and relationship-management practices are being adapted accordingly. On the other hand, slowly changing actor cognitions create rigidities, resistance to change and heterogeneity in the way management perceives the changes on the network level. The outcome of this is habitual action in management decision-making and partial structural optimization on the organizational level, resulting in a sub-optimal outcome on the network level and the need to orchestrate the change.

4.1.2. Legitimacy, co-operative relationships and institutional capacity

The findings of this study are in line with prior literature (e.g., Greenwood, Suddaby and Hinings, 2002): regulative and normative ascendance prevails over actor conformity in a highly institutionalized market. Consensus is essential, building legitimacy in the eyes of social stakeholders. However, regulators and normative institutions (e.g., trade associations) in the healthcare and pharmaceutical businesses are also related to the unavoidable political endowment inherent in the healthcare market. The definition of legitimacy adopted in this dissertation (see Chapter 3.3. Applications of institutional theory in relationship management) therefore highlights its acceptance and approval by external constituents (Suchman, 1995) and its achievement through isomorphism. Striving for legitimacy results in isomorphic relational structures and relationship-management practices.

The regulative dimension

Regulative authorities exercise their power by imposition or inducement. This exercising of coercive power or will is often beneficial to society at large (Oliver, 1991; Baron, 1989), and is therefore perceived to be legitimate. Legislative changes have paved the way for the marketization of healthcare in Finland. Municipalities are no longer responsible for the production of essential healthcare, only for organizing it. For example, the law covering the planning and state subsidy of social and healthcare passed in 2003 allows municipalities to organize the services in five different ways, namely:

- 1) produce the services themselves
- 2) co-operate with other municipalities and produce the services jointly with them
- 3) join a federation of municipalities that produces services
- 4) purchase services from the state, other municipalities, federations of municipalities or private service providers
- 5) provide service users with vouchers (the users choose an authorized producer and the municipalities cover the cost within the limits of the voucher).

The outcome of this is the erosion of traditional hierarchical market structures and the emergence of complex business networks. This contemporary trend towards more

liberalized and market-accommodating healthcare, with competitive bidding and tender processes (in the municipalities among internal purchasers and providers, and between the municipalities and/or federations of municipalities and other municipalities or private service producers) has boosted non-orchestrated and spontaneous change. This process has resulted in inefficiencies (see essay 1 and e.g., Lauridsen et al., 2007; Pekurinen and Häkkinen, 2005; Nguyen and Häkkinen, 2005; Häkkinen and Joumard 2007; Lister, 2005; OECD, 2005; Häkkinen and Järvelin, 2004). It is proposed in essay 1 that the orchestration of counter-measures in Finnish healthcare networks is possible provided that the outcomes and/or threats of spontaneous ordering are understood. Key orchestration processes include managing knowledge (about relevant alternatives), monitoring the legitimacy of appropriation and ensuring network stability for the provision of essential services. As in other contexts, the role of hub actors in carrying out these processes is vital.

The exercise of power by regulative authorities typically forces actors in business networks to restructure relationship patterns and interaction processes, whether they are expected or unexpected (e.g., the cases in essay 2). However, given that co-operative relationships and interactive channels of communication with regulative authorities are perceived to be legitimate, imposed institutional disruptions and their negative influence on business can sometimes be resolved through negotiation and consensus. The following comment by one of the interviewees, who had worked for over twenty years on regulatory and marketing assignments, describes well how co-operation in the form of reciprocal interaction between the pharmaceutical industry and its regulators can happen (for more details see essay 3):

"Taking care of relationships, building and maintaining them, is at the core of our performance. In contemporary business the right kinds of relationships are important...business situations change rapidly [refers to EU legislation, which has changed local import processes]...we are capable of negotiating, adapting...there might be a chance to negotiate more favorable terms. For example, in the last twelve months I have updated [specifies later during the interview: close to ten times] our wholesale license with the National Agency for Medicines [NAM]. It helps when you know these people. For example, when this factory license issue with the imports from non-EU countries came up, it looked as though our operations here in Finland would come to an end. But then I telephoned this person in NAM and realized that we could work it out..."

The case company referred to above was able successfully to settle its wholesale license and import issues in negotiation with the local authorities about what the new EU rulings meant, how they were interpreted in other EU countries, and how they could be interpreted in the case of importing from non-EU countries into Finland. The company has substantial institutional capacity and a legitimate position, especially in the field of R&D, being in the top tier of research-intensive pharmaceutical MNCs. It utilized its institutional capacity, avoided having to discontinue the import of medicines for clinical research, and was able to carry on business with its customers and research partners.

Actors possess varying institutional capacities. There are differences in the availability of the instruments required to take action (e.g., authoritative power) and in the capability to legitimately utilize them (e.g., imposition by regulative orders). The findings of this dissertation indicate that in terms of networks, the actors' institutional capacities are influenced by 1) the actors' own actions and 2) the actions of others, which are mediated through relationships. Relationship patterns and how they are managed in business networks therefore have an influence on institutional capacity, and vice versa.

Part II gives several examples of the interplay between institutional capacity and relationship-management practices. One instance is described in essay 2 in connection with the third case, "Generic vs. research-based companies". The imposition of the law of generic substitution caught the PIF trade association by surprise, and it was unable to take action, to agree on a mutual focus or to mobilize collective action. As a consequence of this absence of institutional capacity and the framing of activities, PIF failed to influence the content of the law, although this was largely unrelated to the tension that existed between generic and research-based firms. Its internal dispute over the law brought the tension to the surface, ultimately driving the generics to start their own interest group. This further eroded PIF's legitimacy as an institutional entrepreneur in the eyes of its members and of socio-political actors, which were lobbied by the industry. The emergence of the new interest group split the lobbying and influencing activities into two camps, generic vs. research-based companies. The

outcome of this was that the companies restructured some of their relationship portfolios in order to develop their competitiveness and to influence their operating environment.

The normative dimension

Cohesion in industrial and strategic networks can support the legitimacy of action. Further, it can strengthen the institutional capacity of the actors and their role as normative institutions, and provide them with a mandate to negotiate with / face regulative authorities. Essay 2 presents a case study of Pharma Industry Finland (PIF). PIF as a strategic network is defined by fairly clear boundaries, because without a thorough understanding of the organizations that belong and do not belong to the network it is difficult for the members to agree on shared goals, and its management will be difficult. Strategic networks often have one or more hub organizations that tend to take the initiative in terms of development and management, and other players with a less visible or less powerful role. The findings presented in essay 2 are in line with prior research: 1) hub organizations are unlikely to have complete control over the network's strategy making, but they could play a key role in establishing the need for collective action as valid, reliable, and useful (e.g., Rao, 2001); 2) synergy in vested interests is turned into cooperation, and collective action is mobilized and maintained (Garud, Sanjay and Kumaraswamy, 2002). For example, the fifth case analyzed in the essay concerns how PIF utilized its strategic cohesiveness and collective power by appealing to the European Commission about Finnish pricing and reimbursement processes. The European Court of Justice ultimately found that Finland was breaking the transparency rules of governing decisions on special reimbursements for medicinal products, and dishonoring given deadlines. The following comment by an executive praised the collective power of PIF:

"I think PIF and its influence on the market is the most important channel for us...A single company cannot have an eminent position – the field and the trade association are the actors."

On the other hand, abusing the role of a hub could set off a legitimacy trap: some members of the strategic network will view entrepreneurship activities as not being in the best interests of the field as a whole. This will decrease the strategic cohesion of the network

and its capability to mobilize collective action. In addition, maintaining collective action may be difficult because others may want to challenge the institution (PIF as the normative, authorizing institution in the field) when it transforms or a new one emerges, for example. Failure to mobilize all network members behind a common strategy in a strategic network erodes the legitimacy of common efforts, ultimately leading to failure in network-wide institutional entrepreneurship. As such, it is proposed in essay 2 that legitimacy traps and collective action are strongly linked to the strategic cohesiveness of networks and their ability to act as legitimate normative institutions that are mandated to negotiate with the regulative authorities, for instance.

The cognitive dimension

Pharmaceutical companies and physicians' associations have a long and strong tradition of co-operation in the knowledge-intensive fields of clinical research and further occupational education. The chairman of the Finnish Medical Association (FMA), quoted in essay 3, supports the common view that the medical profession and the pharmaceutical industry cannot be separated from each other:

"It would be an absurd idea, but the interaction between the parties must be transparent... pharmacotherapy will not develop without knowledge flow between the industry and the profession."

Nevertheless, there are strong voices arguing that there is a conflict of interest in this kind of set-up, with physicians playing multiple roles in the sensitive issues of severe illness, government spending on drugs, and the personal interests of professionals in gatekeeper positions. The findings of this dissertation are in line with prior research: the standards of socially acceptable behavior are questioned in the changing institutional environment (see also Gallego, Taylor and Brien, 2009; Blumenthal, 2004; Studdert, Mello and Brennan, 2004). The legitimacy of physicians' associations derives from the control of institutional information and the degree to which they are considered the leading, objective, expert organizations in the field. This further gives them the ability to strategically influence their environment and the business. The data indicates that some of these professional institutions face procedural-legitimacy concerns, and an increase in institutional

discontinuity has been observed, as in the foundation of the Centre for Pharmacotherapy Development and its physician network in order to promote rational pharmacotherapy. However, cognitive institutional aspects (Meyer and Rowan, 1991) have an impact on the advancement and outcomes of these changes. In principle, the traditional role system and the action scripts of the business network between the industry and the medical profession are being preserved. For example, the PIF code for the marketing of medicinal products was revised, not rewritten, and so far there has been no radical imposition of new marketing regulation by the authorities.

On the other hand, globalized pharmaceutical business has created domain pressures and legitimated – to some extent - the utilization of relationships as channels of influence for regional socio-political interests. The innovative pharmaceutical industry has traditionally had a strong home base in Western European countries. The Trade Related aspects of Intellectual Property Rights (TRIPS) agreement changed the principles of patent protection and established the patenting of medical substances. However, it also increased commercial pressures in the form of shorter patent-protection times, which reduced the pay-back time of R&D investments and boosted parallel imports and generic competition from emerging markets (e.g., India). Essay 4 is a study of the merger of two pharmaceutical companies, and describes how imports from the emerging markets were considered to have triggered the increased pressure to contain production costs in Western European sites in the M&A process. This newly established research-based company is a major player in the business, and was therefore expected to serve regional socio-political interests in terms of protecting the European pharmaceutical industry (concerning employment and growth prospects at innovative high-tech industrial sites, for example). More relational resources were allocated to political relationships in order to secure interaction channels for regional socio-political institutions and to seize the legitimate opportunity to negotiate more favorable terms of business.

In sum, in the pharmaceutical and healthcare business the legitimacy of the actors' objectives and value creation in business networks are subject to the acceptance and approval of the constituents of society. These constituents could be external to the networks

in question (e.g., common cognitive templates) and / or actors in them (e.g., regulators or socio-political authorizing agents). Further, legitimacy is typically achieved through isomorphism, which characterizes relationship-management practices and relational patterns, as in the pharmaceutical business networks under study.

4.1.3. Relational isomorphism: the outcome of institutional interplay

Isomorphism is identified from the interview data as mimicking the behavior of and/or adopting relationship-management practices and relational patterns that are perceived to be a standard in the business, or are similar to competitors' CRM behavior. The concept is broadly defined in this study, and comprises "institutional isomorphism" (Kondra and Hinings, 1998; Scott, 1987; DiMaggio and Powell, 1983) and "competitive isomorphism" (Kostova, Roth and Dacin, 2008; Hannan and Freeman, 1977). Nevertheless, research-based pharmaceutical companies are typically MNCs, and in their global business they confront diverse institutionalized rules with which their subunits cope in national and/or regional markets. The rich case-study data provides many explanations of why actors in business networks mimic others and adopt standard relationship-management practices and relational patterns, resulting in substantial similarity among pharmaceutical companies on the national/regional (meso) and international (macro) levels.

These explanations are classified into three broad categories, and discussed in the following sections in relation to the dimensions and related pressures in the institutional environment.

The regulative dimension

High volumes characterize the European ambulatory-care market and its pharmaceutical sales. However, care is highly institutionalized and its cost is often restricted by general practitioners' (GPs) budgets or other incentives to reduce the bill for pharmaceuticals (e.g., reference pricing). From the pharmaceutical industry's standpoint the profitability of relationships with GPs is decreasing, and the trend is expected to continue due to various market-wide regulative pressures. The outcome is a general trend to focus on specialists who are typically the first-tier prescribers of innovative medical substances that have patent

protection and higher margins. Isomorphism in customer targeting due to regulative pressures is observable across the industry.

The M&A case described in essay 4 is an example of this relational isomorphism in the pharmaceutical industry. The maturation of some brands and their level of substitution in the regional, high-volume ambulatory-care markets were considered crucial factors influencing the redefinition of the customer and the focusing on specialists instead of GPs in the newly established company. The interviewees admitted that their corporate-level CRM strategy was to some extent influenced by the general trend in the industry: relationships with GPs were becoming less profitable, and this was expected to continue due to regulative imposition. It was therefore thought that relational resources would yield higher profits in the specialist branch. According to the interviewees, the outcomes included the deinstitutionalization of some long-term CRM practices, the termination of some customer relationships, and the restructuring of CRM portfolios in the therapeutic area under study. For example, some R&D and CME projects aiming at growth in mature, high-volume ambulatory-care markets were cut. One of the interviewees described this as follows:

"Yes, the relationships have changed. In fact we'll do less and less in this specific field. The reorganization has had this impact...life-cycle management of products and at the same time life-cycle management of relationships."

The normative dimension

The pharmaceutical industry and its marketing practices are regulated in accordance with various laws. In addition, the industry has agreed on voluntary codes of marketing among its international federations, which are often similar to the regional- or country-specific normative guidelines on the control of marketing. Examples include The European Federation of Pharmaceutical Industries and Associations (EFPIA) "Code on the promotion of prescription-only medicines to, and interactions with, healthcare professionals" and "Code of practice on relationships between the pharmaceutical industry and patient organizations", and "The code of the pharmaceutical marketing practices of the global

research-based pharmaceutical industry" followed by The International Federation of Pharmaceutical Manufactures & Associations (IFPMA).

Finland is a pioneer in the auto-regulation of pharmaceutical marketing. The first voluntary controls date back to 1959, and the most recent update came into force on 1 July 2008 (see e.g., Pharma Industry Finland, 2008). The Finnish code operates on a voluntary basis, but PIF member companies are committed to following it. A breach of the agreed ground rules could lead, at worst, to fines of tens of thousands of Euros. This long tradition and respect for common rules have created tight normative pressure to follow the code. The current version covers the validity of medicines, consumer and competition legislation, as well as international pharmaceutical-marketing norms, and lays down the ground rules for marketing medicines. It also sets out codes of conduct covering good medical-salesrepresentation practices, co-operation between the pharmaceutical industry and patient organizations, and health-awareness and other information on health and diseases targeted at consumers. This all-embracing normative order has induced mimicking and habituality in marketing practices, and relational patterns and interaction processes among companies. PIF as a normative institution has incorporated marketing practice into its authorized isomorphic activities in Finland. Still, by voluntarily imposing stricter normative medicalmarketing codes PIF and its members have avoided the imposition of new restrictive legislation that loomed large due to socio-political pressure.

On the general level, all PIF members have agreed upon the Code of Medicinal Marketing. Nevertheless, as described in essay 2, on the level of actual marketing practice there has been some disruption in industry cohesiveness and in the respect for common rules. Some members argued that the competitive situation required companies to bend the rules. However, it was not always the competitive situation that drove them to go against the normative code and isomorphic practice. Some MNCs were more open to bending the rules than others, having values that allowed them to do so. As such, they were decoupling themselves from the local normative code. On the other hand, this type of behavior could erode their legitimacy as it is typically achieved through isomorphism. It could also eventually catch PIF in a legitimacy trap if and when its role as the normative institution in the market is widely questioned.

The cognitive dimension

As prior research has shown, actor cognitions and shared cognitive business templates are resistant to change and tend to change slowly, and in turbulent environments habitual action and mimicking are often adopted as standard responses to uncertainty (e.g., Meyer and Rowan, 1991; Zucker, 1983 and 1977; Gill and Stern, 1969; Berger and Luckman, 1966). In terms of relationship-management practices, the outcome of habitualizing pressures is rigid, change-resistant business networks on the international (macro) and national or regional (meso) levels, characterized by isomorphism.

For example, essay 4 describes how the pre-merger institutionalization of isomorphic relationship-management practices surfaced as resistance to change. The joint customer relationships in the newly established organization faced new managerial challenges: 1) recognition of the institutionalization and its influence on managerial practices, and 2) the organizational unlearning of some habitualized practices. Both merging organizations were characterized by isomorphic business behavior, and were systematically organizing and sponsoring various training programs and frequent detailing as CME for health-care professionals. The interviewees typically described this isomorphism as an international or macro-level phenomenon, as "a general trend in the pharmaceutical industry" and "the way every company is doing it". This sponsored CME co-operation consolidated interaction with normative institutions (e.g., with specialist scientific medical societies), and thereby shaped or preserved existing collective, professional cognitive templates. As a result, some relationship-management practices were cast into a pattern by means of habitual action, and became resistant to change.

Nevertheless, the findings indicate that relational isomorphism also exists on the national and/or regional level. As described in essay 4 in the case involving merging companies, all the interviewees from the global marketing team emphasized that there was significant ambiguity surrounding the local relationships and customer-portfolio-management decisions. The portfolios were not selected at a particular point in time or for a particular market. For example, there was regional variation in the level of market maturation, and in perceptions of the influence of the institutional context on the business. The customer base

and the relationships took time to develop, and they were subject to habitualization.

According to the interviewed team, the outcome of this was isomorphic regional and/or country-specific CRM practices. One of the interviewees stated:

"If you want to utilize the potential globally you have to look at the different regions...cope with differences from country to country."

Therefore, as concluded in essay 4, local institutionalized CRM practices were not harmonized by force across the subunits during the merger. Indeed, they could have influenced the legitimacy of the meso-level changes arising from the macro-level redefinition of the customer and the restructuring of customer-relationship portfolios.

In sum, it could be concluded that regulative, normative and cognitive pressures enhance isomorphism in relationship-management practices and relational structures in pharmaceutical business networks. Regulative restrictions create industry-wide isomorphism in the targeting of customers. A normative order guides the content of interaction with customers into uniform processes, and slowly changing actor cognitions foster habitual action and mimicking.

4.2. Managerial contributions

This dissertation contributes to the research on inter-organizational business networks and related management practices. The majority of prior studies in this field model the environment in terms of tasks and therefore do not mention the influence of institutions on business-relationship management in their managerial contributions. The aim of this study is to enhance understanding of why and how the dynamics of the institutional environment affect relationship-management practices, and how networks and companies as actors in them cope with the pressures involved.

The present study shows how institutional dynamism is transmitted through customer relationships in business networks. The focus in this endeavor was on the dynamics of the institutional environment, the conceptualization of its processes, and the exploration of their impact on organizational relationship-management practices. The findings highlighted

the impact of the relational governance of the institutional environment on pharmaceutical and healthcare business networks and relationship-management practices. Dynamic institutional environments and the concomitant disruptions and institutionalization processes exert pressure on economic actors. The outcomes include changing organizational fields, transient perceptions of legitimacy, and isomorphism to which the actors adapt and/or react by acting as institutional entrepreneurs. Business networks as a form of market structure are reshaped, and management practices are influenced. For example, the Finnish healthcare regulative authorities are powerful enough to impose constraints on marketing measures to which economic actors have to adapt. On the other hand, institutional dynamism could also create new business opportunities. This study thus underlines the importance of understanding the influence of the dynamics in the institutional environment on business relationships, and how companies can utilize this influence, to some extent, by acting as institutional entrepreneurs while following their business aspirations and interests, engaging in collective action via strategic networks, for example. In sum the management practices of inter-organizational relationships in healthcare and pharmaceutical business networks could be broadly classified as activities of adaptation and of influencing.

This dissertation is explorative, the aim being to describe real-world phenomena rather than develop normative managerial decision models. Nevertheless, as suggested in the essays comprising Part II, it is possible to draw some modest managerial ramifications from the rich data. These are presented in the following sections. It is important to relate these findings to the uncertainty factor in business-network dynamics, namely that management can never know for sure or fully control what the counterpart will or could do (e.g., Anderson, Havila and Salmi, 2001). Certain types of reactions can only be anticipated, especially in the case of business relationships in the public interest involving potential economic gain (e.g., unmet medical needs and their public funding). One of the interviewees quoted in essay 4 described this uncertainty related to management practice as follows:

"You know, when you speak about relationships, which take a very long to build, usually you are very careful about changing things"

Still, when there is mutual interest and intention, and the ability to jointly develop and utilize relationships as channels of influence and adaptation, it is easier to anticipate the reactions of counterparts in the business network. Further, the network could then be cooperationally managed, to a certain degree, through reciprocal relationship-management activities that coordinate and control. For example, institutional entrepreneurs could change the prevailing institutionalized coordination and control mechanisms in business networks by influencing the institutional environment and the pressure it exerts on the market.

In the following chapters the managerial implications of this research are being presented and their summary is in the table 5 below.

Table 5. of the main managerial implications.

Level of exchange	Managerial implications
All levels (macro, meso and micro)	Build up the ability to sense institutional changes
	and the capacity to utilize them.
Macro: a Beveridge-style healthcare	Orchestrate the marketization process across
system consisting of business	business networks and institutions in order to
networks	counteract the negative outcomes of spontaneous
	ordering.
Meso: the business network	Build up the ability to sense institutional changes
	and assess if a network-wide or stand-alone
	entrepreneur strategy is more suitable in order to
	fulfil business aspirations.
Micro: dyads, customer-relationship	Seek a wide customer portfolio that challenges the
portfolios	conventional boundaries of customership and
	enforces stronger reciprocal relationships between
	economic and institutional actors in order to sense
	and shape the institutional environment.
	Make changes in customer-relationship-
	management practices in order to cope with
	isomorphic pressures and habitual action, and
	utilize actor-specific inducement in order to avoid
	the negative effects of deinstitutionalization.

4.2.1. The need for orchestration across the levels of Finnish healthcare

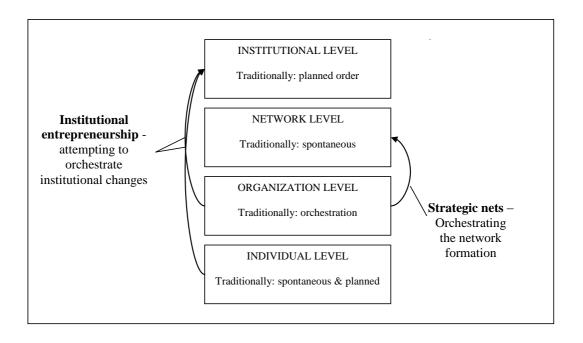
It is suggested in essay 1 that the marketization of Finnish healthcare could result in spontaneous ordering. Inherent in this concept is the idea that harmonious evolving order arises from interaction among decentralized, atomistic and heterogeneous economic agents (Hayek, 1937; Castells, 1996; Tikkanen and Parvinen, 2006). Further, this order could not be designed by a social planner but emerges spontaneously from a seemingly complex network of interaction. Planned order, on the other hand, rests on purposefully designed governance structures in a societal context (e.g., Loasby, 2000). According to the findings from the interview data on Finnish healthcare decision makers' perceptions of marketization, spontaneous change processes could lead to the partial optimization of resources and sub-optimal structures in healthcare networks. The caveats of nonorchestrated change include rigid and institutionalized networks and the inability of healthcare organizers to partner strategically. Deeply rooted ideological institutions, isomorphism and mimicking stifle innovation during reforms. In addition, time pressure seems to lock service producers into old-fashioned, habitual operational modes. In short, there is a clear need for orchestration across different levels in the changing healthcare environment.

Actor cognitions play a vital part in understanding the interplay of planned and spontaneous ordering. Knowing about the nature of the underlying economic ordering is also a key issue in the manageability of Finnish healthcare networks and the orchestration of their marketization. It is proposed in essay 1 that the orchestration of counter measures is more likely once the corresponding spontaneous ordering process and its likely outcomes are understood. With a view to supporting managerial decision-making and enhancing consensus in change, research on the orchestration of healthcare networks should integrate cognition as a central determinant, and span different levels of analysis. Just as spontaneous and planned processes permeate the institutional, network, organizational and individual levels of healthcare, so should orchestration.

Orchestration as a concept is traditionally attributed to organizational-level control of complex work (Karreman and Alvesson, 2004). Hinterhuber (2002) extended this to

incorporate the value chain, concluding that the orchestration of an extended network of diverse partner companies leads to superior financial results. Dhanaraj and Parkhe (2006, 659) define network orchestration as "the set of deliberate, purposeful actions undertaken by the hub firm as it seeks to create value (expand the pie) and extract value (gain a larger slice of the pie) from the network." Orchestration in this study is considered a network- and institutional-level phenomenon. It is proposed that the new trajectories of planned order and orchestration in service-provision networks should be taken into consideration in analyses of the healthcare business and its management. These trajectories are illustrated in Figure 5 below. Further research on institutional entrepreneurship and strategic nets could give fruitful support to managerial decision-making and enhance the orchestration of healthcare-service-provision networks.

Figure 5. New and recent trajectories of planned order and orchestration



4.2.2. Institutional pressures shape cohesiveness in strategic networks

The case study presented in essay 2 shows how the institutional environment can increase or decrease strategic cohesiveness in a network, thus having a potential impact on the success of collective action. It is argued that changes in the institutional environment may cause friction between the interests of actors and decrease the cohesiveness of a strategic network, and further, they may erode the network's position as an institution in the organizational field. A managerial ramification of this is that, in order to be successful, companies and networks must constantly evaluate the changes in the institutional environment and assess how these changes will affect them.

Another managerial contribution of the study concerns the findings that 1) the cohesiveness of network activities has an impact on the success of institutional entrepreneurship, and 2) failure to mobilize all network members behind common goals could erode the legitimacy of the chosen strategy. Companies should therefore evaluate the matters that can be dealt with through collective institutional entrepreneurship, their own entrepreneurial activity, or simultaneous approaches. Available resources, timing, and the strategic value of the issue at hand may be used as decision-making criteria. However, using an individual strategy such as institutional entrepreneurship may undermine the collective power of the network. It may be impossible to resolve some situations without network-wide cooperation, and companies must therefore build up the capability to strategize together, even when a common ground is difficult to find. These managerial implications are summarized in Table 6.

Table 6. Managerial implications: institutional pressures on the cohesiveness of a strategic network

Finding	Managerial implication
Institutional changes can increase or	Build capabilities to sense changes in the
decrease the cohesiveness of the strategic	institutional environment and assess the
network.	impact of these changes on the network,
	your own company, and other network
	members.
The cohesiveness of the network's	Build capabilities to evaluate if a network-
institutional-entrepreneurship activities	wide or stand-alone entrepreneur strategy is
varies; companies can adopt a mutual or a	more suitable in the face of an institutional
stand-alone strategy. Changes in	change and to strategize effectively when a
cohesiveness influence the success of	network-wide strategy is chosen.
institutional entrepreneurship.	
Failure to mobilize all network members	Build capabilities to mobilize other network
behind a common strategy erodes the	members behind a chosen institutional-
legitimacy of common efforts, ultimately	entrepreneurship strategy.
leading to failure in network-wide	
institutional entrepreneurship.	

4.2.3. Institutional influence and adaptation through customer-relationship-portfolio management

The findings of the study reported in essay 3 suggest that pharmaceutical companies would do well to seek a wide customer portfolio that challenges the conventional boundaries of customership, and seek benefits through 'lobbying' and coordination among competitors. A company has a choice determining the extent to which it is the instigator, rather than the target, of normative initiatives and other institutional changes. By continuing to develop and enforce stronger reciprocal relationships between economic and institutional actors companies can actually create value by shaping their institutional environment. The same applies to recognizing aspects of pragmatic, procedural and cognitive legitimacy in cooperation and interaction with other companies in the industry.

Furthermore, having a range of relationships with various socio-political actors facilitates a company's ability to sense institutional disruptions and their emergence. From a marketing

perspective, developing this type of sensing is an investment that will result in a better fit with the institutional environment, and the capability to seize the opportunities arising from institutional disruptions. This translates into responsiveness to change and a better ability to cope with legitimacy concerns.

Thus, the main managerial implication of the study presented in essay 3 reflects the standard institutional-entrepreneurship argument that management seeking to induce change in institutions should be sensitive to the emergent discontinuities, which are a critical source of leverage. The findings indicate that it is not so much the possession of overwhelming resources as understanding network dynamics, steering institutional coevolution, and satisfying actor cognitions that are key managerial issues in institutionalized marketing contexts. Further, it is also a question of adopting influencing and adaptation strategies. The existence of two different customer-portfolio-management approaches to the same issue in the case companies - "social capital" and "high-powered incentives" - demonstrates the variety of responses to institutional change. Institutional strategies based on high-powered incentives are more likely to require extensive resourcing than strategies based on social capital, which are driven by social skills.

The pharmaceutical industry has created a "mandate" to participate in dialogue with the regulative agencies and validating agents. However, the regulators and normative institutions in the business are also subject to the unavoidable political endowment inherent in healthcare systems. Marketing practices are therefore contingent on three related factors in the evolving institutional environment:

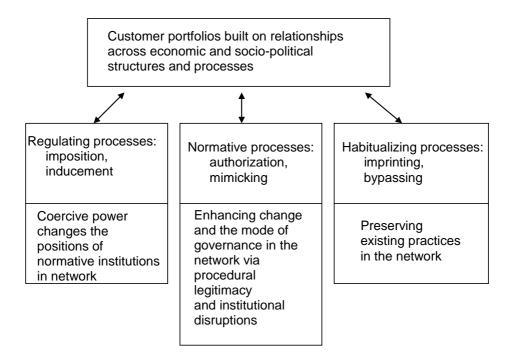
- (1) the accessibility of necessary channels of influence and adaptation inside the healthcare socio-political system (e.g., the ability to cope with varying political power balances on the municipal level),
- (2) the legitimacy of objectives and value-creation activities in the eyes of social stakeholders (e.g., profits arising out of public-private partnerships), and
- (3) the degree to which domain consensus exists among the actors in the pharmaceutical business (e.g., contracting out essential parts of primary healthcare services).

Before attempting to derive value from being institutional entrepreneurs companies should check whether the above-mentioned preconditions for successful action are in place. It is customary to claim that this is hard to do, but the results of the study reported in essay 3 indicate that channels can be opened, legitimacy can be improved, and consensus can be reached.

Last but not least, the study results indicate that understanding and developing institutional influencing and adaptation mechanisms on the customer-relationship-portfolio level comprise a key success factor for pharmaceutical companies. This seems to hold true for institutional entrepreneurship and the management of customer portfolios independently. The managerial implications are the clearest on the relationship level: it appears that relationships are essentially channels of influence and adaptation. Efforts should be made to develop explicit practices (resembling supply-chain or distribution-channel management) involving the use of relationships as channels for institutional marketing. Given the indication in the study that cognitive institutions preserve existing marketing practices, practical activities should be people-based and media-mediated, and should exploit public interest (see also Ulaga and Eggert, 2006).

The managerial ramifications of influence and adaptation through customer-portfolio management are summarized in Figure 6 on the following page.

Figure 6. Outcomes of influence and adaptation through customer-portfolio management

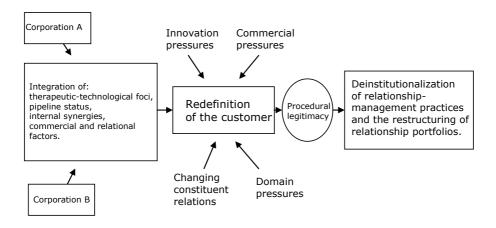


4.2.4. Relationship-management practices deinstitutionalize during mergers in network organizations

Essay 4 presents a case study of the institutional impact on CRM practices and the restructuring of relationship portfolios during the merger of two pharmaceutical companies. The paper describes how the therapeutic-technological foci, the pipeline status, and perceived internal synergies with commercial and relational factors resulted in the redefinition of the customer during the integration process. Driving this redefinition were the innovation, commercial and domain pressures and the changing constituent relations in the industry. The findings highlight how the outputs and innovative achievements of the pharmaceutical business are highly socially defined and valued (e.g., in the areas of fertility

and contraception). Further, some of the industry's outputs are inherently difficult to measure at the time of their inception (e.g., improvements in public health and increased life expectancy as a result of new innovative products). It is therefore concluded that the industry embraces itself in socially accepted procedures, which are a standard in the business, and by so doing fosters procedural legitimacy. This striving for procedural legitimacy had an impact on the merging companies and the restructuring of their relationship portfolios during the integration process. Figure 7 illustrates this sequence.

Figure 7. Institutional interplay: the integration of relational resources during the merger of two pharmaceutical corporations.



The study describes how the pre-merger institutionalization of practices and isomorphic pressures harnessed the redefinition of CRM practices during the integration process. Resistance to change surfaced, resulting in the following managerial challenges in the merging of customer-relationship resources: 1) recognition of the institutionalization, isomorphism, and the influence of both on practices, and 2) the organizational unlearning of some habitualized practices.

The managerial contributions lie in the proposition that CRM practices are contingent upon how isomorphic pressures and habitual actions are coped with, and how the actors utilize the institutional arrangements during the merger. The newly established multinational network organization has layers of CRM practices. One of these layers comprises the practices mandated by the meta-institutions of healthcare, and may be surprisingly similar across subsidiaries (e.g., co-operation with professional associations for the sponsorship of continuing medical education for health-care professionals). Another, consisting of practices mandated by the headquarters, may be subject to pressure from the host country in terms of compliance with and responsiveness to the local normative and regulative domains. Therefore the integration process calls for flexibility with the schedule of the restructuring of CRM portfolios, and with the termination of some relationships. Another managerial ramification is that the possible negative effects of the deinstitutionalization and imposition resulting from changed institutional arrangements tend to be reparable. For example, the right forms of inducement could reverse disenchantment and restore the confidence that has been damaged by the discontinuation of valued traditions. It could also facilitate collective understanding about new procedures, resources, rights, duties and power relationships in the newly established organization.

4.3. Limitations and avenues for further research

Business-network and neo-institutional theories highlight the dynamic approach and the time aspect. The phenomena and units of analysis used in this study are by nature dynamic, and susceptible to continual change. For example, customer relationships build up over time, and both the history and the future expectations of the involved parties influence how they evolve (e.g., Grewal and Dharwadkar, 2002; Uzzi, 1997; Ring and Van de Ven, 1994). In addition, institutional pressures, constraining processes of organizational homogenization and isomorphism (e.g., Whitley, 2003), institutionalization and deinstitutionalization take their time. The time perspective is relational in this study: past, present and future dimensions are inherent in the descriptions of the interviewees and the secondary material from the case studies. This continual change and theory generation could perhaps be better addressed in longitudinal studies and case comparisons across time

rather than in unique "snapshots" of complex phenomena (e.g., Essay 4 and the study of the merger). On the other hand, whatever the method, dynamic networks and institutions are self-acting, amorphous phenomena, which can never be wholly captured by research. Therefore it is not possible to establish a range of generality in order to pin down the conditions under which the findings of this dissertation will invariably recur.

The complexity inherent in embeddedness, network boundaries and the organizational structure is a weakness in this study. The researcher defined the limits of the network organization, the strategic network and the business networks under study a priori on the basis of the organizational field (e.g., in the case presented in essay 4 according to the corporate HQs, the subsidiaries and other first-tier counterparts of the customer relationships defined by the interviewees). Nevertheless, networks and institutional boundaries and contexts are inherently dynamic, vague and porous. Therefore, when defined a priori the organizational field as the unit of analysis could lack some relevant actors and brush aside connections and structural aspects of influence and adaptation via intentional networking. In addition, this type of analyzing within a known network limits the findings somewhat to what has already been constructed as the reality ex ante, concerning the prevailing institutions and their influence, for example.

Despite the limitations of this study, the integration of neo-institutional theory with the analysis of business-network and relationship management may provide an interesting avenue for further research. Institutions provide the meaning structure for a particular social arrangement. During institutional disruptions variation in the degree and kind of connectedness between actors in a network may provide clues as to the threshold points at which business networks take hold or break down. For example, highly interconnected social systems may reinforce coherence and stability, whereas the entrepreneurial opportunities institutional disruptions offer some actors may be a predictor of business-network instability.

Analysis of institutional pressures on business networks may enhance understanding about the context dependency of relationship-management practices in the healthcare business. Conceptualizing economic actors as social agents who face institutional pressures could

shed light on the interpretation and/or construction of the rule and role systems in business networks, and the organizational responses to these systems could offer interesting directions for theory development. For example, the operationalization of norms or other institutional arrangements in connection with the expectation and sanctioning dimensions of business networks may offer alternative approaches to the current discussion on governance and manageability.

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PART II: Original research papers

Marketisation and the orchestration of healthcare networks in Finland

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ESSAY 1

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Marketisation and the orchestration of healthcare networks in Finland

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Abstract

This paper discusses the coordination of change in healthcare networks and highlights their orchestration as a potentially valuable research avenue. In this study, theoretical propositions are drawn from literature of (a) strategic nets and business networks, and (b) institutional change. These propositions are tested by an exploratory study on the marketisation-oriented changes in Finnish healthcare. Findings indicate that network heterogeneity creates a structural possibility for partial optimisation, and marketisation is a spontaneous change process that fuels these partial optimisation habits. Orchestration across levels is needed, because heterogeneity and spontaneity create significant problems in outcomes. Further, a practical implication of the findings is drawn: the orchestration of countermeasures in healthcare networks is possible when the outcomes and/or threats of spontaneous ordering are understood.

Introduction

Institutions could be seen as an inherent feature in healthcare networks as they have an influence on actors: institutional bases are imported into companies and other service production organisations as underlying invisible assumptions which shape their performance. ¹⁻⁶ As such they are organisms characterised by complex actor interests, ⁷⁻⁸ heavy regulation and legislation, influential norms, rules, traditions, peculiar professional subcultures and continuous political interest. This paper focuses on the interplay between institutional environment and healthcare networks, which are conceptualised by the provision of services (see Appendix A). The paper argues that change of network and its characteristics (orchestrated eg by institutional entrepreneurs or otherwise coordinated, planned change) is subject to rivers of activity and actors' managerial cognitions, which influence the emergence of planned order, and challenge the orchestration of changes in Finnish healthcare networks, eg in the case of marketisation.

Disruptions of institutional environment and organisation-level governance are known to be related in an interactive way. This interplay can be understood by the analysis of pressures created by the institutional environment (eg marketisation) and by organisations' responses to them

(eg institutional entrepreneurship). Organisations and networks tend to adapt themselves to institutional pressures through renewing their governance logics, forms and practices.¹⁰

In studying institutional changes, the issue of spontaneous ordering has emerged. ¹¹⁻¹² To stress the role of markets in the functioning of the modern society, Hayek ¹³ introduced the concept of spontaneous order — the idea that a harmonious, evolving order arises from the interaction of decentralised, heterogeneous economic agents. This order could not be designed by a social planner, but merely emerges spontaneously from a seemingly complex network of interaction.

Two theoretical approaches, one emerging from the literature of networks and the other from literature on institutional change, advocate the antidote to spontaneous evolution. Specifically, the literature on strategic nets¹⁴ and institutional entrepreneurship¹⁵⁻¹⁶ maintain the power and necessity of planned ordering. The present paper proposes that planned order is conceptually close to the notion of orchestration and successful institutional entrepreneurship activity could be understood as one form of it. Traditionally, orchestration has been considered an organisation-level issue, ¹⁷⁻¹⁸ and planned order has mostly been related to the planning of societal and institutional-level structures, norms and rules. There is a gap in present research and a need to address orchestration of change processes at the network level (eg intentional weaving of strategic nets).

Lunt¹⁹ provides one of the most comprehensive reviews. They suggest that four schools of thought can make contributions to our understanding of the process: neoclassical economics, 20 transaction cost theory, 21 Austrian economics and the new economic sociology.²² Of these, only the last two lie close to the network perspective and analysis of marketisation as an influencing factor of network change with their key issues of social network relations, interaction processes and non-price competition.²³ Conceptually, this paper aims at exploring the mechanisms through which institutional entrepreneurship and strategic nets represent planned order and orchestration. Networks have been argued to be spontaneously evolving, which inherently contests the idea of their manageability²⁴ or orchestration of their change processes. A literature review was conducted to develop an understanding of how institutional entrepreneurship and the weaving of strategic nets operate. The aim was to enrich the conceptual understanding of the mechanisms of planned order in spontaneously evolving contexts by exploring the similarities between the two theoretical approaches.

Healthcare reforms were selected as the empirical issue for a round of interviews as they represent a rich example of the need to exercise orchestration at the level of networks and institutions. It was observed that spontaneous change processes could lead to partial optimisation of resources and suboptimal structures in healthcare networks. The caveats of non-orchestrated change include rigid and institutionalised networks and actors — the inability of healthcare organisers to partner strategically. Deeply-rooted ideological institutions, isomorphism and mimicking stifle innovation during reforms. In addition, haste seems to

lock service producers to old-fashioned, habitual operation modes. In short, there is a clear need for orchestration in the changing healthcare networks. The key argument is that once the corresponding spontaneous ordering process is known, orchestration seems more likely. Once likely partial optimisation outcomes (threats) of spontaneous ordering are understood, the orchestration of countermeasures is possible.

Theoretical perspectives contributing to the orchestration of networks Spontaneous vs planned ordering

A dichotomy between planned and spontaneous orders in the organisation of economic activity was already highlighted in the Austrian economics of the 1930s and 1940s,²⁵ and has aroused interest in various areas of social science, developing into 'new economic sociology' in the early 1980s.²⁶⁻²⁷ The emphasis on how economic activity is co-coordinated by groups of people rather than undertaken by isolated individuals has gained wide recognition and provided a rich critique of recent economic discourse dominated by neoclassical and to some extent by Austrian theorists.¹⁹ Social network relations and non-price competition are key issues of new economic sociology which resonate well with an industrial networks point of view.²³ However, the ideas of spontaneous and planned ordering by the Austrian economics should not be overlooked in the analysis of changing networks and marketisation within the network perspective, as the interaction process is one of the key issues in both schools of thought.

Austrian economics stresses that the more complex the system, the more central a role limited knowledge will assume, and thus the more important the influence of spontaneous ordering will become. An economic system consists of more or less calculative economic agents with limited knowledge, and spontaneous order arises from the interaction of decentralised, heterogeneous actors. This spontaneous order emerges as a result of the cognitive limitations of economic agents in dealing with the huge amount of ambiguous and fragmented information relevant to the exchange situation. A market develops as an institution, which economises on each agent's scarce resources of cognition and focuses the attention of that agent on a particular range of options.²⁸

Hayek referred to planned order when discussing the purposefully designed governance structures in a societal context, eg in a planned socialist economy. A more recent example is the ongoing Finnish project to restructure municipalities and their service provision. The project is endogenously generated, planned institutional change to enhance the functional rationality and productivity of public services. It is powered by financial inducements and political consensus of various institutional actors. The aims of this project are to be realised through the amalgamation of municipalities and public service organisations into larger regional and national entities for a more unified market. With this project, as with any other economic order, purposefully designed orders

appear to be important balancing tools for governing outcomes of market processes, just like creative destruction seems to be necessary in unravelling outdated structures and constantly preparing agents for changes in the rules of the game through innovations.²⁹⁻³⁰

Networks and strategic nets

Powell³¹ argues that if economic exchange is embedded in a particular social structural context, then networks could be seen as a distinctive coordination form of economic activity. Typical for these network modes of resource allocation is that transactions occur neither through discrete exchanges nor purely by administrative fiat, but through networks of actors engaged in reciprocal, preferential, mutually supportive actions.³¹ In this study, Finnish healthcare is conceptualised as six different networks according to the provision of services. However, this type of resource allocation can result in partial optimisation when actors engage themselves in actions which are beneficial to themselves or to their own network, but not to the whole healthcare system.

In networks, spontaneous ordering has been seen to operate through a 'series of systematic changes in the interconnected network of market decisions'. This would imply that networks are highly spontaneous. On the other hand, the role of increased planned order has been emphasised, eg the creation and management of diverse networks of tightening relationships with few strategic partners and with intentional weaving of strategic nets as subsystems of network entities. 11

In marketing research there are contradictory views concerning the manageability of networks. Some research suggests that networks are uncontrollable, unmanageable spontaneous organisms in which both economic and social dimensions are crucial, and in such structures total dominance over other actors' resources and activities is not possible. 32-33 Others insist that the manageability of business networks is possible and have explored intentionality within networks and the pursuit of shared goals and benefits. 34-35 The strategic net has been introduced as a concept encompassing the ability of organisations to exert intentional influence on network-level organisation of economic activity. 36 In manageability research preceding the idea of strategic nets, attention has primarily been paid to network characteristics, the nature of networks as organisations and intra-network dynamics. 14 So far the influence of institutional changes has been a fairly unaddressed field of research.

Institutional entrepreneurship

Within the marketing discipline, less attention has been paid to institutional approaches to change. In a highly institutionalised market, 'power balance' between actors and extant regulative forces can lead to an institutional lock-in and curb spontaneous change processes. Institutional entrepreneurship, which shapes the institutional environment and its processes, has been presented as a spontaneous counterforce that works its way slyly through structures of planned order by influencing our shared understandings. ^{15,16,37} Institutional entrepreneurs (both individual and organisational) thus create new

channels of influence and adaptation for the actors in the network with their intentional networking activity powered by social (eg personal trust and power), technological, competitive and/or regulatory issues (eg system trust and power). While institutions may appear to give markets stability, the emergence of new players, ascendance of actors, and institutional entrepreneurship causes institutional discontinuities and disruptions.³⁸ Further, these processes of institutional change usually have an impact on the network.

Propositions on the orchestration of networks

Traditionally, orchestration as a concept has been attributed to organisation-level control of complex work.¹⁷ Hinterhuber³⁹ extended the notion to value-chain orchestration, concluding that the orchestration of an extended network of diverse partner companies leads to superior financial results. Dhanaraj and Parkhe⁴⁰ define network orchestration as 'the set of deliberate, purposeful actions undertaken by the hub firm as it seeks to create value (expand the pie) and extract value (gain a larger slice of the pie) from the network'. In this study, orchestration is becoming a concept of network and institutional perspectives with analysis of healthcare business and service provision. For example, over recent years Finland has followed the general European-wide convergence towards 'new public management' through healthcare network level imitation and through modelling by norms of 'quasimarkets' ideas. Introduction of market mechanism in the field has shifted focuses strongly on the exchange-value element of the healthcare, rather than on the use values delivered: services are effectively commodified through market measures. Central and local governments have new primary roles as purchasers and commissioners of services for empowered consumers. New trajectories for planned order and orchestration emerge.

Figure 1 depicts the way spontaneous and planned ordering and orchestration have traditionally been attributed to different levels of analysis. The way our understanding has changed through rather recent trajectories of planned order and orchestration (institutional entrepreneurship and strategic nets) are drawn in the figure.

Based on the theoretical perspectives and the multi-level approach embedded in them, the following propositions are produced:

- Networks and their heterogeneity create possibilities for partial optimisation. Decentralisation and mixed funding weave complex service provision networks in which some actors have multiple roles and various channels to service facilities and other resources by the utilisation of personal and/or system trust and power (eg about onethird of all physicians work in both public and private sectors).
- Marketisation as a spontaneous change process fuels partial
 optimisation habits. Network and institutional change both involve
 a variety of subjective actor positions, and a range of organisational,

- professional and sociopolitical standings, which all could pursue conflicting interests and agendas of change.
- Orchestration across levels is needed, because heterogeneity and spontaneity create significant problems in outcomes.

The Finnish healthcare system resembles those in other Nordic countries in that it relies mainly on public provision of care and offers universal coverage of a comprehensive range of publicly-funded health services paid for mainly out of general taxation⁴¹ (for more details see Appendix A). The contemporary trend towards more liberalised and market-accommodating healthcare with competitive bidding and tender processes has boosted change and created market dysfunction. Recent research has addressed these inefficiencies, 42-46 but so far the issue of orchestration has not been addressed, when outcomes of the customer process suffer from the combination of heterogeneous networks and spontaneous change. Key orchestration processes are managing knowledge (about relevant alternatives), monitoring the appropriation or legitimacy (of changes) and ensuring network stability. 40 As in other contexts, the role of a hub actor in performing these processes is vital. In the complex actor interests contexts, the identification, defining and empowerment of hub actors is the first step in coming up with an orchestration strategy.

Research approach

The research strategy in this study is deductive. The process started with a pure theoretical treatment of the marketisation and orchestration phenomenon in networks. The core propositions were formed on the basis of the selected theoretical angles. As the marketisation and orchestration of healthcare networks in particular was perceived to be a largely unexplored phenomenon, an exploratory research approach with the empirical study seemed in order. The aim was to produce a modest contribution by legitimising marketisation and its orchestration as a research setting by exploring whether they are active and relevant determinants of outcomes in healthcare networks. Accordingly, the study gathered data from interviews in which the theory-based propositions were not presented to the interviewees, but it was explored whether they would emerge spontaneously in dialogue and support the propositions.

Researchers interviewed 39 key decision-makers in Finnish healthcare service organisations or closely-related professional organisations. The semi-structured interviews dealt with ongoing, visible, coming or anticipated marketisation-related changes in the network. The objective of these interviews was to allow managers to describe their views of changing healthcare networks in relation to marketisation and coordination in their own words. The data analysis of transcripted interviews focused on (a) the search and identification of patterns of spontaneous and planned ordering within the data (eg descriptions of practical processes) and (b) interpretation of their meaning to organisations (eg relationship

management decisions which created partial optimisation, utilisation of personal and/or system trust and power), and not on the narratives told by the participants. This interpretive approach provided open, fairly flexible, experiential and illuminating data to study change processes and dynamics of marketisation; and operational links needing to be traced over time with local grounding,⁴⁷⁻⁴⁹ in which interviewees' descriptions were a mixture of various levels of actors and their institutional entrepreneurship and orchestration activities (see Figure 1) in the Finnish healthcare networks.

The unit of analysis in the interviews was marketisation changes. The interviews attempted to cover all key marketisation change-related issues including (a) identifying functions and areas prone to marketisation, (b) identifying actual ongoing change projects potentially leading to marketisation, (c) discussing the pace and probability of marketisation, (d) determining the possible or probable forms of marketisation (changes in organisations and governance modes), (e) anticipating the potential mid-run outcomes of current marketisation-oriented changes and possibilities for partial optimisation, and (f) discussing the impact and magnitude of marketisation-related changes (eg in terms of number of employees influenced (personal/system trust and power)).

Analysis in the interviews focused on the local strategic nets and the regional parts of the national healthcare network. This was reflected in the selection of respondents, as persons responsible for managing and reorganising healthcare in the six largest cities, six largest municipal leagues and 15 key hospital districts were covered. The respondents, typically chief executive officers, chief medical officers or chief planning officers, all held responsibilities over and information about entire local strategic nets and/or the regional part of the national healthcare network, not just single organisations. The interviews overlapped geographically to the extent that all major regions were covered with a minimum of two interviews.

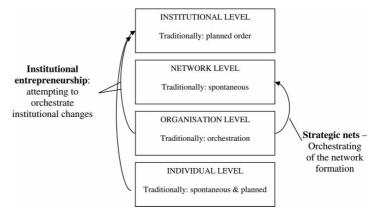


Figure 1: New and recent trajectories of planned order and orchestration

Results of the exploratory study

Generally, the interviews provided evidence of the need for orchestrating the ongoing marketisation-oriented changes.

Result 1: Heterogeneity exists

In the interviews, heterogeneity factors emerged which indicated that due to prevailing cognitions of change, decision making by executives could result in structural and habitual partial optimisation. Researchers identified that there is much heterogeneity in the way management perceives the changes in the network. More specifically, there seems to be little consensus on (a) what the changes are, (b) how they involve certain types of network actors, (c) what the potential outcomes are, and (d) whether and how the changes could be orchestrated.

Typically actor positions, instead of actor characteristics, contributed to the heterogeneity of perspectives on what marketisation is and how it is occurring. For example, directors of large organisations tended to play down the significance of a dramatic change in a single function (eg the incorporation of all occupational healthcare within a large primary care organisation). Decision makers in smaller organisations regarded the same change as a major step towards marketisation. When asked about the mergers of surgical units, the directors of large organisations perceived this as a local adaptation in the operational level, which did not have network level impact, while the decision makers in smaller organisations perceived this as a major change of the whole regional part of the network. There was also variation in the views of directors in large organisations depending on their perception of their own ability to influence the changes.

This highlights the relevance of actor cognitions in how decision makers perceive the marketisation of healthcare networks. Further, this can be argued to play a critical role in determining final outcomes and possibilities for partial optimisation.

Result 2: Evidence of partial optimisation exists

The interviews recorded little evidence or opinions for marketisation bringing immediate or direct cost savings. Contrary evidence of escalating costs, usually due to earlier miscalculation of costs or witty profit-maximising business models, was ample. Six respondents mentioned the same private player whose ability to utilize deficiencies of public sector human resource management and consecutive staff shortages led to structural partial optimisation at the organisational level and to a suboptimal outcome at the network level. On a more general scale, spot work contracting and new overtime pay schemas were heavily criticised as features of increased marketisation in the labour market. Furthermore, five respondents raised, referred to or implicitly emphasised the fact that, in parts, the healthcare networks are mainly a public good, so orchestration of some kind is needed anyway. Finally, a respondent poignantly pointed out that, without orchestration, the general state of overcapacity in many functions was destined to lead to service price dumping, pile-driving by

agile institutional actors and other unwanted phenomena if and when markets opened up.

Result 3: Different marketisation rivers within different networks

Another finding was that marketisation-oriented changes were perceived to be taking place, in distinct and rather unconnected rivers. ⁵⁰ The first river was characterised with private involvement and business-like behaviour, with markets playing an obvious, important part. The key argument was that of resourcing and capacity utilisation efficiency. Repeatedly mentioned parts of the healthcare networks were laboratories, medical imaging, elective surgery and residential elderly care.

A second river consisted of functions in which the most agile private players were able to exploit the rigidities of the public healthcare organisations, which have been notoriously slow in adapting to macrolevel or institutional changes in their environments. This was perceived to lead to a number of areas of activity going 'wild' with marketisation, usually due to difficult or even desperate situations in the public sector. These situations included: basic occupational healthcare (large and numerous employers suddenly started seeking new care providers); health centre and emergency room worker outsourcing (staff shortages emerging from union contract rigidities created a shortage of qualified workers, which private players utilised nimbly); hotelling-type wards (financing and investment decision-making gave private players overwhelming advantages); and dental care (changes in legislation placed such demands on the public sector that it could most often only manage with extensive public-private cooperation). These can all be characterised as slip-ups, where partial optimisation at the organisational level meant that the benefits of marketisation to the public sector were largely lost

The third river dealt with major changes in organisational roles, which shifted parts of the public sector to a market-oriented relationship with the rest of the public system. For example, plans were being made to incorporate entire hospital districts. Alternatively, service-producing units in many regions faced being subjected to a strict purchaser-provider setup, in which public providers would have to fight for patients with private players in order to maintain their existence.

Within the boundaries of each river, the perceptions of driving forces and outcomes were again very mixed. This leads back to the third proposition of the need for orchestration. However, attaining orchestration seems to be very challenging due to: (a) the continuous spontaneous ordering processes (coined 'rivers of activity'), (b) the impact of the dynamic institutional environment and (c) managers' cognitive limitations.

Result 4: Substantial network fragmentation exists and institutions are fuelling it

Several respondents mentioned that institutional structures were fuelling network fragmentation and partial optimisation at the organisational level. The governance of healthcare networks is decentralised and has parallel arrangements for service production and funding. The municipalities are free to produce health services themselves, to contract

with other municipalities or to contract with the private sector for their provisions. This freedom (a) increases the variety of regional normative order, resulting in the quality and dynamics of relationships which can be controlled by patterns of personal trust and/or power, and (b) enhances spontaneous order, resulting in diversity in methods of delivering services, which hinders possibilities of orchestration and creates production overcapacity (a partially optimal outcome at the national level).

In addition, the interviewees described how the networks are further fragmented by the parallel arrangements for partial National Health Insurance (NHI) funding in occupational and private health services (hospital, specialist and occupational health). The municipal and NHI arrangements are somewhat complementary and overlapping. GP gate-keeping is in place for patients who rely solely on municipal health services; however, this is not the case with respect to private hospital, occupational health and specialist services. There is a risk of supplier-induced demand and overcapacity. The interview data indicate that parallel arrangements for funding and access to care for private and public sectors should be harmonised in order to avoid overcapacity.

The informal institutions (traditions, cognitions and opinions) around private healthcare organisations are also influencing the network structure and partial optimisation at the organisational level. The respondents referred to 'the private sector' and 'profit-oriented company activity' as one and the same thing. There seems to be a dominant notion about what a private sector healthcare company looks like, does and aims at: 'cherry-picker, who exploits the financing system'. This institution is a major factor in inhibiting the development of wide-ranging, cross-network private service provision. This is not a new phenomenon. One respondent accounted that all the Nordic countries seem to have produced private sector clones of old and existing public sector operations since the early 1990s.

Contributions

Theoretical contributions

It is proposed that understanding the nature of underlying economic ordering is a key issue in the manageability discussion. ⁵¹⁻⁵² The key argument is that once the corresponding spontaneous ordering process is known, orchestration seems more likely. In the case of healthcare networks, it is argued that once likely outcomes (threats) of spontaneous ordering are understood, the orchestration of countermeasures is possible.

In networks, various reciprocal episodes of interaction can intertwine or reinforce each other by their content or timeframe, depending on the role(s) and subjective positions of actors. The range of actors' relationships and how they are managed as channels of interaction have an impact on how influence is exerted as an activity of institutional entrepreneurship and how adaptation to the changing institutional environment is received at the individual, organisational and network level. Further, this can enhance spontaneous or planned ordering.

Based on the evidence on healthcare networks, network-oriented service production is prone to bringing spontaneous governance with it.⁷ However, there is a difference between the 'benefits' of network-oriented production and network-oriented governance. Beneficial spontaneous ordering processes (eg price competition, emergence of new actors) need planned order in the form of orchestration mechanisms. In the Finnish interviews, this was evident, eg in home care and physiotherapist services. Whereas marketisation created a range of new services and service providers, clear benefits from marketisation only emerged after service standards (home care) and administrative recommendations (physiotherapists) were implemented. This highlights the need for interplay between spontaneous and planned orders.¹²

Evolving governance calls for the differentiation of marketing practices. ⁵³ In addition, it calls for various managerial practices which are subject to the ability to sense the governance mode on the market sector in which one operates. In this study, institutional disruptions opened the network to new players and boosted the competitiveness of the business. This development changes the old patterns of cooperation and relationships. The network governance mode gains market-like aspects: relationships are more competitive and price is a means of communication. Simultaneously, the hierarchical control and authority of regulative and normative institutions are decreasing, giving rise to a new kind of cooperation and reciprocal relationships. Healthcare providers have become more autonomous corporate bodies, which can cultivate partial optimisation.

However, the interview data suggest that part of the quality and dynamics of relationships can be controlled by patterns of personal trust and/or power in a network built on strong institutional governance structures. Bachmann⁵⁴ argues that while in a less strongly regulated system (eg Finnish healthcare networks), social actors, to a large extent, need to secure the effectiveness of the coordination of their mutual expectations and interactions on the basis of individual experiences and resources, the same is neither necessary nor a promising strategy when the business is built on a strong institutional framework of governance structures. In the first case, trust and power are likely to appear as personal trust and power. But, in the case of a strong institutional environment, the management of channels of influence and adaptation is subject to the actors' ability to utilise both system and personal trust and power, ⁵⁵⁻⁵⁶ which could enhance the emergence of planned order.

In line with previous literature, it is argued that cognitions play a vital part in understanding the interplay of planned and spontaneous ordering. A direct conclusion from this is that research on orchestration should integrate cognition as a central determinant and span different levels of analysis. As spontaneous and planned processes permeate institution, network, organisation and individual levels, so should orchestration. The analysis of change in healthcare networks calls for reference to sociopolitical, economic and subjective actions of action with account of

situated actors' orientations toward one another and the substance of cognition.⁵⁷

Guiding future research

This study thus legitimises the question of orchestration of marketisation in healthcare networks, and turns the research to the 'why' and 'how' questions. Further research with empirical cases or other types of data are needed in this field in order to generalise the findings for different health systems. But, as with any research, there are various challenges. First, the complexity formed by embeddedness and boundaries of networks and institutions. In this study, the researchers defined the limits of networks a priori into six different national networks by the provision of services, but the boundaries of institutions are much vaguer. Secondly, there is the challenge of time. Networks and institutions are by their nature inherently dynamic and susceptible to continuous change. Therefore, this exploratory study of marketisation should be amended perhaps with longitudinal methods or with other tools of process research. Thirdly, in theory-generating research, the potential for case comparisons is commonly viewed as important.⁵⁸⁻⁶⁰ Future research with multiple cases could allow the comparison of sites or cases and their specificities related to different health systems and cultures, and establish the range of generality of findings to pin down the conditions under which those findings will occur. Despite these challenges, the way is paved for further research incorporating the institutional perspective strongly.

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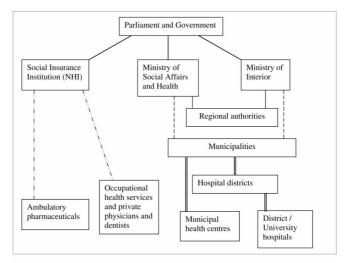
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Appendix A: Description of Finnish healthcare

Local government, currently in the shape of 348 municipalities, plays a leading role both in the provision of care and financing. Municipalities often cooperate to provide services. Approximately 194 municipal health centres provide a wide range of primary, preventive, inpatient and community health services throughout Finland. Viewed from the perspective of primary healthcare arrangements in many other countries, they are large units. On average, municipalities are small in size and therefore need to join federations to fund and manage specialist services. The 20 hospital districts throughout Finland represent such federations.

Finnish healthcare is both more decentralised and more mixed in its funding than in other Nordic countries. Some services are financed by a 'parallel' social health insurance scheme, rather than by general taxation. ⁶² Private (corporate and out-of-pocket) finance accounts for almost 25 per cent of total health expenditure, and private providers play a significant role in the provision of some services (eg dental and occupational health services). Physicians in the public health centres and hospitals are either employed or have spot work contracts (about one-third of all physicians work in both sectors).

Networks in the Finnish healthcare could be classified roughly into six different national networks according to the provision of services. Some actors operate and have a role in various networks, so these networks overlap and interact; nonetheless, ownership, funding and actor-specific business models are different. Municipal health centres form a nationwide network to provide a wide range of primary, preventive, inpatient and community health services. Municipal hospital and specialist services are provided by five university hospitals, 15 central hospitals and about 40 smaller specialised hospitals, which form the hospital and specialists services network. Prescribed drugs and over-the-counter medicines for ambulatory patients are mainly supplied by about 800 independent pharmacy outlets, which form the pharmaceutical services network. Employers in Finland are required by law to provide occupational health services for their employees and insurance for industrial diseases and accidents. Employers can provide these services themselves, or can contract out the responsibility to private providers or to municipal health centres, which jointly form the occupational health services network. Private medical and dental practice form a network of their own, as patients can approach a specialist (only about 7 per cent of all private consultations are with general practitioners⁶¹) directly in the private sector, without referral



Legend: ___ governance, ___ reimbursement, __ state subsidies, ___ ownership and management

Figure A1: Organisation of health services in Finland⁶¹

from a GP, and private specialists can refer patients to public hospitals. Long-term (institutional and home-based) care for the elderly and disabled is provided under the auspices of both the health and social service departments of the municipalities. There is also some private provision, which is often complementary to the public service offer. These public and private provisions jointly form the long-term care network.

Figure A1 provides an overview of the main organisation of health services in Finland.

Strategic networks and the institutional environment A case study of Pharma Industry Finland (PIF)

Timo Järvensivu, Pirjo Lukkari and Paavo Järvensivu

ESSAY 2

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Strategic networks and the institutional environment

Strategic networks

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A case study of Pharma Industry Finland (PIF)

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Abstract

Purpose – The purpose of this paper is to discuss the impact of the institutional environment on strategic networks including their cohesiveness as well as institutional entrepreneurship activities conducted by members of these networks.

Design/methodology/approach – The paper presents a case study of the trade association Pharma Industry Finland (PIF) and its institutional environment.

Findings – Institutional environment and institutional entrepreneurship of a strategic network are intertwined in various ways. Changes in the institutional environment influence the strategic cohesiveness of the network and the mutual goals of its network members. As a result, PIF proactively engages in entrepreneurial activities to realize its interests.

Research limitations/implications – The paper of one network and one institutional environment is limited in generalizability. Further research is needed to explore if similar results can be obtained in other contexts.

Practical implications – In order to be successful, companies should be able to sense and evaluate which matters can be effectively addressed through collective institutional entrepreneurship and/or the company's own entrepreneurial activity.

Originality/value — This empirical study contributes to discussions on the theoretical understanding of strategic networks in relation to institutional environments, institutionally bounded strategizing in networks, and institutional entrepreneurship in business networks.

Keywords Institutional care, Entrepreneurialism, Health services, Pharmaceuticals industry **Paper type** Case study

Introduction

Recent's pharmaceutical industry can be best understood as a network (Compagni *et al.*, 2008; Erat and Zorzi, 2007; Gambardella *et al.*, 2001). Drug innovation, as well as the production, commercialization, and consumption of drugs, involves a variety of actors including different types of firms, research organizations like universities and public and private research centers, financial institutions, regulatory authorities, sociopolitical decision makers, consumers, and professions (Blumenthal, 2004; Studdert *et al.*, 2004; Abraham, 2002; Collier and Iheanacho, 2002; Dukes, 2002; Eaton, 2001; Montaner *et al.*, 2001). Therefore, pharmaceutical business cannot be assessed by looking only at the firms but also at the broader set of institutions and the dynamic interactions between them (Lichtenberg, 2009; Mittra, 2006; Gambardella *et al.*, 2001; Maynard and Cookson, 2001; Earl-Slater, 1998).



International Journal of Pharmaceutical and Healthcare Marketing Vol. 4 No. 3, 2010 pp. 265-281 © Emerald Group Publishing Limited 1750-6123 DOI 10.1108/175061221011076183 Studies on the relationship between institutions and healthcare organizations have shown that institutional features of organizational and business network environments shape the goals and means of different organizational actors (Kirby, 2006; Guo, 2004). Institutional environments are thus an inherent feature of business networks that influence their economic and sociopolitical structures and processes as well as their strategic choices (Zucker, 1986; Oliver, 1997; Lukkari and Parvinen, 2008). While these studies address the interplay between institutions and healthcare organizations, they lack analysis of the interplay between institutions and strategic networks in this field.

This paper examines this interplay in the pharmaceutical industry. First, we analyze the impact of institutional environments on strategic networks and their strategic cohesiveness. Next, we investigate how strategic networks influence institutional environments through institutional entrepreneurship (DiMaggio, 1988; Fligstein, 1997). For researchers of healthcare management, the relevance of this paper lies in the understanding of the pharmaceutical business through consideration of its institutional influencing via strategic networks.

The paper is organized as follows. We start by reviewing how institutional processes affect strategic networks and how institutional entrepreneurship may influence the institutional environment. Then, we present our theoretical framework regarding the interplay between institutions and strategic networks. This is followed by a case study, through which we discuss and extend the framework. Finally, we present our conclusions.

Institutional processes affecting strategic networks

Neoinstitutional theory focuses on the interplay between society and institutions, drawing from the social constructionist approach (Berger and Luckmann, 1967; Zucker, 1977; DiMaggio and Powell, 1983; Meyer and Rowan, 1991; Scott, 2001). It views institutions as social constructs and explains how social reality becomes reinforced, for example, by regulatory processes involving state agencies and professional bodies (Greenwood *et al.*, 2002).

According to Scott and Meyer (1983, p. 149), institutional environments are "characterized by the elaboration of rules and requirements to which individual organizations must conform if they are to receive support and legitimacy." In this paper, we focus on three important processes through which institutional environments affect strategic networks: regulating, validating, and habitualizing (Grewal and Dharwadkar, 2002). Regulating processes work through their interaction with regulatory institutions, which exist to ensure the order, accountability, and continuity of healthcare and social welfare systems (Touhy, 2003). This interaction is characterized by the imposition and inducement mechanisms used by regulatory institutions to influence different market mechanisms. Regulatory institutions can impose direct constraints in the form of authoritative orders or indirect constraints through rigorous rules and regulations (Grewal and Dharwadkar, 2002). When regulatory institutions do not possess the institutional capacity to initiate constraints, they can provide valued incentives. These exercises of power are often beneficial to society at large (Oliver, 1991; Baron, 1989). However, they are likely to force actors in strategic networks to make changes in their operations.

Validating processes involve interaction with normative institutions (such as trade associations and professions) and give rise to standards for socially acceptable behavior

(Baum and Oliver, 1991; Berger and Luckmann, 1967; Pfeffer and Salancik, 1978). Authorization involves the development of rules and codes of conduct by superordinate actors that are considered legitimate and requires subordinate actors to voluntarily seek the approval of the authorizing agent (i.e. trade association or labor union). DiMaggio and Powell (1983) point out that this type of normative pressure is likely to be found in professional sectors and organizations. They argue that because of mimetic or normative mechanisms, organizational decision makers adopt institutional designs and attempt to model their own organizations on patterns that they consider appropriate or professional. Furthermore, the authors point out that legitimacy frequently goes hand-in-hand with success.

Habitualization is a base-level institutional process that gives rise to shared cognitive templates (Meyer and Rowan, 1991). Repeated actions are cast in a pattern, reproduced with minimal effort, and recognized by actors (Zucker, 1983, 1977; Gill and Stern, 1969; Berger and Luckmann, 1967). The two primary mechanisms that facilitate these processes of habitualization are imprinting and bypassing (Grewal and Dharwadkar, 2002). Imprinting refers to the process through which organizations acquire characteristics at the time of their inception; subsequent inertia preserves these features and results in particular structures and performance (Baum and Oliver, 1991). As organizations mature, they may find it difficult to change or to understand the need for change. In addition, cultural control often substitutes for structural control, which results in the bypassing of formal structures and processes (Zucker, 1977). Actors are aware of their role expectations, irrespective of their organizational affiliation (Meyer *et al.*, 1981), and existing interaction practices and processes are consequently preserved over time.

Institutional entrepreneurship

The concept of institutional entrepreneurship refers to the activity of leveraging resources in order to create new institutions or to transform existing ones (DiMaggio, 1988; Fligstein, 1997). The role of individual and organizational activity in institutional entrepreneurship is highlighted through actor positions and relational connectivity between actors (Hargrave and van De Ven, 2006; Gadde *et al.*, 2003). Institutions do not specify a fixed outcome but rather define a context in which actors can produce a wide range of actions and relationships (Burau and Vrangebæk, 2008; Pentland and Rueter, 1994). Institutional entrepreneurs adapt to institutions, modify them, and seek advantageous network positions in order to fulfill aspirations (Maguire *et al.*, 2004, Garud *et al.*, 2002, Lawrence, 1999). Institutional entrepreneurship can yield results by partaking in institutional (re)formation and reacting to institutional changes (Hensman, 2003). Disruptions, such as emerging industry rules or new legislative norms, can facilitate changes in systems of institutions (Selznick, 1957).

Many factors influence the potential for organizations to act as institutional entrepreneurs. In mature and regulated industries, institutional processes tend to stabilize (Greenwood *et al.*, 2002); institutional rules take the form of legislation, explicit codes of conduct, or systemic structures. In a highly institutionalized market, such as the drug market, there is typically an asymmetrical power balance between extant regulative authorities and other actors. However, success is not only contingent on adhering to current rules but also on reacting to opportunities created by institutional disruptions. By influencing new institutions or transforming existing ones, organizations can turn favorable attributes into emerging institutional structures (Maguire *et al.*, 2004).

There is a complex interplay between institutional environments and strategic networks pursuing institutional entrepreneurship. Strategic networks can help organizations by giving them legitimacy in an institutional environment. However, because strategic networks are also seen as institutional arrangements, the organizations within them are critically dependent on the processes of institutionalization and the consensus around activities of institutional entrepreneurship. As Garud *et al.* (2002) conclude, the process of institutional entrepreneurship is fraught with dialectical challenges. First, because mobilizing collective action often creates opposition, entrepreneurs must overcome inertia and take vested interests in the collective. Second, mobilizing collective action is made difficult by legitimacy traps: some will view entrepreneurship as not in the best interest of the field as a whole. In addition, maintaining collective action may be difficult, because others may want to challenge the new institution as it emerges. We propose that legitimacy traps and collective action are strongly linked to the strategic cohesiveness of networks.

Interplay between institutions and strategic networks

The institutional environment, through the processes of regulating, validating, and habitualizing, is likely to influence strategic networks (Figure 1). Strategic networks are also likely to influence their institutional environment, i.e. to engage in institutional entrepreneurship. We will focus on this interplay.

Based on the ideas of Jarillo (1988), Gulati et al. (2000), and Möller et al. (2005), we define a strategic business network as an intentionally developed and managed interorganizational cooperation between three or more organizations for the pursuit of mutually beneficial strategic business goals. Such a strategic network is defined by its intentionality: strategic networks are intentionally created, developed, maintained, and managed (Möller and Svahn, 2003). The existence of these networks is motivated by the pursuit of strategic business goals and benefits. A strategic network is defined by clear boundaries; without a clear understanding of the organizations that belong and do not belong to the network, it is difficult for network members to agree on shared goals. A strategic network often has one or more hub organizations that develop and manage the network as well as other players that have a less visible or less powerful role.

Hub organizations are unlikely to have complete control over the network's strategy, but they can play a key role in how the need for collective action is framed (Rao, 2001); how synergy in vested interests is turned into cooperation; and how collective action is mobilized and maintained (Garud *et al.*, 2002). On the other hand, abusing the role of a hub could initiate a legitimacy trap and decrease the strategic cohesion of the network.

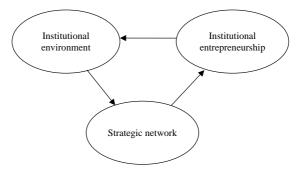


Figure 1.
Theoretical framework: interplay between institutional environment, strategic network, and institutional entrepreneurship

The success of a strategic network is influenced by its strategic cohesiveness, i.e. the degree of mutual understanding and acceptance of a future vision and game plan as well as the degree of framing issues and strategies similarly. If a network is strategically cohesive, then it is more likely to succeed in achieving its strategic goals and vice versa (Möller *et al.*, 2005).

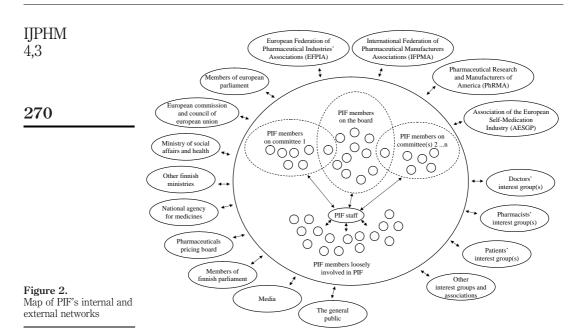
Case study: Pharma Industry Finland

We conducted a case study (Yin, 2003) on Pharma Industry Finland (PIF), a horizontally aligned strategic network. In 2004 and 2005, we interviewed 25 key persons from PIF's internal and external networks, including representatives of pharmaceutical companies, patient organizations, physician's associations, and government agencies. Additionally, we collected secondary material, such as memos, annual reports, and company-specific information. We analyzed the data by finding themes and patterns (Miles and Huberman, 1994) using our theoretical framework shown in Figure 1 (Alasuutari, 1996). One of the authors has 12 years of expertise in the industry, including work with PIF and institutional relationships and regulatory authorities in Finland; this provided direct access to the informants and documents as well as helped to deepen the analysis.

PIF is a trade association that looks after the policy interests of the research-based pharmaceutical industry in Finland. Its objective is to develop the competitiveness of the industry, relevant research and development activities, and the operating environment both in Finland and the EU. Its main target of influence is the economic, industrial, and sociopolitical legislations that govern the pharmaceutical industry. PIF's members represent most of the pharmaceutical companies engaged in research, manufacturing, and marketing of medicinal products in Finland. The case description is based on interview data and documentary analysis of PIF's internal memos, unless otherwise indicated.

Figure 2 shows PIF's internal and external linkages. There are four kinds of actors: member companies represented on the board, member companies represented on committees, member companies more loosely involved in network operations, and PIF staff personnel. The board of directors, expert committees, and staff personnel form the backbone of PIF. The board sets its strategic goals and steers the expert committees and the staff personnel. The 12 seats of the PIF board are held by representatives (usually chief executive officers) of the member companies. The general director of PIF acts as the secretary of the board. The board meets approximately once a month.

The expert committees prepare and implement the strategic decisions made by the board. In practice, this means that the committees make available their expertise and specialized knowledge to the board and staff personnel as requested. Among the expert committees, the Medicines Policy Committee concentrates on issues related to the prices and reimbursements of medicines and sickness insurance legislation; other committees focus on specific sub-goals on PIF's agenda. In addition to its expert committees, PIF occasionally sets up *ad hoc* committees assigned to specific projects, such as drafting of the *Code of Marketing of Medicinal Products*, a guidebook for the voluntary control of marketing medicinal products. The seats of the expert committees are held by representatives of PIF member companies; one seat in each committee is held by a member of the board and one seat by a PIF staff member who also acts as the secretary of the committee.



The role of the PIF staff is to assist the board and take care of the day-to-day operations of the association; to accomplish this, the staff frequently engages in discussions with expert committees. The staff personnel include a general director, director of interest supervision, communications director, director of government and external affairs, and other staff (20 persons in total).

PIF is externally networked with a variety of actors, including its main targets of influence: governmental authorities like the Ministry of Social Affairs and Health (MSAH), National Agency of Medicines (NAM), Pharmaceuticals Pricing Board (PPB), Members of the Finnish Parliament, Members of the European Parliament, European Commission, and Council of the European Union. PIF naturally conducts its public relation activities with the media and the general public. The European and international allies of PIF include the European Federation of Pharmaceutical Industries' Associations, International Federation of Pharmaceutical Manufacturers' Associations, Pharmaceutical Research and Manufacturers of America, and Association of the European Self-medication Industry. Finally, PIF also cooperates with other industrial and citizen interest groups such as doctor, pharmacist, and patient associations.

We identify several networking situations featuring institutional effects and/or institutional entrepreneurship. Five of these are selected for closer study, based on their relative significance for PIF's development as a strategic network. The findings are summarized in Table I.

Effects of the increasing political pressure on costs

Political and economical pressure to cut the cost of medicines in Finland increased in the early 1990s due to recession. One of the industry executives notes that:

Strategi	c
network	S

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Sub-case	Cohesiveness of strategic network before changes	Cohesiveness of Changes in institutional strategic network environment after changes	Cohesiveness of strategic network after changes	Activities of institutional entrepreneurship	Result and conclusion
Effects of the increasing Mutual framing of political pressure the situation on costs Long history of su No need to find a stronger, mutual strategic focus	scess	Increasing political and economic pressure to cut cost of medicine	Realization of inevitable changes. Struggle to find new, more proactive strategy. Different framing of the sistuation emerged that slowed down the	PIF became more proactive in general instead of just reacting to changes in the environment	Environmental changes helped PIF to define its strategic focus as a proactive player
Voluntary control of medicinal marketing	Mutual strategy to avoid strict legislation by having voluntary marketing control	Increasing sociopolitical pressure demanding for a stricter regulation of medicinal marketing	strategy informs Mutual strategy still clear, although some members questioned the unavoidability of making the code stricter	A new, stricter marketing code was made voluntarily by PIF Although all members agreed with the new code, some members did not fully follow the code in their	Success in creating the new marketing code: no new legislation has been drawn However, some disruption in the cohesiveness at the level of marketing practice: threat of a
Generic vs research-based companies	Comfortable, side-by-side cooperation, despite inbuilt tensions between business logics	Sudden introduction of new legislation favoring generic industry leading to entry of foreign, large companies into Finland	Confusion, even panic Lack of mutual strategy and mutual focus Tension of opposing business logics brought to surface	marketing practice Uncoordinated, individual attempts to lobby changes in the new law	legitimacy trap Lobbying was unsuccessful; no changes to the law Generics started their own trade association PIF lost some legitimacy and institutional capacity as an institutional entrepreneur (continued)

Table I. Findings

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Sub-case	Cohesiveness of strategic network before changes	Cohesiveness of Changes in institutional strategic network environment after changes	Cohesiveness of strategic network after changes	Activities of institutional entrepreneurship	Result and conclusion
Proactively changing the pricing, reimbursement, and sickness insurance (PRSI) legislation	NA	Gradual changes in the PRSI system between 1970 and 1998	Mutual understanding of the importance of PRSI legislation In 1998, a mutual agreement of two-level agenda: short- and long-term strategies	Gradual changes in the Mutual understanding Two-level lobbying by Little success with the PRSI system between of the importance of PIF according to the long term strategy, PRSI legislation agreement In 1998, a mutual Some individual window of opportunity agreement of two-level lobbying by PIF has been identified agenda: short- and nembers outside the long-term strategies by individual legislation leading to business interests evolution institutional business interests evolution in the properties of the individual legislation leading to business interests evolution institutional business interests.	Little success with the long term strategy, although a recent window of opportunity has been identified Inability to influence some specific legislation leading to legislation leading to recording institutional
Disruptions and international harmonization of regulation	Habitualized perceptions of how to deal with the authorities No need for a stronger mutual focus	EEA agreement EU and EMEA membership Stricter following of law and negotiation rules by the authorities	Old habitualized action was revised New strategic focus	Old habitualized action New processes to follow Some success was revised up legislative changes (e.g. influence New activities to lobby EU) New strategic focus New activities to lobby EU) New strategic for legislative changes within PIF lear Influence through increased legit EU channels and institution capacity of PII institutional entrepreneur	Some success (e.g. influence through EU) New strategic focus within PIF leading to increased legitimacy and institutional capacity of PIF as an institutional entrepreneur

Table I.

[...] when the costs of the health care system were being controlled, and the gross national product dropped, the share of health care costs of the gross national product went up [...] After this, there was this natural reaction by the governmental authorities that something needs to be done.

This pressure influenced cooperation and strategic cohesiveness at PIF. Members started to realize that changes were inevitable and that the industry needed to redefine its strategic focus. However, this new strategic focus was not achieved easily, because the pressure for change was framed differently among PIF members. In addition, due to imprinting, it was difficult for the members to commit themselves to a new type of collective action. One executive explains that it was difficult to define "the issues that we should look at and [...] the focus on which we should build our strategies."

In other words, the industry's perceptions of the outside world were still bounded by its reasonably long history of continuous success. They had witnessed steady growth and had not yet faced serious challenges that might affect business conditions. It required several years before PIF members understood the need to find a common goal. In the late 1990s, PIF defined its role as a more proactive strategic actor trying to influence the political atmosphere and legislation.

To sum up, increasing political and economical pressure to cut the cost of medicine, which became institutionalized in Finnish society due to the early 1990s recession, helped PIF to find and define its strategic cohesiveness. In other words, the network achieved stronger strategic cohesiveness and mutual understanding due to changes in the institutional setting. As a result, PIF became more proactive as a trade association.

Voluntary control of medicinal marketing

Advertising medicine and medicinal products in Finland was regulated by law and monitored by the NAM. In addition to these legislative regulations, the pharmaceutical industry controlled its marketing practices voluntarily through the Code of Medicinal Marketing. This code was written by PIF based on legislation related to medicinal products, consumers, and competition as well as the International Code of Advertising Practice and the provisions introduced by the EU Directive 2001/83/EC on medicinal products for human use. The reason for this voluntary regulation was to avoid obligatory legislation, which could be stricter. PIF acted as an institutional entrepreneur by creating and maintaining standards for acceptable behavior and validating its institutional capacity to act as the authoring agent. In addition, similar codes of marketing had been drawn in other Nordic countries, indicating the influence of mimicking processes, resulting in isomorphism.

Compliance with the voluntary Code of Medicinal Marketing was monitored by PIF. If a marketing practice was found to break the code, then the company was given a warning, ordered to discontinue the practice, or sanctioned with a fine. Disagreements between companies concerning violations were first examined by PIF before they were brought to the attention of the relevant authorities, namely NAM. The latest code came into force in 2005 and was stricter than its previous versions, mainly due to sociopolitical pressure by the authorities, the public, and the media. Many previously acceptable practices were no longer approved.

At the general level, all PIF members agreed upon the new Code of Medicinal Marketing. At the level of actual marketing practice, however, there was some disruption in the cohesiveness of the industry. Some members found the guidelines to be too tight:

"there were those who thought there was no point in setting too restrictive limits at this stage, because it would limit our [the whole industry's] business." Some companies were accused of not sticking to the marketing code despite their official commitment to it. Some argued that competition in the industry required companies to bend the rules. Some companies were more open to bending the rules than others and had values that allowed them to do so. This type of behavior could lead to a legitimacy trap.

To sum up, the voluntary marketing regulation by PIF represents an attempt to influence the legislation in this field or rather to avoid strict regulation. This is an example of institutional entrepreneurship. PIF members mutually supported this activity, at least on a general level. Increasing sociopolitical pressure influenced PIF to draw a stricter set of voluntary regulations. In some ways, this increased the industry's cohesiveness: they had to work together in order to avoid stricter, obligatory legislation. However, the new set of regulations also stirred some uneasiness among firms, some of which opposed the voluntary regulation and continued to work around it; this negatively influenced PIF's cohesiveness. Overall, however, the industry has been successful in that no new legislation has been introduced. On the other hand, the increased sociopolitical pressure has worked against the industry, since PIF created stricter voluntary normative rules.

Generic vs research-based companies

The majority of PIF members represent research-based companies, but a few are generic companies. Research-based companies focus on discovering, patenting, and marketing new medicines, while generic companies focus on marketing older medicines that no longer have patent protection. Tension arises from the fact that research-based companies benefit from a long period of patent protection, while generic companies benefit from short periods.

For most of the 1990s, generic and research-based companies maintained comfortable, side-by-side cooperation. PIF chose to emphasize a balance between these industries. This benefited patients and society as a whole, because both industries are needed: research-based companies bring new cures to the market, while generic companies help to save costs.

However, not everyone in PIF agreed with this approach. Some felt that it led to indecisiveness and vagueness about PIF's ultimate goals, since vested interests among members were different. Whose business interests was PIF promoting? A juxtaposition existed between member firms. Gradually, generic members started to withdraw from PIF.

This split was triggered by at least two institutional external factors: new legislation favoring the generic industry and the subsequent entry of foreign generic companies into Finland. The new law on generic substitution, which was designed to increase the substitution of higher priced brand products with lower priced generics, came into effect in April 2003. PIF opposed the law, which was prepared by the MSAH behind closed doors. When it was finally brought to the attention of PIF and other interest groups, they were given little time to submit their comments and propose changes. PIF thus could not adequately familiarize itself with the law before it was passed; this spurred confusion among PIF members: "In hindsight, we should have acted more radically [...] We weren't able to put together a unified, swift, shared policy of what we, as an industry, wanted." There was a lack of focus in PIF's lobbying, because the industry was unable to agree on a mutual focus.

As a consequence of this lack of institutional capacity and framing of activities, PIF failed to influence the content of the law; however, this was largely unrelated to the tension between generic and research-based firms. Authorities exercised their coercive power, resulting in imposition. The new law brought the tension between research-based and generic companies to the surface, ultimately driving the generics to start their own interest group. This further eroded PIF's legitimacy as an institutional entrepreneur in the eyes of its members and external actors. The institutional change thus exposed the inability of PIF to find strategic cohesiveness.

Proactively changing the pricing, reimbursement, and sickness insurance legislation Legislation on marketing authorization, pricing and reimbursement of medicines, and sickness insurance (PRSI) is a key lobbying target for PIF. These issues are directly linked to the amount of profits that a pharmaceutical company can make, so they are of great strategic importance to the entire network.

Beginning in the 1970s, PRSI legislation had evolved into a complicated and bureaucratic system. Since 1998, PIF had a two-level agenda for reforming PRSI legislation. As a long-term goal, PIF wanted to replace the current PRSI system with a completely redesigned system in which reimbursements and patient co-payments were calculated based on total annual costs; all medicines would be funded by general taxation in the same way. A short-term goal was to promote changes to the current system, which contained various categories of reimbursements funded by government financing and out-of-pocket payments, governed by the Social Insurance Institution (Järvelin, 2002).

Neither of these two goals took priority over the other, as PIF and its members understood that both goals were equally important. Both were driven by business interests; the only difference being in their timing. It would take time before the new, insurance-based system would be accepted and implemented, so there was a need to patch up the current system first. A fundamental change in the reimbursement system could be initiated in the near future under the current right-wing government appointed in 2007. A recent press release by PIF from 2007 called for action:

Reform of the medicines reimbursement system must start from a clean slate. PIF demands that the Finnish medicines reimbursement system be thoroughly reformed. This was agreed upon in the new Government programme. The pharmaceutical industry wishes that the work be initiated as soon as possible so that the reform can be implemented towards the end of this Government's mandate [2011].

Strategizing within PIF related to PRSI legislation has not been purely cooperative. One reason for non-cooperative behavior is that the current PRSI system benefits some companies more than others, depending on their product portfolios. Some products receive a higher reimbursement rate, which generally makes it easier to sell ambulatory pharmaceuticals. While its members appear to support PIF's argument at the general level, interviews show that, given the chance, each company will speak for its own products to get a higher price or a higher reimbursement rate. As this happens, some member companies question PIF's institutional capacity and perceive its value as decreased. For instance, PIF has not been able to hinder wholesale price cuts, which PPB imposed in the form of 5 percent cuts during the 1990s, with a second round for all reimbursed medicines in 2006. Overall, PIF has been able to construct a cohesive strategy with short- and long-term objectives, but there are signs of disruption among members and the threat of a legitimacy trap.

Disruptions and international harmonization of regulation

The Finnish pharmaceutical market was fairly non-competitive before the 1990s. Relationships between companies and authorities were fairly personal. In accordance with the European Economic Area (EEA) agreement, EU membership, and European Medicines Agency (EMEA), the Finnish market has opened up and experienced rapid harmonization of the regulation pushed through by the Finnish health authorities. This sudden imposition of new constraints caught PIF by surprise; its members did not analyze what these changes mean.

Initially, PIF and its members did not believe that authorities would enforce the changes. The industry was used to settling these kinds of situations through informal discussions with authorities. PIF assumed that business would continue with its prior habitualized action and that existing processes would be preserved: there would be no need to find new strategic cohesiveness as a prerequisite for collective action. With the new EU-related agreements, however, there was no room for discussion, as one of the interviewees described:

We didn't realize what changes the EEA contract would bring along [...] We didn't have any clear agenda, or any clear policy, on what we wanted [...] The industry did not actually believe in the demands.

Eventually, new strategic cohesiveness emerged; habitualized actions were revised; and PIF set up processes to lobby for changes in marketing authorization, pricing, and reimbursement. For instance, according to one of the interviewed executives, the new strategic focus PIF aimed "to make sure that the NAM operated in an efficient manner [...] [and to] monitor the newly founded pricing process." International comparisons were made to show that the Finnish system was not as efficient as it could be.

Another example of new strategic cohesiveness was the appeal that PIF made to the European Commission about the Finnish pricing and reimbursement processes. The European Court of Justice ultimately found that Finland broke the transparency rules of governing decisions on special reimbursements for medicinal products and dishonored given deadlines. One executive praised the collective power of PIF:

I think PIF and influencing via it on the market is the most important channel for us $[\ldots]$ A single company cannot have an eminent position – the field and the trade association are the actors.

The changes in regulative harmonization caused some disruption in PIF, but its members were able to find consensus on how to frame dramatic changes in the environment and how to take advantage of the collective power of institutional entrepreneurship. PIF even found a way to use EU level influence as an institutional entrepreneurship practice. The new focus has brought some success with it, but the most important impact of the environmental changes has been the strengthened focus within PIF, which has increased its legitimacy among its members.

Discussion and conclusions

This paper has examined the interplay of institutional environmental influence on strategic networks and institutional entrepreneurship by the network. To explore this issue, we conducted a case study on PIF, a strategic network of Finnish pharmaceutical companies. We detailed typical dynamics of institutional forces as well as entrepreneurship (Table I). In general, our findings are in line with other studies (Kirby, 2006; Guo, 2004; Zucker, 1986;

Our case study shows how the institutional environment can increase or decrease strategic cohesiveness in a network, thus having a potential impact on the success of collective action. In PIF's case, there were several different types of institutional forces. For instance, increasing cost awareness and tightening regulation helped PIF members to find a mutual strategy, but new legislation also had decreasing effects on PIF's strategic cohesiveness. Most importantly, our study reveals how the influences of the institutional environment on a strategic network and the institutional entrepreneurship activities by the same network are closely intertwined. For instance, voluntary marketing regulation is an entrepreneurial activity by PIF to avoid legislative changes. However, this activity is bounded and influenced by the institutional environment: external sociopolitical pressures have forced PIF to tighten their regulations.

We identify several types of institutional entrepreneurship activities by PIF members. Some of these activities were based on a cohesive, mutual strategy and some were based on a less cohesive strategy. For instance, PIF was united in its efforts to change the PRSI legislation in both the short and the long term. However, in other cases, such as when the law on generic substitution was introduced, PIF's attempts were not united. The cohesiveness of these activities had an impact on the success of institutional entrepreneurship. Failure to mobilize all network members behind common goals can erode the legitimacy of the chosen strategy.

This study has at least three important managerial implications (Table II). First, changes in the institutional environment may cause friction and decrease the cohesiveness of a strategic network. In addition, they may erode the network's position as an institution in the field. In order to be successful, companies and networks must constantly evaluate changes in the institutional environment and assess how these changes will affect them.

Second, companies must evaluate which matters can be dealt with through collective institutional entrepreneurship, or through a company's own entrepreneurial activity, or simultaneous approaches. Available resources, timing, and the strategic value of the

Finding

Institutional changes can increase or decrease the cohesiveness of the strategic network

The cohesiveness of the network's institutional entrepreneurship activities varies; companies can adopt a mutual or a stand-alone strategy for institutional entrepreneurship. Changes in the cohesiveness influence the success of institutional entrepreneurship Failure to mobilize all network members behind a Build capabilities to mobilize other network common strategy erodes the legitimacy of common efforts, ultimately leading to failure in network-wide institutional entrepreneurship

Managerial implication

Build capabilities to sense changes in the institutional environment and assess the impact of these changes on the network, your own company, and other network members Build capabilities to evaluate if a network-wide or stand-alone entrepreneur strategy is more suitable in the face of an institutional change and to strategize effectively when a network-wide strategy is chosen

members behind a chosen institutional entrepreneurship strategy

Table II. Key findings and managerial implications issue at hand may be used as decision-making criteria. However, using an individual strategy of institutional entrepreneurship may undermine the collective power of the network. Some situations may be impossible to solve without network-wide cooperation, so companies must build capabilities to strategize together even on issues where common ground is difficult to find.

Third, companies must acquire capabilities to mobilize networked action in order to seize opportunities for change. Both sensing and mobilization capabilities are inherently dependent on the strength of the relationships that the company has with actors inside and outside of the strategic network. These linkages are two-way routes: they provide early signs of forthcoming institutional changes as well as routes for institutional entrepreneurship.

This paper is limited in its generalizability, as we have looked into only one network and one institutional environment. Further research is needed to explore if similar results can be obtained in other contexts. Moreover, this study highlights the need to understand the interplay between institutions and strategic networks and to mobilize actors toward collective institutional entrepreneurship. As a result, future research should examine in detail the various mechanisms by which pharmaceutical companies can seize these tasks.

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Pharmaceutical marketing through the customer portfolio: Institutional influence and adaptation

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Abstract

This paper discusses the dilemma of managing marketing in institutionalized business contexts. On the basis of a study of pharmaceutical marketing practices it is argued that business aspirations are dependent on understanding institutional influence and adaptation mechanisms on the customer-portfolio level. As relationships are perceived as such mechanisms, understanding network dynamics, institutional co-evolution and actor cognitions are key managerial issues. Furthermore, it is suggested that institutional discontinuities leverage institutional entrepreneurship to a critical extent.

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1. Introduction

In the marketing discipline institutions are often seen as forming a general environment (e.g., Johanson & Mattsson, 1991) in which industrial networks are embedded (Granovetter, 1992). However, they could also be considered an inherent feature of networks, and therefore more than a setting or background (Zucker, 1986; Salmi, 1995; Oliver, 1997). They have an influence on network actors, and institutional bases are imported into companies as underlying invisible assumptions that shape their performance. This paper presents a case study of pharmaceutical marketing practices in Finland, which are built on a strong institutional framework of governance structures. Institutions are thus an inherent feature of business networks, and influence their economic and socio-political structures and processes. This study explores how institutional influence and adaptation characterize marketing practices in the drug business.

Some of the institutional disruptions in the drug market are of international origin and are merely reflected in the local business network. These include the establishment of the European Medicines Agency (EMEA), the European Economic Area agreement (the EEA agreement), and membership of the European Union (EU). Whether the changes in question were on the European or the local level in the business network made surprisingly little difference to the way relationships functioned as channels of influence and adaptation for the MNCs in the evolving institutional environment (e.g., the Pharmaceutical Price Board (PPB) ruling concerning reasonable prices and reimbursement). This suggests that the findings may be transferred – to some extent – to other European countries, even though national health systems do have specific local characteristics.

Institutional disruptions, such as new legislative norms, have been identified as facilitating system changes (Selznick, 1957). As such, they are potential moments of adaptation and influence for institutional entrepreneurs. The focus in this paper is on the drug market in a fairly turbulent institutional context. Fig. 1 illustrates recent major disruptions, which have had a significant effect on the marketing practices of pharmaceutical MNCs operating in Finland.

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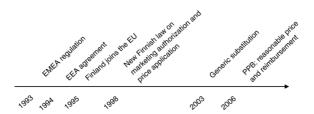


Fig. 1. Recent institutional disruptions in the Finnish pharmaceutical market.

Research on institutional and network dynamics has produced valuable insights into how actor and network dynamics work (Halinen, Salmi, & Havila, 1999; Garud, Sanjay, & Kumaraswamy, 2002), but understanding at the customer-portfolio level in industrial networks needs to be developed. In addition, studies on managing relationships tend to be primarily prescriptively normative and conceptual or theoretical. It therefore appears that empirical research is needed in this area (Olsen & Ellram, 1997). Furthermore, there is a gap in our knowledge of customerrelationship management in institutionalized business contexts, which theoretically anchored empirical research could fill. This paper reports on a descriptive study of how managers structure portfolios and how various industry- and firm-specific characteristics drive the dimensions on which relationship portfolios are developed in drug companies across evolving economic and socio-political structures and processes. The focus is on the interdependencies between various management decisions, with an emphasis on an integrated approach to the management of the company's various business units in the achievement of its longterm objectives (Turnbull, 1990). As in the case of ethical pharmaceuticals, the product pipeline and the current product range drive customer-portfolio management, which functions as a prescriptive guide to the development and maintenance activities of relationship management under institutional disruption. In practice, this means that companies create active relationships with therapeutic opinion-leaders, court prescribers by various means, and promote changes in actor cognitions through information provision, advertising, PR and science-based further education.

2. Theoretical perspectives on institutional interplay

2.1. The institutional environment and its interplay with networks

The concept of embeddedness in this study refers to an actor's relations with and dependence upon different types of networks. These networks form the environment and operate to condition the actions of the actor (an individual or an organizational entity, such as a company or an institution, with an active role in the network), its relationships, and the outcomes it may achieve (Håkansson & Ford, 2002; Halinen & Törnroos, 1998; Håkansson, 1992). As such, conceptualizations of inter-organizational interaction processes and relationships are subject to the perceived environmental context.

The institutional environment could be defined as an entity within the institutionalization process, as corresponding institutions, or as the mechanisms and channels of influence (control and co-ordination) that relate to legitimacy in a particular market; a network of actors embedded in a social system of economic and socio-political forces (Anderson, Håkansson, & Johanson, 1994; Easton, 1992; Hurwicz, 1993). Suchman (1995, 574) emphasizes cognitive belief systems and defines legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." In the case of business networks this definition could be expanded with reference to relational structure. Inter-organizational relationships function as channels of communication and co-operation (i.e. drug-industry-sponsored research in public institutions). They build legitimacy in the eyes of social stakeholders.

Change in the institutional environment could be understood through the analysis of institutionalization processes: regulating, validating and habitualizing (Grewal & Dharwadkar, 2002). The processes of regulating represent evident interaction with regulatory institutions that exist to ensure the stability, order and continuity of societies and social welfare. Such processes are manifested in a market as imposition and inducement mechanisms. These exercises of coercive power or will are often beneficial to society at large (Oliver, 1991; Baron, 1989), but they are likely to force actors in business networks to make changes in their relationship patterns and interaction processes.

Processes of validating involve interaction with normative institutions and give rise to standards for socially acceptable behaviors (Baum & Oliver, 1991; Pfeffer & Salancik, 1978). These processes are manifested via authorization mechanisms and mimicking behavior (Grewal & Dharwadkar, 2002). Mimicking occurs through organizational imitation (e.g., detailing through a sales force that reflects the specialization of the physicians) or modeling by means of norms or practices (the training of sales representatives by the Pharma Industry Finland (PIF) trade association). Authorization involves the development of rules and codes of conduct that are deemed appropriate and require drug companies to voluntarily seek the approval of the authorizing agents (e.g., the trade associations).

Habitualizing processes are the base-level institutional processes that give rise to cognitive institutions: shared cognitive templates (Meyer & Rowan, 1991) in which repeated actions are cast in a pattern, reproduced with minimal effort and recognized by the actors as that particular pattern (Zucker, 1983, 1977; Gill & Stern, 1969; Berger & Luckmann, 1966). The two primary mechanisms that facilitate these processes are imprinting and

bypassing (Grewal & Dharwadkar, 2002). Imprinting refers to the preservation of structures and processes over time: Baum and Oliver (1991) suggest that organizations acquire characteristics at the time of their inception, and that subsequent inertia preserves these features and results in particular structures and processes. As they mature they may find it difficult to change or even to understand the need for change, since some of the structures and processes will have become "sacrosanct", or even symbolic.

Cultural control is often used as a substitute for structural control in highly institutionalized environments, which results in the bypassing of these formal structures and processes (Zucker, 1977). Actors are aware of their role expectations, irrespective of their organizational affiliation (Meyer et al., 1981). Role expectations and definitions (e.g., ethical pharmaceutical companies innovate and create new knowledge) are the same across the network (pharmaceutical market) with its widely shared beliefs (pharmacotherapy will not develop without free knowledge flow between the industry and the physician's profession). As such, existing interaction practices and customer-relationship patterns are preserved in networks.

The interplay between the institutional environment, the network and relationship management is summarized in Fig. 2.

2.2. The customer portfolio as a means of influence and adaptation

The portfolio concept has a wide scope of application in business research (Turnbull, 1990). In contemporary marketing literature the idea of managing relationships as portfolios pertains to the aim of optimizing the resources of the firm and creating value across its customer relationships (Möller & Halinen, 1999; Reinartz, Krafft, & Hoyer, 2004; Johnson & Selnes, 2005). The numbers and types of customers a company has could be viewed as an asset in which to invest (e.g., Storbacka, Strandvik, & Grönroos, 1994; Ryals, 2002), and its range of relationships represents its relationship portfolio (Ritter, Wilkinsson, & Johnston, 2004). The concept of customer-portfolio management

in this paper refers to the development and maintenance of the relationships that ensure the company's future profitability. In the marketing of pharmaceuticals it could be described as a balancedinteraction approach to relationship management, the aim of which is to identify accurately customers' portfolios and the risks related to investments in these customers and the respective returns (Ryals, 2002). Development (design, criteria and efforts to acquire information), analysis, organizational learning and responsiveness build up a unified view of the customer across all contact channels with regard to all customer-facing functions (e.g., clinical research, medical information, and sales and marketing business units) (Reinartz et al., 2004). The chosen identification criteria (e.g., level of investment and related risk) and the outcomes (e.g., future returns) and single-view building processes jointly define the boundaries of customer portfolios (e.g., medical students as potential future prescribers).

Researchers focusing on business networks hold contradictory views concerning the opportunities, restrictions and control they bring to a company. Some argue that these networks cannot be managed or controlled since they represent the outcome of the deliberations, aims and actions of some of the participants, and no company is at the "hub" or is likely to have complete control (Håkansson & Ford, 2002). Others take a less stern view and suggest that relationships and the networks they foster can be managed to a certain extent, concentrating on exploring intentionality within them and the pursuit of shared goals and benefits (Klint & Sjöberg, 2003). A third group of researchers argue that network manageability is contingent on having clear boundaries and a focal hub actor, and their attention has primarily concentrated on network characteristics, the nature of networks as organizations, and intra-network dynamics (Jarillo, 1988). Despite these contradictory views, however, it has been suggested that researchers have reached general agreement on the strategic long-term aspects of the management of relationships (Turnbull, 1990; Ring & Van de Ven, 1994; Plakoyiannaki & Tsokas, 2002). Due to the nature of the drug market, the following general aspects of relationship and network

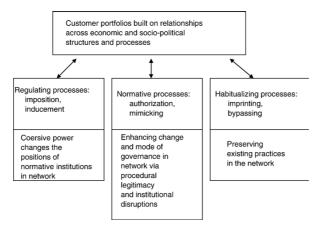


Fig. 2. Outcomes of influencing and adaptation through customer-portfolio management.

development are emphasized in pharmaceutical marketing and the management of customer portfolios:

- Relationships are inherently dynamic and change over time (Håkansson 1992; Möller & Wilson, 1995).
- Network change is generally considered to be most likely during institutional discontinuities (Johanson & Mattsson, 1991; Garud et al., 2002).
- (3) Institutional changes are characterized by co-evolutionary and interactive processes in relationships (Greenwood, Suddaby, & Hinings, 2002; Maguire, Hardy, & Lawrence, 2004).
- (4) Outcomes of institutional change are ultimately filtered through actor cognitions (Rao, Morrill, & Zald, 2000; Lawrence & Phillips, 2004).

Hunt (2002) points out that there is significant ambiguity surrounding relationship and customer-portfolio management decisions: the portfolios are not selected at a particular point in time, but take time to develop. Investments in a customer portfolio should therefore be a function of the underlying firm and industry characteristics (Johnson & Selnes, 2004): what is typical of the pharmaceutical industry, for example, is its slow knowledge- and investment-intensive product development (Pharma Industry Finland, 2006a). The value of any single relationship must also be considered part of the overall portfolio, which contributes in a different way to some total value (Ford et al., 1998). Instead of merely managing individual relationships a company should consider its whole portfolio (Turnbull, 1990). In the highly institutionalized drug market this calls for continuous, intentional networking (Möller & Svahn, 2003).

2.3. Institutional entrepreneurship

Contemporary institutional theory favors a dynamic approach, according to which institutions gradually evolve over time and the role of individual and organizational activity is highlighted (Meyer & Scott, 1992). Garud et al. (2002) refer to institutional entrepreneurship as the active formation of institutions as they emerge (see also DiMaggio, 1988; Fligstein, 1997). This literature also discusses systems of meaning that tie the functioning of institutions together (DiMaggio, 1988; Aldrich & Fiol, 1994). Different actors assume different roles – defining, legitimizing,

combating or co-opting – in different systems (Scott, 1995). Disruptions such as emergent industry rules and new legislative norms have been identified as facilitating changes in institutional systems (Selznick, 1957).

In a number of industries marketing activities are closely related to the institutional and contextual environment in which the businesses operate. Institutional processes tend to stabilize in mature and regulated industries (Greenwood et al., 2002), and institutional rules begin to take the form of legislation, explicit codes of conduct or systemic structures. Where there are heavy institutional regulations and constraints marketing success is contingent not only on adhering to current rules, but also on reacting to opportunities created by institutional disruptions. Institutional entrepreneurship can yield results through partaking in institutional (re)formation and reacting to the changes in order to establish new institutions around the changed setting (e.g., Hensman, 2003).

Relating institutional entrepreneurship to business (or other) outcomes, and particularly business success, requires an understanding of the mechanisms of value creation. The general argument is that by influencing new institutions or transforming existing ones, firms can build favorable attributes into the emerging institutional structures (Maguire et al., 2004). "An opportunity to realize interests that they value highly" has been found to drive activities and thereby the processes of institutional interplay (DiMaggio, 1988, 14). For example, university clinics receive substantial support for their research projects from the drug industry. Success and outcomes have been related to the scarcity of socially constructed subject positions that limit the number of actors and interested parties who can succeed in a single institutional project (Fligstein, 1997; DiMaggio, 1988; Foucault, 1972).

However, marketing success through institutional entrepreneurship requires incorporating two additional value-creation perspectives into this general line of thinking. Both relate to the fact that at the relationship level, institutional-entrepreneurship activities (particularly marketing-oriented ones) are subject to the influence of a diverse network of stakeholders (Maguire et al., 2004). Firstly, such activities need to have a degree of legitimacy among the stakeholder network in order to prevail. Again, this is particularly true in the case of marketing-oriented activities, given the aggravated sense of agency in these high-powered business contexts. Maintaining legitimacy is naturally a constraint, but it can also add to the value creation by revealing the need to visibly expand the market to be divided among the stakeholders.

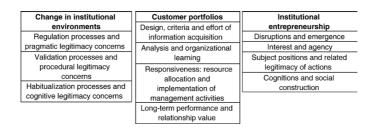


Fig. 3. Emphases of different perspectives on institutional interplay.

Secondly, as is emphasized in marketing research (e.g., Salmi, 1995; Garud et al., 2002), institutional-entrepreneurship activities need to correspond with actor cognitions. Actors and their actions are critically dependent on the surrounding processes of structuration, and this favors emergent strategies and practices (Lawrence, 1999; Lawrence & Phillips, 2004). Both marketing and institutional entrepreneurship are 'regulated' by the way socially constructed realities perceive efforts, and thus institutional interplay needs to be sensitive to stakeholder cognitions.

Fig. 3 summarizes the theoretical discussion. It illustrates the different perspectives on institutional interplay, all of which have an impact on how customer portfolios are managed and structured in evolving economic and socio-political processes.

3. Research approach

Some "prior instrumentation" and structuring of the research design are often desirable. Pure induction without theoretical reference might prevent researchers from benefiting from previous work, just as pure deduction might prevent the development of new and useful theory (Carson, Gilmore, Perry, & Gronhaug, 2001; Miles & Huberman, 1994). The abductive approach to case research (Dubois & Gadde, 2002; Coffey & Atkinson, 1996) is well suited to the examination of why and how real-life phenomena occur (Lee, 1999; Yin, 1994).

In our research we adopted an explicit sampling strategy in order to identify three comparative cases of pharmaceutical MNCs and institutional actors in the Finnish market. The unit of analysis was the case company and its network-customer portfolios, and the boundaries were limited to the organizational field: organizational hat, on the aggregate, constituted a recognized area of institutional life (DiMaggio & Powell, 1983). The virtue of this unit of analysis is that it directs attention to the totality of relevant actors and incorporates both connectedness and the structural aspects of influence and adaptation via intentional networking.

The case companies were deliberately selected on the basis of the postulated theory and could be characterized as:

- major players in the Finnish market (active actors whose joint market share was 26.3% in 2005) with
- somewhat different product portfolios and company profiles and
- (3) an interest in the focal study.

This selection was sufficiently representative in that the companies shared some homogeneous (they were all members of PIF and followed the same normative code for the marketing of medicinal products, for example) and some contrasting characteristics: one was strong in generics and was largely owned by local healthcare professionals, the second dominated certain therapeutic fields and the third covered all major therapeutic sectors. This type of combination is believed to produce information of greater depth than would be the case with homogeneous selection (Knodel, 1993), and some generalizing is justified when general phenomena are under investigation (Stake, 2000; Mason, 1996).

In business studies, the "asymmetrical encounter" of the interview (Green & Thorogood, 2004; Hiller & DiLuzio, 2004;

Fawcett & Hearn, 2004; Holstein & Gubrium, 1995) is in imbalance with the research object, which is usually relatively more powerful than the researcher and strictly controls access to the data. The management's interest in the case facilitates access to the primary and secondary data and provides the basis for active interviewing. As such, this study was not greatly dependent of the whims of organizations' gatekeepers who would seek to limit what could be investigated (Silverman, 2005).

The interviews were collaborative, meaning-making encounters characterized by dialectical analysis of the participants' descriptions and perceptions of 1) inter-organizational relationships, 2) management-relationship practices and 3) the impact of the institutional environment and its changes on customer portfolios and their management practices. The researcher conducted thirty-seven interviews between November 2005 and February 2006, all of which were recorded for analysis. Typically the interviewer opened the dialogue by giving a short presentation of the framework of the study (approximately three-and-a-half minutes of the average 44-minute sessions). She then gave the lead to the interviewees, inserting questions when necessary in order to ensure that all three themes were covered.

The data-analysis process constituted five phases: 1) interpretation and coding, 2) categorization and thematization, 3) the identification of patterns and the drawing of preliminary conclusions, 4) generalizing the conclusions within the data, and 5) considering the generalizations in the light of existing knowledge (Miles & Huberman, 1994). It was a reasoned decision not to build the analysis on the use of a software program as a technical tool for pursuing arguments about data, since it did not yield any new insights or value. The significance of the data is typically established throughout the whole interview dialogue in the diverse examples and descriptions of practices, which are entwined and rich in descriptive key words, multilingual phrases and metaphors. It was therefore appropriate to preserve the flow of the dialogue in this analysis and not to break it up too much.

In taking this approach it is advisable to build various devices into the research design in order to ensure the accuracy of the data interpretation (Silverman, 2005). The interviews took in "both sides of the dyads". The first interviewees were representatives of pharmaceutical companies and included 29 members of senior and middle management, chosen according to their position and responsibilities in the organizational structure, and the function and/or area of pharmacotherapy they represented: eight interviews in company A, seven in company B, and 14 in company C. Secondly, eight interviews were conducted with institutional representatives CEOs of patient organizations, presidents of associations and senior civil servants and directors from government agencies.

4. Institutional change and the evolution of pharmaceutical marketing practices

4.1. Relationships, channels of influence and adaptation during institutional disruptions

The Finnish drug market could be considered a typical example of the European market. It is characterized by the

interplay of 1) tight regulation, 2) strong normative order in terms of professions, trade unions and patient associations, and 3) slowly changing actor cognitions. This set-up directs attention to both the structure of customer portfolios and the legitimacy of the interaction and value-creation processes. The importance of co-operative relationships and interactive channels of communication to both the normative and the regulative institutions was constantly stressed by all parties involved in the interviews. One of the subjects from the institutional side (a National Health Insurance (NHI) director) stated:

"It is essential that we have channels of communication, so that we hear the arguments of others in this field. Otherwise we could easily make decisions that could harm the whole business."

All of the case companies had interactive relationships with the regulative and normative institutions, which are central to their business aspirations (the management of these relationships is allocated to the departments/business units). They also recognize the need to cope with and take action to shape the actor cognitions (corporate responsibility and citizenship issues were highlighted in the marketing strategies). As such, they built up relationships across all three dimensions of the institutional environment and perceived that pragmatic, procedural and cognitive legitimacy concerns were fairly balanced. There were sufficient channels of influence and adaptation to drive the business successfully as an institutional entrepreneur.

As mentioned earlier, however, the institutional environment has been quite turbulent in the Finnish market. The case companies had faced unexpected challenges, which called for adaptation and proactive influencing. The EMEA, the EEA agreement and the EU had a profound influence on the local business network: its procedures and processes of marketing authorization, wholesale and factory licenses, pharmacovigilance and the provision of medical information are all subject to the wider European context. On the other hand, new local regulations such as the factorization of marketing-authorization and price-application processes raise the expertise of the local institutional environment and increase its impact on the local business network. The following comment was made by someone who had worked for over twenty years on regulatory and marketing assignments in one of the case companies:

"Taking care of relationships, building and maintaining them, is at the core of our performance. In contemporary business the right kind of relationships are important... business situations change rapidly [refers to EU legislation, which has changed local import processes]...we are capable of negotiating, adapting...there might be a chance to negotiate more favorable terms. For example, in the last twelve months I have updated [specifies later during the interview: close to ten times] our wholesale license with the National Agency for Medicines [NAM]. It helps when you know these people. For example, when this factory license issue with the imports from non-EU countries came up, it looked as though our operations here in Finland would

come to an end. But then I telephoned this person in NAM and realized that we can work it out..."

Relationships, therefore, are channels of influence and they are also dynamic channels of adaptation for the case companies facing institutional disruptions. For example, the above company was able successfully to settle its wholesale license and import issues by negotiating with the local authorities about what the new EU rulings meant, how they were interpreted in other EU countries, and how they could be interpreted in the case of importing from non-EU countries into Finland. The company acted as an institutional entrepreneur and avoided having to discontinue the import of medicines for clinical research, for example, and was able to carry on business with its customers and research partners.

Another issue highlighted by the participants was the range of relationships and how they were managed as entities and as customer portfolios across business functions. Traditionally legislation and well-established norms have regulated the business to a great extent. They have set a tight framework for legitimate relationship management and for knowledgeintensive co-operation between the industry and the physicians. The changing institutional environment has created new roles for the actors with the imposition of price and reimbursement control systems, for example. Some of these new role constructs have created somewhat contradictory multiple roles for physicians and their professional associations. The professional associations in Finland are considered objective, scholarly opinion-leaders and therefore they carry weight as far as recommendations for pharmacotherapy are concerned. State agencies ask for their expert opinions on marketing-authorization and reimbursement issues, for example, which have a direct impact on market penetration and sales volumes. One marketing director from one of the case companies described their contemporary customer-portfolio-management practices as follows:

"Today the relationship portfolio is a management tool for us, which was not the case earlier... We have organized ourselves in teams by therapeutic sectors, and in these teams some people are responsible for the custom, and other people for the products [refers to clinical research and medical information]. We try to define what needs the customers have and, respectively, what needs our products have. Then we combine these needs so that our information is synchronized and take advantage of these subfields jointly. It is extremely challenging to manage this kind of network, since you can't be quite certain who the decision maker is and what [institutional] position he or she has."

4.2. Procedural legitimacy drives change in the network

The influence of the state as a regulator, and of the professional associations as the validating institutions in the market, was perceived to be unquestionable and profound by all parties in the focal study. Various relationships with existing and emerging institutions in the evolving environment were therefore seen as a

crucial part of the business and as a basis for building up customer portfolios. For example, the aim in the Finnish drug market since 2003 has been to curb the growing public spending on medicines via the NHI through the introduction of generic substitution, which made the drug companies re-evaluate their business relationships with pharmacies. A portfolio director from one of the case companies stated:

"This business is built on customer relationships. The core thing is the definition of the customer in various market situations. Defining the custom is not necessarily unambiguous...it takes only one new law and the custom changes."

Generic substitution and the re-evaluation of custom with the pharmacies has nevertheless led to procedural legitimacy concerns due to the misuse of the Finnish pharmacy system, which was built on regional licensing and nationally fixed maximum prices. Drug companies were buying space by offering discounts, which were not accounted for in the retail prices. Under public pressure the industry accepted a ban on discounts for pharmacies at the beginning of 2006, and customer relationships with pharmacies were again re-evaluated.

Pharmaceutical companies and physicians' associations have a long and strong tradition of co-operation in the knowledgeintensive fields of clinical research and further occupational education. On the institutional side the Finnish Medical Association (FMA) holds the view that the professions of doctor and drug industry cannot be separated from each other:

"It would be an absurd idea, but the interaction between the parties must be transparent... pharmacotherapy will not develop without knowledge flow between the industry and the profession."

Nevertheless, there are strong voices arguing that there is a conflict of interest in this kind of set-up with physicians playing multiple roles in the sensitive issues of severe illness, government spending on drugs, and the personal interests of professionals in gatekeeper positions. The standards of socially acceptable behavior are questioned in the changing institutional environment (see also Blumenthal, 2004; Studdert, Mello, & Brennan, 2004). The legitimacy of physicians' associations derives from the control of institutional information and the degree to which they are considered the leading, objective, expert organizations in the field. This further gives them the ability to strategically influence their environment and the drug business. The data indicates that some of these normative institutions face procedural legitimacy concerns about their socially questionable co-operation and interaction with the drug industry. A rise in institutional discontinuities has been observed, i.e. the deteriorating role of some specialist associations as objective expert organizations and the foundation of the Centre for Pharmacotherapy Development and its physician network to promote rational pharmacotherapy. There have been changes in the interaction processes between actors in the business network (e.g., the resumption of sponsorship for continuing medical education (CME) and specialization courses for students), and a revision of the PIF code for the marketing of medicinal products (Pharma Industry Finland, 2006b).

4.3. Cognitive institutions preserve existing marketing practices

The case companies systematically organize and sponsor various training programs and frequent detailing, which are considered CME for healthcare professionals. This sponsored CME co-operation consolidates interaction with normative institutions (e.g., co-operation with the leading Finnish scientific Medical Society Duodecim) and thereby shapes or preserves existing collective, professional cognitive templates. As a result, cognitive institutions emerge and repeated prescribing actions are cast into a pattern by means of habitual action. Existing relational structures and processes are preserved, and the case companies perceived that the speed of institutional change had slowed down and that its effects were less radical since there was time to adapt and influence.

For example, cognitive institutions in the Finnish drug market seem to hinder the advancement of generic substitution. The interview data indicates that the imprinting mechanism preserves the structures and processes of prescribing, and the bypassing mechanism preserves habitual prescribing by physicians. These mental processes of enactment create stability and stagnation in a dynamic environment. Institutional change is less abrupt and companies have more time to adapt to it by reevaluating their strategic relationships and restructuring the customer portfolios. The following statement by a medical director from one of the case companies describes the habitual action and preservation of structures and processes well:

"Our drug market was split in two when generic substitution started: the generic market and the branded market, on which our business rests ... A change is on the way. But, for time being, the majority of physicians have ignored the whole issue of substitution..."

There were high hopes of boosting the sales of generics with the introduction of substitution in April 2003. Progress has been slow within some therapeutic sectors, and this has had a radical effect on some generic companies with purely price-driven marketing strategies that failed to take into account the influence of the institutional process on the business. These companies were forced to promptly redirect their customer portfolios. A sales director from one of the case companies described this reorientation as follows:

"Since April Fools' day 2003 and generic substitution... generic companies have quickly changed their approach to relationship management. They no longer operate on the "prescriber-customer surface". That's where they started, but they quickly "backed up" from there to the pharmacy-customer interface."

4.4. The coercive power of regulative institutions changes the positions of normative institutions

Regulatory institutions act as interpreters and enforcers of laws, setting the scene for pragmatic legitimacy, and in that role they interact with various actors in business networks. Networks evolve in any field of business when actors exercise their will. In the case of the Finnish pharmaceutical industry, however, regulatory institutions are powerful enough to impose direct constraints by order of the authorities, or indirect constraints via rules and regulations, both of which mean change. Since regulatory institutions possess the capacity to institute legal constraints, they are not inclined to provide valued inducements to influence networks of actors. They are in a position to use coercive power when they perceive that there is a conflict with the societal good or a threat to the best interests of patients. The tolerance of regulatory institutions was stretched, once again, by the relative lack of control of expenditure on drugs in Finland under the NHI (for more details see Leppo, 2002; OECD, 2005). The pharmaceutical price board exercised coercive power in the form of a five-percent cut in wholesale prices for all nationally reimbursed medicines from the beginning of 2006. (Previous price cuts were forced as a result of national, Nordic and European price comparisons within the various ATC categories during the 1990s).

The recurring use of coercive power and imposition by the regulative institutions has eroded the institutional capacity of some contemporary normative institutions and facilitated the rise of new ones. Furthermore, previous impositions have changed the network positions of some actors and restructured the relationship portfolios of pharmaceutical companies. The data from the interviews indicates that some actors are questioning the PIF's capability of influencing economic, industry and socio-policy issues and legislation as the unified association of the research-based pharmaceutical industry. For example, it is perceived that its institutional capacity and its relationship value have decreased. The case companies have reallocated their resources and have forged new, more direct channels of influence to the socio-political opinion-leaders in the market, thereby bypassing PIF with their institutional entrepreneurship. This performance has changed the position of PIF in the strategic nets of pharmaceutical companies, and has influenced the perceptions of other institutional actors in the network. The following descriptive statement on the institutional side came from a civil servant with long-standing experience in the control of medicinal marketing:

"There was a time when drug companies understood the joint interests of the business better than they do today. Companies have become selfish. They focus on their own interests rather than on the joint good of the whole industry under PIF..."

5. Discussion and implications

5.1. Theoretical implications and related managerial ramifications

5.1.1. Dynamic relationships and balanced customer portfolios

The empirical data suggests that there are two sides to the management of relationships as portfolios across companies' economic processes and structures. Firstly, customer portfolios cover the multiple institutional and economic roles of actors. For example, a physician or a pharmacist may be 1) an institutional influencer by being an opinion leader (influence

over national recommendations for pharmacotherapy and/or price issues), 2) a customer with economic value (a prescriber with substantial volumes and/or a purchasing decision maker), and 3) a shareholder of a drug company with a personal interest. Secondly, companies are faced with serving the joint interests of socio-political actors through the institutional processes and structures that enable them to cope with dynamic relationships.

Greenwood et al. (2002) claim that regulative and normative ascendance prevails over actor conformity in a highly institutionalized market, and that shared understanding is crucial. The results of this study indicate that the above-mentioned balanced customer-portfolio management forms the basis of a company's fit into its institutional environment, and thereby may influence prevailing regulative and normative ascendance over actor conformity and shared understanding. It could also give rise to institutional entrepreneurship — the creation of new channels of influence and adaptation for the actors in a network, their intentional networking activity being powered by social, technological, competitive and/or regulatory issues (Déjean, Gond, & Leca, 2004). It is therefore proposed that the range of relationships and how they are managed as a portfolio (e.g., as cross-functional aggregates according to particular pharmacotherapies and across a company's business units) affect how influence is exerted and how adaptation to a changing institutional environment is received. For example, the case companies have adopted new customer-portfolio strategies in order to cope with generic substitution. One has taken full advantage of its traditionally good pharmacy relationships and is increasing investment in them in order to increase its generic business. The other two have taken advantage of cognitive processes and the slow advancement of generic substitution. They are counteracting the declining sales of "patent-expired" products by cutting their further investment in some physician customer relationships, and at the same time are cautiously investing in pharmacy relationships in order to differentiate their products from the competing generic substitutes.

5.1.2. Managerial ramifications

A pharmaceutical company has a choice in determining the extent to which it is the instigator, rather than the target, of normative initiatives and other institutional changes. By continuing to develop and enforce stronger reciprocal relationships between economic and institutional actors companies can actually create value by shaping their institutional environment. The same applies to recognizing the pragmatic, procedural and cognitive legitimacy concerns of co-operation and interaction with other companies in the industry. The results of this study suggest that companies would do well to seek a wide customer portfolio that challenges the conventional boundaries of customership, and to seek benefits through 'lobbying' and co-ordination among competitors.

Furthermore, the range of dynamic relationships with their various socio-political actors facilitates a company's ability to sense institutional disruptions and their emergence. From a marketing perspective, developing this type of sensing is an investment that will result in a better fit with the institutional environment. This translates into responsiveness to change and a better capability of coping with legitimacy concerns.

This study demonstrates that these issues are to do with marketing, and should be treated as critical in terms of the allocation of marketing and business-development resources, for example.

5.1.3. Institutional disruption and network change

Local and European institutional disruptions induce network change by opening it up to new actors and by changing the governance mode to some extent. New actors (e.g., new generic companies) have to achieve legitimacy. As Scott (1995) explains, ideas (e.g., the pricing strategies of generic companies) achieve legitimacy if and as they are adopted by exemplary others (i.e. successful institutional entrepreneurs who sense opportunities and react to institutional changes (Hensman, 2003)) and are thought to provide economic benefits (by setting standards (Garud et al., 2002)). As such, organizations mimic others because they anticipate similar benefits. This widespread mimicry changes the network and its mode of governance, which is characterized by co-operation and reciprocal exchange relationships and trust, differing qualitatively from market and hierarchical modes (Powell, 1990). The interview data indicates that the mode of governance is evolving in the drug business. It has gained and lost some of its hierarchical characteristics (i.e. the influence of the new European authorities over local authorities) and market-like aspects (generic substitution made some relationships more competitive and price became a means of communication). This study highlights the fact that in a business network with an evolving mode of governance success in institutional entrepreneurship is subject to a relationshipmediated capability: the ability to sense and define opportunities or problems related to institutional processes and to understand what needs to be or can be done in relation to the available instruments. For example, the case companies have taken different approaches to their customer-portfolio management and they have utilized the different instruments available to them in coping with institutional disruptions.

5.1.4. Managerial ramifications

The main managerial implication here reflects the standard institutional-entrepreneurship argument indicating that management seeking to induce change in institutions should be sensitive to the emergent discontinuities as they are a critical source of leverage. However, the standard "then what" argument that successful activities relate to actors with sufficient resources who leverage them in order to create or transform institutions (DiMaggio, 1988; Fligstein, 1997; Rao et al., 2000) should be

It is not so much the possession of overwhelming resources as understanding network dynamics, steering institutional co-evolution and satisfying actor cognitions that are key managerial issues in institutionalized marketing contexts. This is naturally also a question of adopting influencing and adaptation strategies. The existence of two different customer-portfolio-management approaches in the case companies – "social capital" and "high-powered incentives" – concerning the same issue demonstrates the variety of responses to institutional change. Institutional strategies based on high-powered incentives are more likely to

require extensive resourcing than strategies based on social capital, which are driven by social skills.

5.1.5. Institutional change as a co-evolutionary and interactive process

The pharmaceutical business is characterized by tight regulation and a strong institutional order, which jointly define the proportions of trust and power and their governance over relationships (Bachmann, 2001). In the focal study the influence of authorization and acquisition mechanisms seemed to enhance the co-evolutionary and interactive nature of change and reinstitutionalization by changing the nature of decision-making, trust and power-dependence in the network relationships. The data suggests that institutional changes have produced new kinds of systems of trust and new power balances by decreasing formalization and centralization in local decision-making. This development highlights the actors' ability to utilize system and personal trust, and to exert system and personal power over customer-portfolio management (Luhman, 1979; Zucker, 1986; Giddens, 1990). The Finnish pharmaceutical market was fairly "closed" during the 1980s and local physicians' associations had strong control over publicly accepted pharmacotherapy practices. Personal trust in and the power of opinion-leaders were notable. Since then, however, the market has "opened up" in accordance with EMEA, the EEA agreement and EU membership. Pharmaceutical companies have also recently developed great industry concentration, and this cohesion of information and interest reveal increasing power to face regulators (system trust and power).

5.1.6. Managerial ramifications

The pharmaceutical industry has created a "mandate" to participate in the dialogue with the regulative agencies. However, regulators and normative institutions in the drug business are also related to the unavoidable political endowment inherent in healthcare systems. Marketing practices are therefore contingent on three related factors in the evolving institutional environment:

- the accessibility of necessary channels of influence and adaptation inside the healthcare socio-political system,
- (2) the legitimacy of objectives and value-creation activities in the eyes of social stakeholders, and
- (3) the degree to which domain consensus exists among the actors in the pharmaceutical business.

Before attempting to derive value from being institutional entrepreneurs companies should check whether the above-mentioned preconditions for successful action are in place. It is customary to claim this is hard to do, but the results of this study indicate that channels can be opened, legitimacy can be improved, and consensus can be reached.

5.1.7. Actor cognitions, regulative cohesion and outcomes of institutional change

The data suggests that cognitive institutional aspects (Meyer & Rowan, 1991) have an impact on the advancement and outcomes of institutional change. For example, they influence how generic

substitution advances through the market, and how it changes the role system and action-scripts of the network. The imprinting mechanism preserves the prescribing structures and processes, and the bypassing mechanism preserves habitual prescribing by physicians. The traditional role system and the action-scripts of the network are also preserved. As such, the coercive imposition of radical change by regulative authorities is proceeding surprisingly slowly and companies have more time and options in adapting to it.

The innovative, ethical pharmaceutical industry aims to create new standards of pharmacotherapy and to shape actor cognition. This institutional-entrepreneurship behavior consolidates interaction with normative and cognitive institutions and ties together the functions of disparate sets (e.g., professional associations, and governmental and municipal healthcare organizations). Simultaneously, the drug market is experiencing industry and institutional cohesion, which is, to some extent, "harmonizing" the institutional environment and its regulative and normative pressure on the business. For example, there have been mergers of global companies and growing co-operation within the industry at the regional level. The establishment of the regional, regulative EMEA organization and the other types of regional co-operation (Canada and the U.S.A., Australia and other parts of Oceania) between national regulative organizations has improved cohesion along the regulative dimension. There are also plans to merge some national regulatory agencies (e.g., Australia and New-Zealand). On the other hand, there are contradicting forces influencing the business. For example, the Centre for Pharmacotherapy Development works through organizational and personal networks to promote and implement evidence-based, costeffective, rational practices. As a state authority (an expert unit under the Ministry of Social and Health Affairs) it has influence over political issues and pharmacotherapy guidelines. Its work has, to some extent, undermined the CME co-operation between the industry and the medical profession.

5.1.8. Managerial ramifications

The study results indicate that understanding and developing institutional influencing and adaptation mechanisms at the customer-relationship-portfolio level is a key success factor for companies. This seems to hold true for institutional entrepreneurship and customer-portfolio management independently. The recommendations are most clear on the relationship level: it appears that relationships are essentially channels of influence and adaptation. Efforts should be made to develop explicit practices (resembling supply-chainor distribution-channel management) involving the use of relationships as institutional marketing channels. Given that the study indicates that cognitive institutions preserve existing marketing practices, the practical activities should be peoplebased and media-mediated, and should exploit public interest (Ulaga & Eggert, 2006).

5.2. Research implications and limitations

The discussion relating customer-portfolio management and networks is still very immature, and the present study yields little evidence of the success of network management. Simultaneous customer-portfolio-management activities by other companies could lead to a near-infinite number of outcome permutations. Therefore, even though the study confirms the power and relevance of customer-portfolio management as an influencing and adaptation mechanism, it does not put forward any grounded recommendations. Performance and manageability merit more attention than they are currently receiving in research on institutional entrepreneurship and relationship management. Success should be grasped as an outcome variable.

It is unclear whether this type of study would benefit more from research on actors and their activities than on institutions, institutional structures and institutional change. The contribution of recent research to management practice has remained at the level of 'increasing understanding about the relevance of institutions' (cf. Greenwood & Suddaby, 2006; Dorado, 2005; Déjean et al., 2004). Research on both individual and organizational actors is inconclusive in terms of whether their activities have any significant impact at all (e.g., Lawrence & Phillips, 2004; Maguire et al., 2004; Munir, 2005; Munir & Phillips, 2005). The same applies to the discussion on network manageability (Ritter et al., 2004). However, the drug market is experiencing institutional cohesion that, to some extent, is "harmonizing" the institutional environment and its pressures on the business. This trend suggests that research on the level of relationships and business networks, rather than of institutions, may be more fruitful since success is often subject to entrepreneurship and the discovery of opportunities. The results of this type of research could perhaps also be more transferable to other countries or regions given the institutional cohesion.

Another problem is that research on relationships, business networks, institutional change and institutional entrepreneurship is based on rather different ontological and epistemological premises. Yet, although some underlying assumptions may conflict, paradigmatic boundaries are often fuzzy and, to a certain extent, permeable (Willmott, 1993; Lewis & Grimes, 1999), thereby facilitating the linking of views created by different paradigms (Gioia & Pitre, 1990; Ritvala & Granqvist, 2006).

This problem is also reflected in the key findings of this paper. For example, in stating, 'The coercive power of regulative institutions changes the positions of normative institutions', the authors are assuming that institutions are self-acting, amorphous phenomena, which can never be wholly captured by research. Nevertheless, as this study indicates, a research agenda building on institutional capability at the relationship level and/or the institutional capability of relationships (not just organizations or individuals) could offer an intelligible avenue for future research.

The present study is also limited by the methodological choice. Interviewing key players and analyzing other company-specific data within a known network limits the findings somewhat to what has already been constructed as the reality about the prevailing institutions ex ante. Future research should avoid stating the obvious and simply writing up what is known about pharmaceutical marketing and using relationship portfolios in known contexts. Comparative research, cross-border studies or slightly more mechanical (perhaps semi-quantitative, semi-qualitative) case studies could increase the objectivity and generalizability of the findings in this stream of research.

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ESSAY 4

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Merger: Institutional interplay with customer relationship management

Abstract

Purpose: This paper discusses institutional influence on customer-relationship-

management (CRM) practices and the restructuring of portfolios during the merger of

two pharmaceutical companies.

Design: An explanatory case study from the perspective of the focal actor.

Findings: Isomorphic pressures and some organizational conditions are identified as

relevant factors in the redefinition of the customer, the outcome of which is the

deinstitutionalization of some CRM practices and the restructuring of customer

portfolios. It is also proposed that procedural legitimacy drives the change within the

network organization.

Limitations: This study is idiographic and explores one case. Further longitudinal

research is needed in order to generalize the findings.

Practical implications: CRM practices are contingent upon how isomorphic pressures

are coped with and how the institutional arrangements are utilized during the merger.

Originality/value: This empirical study contributes to the discussion on institutional

influence on customer relationship management in network organizations.

Keywords: Relationship management, merger, institutional interplay, research paper

1. Introduction

When business organizations mature some of their practices tend to institutionalize, turning into established customs or norms that are taken for granted. This habitualized action tends to preserve structures and processes over time (Baum and Oliver, 1991). In addition, maturing business organizations tend to mimic each other, and isomorphism characterizes the business (Scott, 1987; DiMaggio and Powell, 1983). The merger as a fundamental change of organization could disrupt this institutionalization and mimicking. This explanatory case study addresses the research question of how CRM practices — particularly customer-relationship portfolios - are influenced by isomorphic pressures and deinstitutionalization when pharmaceutical corporations merge.

In the pharmaceutical industry and related application areas various types of strategic alliances, collaborative agreements and licensing strategies are increasingly driving contemporary innovation and marketing management, thereby creating complex relationship networks (Luukkonen, 2005). As with the case company, there are 150 countries in which products are commercialized by subsidiaries and marketing-authorization agreements with other companies. Accordingly, the focal case, which operates in a therapeutic area¹ of the pharmaceutical division of a global chemical and pharmaceutical corporation, is conceptualized as a business network. The integration process primarily involves coping with a variety of customer relationships (Anderson et al., 2003) and their management as portfolios (Lukkari and Parvinen, 2008).

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¹ A branch of medical care pertaining to the cure or the prevention of certain type of diseases, e.g., metabolic disorders.

The issue of change during a merger is considered from two perspectives in this study. Firstly, institutionalized organizational behaviors have been defined as stable, repetitive and enduring activities that become "infused with value beyond the technical requirements of the task at hand" (Selznick, 1957, 17). The force of habit, history and tradition within the organization creates value congruence among the members around the propriety of re-enacted activities; these activities acquire a rule-like status as cognitive templates that render them resistant to change (Meyer and Rowan, 1991). Therefore, the merger is a particularly relevant phenomenon for studying change, because during the integration period the merging organizations are confronted with a new set of practices that could cause them to develop an enhanced awareness of what they do (Lubatkin et al., 1998) and an understanding of the need for change.

Secondly, in the context of merger and acquisition (M&A) research, consequential effectiveness has been included among the motives driving the integration process (e.g., Allen et al., 2002; Havila and Salmi, 2002; Sudarsanam, 1995; Goldberg, 1983; Pfeffer, 1972; Lawrence and Lorsch, 1967; Penrose, 1959). However, given the fundamental interests behind interaction, and the parties involved and the results thereof, management can never know what the counterpart will do and therefore can only anticipate certain types of reaction (Anderson et al., 2001).

If deinstitutionalization is defined as the erosion or discontinuity of an institutionalized organizational activity or practice (Oliver, 1992), then its examination is important for several reasons. Deinstitutionalization or the lack of it may explain some range of status

quo or change in factors that might have an impact on the future success and/or failure of the newborn company. In addition, its causes may explain situations in which e.g., institutional pressures of legitimacy and isomorphism are most or least likely to have an impact on multinational corporations (MNCs).

The results of the focal study indicate that isomorphic pressures have an impact on how the customer is redefined. The outcome of this redefinition is that customer-relationship portfolios are restructured and some relationship-management practices begin to deinstitutionalize in the newborn organization when their legitimacy is questioned. For example, analyses of the interview data revealed that during the integration of resources some habitualized processes and related actor roles were re-typified and new activities and positions were associated with classes of actors. In addition, a set of organizational factors relating to habitualized and mimicking behavior were identified as institutionalized relationship-management practices, which are vulnerable to erosion or rejection over time.

The structure of this paper is as follows. First the theoretical notion of institutional interplay with the management of customer relationships as portfolios is introduced: this provides a basis for the analysis of the empirical data. The research approach is described next. The preliminary analysis facilitated the redefinition of the customer and of customer relationship portfolios. Then the focus moves to the way in which procedural legitimacy drives change within the merging network organization. The conclusions are presented as closing remarks at the end of the manuscript.

2. Institutional interplay

Hurwicz (1993) distinguishes between institutional entities and institutional arrangements, the term institution (e.g., a social institution; organizations or systems of organizations such as companies or corporations) referring to the latter. This distinction is useful in terms of understanding actors' roles and connectivity in the merging network organization. It is only by virtue of an institutional arrangement and its constitutive roles (e.g., property rights and ownership) that an actor in such as organization can act like a person with specifically designated rights and duties when it interacts with other actors (Hardgrave and Van De Ven, 2006) and aims to take over the customer relationship through acquisition.

2.1. Isomorphic pressures

In this study isomorphism is defined as substantial similarity among companies that results from the adoption and diffusion of certain business models, practices, and structures, which are established as a standard and legitimate (Kostova et al., 2008). Further when business organizations become similar to other business organizations in their field of business it tends to enhance the achievement of legitimacy: acceptance and approval by external constituents (Suchman, 1995). This achievement of legitimacy through isomorphism is subject to relational structure and CRM practices, since inter-

organizational relationships function as channels of communication and co-operation. (Lukkari and Parvinen, 2008).

In his recent review of large-scale pharmaceutical M&As Mittra (2007) analyzes the merger waves and the changes in the industry. He points out how the concept of "institutional isomorphism" (Kondra and Hinings, 1998; Scott, 1987; DiMaggio and Powell, 1983), and the account of the mimetic process through which bureaucratic organizations come to appear increasingly similar as rational actors adopt standard responses to uncertainty, nicely capture the ongoing third wave of mergers. According to him, this wave of "corporate imitation" became evident when all the major pharmaceutical companies invested heavily in promissory genomic technologies in order to match their competitors in facing unexpected industry shocks resulting from the emerging new technologies and deregulation. The outcome was a rash of oligopolistic mergers, which "are defensive response to internal weakness, particularly innovation deficit and managerial concerns about R&D efficiency and productivity" (Mittra, 2007, 283). This was also the case with the merger under study: some products in phase three of the clinical trials failed, and a recently launched product was withdrawn from the market². There were managerial concerns about the in-house R&D capability and pressures to mimic the mushrooming of research collaboration with emerging industrial networks of new technologies. Taking over another company enhanced R&D efficiency with promising pipeline and know-how in the context of research collaboration on the innovative frontier of small molecules and biopharmaceuticals.

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² Route of new active substance from discovery to patient access takes typically 10 years of research (acute and chronic toxicity, pharmacology, and phase 1-3 clinical trials) (e.g., Lee, 2004)

However, it is argued in this paper that the constraining process of organizational homogenization is also characterized by competitive isomorphism (Kostova et al., 2008; Hannan and Freeman, 1977). Decision makers have learned the appropriate responses and have adjusted their behavior accordingly (Hannan and Freeman, 1977). Market competition and fitness measures for publicly listed companies characterize decision-making in the global pharmaceutical business, in which there is considerable free and open competition. Consequently, the research question focuses on how the focal newborn organization changed its CRM practices and restructured its customer-relationship portfolios by redefining its customers on account of the competitive and institutional isomorphic pressures it faced during the merger. The data indicates that a process of deinstitutionalization involving some pre-merger practices was initiated, and new interaction patterns were established.

2.2. Deinstitutionalization

Baum and Oliver (1991) suggest that organizations acquire characteristics at the time of their inception, and that subsequent inertia preserves these features and results in particular structures and processes. Some of these practices or processes tend to institutionalize, turning into established customs or norms that are taken for granted (Oliver, 1991). These institutionalized practices or processes may be difficult to change, and could hinder the integration process during the merger, since the actors may not

understand the need for change. Some practices may even have become sacrosanct. On the other hand, the merger could trigger deinstitutionalization.

According to Oliver (1992, 564), deinstitutionalization refers to the "delegitimation of an established organizational practice or procedure as a result of organizational challenges to or the failure of organizations to reproduce previously legitimated or taken-for-granted organizational actions." In the case of mergers, deinstitutionalization could be understood as a process in which the reproduction of pre-merger legitimated or taken-for granted actions is questioned and delegitimated as a result of new institutional arrangements and poor performance, or other internal weaknesses. In addition, organizational and individual cognitive processes could be questioned and delegitimated because of the duality in the institutional structure as agents interact with a wider array of institutions (Seal, 2003). For example, the behavior and decisions of actors in the merger could be influenced by professional interests, and there may be strong tendencies to copy practices from other organizations. According to institutional theory, these kinds of isomorphism are driven by normative and mimetic influences (e.g., DiMaggio and Powell, 1983), but could also be driven by regulative coercion (Seal, 2003) or inducement.

Explanations of deinstitutionalization in the literature are based mainly on changing interpretive schemes and/or institutional resistance to organizational transformation.

Greenwood and Hinings (1988) devised a framework explaining the delegitimation and replacement of interpretive schemes in terms of interaction among contingencies (e.g., the environment), power dependencies and commitment. Barley (1986 and 1990) studied

how the introduction of new technology began to modify and replace institutionalized roles and patterns of interaction, leading eventually to the reconfiguration of the organization's institutional structure. Tushman and Romanelli (1985) adopted the contingency perspective, highlighting how institutionalized beliefs and schemes brought coherence to design archetypes, but also impeded transformation or radical change. Oliver (1992) identified a set of pressures (political, functional, social, entropic and internal) determining the likelihood that institutionalized behaviors will be vulnerable to erosion or rejection over time. Seal (2003) discussed the spontaneous interplay between the wider institutional realm, organizational and individual cognitions, and how isomorphism could be driven by coercion. Although these frameworks have contributed significantly to our understanding of fundamental organizational transformations, they focus less on the relational outcomes. In an attempt to fill this gap this study examines how some pre-merger CRM practices could become deinstitutionalized when the customer is redefined e.g., under isomorphic pressures.

2.3. The restructuring of customer-relationship portfolios

Pharmaceutical companies tend to manage their customer relationships as portfolios in which to invest (Lukkari and Parvinen, 2008). This idea of optimizing the resources of the newborn company and creating value across its customer relationships is highlighted during the merger process (Weston et al., 2004; Hassan et. al., 2007). The numbers and types of customers companies have are evaluated as assets in which to invest for respective returns with a certain level of risk (Johnson and Selnes, 2005; Reinartz et al.,

2004; Ryals, 2002; Möller and Halinen, 1999; Srivastava et. al., 1998; Storbacka et al., 1994). The ranges of relationships across customer-facing functions (e.g., medical information, sales and marketing business units) represent relationship portfolios (Terho, 2008; Ritter et al., 2004). These customer-facing functions tend to operate under business-specific institutional rules in the form of legislation, explicit codes of conduct, and systemic structures when the organizations mature (Greenwood and Suddaby, 2006; Greenwood et al., 2002; Zucker, 1988).

Consideration should be given to these institutional rules during the merger because they could have an influence on how legitimate changes of interaction patterns arising from the restructuring of customer-relationship portfolios are perceived by the parties involved. For example, during the integration process some of the organization-specific administrative heritage and cognitive templates could begin to deinstitutionalize, resulting in the termination of some pre-merger social relationships (e.g., charity sponsorship). On the other hand, socially sound practices, which tend to rely on shared cognitive templates, serve to demonstrate to the environment and related actors that the newborn pharmaceutical division is making a good-faith effort to achieve valued, future ends (Seal, 2003; Suchman, 1995)

Researchers in the fields of business networks and M&A hold opposing views on the question of whether customer relationships can be taken over, and what kind of opportunities and control relationship management brings to a company (i.e. Klint and Sjöberg, 2003; Håkansson and Ford, 2002; Anderson et al., 2001). It is assumed in this

study that customer relationships can be co-operationally managed and taken over in the merger given certain institutional arrangements. For example, the ownership of property rights could mean that an actor would be able to manage some relationships to a certain extent, inducing the desired behavior by means of rewards, for example. However, uncertainty could limit this manageability. Firstly, management can only anticipate what the counterpart will do (Anderson et al., 1998): it could be lured by better prospects offered by a competitor and therefore terminate the relationship, for example. Secondly, the capability to manage relationships could be subject to the unintended results of the free actions of actors who are motivated by implicit and/or latent collective ends (Miller, 2007), which create isomorphic pressures for relational patterns. Members of a business organization might have a commitment to a collective good (improved health or the advancement of pharmaceutical science, for example) as an explicit institutionalized and legitimate collective end, even if it is not a chosen criterion in terms of investing in a customer relationship.

3. Research approach: abductive case study

The aim of the study was to provide an insight into the ongoing interplay between the isomorphic pressures, deinstitutionalization and CRM practices of customer-relationship portfolios. To this end, the abductive case study (Dubois and Gadde, 2002; Coffey and Atkinson, 1996) was considered to be well suited to the examination of why and how real-life phenomena occur (Lee, 1999; Yin, 1994). A focal-actor perspective was adopted in this study of the integration process in a network organization. The focus was on the

change and on the outcomes of the CRM practices arising from the merger, rather than on the merger process per se. Isomorphism was identified from the interview data as descriptions of mimicking behavior and/or adoption of CRM practices and relational patterns, which are perceived to be a standard in the business or which are similar to competitors' CRM behavior. Deinstitutionalization was identified from the interviewees' responses to questions of why some relationships or practices were terminated.

3.1. The sample

An explicit sampling strategy was adopted, since the opportunity to access the data opened up shortly after the launch (January 2007), when the processes of integration and reorganization were under construction. The pharmaceutical business of the case corporation was spread over six therapeutic areas. The unit of analysis used in this study was one of these areas, in which the product ranges of the merging corporations were considered complimentary and synergies were expected with the integration of relationship management and other sales and marketing activities (e.g., cross-selling). Particular reliance was placed on interviews. Nevertheless, in order to decrease dependence on the whims of the organizations' gatekeepers in the asymmetrical encounter, who could potentially seek to limit and control what could be investigated (Silverman, 2005; Green and Thorogood, 2004; Hiller and DiLuzio, 2004; Facett and Hearn, 2004; Holstein and Gubrium, 1995); information was acquired from a variety of sources.

3.2. The interviews

The marketing management in the focal therapeutic area was organized under a global team, which was responsible for the marketing strategies of various product franchises, and also supported the subsidiaries and other business partners with their regional or country-specific marketing activities.

The interviews with the members of the global marketing team were active encounters characterized by dialectical analysis of the participants' descriptions and perceptions of 1) customer relationships, 2) related management practices, and 3) the impact of the merger on both. The author conducted six interviews at the end of October and in early November 2007, all of which were recorded and transcribed for analysis. In each session the interviewer opened the dialogue by giving a brief presentation of the study and describing the institutional context, since the interviewees were not familiar with them. (This description of the main concepts could have biased the study somewhat, but on the other hand it helped the subjects to describe and present their perceptions of habitualized practices.) She then gave the floor to the interviewees, asking questions when necessary in order to ensure that all three themes were covered. The interviews lasted 36 minutes on average.

The seven interviewees were members of the global marketing team and senior managers with extensive experience (10-20 years) of marketing in the merging corporations. They were chosen on the basis of their position and responsibilities in the organizational

structure, and the function and/or area of pharmacotherapy they represented.

Consequently, all major product franchises in the therapeutic area were covered.

Additional information came from corporation documents and personal correspondence

with some key persons involved in relationship-portfolio management and related actor-

facing functions in the HQs and in the Nordic subsidiaries (e.g., R&D, medical

information and regulatory affairs). This verified some conclusions drawn on the basis of

the interviews, and filled in some of the gray areas that remained.

4. Institutional interplay with CRM practices

The emergent deinstitutionalization of some relationship-management practices and the

restructuring of some relationship portfolios as on outcome of the influence of the

isomorphic pressures on the redefinition of the customer could be considered the main

empirical findings of the study. This is illustrated in Figure 1.

Insert Figure 1. about here

4.1. Isomorphism harnesses the redefinition

The interviewees responded that the two merging corporations were managing their customer relationships as portfolios prior to the merger. At first glance of the empirical data gathered not much seemed to change as a result of the integration process, since the aim remained the same: to optimize relational resources and to create value across customer relationships cross-functionally (i.e. between R&D, regulatory affairs, and sales & marketing). However, the merging organizations had somewhat contrasting pre-merger relationship-management practices (e.g., the level of interaction depending on the product, the size and profiles of customer target groups, and corporate cultures). Interviewees highlighted that at the beginning of the integration process the managerial challenge of restructuring and evaluating the relationship portfolios seemed to lie in the ability to recognize and utilize synergies of the integrated resources. In addition they saw that the integration process was mainly subject to the following task-environment factors:

- 1) the therapeutic and technological foci (e.g., on highly specialized and/or general practitioners (GPs), thus calling for differentiated relationship-management practices)
- 2) the pipeline status (e.g., the innovativeness of new products and brand-line extensions in new applications)
- 3) internal synergies (e.g., cross-selling to various customer groups)
- 4) commercial and relational factors (e.g., the estimated value of prescriptions, customer loyalty given unexpected occurrences, and brand strength when the patent expiries).

However, according to several interviewees' responses the pre-merger institutionalization of the CRM practices surfaced as resistance to change. The joint customer relationships in the newborn organization faced new managerial challenges: 1) recognition of the institutionalization and its influence on managerial practices, and 2) the organizational unlearning of some habitualized practices. For example, both merging organizations were characterized by isomorphic business behavior, and were systematically organizing and sponsoring various training programs and frequent detailing as continuing medical education (CME) for health-care professionals. Typically the interviewees described this isomorphism as "a general trend of the pharmaceutical industry" and as "a way every company is doing it [CRM]". This sponsored CME co-operation consolidated interaction with normative institutions (e.g., co-operation with the scientific medical societies of specialists or general practitioners), and thereby shaped or preserved existing collective, professional cognitive templates. As a result, some CRM practices were cast into a pattern by means of habitual action and became resistant to change. There was a need to introduce new unified ways of seeking the approval of the authorizing agents as part of the integration process in order to promote the efficient use of the merged relational resources. One of the interviewees described this as "there is lack of coordination" between different functions [refers to internal cross-functional teams and their CRM practices with e.g., opinion leaders or other key accounts] and we are currently working on to improve this."

Some of the driving forces and pressures in the pharmaceutical industry (e.g., changes in legislation that had shortened the patent-protection time of ethical pharmaceuticals,

which in turn increased the pressure to innovate and decreased the pay-back time of R&D investments) were also identified by the interviewees as enhancing isomorphism. The following factors arose from the data as having an influence on the redefinition of the customer, which resulted in the restructuring of customer-relationship portfolios, and triggered the deinstitutionalization of some relationships:

- 1) increasing innovation pressures
- 2) changing constituent relations
- 3) growing commercial pressures
- 4) new types of domain pressures

Based on the empirical data gathered innovation pressures seemed to increase in the acquiring corporation due to the threat of innovation deficit when new technologies emerged at the industry level. This also changed the constituent relations of the case business network. Thus far there had been reliance on the in-house R&D function in the acquiring corporation, which now faced great challenges and risky investments with the adoption of new technologies. It was considered feasible to revise the R&D function, and to mimic others in the business by investing more in relationships of research collaboration. A company with a promising R&D pipeline and a tradition of research collaboration was taken over. During the integration process this isomorphic action had an impact on how the customer was redefined and the customer portfolios restructured. One of the interviewees described this development as follows: "In the biotech field people are working much more with - for example - with small external research groups. We were not doing this enough within X [refers to the acquiring corporation] in the past.

We were more relaying on our own research capacity...I think we shall go more and more external as well. I think this is a general trend of the pharmaceutical industry, because it is such a difficult to find a new NP [new product] or NC [new compound] and everybody is looking and shopping for them around and that is why companies are targeting to some start-ups..."

It was clear through interviewees' responses that commercial pressures were growing mainly for regulative reasons and due to domain pressures. Especially on brands, which are prescribed by GPs in ambulatory care with high volumes and which are reimbursed by national health insurances, thus having high socio-political interests because of their share of national expenditures on drugs. All interviewees saw that changes in the legislation related to patent protection³ increased commercial pressures in form of shorter patent-protection times, which cut down the pay-back time of R&D investments, boosted the parallel imports and the generic competition from the emerging markets (e.g., India). The maturation of some brands and their level of substitution in the regional, high volume ambulatory care markets were seen as crucial factors influencing the redefinition of the customer and the focusing on specialists instead of GPs. The interviewees admitted that their corporate level CRM strategy was to some extent influenced by the general trend of the industry: the profitability of relationships with GPs was decreasing and it was expected to continue to decrease. Therefore it was seen that relational resources could yield higher profits in the specialist branch. According to the interviewees the outcome was the deinstitutionalization of some long-term CRM practices, the termination of some

³ The Trade Related aspects of Intellectual Property Rights (TRIPS) agreement changed the principles of patent protection and established the patenting of medical substances.

customer relationships, and the restructuring of portfolios in the therapeutic area under study. For example, some R&D and CME projects aiming for the growth in mature, high volume ambulatory care markets were cut down. One of the interviewees described this as: "Yes, the relationships have been changed. In fact we'll do less and less activities in this distinct field. The reorganization has had this impact...life-cycle management of products and at the same time life-cycle management of relationships."

The domain pressures were mentioned to have another effect. One of the interviewees mentioned that the imports from emerging markets were considered the factor to the increased pressure to contain production costs in Western European sites. But, on the other hand he pointed out that there were regional socio-political interests for the protection of European pharmaceutical industry (e.g., employment and growth prospects of innovative high-tech industrial sites). The newborn organization is a major player in the business. Therefore more relational resources should be allocated to political relationships in order to secure influence channels for regional socio-political institutions.

4.2. Procedural legitimacy drives change

During the interviews some interviewees pondered how the pharmaceutical business differs from the other fields of business within the acquiring corporation. They emphasized that pharmaceutical business' outputs and innovative achievements are more socially defined and valued (e.g., in the areas of fertility and contraception). Further, they

saw that some of its outputs are inherently difficult to measure at the time of their inception (e.g., improvements in public health and increased life expectancy as a result of new innovative products). Therefore, it was seen by the respondents that the pharmaceutical industry embraces itself in socially accepted procedures which are a standard in the business, and by doing it fosters procedural legitimacy. One of the respondents described this as follows: "If you speak about pharma industry's relationships with authorities or key opinion leaders or physicians, we have to be very careful with in the way we deal with these types of relationships. These are usually the people who are more sacrosanct than the others...we are in an industry where the image has not always been good..."

The public interest and economic activity at stake

While pondering with the unique characteristics of the pharmaceutical industry the interviewees highlighted its strong institutional framework of governance structures and operational regulation which include a description of the human good that it purports to produce. As with the focal case, part of its mission is framed as: "...we develop therapies for high unmet medical needs. Through their targeted effect, these help patients to live a longer and better life..." (quoted from case-specific promotional material). Thus, public interest and globalized economic activity are at stake, and as one of the interviewees pointed out: they are evidenced in the competing social, political and functional pressures that jointly influence commercial decision-making and customer relationship

management e.g., with further investment decisions on Western European production sites.

Slow knowledge- and investment-intensive product development and life-science innovation were mentioned by the interviewees as other characteristics of the pharmaceutical industry, which are reflected in its CRM and characterizes the information-intensive interaction (e.g., the availability of and ability to utilize the latest medical information) with a great variety of customers and other related actors (e.g., public research institutes, health authorities and patient associations). Several responses of the interviewees verified that the integration process in the focal case was a highly variable management activity: each business relationship was specific in its own way, given the complexity of the network ties. As an example the interviewees mentioned that the merging organizations had fairly different traditions in terms of co-operating with patient organizations due to differences in their product ranges and therapies (life-preserving versus therapies which improve quality of life).

Relationships are reciprocal and take time to develop. Interviewees saw that it is essential to acknowledge that potential economic gains in the institutionalized context are subject to the mutual intention and ability to jointly develop and utilize existing relationships. One of the interviewees described it as "You know when we speak about relationships, which took very long to be built, usually you are very careful to change things."

Therefore, it was high lighted in interviewees' responses that collective reciprocity was considered an only option in the process of restructuring the customer-relationship

portfolio, since management could never know or control what the counterpart would or could do. Certain types of reactions could only be anticipated, since relationships in the public interest (e.g., unmet medical needs and their public funding) could not be subject to acquisition, like companies.

The institutional context highlights standards of socially acceptable action that are subject to the validation of performance. Often this calls for interaction with regulative authorities and authorization by normative institutions. One of the respondents who had years of experience of marketing authorizations and other regulatory issues explained how the co-operation with various regulative and normative parties was re-evaluated during the integration process, the focus being on the efficient utilization of the joint relational resources and organizational learning. He mentioned that e.g., some of the acquired party's successful relationship-management practices involving the regulative authorities were acknowledged, and efforts to establish them as standard procedure across the newborn organization were initiated.

Based on the empirical data gathered it can be summarized that management understanding of the ambiguities involved in coping with changing network connections was essential. The emphasis in the process of relationship integration was on interaction and communication, the aim being to avoid unanticipated consequences for both the merging organizations and other related actors. There was no implicit assumption that taking over another company would also mean acquiring its customer relationships, or that all of its pre-merger relationships would be worth future investment given the

redefined customer. According to the respondents the key role of marketing management and the value of long-term industrial relationships with other actors in the network were recognized in the process of strategy formulation in the newborn company. The redefinition of the customer in the therapeutic area under study was regarded by the respondents as a way of increasing competitiveness and future profits, but also as an activity that would jeopardize and bring to an end some existing customer relationships. Some of these discontinued CRM practices could be characterized as being subject to deinstitutionalization in that an established organizational practice or procedure was questioned and its legitimacy was eroded.

The influence of regional institutions on the global business

All interviewees of the global marketing team underlined that there was significant ambiguity surrounding the regional relationships and customer-portfolio-management decisions. The portfolios were not selected at a particular point in time and for a particular market. There was regional variation in the level of market maturation, and in perceptions of the influence of the institutional context on the business. The customer base and the relationships took time to develop, and they were subject to institutionalization (e.g., habitualization). There was variation in the ongoing influence of the regional (e.g., the European Medicines Agency (EMEA)) and/or country-specific (e.g., local regulative guidelines for medical treatment, and normative codes for marketing practices) institutions. According to the interviewed team the outcome of this was regional and/or country-specific CRM practices. These were challenging to change

and harmonize because some of them had become habitualized prior to the merger, and some were subject to regional isomorphic pressures. One of the interviewees stated that "if you want to utilize the potential globally you have to look at the different regions…cope with differences from country to country."

All global marketing team members admitted that it was challenging to form a unified perception of how to optimize the current and future relational resources of the newborn company, and of how to create value from its relationships by viewing them as cross-regional unified assets. As an example it was mentioned that there was some country-specific variation in terms of: 1) estimating the value of customer relationships; 2) recognizing habitualized relationship-management practices and accepting their deinstitutionalization (the handling of connectedness among actors and actions internally and externally); and 3) recognizing and estimating the impact of regional- or country-specific institutions on the changes: alongside the changing management practices they could have a strong enough effect on local performance to encourage flexibility in the adaptation of the global strategy and the termination of some relationships.

5. Conclusions

Prior research is inconclusive in terms of whether the activities of single actors have any significant impact on the process of institutional change (e.g., Lawrence and Phillips, 2004; Maguire et al., 2004) and whether networks and relationships can be managed (e.g., Håkansson and Ford, 2002; Ritter et al., 2004), and on the institutional relevance of

relationship-management practices (e.g., Greenwood and Suddaby, 2006; Dorado, 2005; Déjean et al., 2004). This paper discussed how perceptions of customer-relationship manageability could be enhanced by focusing on the institutional interplay, and recognizing that institutions have an impact on management practices. The practical contributions of the paper lie in the proposition that CRM practices are contingent upon how the isomorphic pressures are coped with and how the institutional arrangements are utilized by actors during the merger. The newborn multinational network organization has layers of CRM practices. One of these layers comprises the practices mandated by the meta-institutions of health care and may be surprisingly similar across subsidiaries.

Another, consisting of practices mandated by the headquarters, may be subject to pressure from the host country in terms of compliance with and responsiveness to the local normative and regulative domains.

Another managerial ramification is that the possible negative effects of the deinstitutionalization and imposition resulting from changed institutional arrangements tend to be reparable. For example, the right forms of inducement could reverse disenchantment and restore the confidence that has been damaged by the discontinuation of valued traditions. It could also facilitate the collective understanding of new procedures, resources, rights, duties and power relationships in the newborn organization.

Case-study research is particularly welcome in new situations in which only little is known about the phenomenon, and when current theories seem inadequate (Eisenhardt, 1989). It is also strong in the context of change processes in that it allows the study of

contextual factors and process elements in the same real-life situation (Halinen and Törnroos, 2005). However, as with any research there are considerable limitations in the focal study, and further research involving other empirical cases and other types of data is also needed in this field. First, business-network and neoinstitutional theories highlight the time aspect. The unit of analysis used in this study was by its nature dynamic and susceptible to continuous change. Customer relationships form over time, and both the history and future expectations of the involved parties influence how they evolve (e.g., Grewal and Dharwadkar, 2002; Uzzi, 1997; Ring and Van de Ven, 1994). In addition, the constraining processes of organizational homogenization and isomorphism take their time (e.g., Whitley, 2003). Therefore this exploratory study should be extended through the application of longitudinal methods and other tools of process research. Secondly, the complexity inherent in embeddedness, network boundaries and the organizational structure is a weakness. The researcher defined the limits of the network organization a priori on a structural basis (according to the corporate HQs, subsidiaries and other firsttier counterparts of the customer relationships), but the institutional boundaries and contexts are much more vague and porous. Thirdly, the potential for case comparisons is commonly considered important in theory-generating research (e.g., Eisenhardt, 1989; Yin, 1994), and this is lacking in the focal study. Therefore it is not possible to establish a range of generality in order to pin down the conditions under which the findings will recur, as would perhaps be possible with a study involving multiple cases. On the other hand, the pharmaceutical market is going through a period of institutional cohesion (e.g., Mittra, 2006; Blumenthal, 2004). For example, the establishment of regional, regulative co-operation (involving Canada and the U.S.A., Australia and other parts of Oceania) and plans to merge some national regulatory agencies (e.g., Australia and New-Zealand) have increased cohesion along the regulative dimension. This development is, to some extent, harmonizing the institutional context and the pressures it exerts on business. Therefore the findings of this exploratory case study would perhaps be more transferable to other cases in the light of this institutional cohesion.

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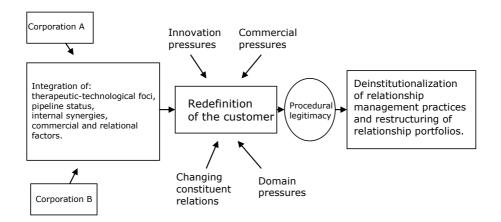
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FIGURE 1

Institutional interplay: the integration of relational resources during the merger of two pharmaceutical corporations.



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