

# **A strategic network and its interplay with the institutional environment: A case study in the pharmaceutical industry**

## **Abstract**

Different institutional bases are imported into business organizations as underlying assumptions and codes of conduct, which frame their marketing practices, have an impact on their performance, and shape markets in which they operate. There is growing, extensive literature theorizing the various characteristics and dynamics of institutional environment and institutional entrepreneurship. The interplay between institutions and business networks as well as how strategizing in networks emerges and is environmentally bounded have been studied to some extent. However, the impact of institutional environment on strategic networks and strategizing in them as well as the institutional entrepreneurship activities by members of these networks seem to have received surprisingly little attention by marketing scholars. Our study focuses on the interplay between institutional environment and a strategic network. We specifically study (1) how the institutional environment influences strategizing in a strategic network and (2) how the network engages in institutional entrepreneurship activities towards changing its institutional environment.

In a case study of the trade association Pharma Industry Finland (PIF) and its institutional environment, we found that the changes in the institutional environment influenced the strategizing of PIF by changing the strategic cohesiveness of the network and the mutuality of goals and interests among the network members. These changes had an influence on the relationship and interaction patterns of the network. Further, we found that the changes in the environment and strategizing had an impact on the institutional entrepreneurship activities of the network members. Through this empirical investigation we contribute to discussions on and theoretical understanding about business networks in relation to institutional environments, institutionally bounded strategizing in networks, as well as institutional entrepreneurship in business networks.

**Keywords:** Strategic networks, institutions, institutional entrepreneurship, pharmaceutical industry

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Different institutional bases are imported into business organizations as underlying assumptions and codes of conduct, which frame their marketing practices, have an impact on their performance, and shape markets in which they operate. There is growing, extensive literature theorizing the various characteristics and dynamics of institutional environment and institutional entrepreneurship. The interplay between institutions and business networks as well as how strategizing in networks emerges and is environmentally bounded have been studied to some extent. However, the impact of institutional environment on strategic networks and strategizing in them as well as the institutional entrepreneurship activities by members of these networks seem to have received surprisingly little attention by marketing scholars. Our study focuses on the interplay between institutional environment and a strategic network. We specifically study (1) how the institutional environment influences strategizing in a strategic network and (2) how the network engages in institutional entrepreneurship activities towards changing its institutional environment.

In a case study of the trade association Pharma Industry Finland (PIF) and its institutional environment, we found that the changes in the institutional environment influenced the competitive strategizing of PIF by changing the strategic cohesiveness of the network and the mutuality of goals and interests among the network members. These changes had an influence on the relationship and interaction patterns of the network. Further, we found that the changes in the environment and strategizing had an impact on the institutional entrepreneurship activities of the network members. Through this empirical investigation we contribute to discussions on and theoretical understanding about business networks in relation to institutional environments, institutionally bounded strategizing in networks, as well as institutional entrepreneurship in business networks.

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## **1 Introduction**

Until the introduction of institutional conceptions, organizations were viewed primarily as production systems and/or exchange systems, and their structures were viewed as being shaped largely by their technologies, their transactions, or the power-dependency relations growing out of such interdependencies (Scott, 1987). For organizations and business networks, environments were conceived of as task environments: as stocks of resources, sources of information, or loci of competitors and exchange partners. While such views are not wrong, they are incomplete. Studies of the relation between institutions and organizations have shown that institutional features of organizational and business network environments shape both the goals and means of different organizational actors. Institutional environments are thus an inherent feature of business networks, and influence their economic and socio-political structures and processes as well as their strategic choices (e.g. Zucker, 1986; Oliver, 1997; Lukkari & Parvinen, 2007).

In this paper we direct our attention to the interplay of institutional environments and strategic networks. The focus is two-fold. First, we analyze how an institutional environment through various institutional processes has an impact on a strategic network and the strategizing within it. According to Scott & Meyer (1983, 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...” Second, we study how the strategic network, as an institutional arrangement, may influence the institutional environment through what is called institutional entrepreneurship (DiMaggio, 1988; Fligstein, 1997).

Our framework is built on a dynamic approach and interplay between institutions and networks: they evolve over time and the role of individual and organizational activity is highlighted through actor positions and relational connectivity between actors (e.g., Hargrave and Van De Ven, 2006; Gadde et al., 2003). Institutions do not specify a fixed outcome but rather define a context from which actors can produce a wide range of actions and relationships (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).

## **2 Institutional processes affecting strategic networks**

There are multiple types of institutional explanations of organizational structure and operations as well as their performance. In this paper we focus on three important processes through which institutional environments affect strategic networks: regulating, validating and habitualizing (Grewal & Dharwadkar, 2002). Regulating processes work through the interaction with regulatory institutions that exist to ensure the order, accountability and continuity of health and social welfare systems (Touhy, 2003). This interaction is characterized by the imposition and inducement mechanisms used by the regulatory institutions in order to influence different market mechanisms. Regulatory institutions are often sufficiently powerful to impose direct constraints, in the form of authoritative orders, or in direct constraints through rigorous rules and regulations (Grewal & Dharwadkar, 2002). Alternatively, when regulatory institutions do not possess the institutional capacity to initiate constraints, they can drive another strategy and provide valued inducements. These exercises of power are often beneficial to society at large (Oliver, 1991; Baron, 1989), but they are likely to force actors in strategic networks to make changes in their operations.

Processes of validating involve interaction with normative institutions (such as trade associations and professions) and give rise to standards for socially acceptable behavior (c.f. Baum & Oliver 1991; Berger & Luckmann, 1967; Pfeffer & Salancik, 1978). Authorization involves the development of rules and codes of conduct by superordinate actors that are considered legitimate, and require subordinate actors to voluntarily seek out the attention and 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 have been shown to adopt institutional designs and to 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 & Rowan, 1991). Typical to organizations is that repeated actions are cast in a pattern, reproduced with minimal effort and recognized by the actors as that particular pattern (Zucker, 1983 and 1977; Gill & Stern, 1969; Berger & Luckman, 1967). The two primary mechanisms that facilitate these processes of habitualization are imprinting and bypassing (Grewal & Dharwadkar 2002). According to Baum and Oliver (1991), imprinting refers to a process in which organizations acquire characteristics at the time of their inception, and that subsequent inertia preserves these features and results in particular structures and performance. As they mature they may find it difficult to change or even to understand the need for change. In addition, cultural control often substitutes for structural control that 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.

## **3 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 by actors who are involved in a particular institutional arrangement (DiMaggio, 1988; Fligstein, 1997). Institutional entrepreneurship can yield results both through partaking in institutional (re)formation and through reacting to institutional changes in order to establish new institutions around the changed setting (e.g. Hensman, 2003). Disruptions, such as emerging industry rules or new legislative norms, have been identified to facilitate changes in systems of institutions (Selznick, 1957).

Many factors influence the possibility of organizations to act as institutional entrepreneurs. In mature and regulated industries, institutional processes tend to stabilize (Greenwood, Suddaby and Hinings, 2002) and institutional rules begin taking 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 still 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 build in favorable attributes into the emerging institutional structures (Maguire, Hardy and Lawrence 2004).

There is a complex interplay between an institutional environment and a strategic network pursuing institutional entrepreneurship. Strategic networks can help organizations in pursuing institutional entrepreneurship 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 consensus around the activities of institutional entrepreneurship.

## 4 Interplay between institutions and a strategic network

The processes of regulating, validating and habitualizing are likely to have an influence on strategic networks. Strategic networks are also likely to try to influence their institutional environment, i.e. engage in institutional entrepreneurship. This interplay is the topic of this paper.

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; these goals of the network may be more or less explicit. Often a strategic network strives to be defined by fairly clear boundaries, meaning that its members should try to gain a mutual understanding of the organizations that belong and do not belong to the network (Klint and Sjöberg 2003). Without clear boundaries, it will be hard for network members to agree on shared goals and, in general, network management will grow difficult. A strategic network often has at least one key player (“a hub”) that often takes the initiative in developing and managing the network, as well as other players that have a less visible or less powerful role in the network; sometimes there may be several more or less equal key players. Still, this does not necessarily mean that a “hub” or “hubs” have total control in terms of the network’s strategy making.

The success of a strategic network is influenced by its strategic cohesiveness. If a strategic network is strategically cohesive – i.e. if its members have a mutual understanding and acceptance of a future vision and game plan – it is more likely to succeed in achieving its strategic goals, and vice versa. In this study we are interested in which ways the institutional environment influences the strategic cohesiveness of a strategic network – and also how the strategic network achieves strategic cohesiveness in their endeavors to influence the institutional environment.

## 5 Case study: Pharma Industry Finland (PIF)

Our study focuses on the interplay between institutional environment and a strategic network. We specifically study (1) how the institutional environment influences strategizing in a strategic network and (2) how the network engages in institutional entrepreneurship activities towards changing its institutional environment. To study these issues we conducted a case study on Pharma Industry Finland (PIF), a horizontally aligned strategic network. We interviewed 25 key persons from PIF’s internal and external networks, i.e. representatives from “both sides of dyads”, including representatives of pharmaceutical companies, patient organizations, physician’s associations, government agencies, etc. Additionally we collected secondary material, such as PIF’s memos, annual reports, and company specific information.

PIF is an industry or a trade association. It looks after the policy interests of the research-based pharmaceutical industry in Finland, with the objective to develop the competitiveness of the industry and relevant research as well as its operating environment both in Finland and the EU. Its main target of influence is the economic, industrial and sociopolitical legislation that governs the pharmaceutical industry. PIF’s circa 50 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 1 illustrates PIF’s internal and external linkages. There are four kinds of actors networked with each other: (1) member companies represented on the board, (2) member companies represented on committees, (3) member companies more loosely involved in network operations, i.e. neither on the board nor on committees, but entitled to participate in PIF activities through information sharing, and (4) PIF staff personnel.

The board of directors, expert committees, and staff personnel form the backbone of the organization of PIF. The board sets its strategic goals and steers the expert committees and the staff personnel. The twelve seats of the PIF board are held by representatives (usually CEOs) of the member companies, so that seven of them represent the ten largest network members and the remaining five represent the other network members. The general director of PIF acts as the secretary of the board. The board meets around 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 by them. Among the expert committees, the *Medicines Policy Committee* concentrates on issues relating to the prices and reimbursements of medicines and sickness insurance legislation, while the others focus on other specific subgoals 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 voluntary control of marketing of 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.

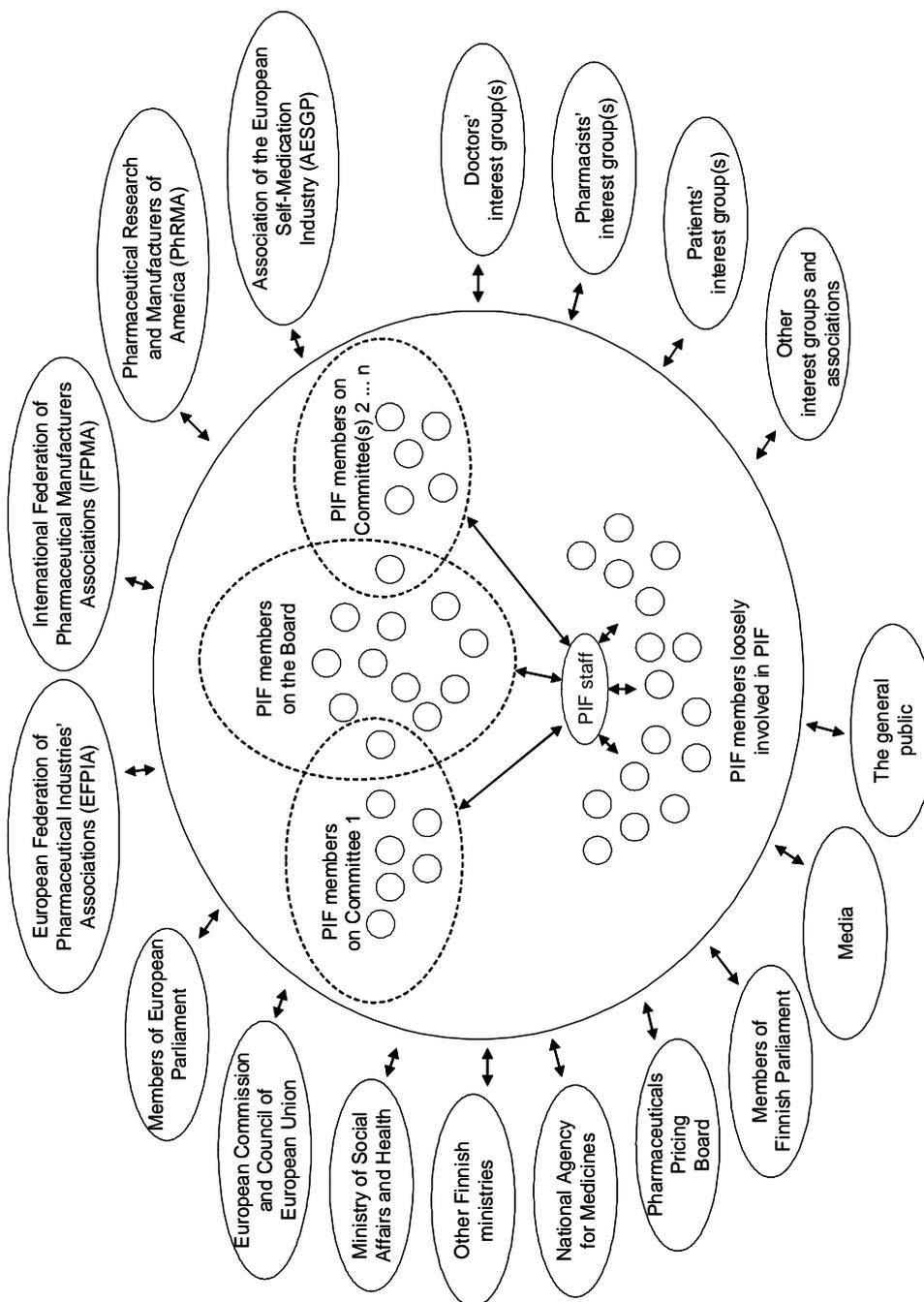


Figure 1: Map of PIF's internal and external networks.

The role of PIF staff personnel is to assist the board and take care of the day-to-day operations of the association. To do this, the staff frequently engages in discussions with the expert committees to access their expertise in the field. 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, such as its main targets of influence: governmental authorities like the Ministry of Social Affairs and Health, National Agency of Medicines, Pharmaceuticals Pricing Board, Members of the Finnish Parliament, Members of the European Parliament, European Commission, and Council of the European Union. PIF naturally addresses its public relation activities also to the media and the general public. The European and international allies of PIF include the European Federation of Pharmaceutical Industries' Associations (EFPIA), International Federation of Pharmaceutical Manufacturers' Associations (IFPMA), Pharmaceutical Research and Manufacturers of America (PhRMA), and Association of the European Self-Medication Industry (AESGP). Finally, PIF also

cooperates with other industrial and citizens' interest groups, e.g. with doctors', pharmacists' and patients' associations.

From the case material we identified several networking situations, or series of events, where institutional effects on PIF and/or institutional entrepreneurship by PIF could be identified. Five of these were selected for a closer study, based on their relative significance for PIF's development as a strategic network. These five sub-cases will be described next.

### **5.1 *Effects of the increasing political pressure on costs***

Political and economical pressure to cut medicine costs in Finland started to rise rapidly due to the recession in the early 1990s, as one of the industry executives noted: "...because of the recession, 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... And after this there was this natural reaction by the governmental authorities that something needs to be done on the medicine costs." This increased pressure had an influence on the cooperation and strategic cohesiveness in PIF. PIF members started to realize that changes were inevitable, and that the industry needed to get a grip of the situation, prepare for the changes and define its strategic focus. However, this newly found strategic focus was achieved neither quickly nor easily. One of the executive notes: "But still at this stage, seeing the focus... what were the issues that we should look at and what was the focus on which we should build our strategies, which our members could commit themselves to... they were still quite deficient."

One of the biggest challenges for the industry was that its perceptions of the outside world were still bounded by their reasonably long history of continuous success: the industry had seen only steady growth and had not yet faced serious challenges that might have affected the business conditions of the pharmaceutical industry. "There was no reason for us to [focus the strategy]... There hadn't been many of these really big issues where the government would have wanted to intervene in the operative environment of the pharmaceutical industry... All of the firms had been growing heavily. All firms' sales were growing." It required several years, up until the end of the 1990s, before PIF members really understood that it needed to find a common factor behind its members' heterogeneous business interests. Gradually PIF thus started to fight back. In the late 1990s PIF finally defined its role as a more proactive strategic actor, trying to influence the political atmosphere and legislation *before* outside pressures would increase, as opposed to a reactive player that it used to be.

To sum up, the increasing political and economical pressure to cut medicine costs, which became quickly institutionalized in the Finnish society due to the early 1990s recession, was in hindsight a factor that helped PIF to find and define its strategic cohesiveness. The network thus became much stronger in terms of both strategic cohesiveness and mutual understanding due to the changed institutional setting.

### **5.2 *Voluntary control of medicinal marketing***

Advertising of medicines and medicinal products in Finland is regulated by law and monitored by the National Agency for Medicines (NAM). In addition to these legislative regulations, the pharmaceutical industry controls its marketing practices voluntarily by its Code of Medicinal Marketing. This code is drawn up by PIF together with its members based on the legislation relating to medicinal products, consumers, and competition as well as on the International Code of Advertising Practice and the provisions introduced by EU Directive 2001/83/EC on Medicinal Products for Human Use. The reasoning for introducing this voluntary regulation is that by having voluntary regulation the industry is better off to avoid obligatory legislation that could potentially be stricter than the voluntary regulation.

Compliance with the voluntary Code of Medicinal Marketing is monitored by PIF. It monitors all marketing of medicinal products to the general public, checks all pertinent magazine and newspaper advertisements from a two-week period four times a year, inspects all radio and television commercials in advance, and monitors marketing activities addressed to health care personnel. On request or by its own initiative PIF will determine whether or not a product has been marketed against the guidelines. If a marketing practice is found to break the Code of Medicinal Marketing, the company concerned may be given a warning, ordered to discontinue the practice, or sanctioned with a fine. Disagreements between companies concerning violations are first examined by PIF before they are brought to the attention of the relevant authorities, namely NAM.

The latest Code of Medicinal Marketing was drawn up in 2003-2004 and came into force in 2005. The new code is stricter than its previous versions, mainly because the overall socio-political pressure, by the authorities, by the public and by the media, had started to demand for stricter marketing regulation for medicines. Many previously acceptable practices were no longer approved, and this was reflected in the new marketing code. The new code also was clearer in stating in detail what is and is not allowed.

At the general level all PIF members have agreed upon the new Code of Medicinal Marketing. At the level of actual marketing practice, however, there has been 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 business." Some companies were accused for not sticking to the marketing code despite their official commitment to it: "...some firms are worse than others, in my opinion... they're much more, you know, free-minded, and more at odds with the boundaries of the laws..." Perhaps the reality is that none of the companies were completely innocent – if not very guilty either.

PIF members mostly argued that the competitive situation required that the companies sought ways to "bend the rules". It was not always, however, the competitive situation that drove PIF members to use more aggressive marketing practices. Sometimes the reason was that some companies were just more open to bend the rules than others; they had values that allowed them to do this: "...If this one firm [that often breaks the rules] had honesty as its value, and also really lived by this value, we wouldn't see them, you know, going around of the marketing regulations."

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 institutional entrepreneurship, and PIF members mutually support this activity, at least at a general level. The voluntary regulation system has worked out quite nicely for the industry. However, the increasing socio-political pressure has had a recent influence on the voluntary marketing regulation: PIF has felt compelled to draw a stricter set of regulations. In some ways this has increased the industry's togetherness: they have had to work together to avoid stricter, obligatory legislation. However, the new set of regulations has also stirred some uneasiness among the firms. Some of them have opposed the tightening voluntary regulation, and have continued to work around it. This has had a negative influence on PIF's cohesiveness. However, overall the industry has been successful in its institutional entrepreneurship: no new legislation has been introduced. On the other hand, other institutional mechanisms beside the legislation, namely socio-political pressure, have worked against the industry: PIF has had to make its own stricter rules.

### 5.3 *Generic vs. research-based companies*

The great majority of PIF members represent research-based companies, but still a few are generic companies. There is an inbuilt tension between these generic and research-based companies, since their business models are built on opposing logics. The research-based companies base their business on discovering, patenting, and marketing new medicines for the duration of the patents. Generic companies, in contrast, base their own business on marketing older medicines that no longer have patent protection. The tension arises from the fact that the research-based industry gains when effective patent protection is long, whereas the generic industry gains if patent protection is short.

However, for the most part of the 1990s the generic and research-based companies were used to a rather comfortable, side-by-side cooperation. Indeed, PIF had officially chosen to emphasize a good balance between the research-based and generic industries. This would, PIF argued, benefit them both as well as the patients and society as a whole, because both are needed: research-based companies bring new cures to the market and the generic business helps to save society's costs later on.

Not everyone inside PIF, however, agreed with this "middle-of-the-road" approach. They felt it sometimes led to indecisiveness and vagueness about PIF's ultimate goals. Whose business interests was PIF promoting? A juxtaposition thus always existed between these member firms. Gradually, generic members have started to withdraw from PIF: "It would be better if, well... if there'd be just one association, which would somehow look for a compromise, that you'd seek the industry's common denominator, which you could support together as an industry. Otherwise we'll be in a situation where the opinions [of generic and research-based members] are too far apart so that certain issues are so important for one [group] of companies, which will then lead to [a situation in which], that you'd operate better as two separate associations... I find that this is the direction we are heading for also in Finland... We are splitting."

The recent splitting of the industry into the generic camp and the research-based camp has been triggered by at least two institutional, external factors. One is the fairly recent entry of foreign, large generic companies into Finland. The other one, perhaps a greater reason and one that has attracted the foreign players into Finland, is that the Finnish government has introduced new legislation favoring the generic industry – such as the law on generic substitution. The new law on generic substitution came into effect at the beginning of April 2003. Until then, Finnish patients had simply bought the medicines that their doctors had prescribed; price had no major effect on the choice of medicine. Now, with the new law, pharmacies were obliged to substitute a medicine prescribed by a doctor with another similar product. Generic and research-based companies, quite naturally, had a different stance to the law on generic substitution, as it affected their

businesses differently. As a consequence of these legislative developments, the generic companies have now indeed established their own interest group to support the new legislation.

Before the law on generic substitution came into force, PIF naturally opposed the law and tried to introduce some key changes to it. However, the law had been prepared by the Ministry of Social Affairs and Health (MSAH) behind closed doors, and when it was finally brought to the attention of PIF and other interest groups they were given very little time to submit their comments on the law and propose changes. The law was introduced this way because MSAH felt compelled to introduce a law on generic substitution since public expenditure into medicinal costs had increased steeply.

PIF was thus given very little time to familiarize itself with the law and comment on it before it was passed, and this spurred confusion, even panic: “Well, at that stage, when we first heard that this [generic substitution] was coming up... In hindsight, we should’ve acted more radically... We weren’t able to put together a unified, swift, shared policy of what we, as an industry, wanted. And we didn’t go ahead with a unified front, but gave these mixed messages.” There was a lack of focus in PIF’s lobbying, largely because the industry was not able to agree on mutual focus and coordination: “Maybe sometimes we had more enthusiasm there than coordination, and lack of focus in communication.”

As a consequence, PIF was unsuccessful to block or change the law. PIF’s failure to influence the content of the law was, however, largely *unrelated* to the tension between generic and research-based firms, because MSAH felt compelled to introduce the law; from the outset the fact was that there was no real room for changing the law. However, PIF’s internal dispute over the law brought the tension between the research-based and the generic companies to the surface, ultimately driving the generics to start their own interest association.

To sum up, there has always been an obvious tension between two groups of actors in PIF. The generic firms’ and research-based firms’ opposing business models are a source of constant juxtaposition, but despite this tension they have for the most part been able to cooperate on most issues. Recent institutional developments, however, exposed this tension. The biggest issue was new legislation that favored especially the generic industry. PIF did not, however, remain inactive when the new legislation was introduced. It tried to lobby for changes in the law fiercely, but was unable to do this in a very focused and coordinated manner. The institutional change thus exposed also the inability of PIF to work together as a focused team that would act on a unified strategy.

#### **5.4 Proactively Changing the Pricing, Reimbursement and Sickness Insurance Legislation**

The legislation on the marketing authorization of medicines, the pricing and reimbursement of medicines, and sickness insurance – which we refer to in this study as “PRSI legislation” – forms the primary area of activity of PIF. There are three basic issues of primary interest to PIF, namely: (1) obtaining marketing authorizations, (2) getting approved prices, and (3) having reimbursements for all medicines. These three issues are directly linked to the amount of sales and profit a pharmaceutical company could make in Finland, and so they are of great strategic importance to the whole PIF network.

The PRSI legislation dates back to the 1970s, it is complicated, bureaucratic and involves numerous details that call for PIF’s attention. Since 1998, PIF has had a general two-level agenda for reforming the PRSI legislation. As a long-term goal, PIF wants to replace the current PRSI system with a completely redesigned system, “an insurance-based system” or “a model based on patients’ annual costs” – a system where reimbursements and patients’ co-payments are calculated based on total annual costs so that all medicines would be funded by general taxation in the same way. A more short-term goal is to promote changes to the current system, which is not a genuine insurance-based system but a complex system of various categories of reimbursements funded by government financing, out of pocket payments, and governed and calculated by the Social Insurance Institution (SII) (for more details see e.g., Järvelin, 2002).

Neither of the above two goals of PIF has priority over the other, as PIF and its members understand both goals as equally important. Both are driven by business interests, and the only difference between them is in their timing. It will take time before the new, insurance-based system will be accepted and implemented, so there is a need to patch up the current system before the new system is a reality. But, the fundamental change of the reimbursement system could be initiated in the near future under the current right wing government appointed in 2007. The recent press release by PIF (PIF, 2007) calls 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].”

On the other hand, the strategizing game within PIF is not purely cooperative. Instances of competition can be identified. One of the reasons for competitive behavior within PIF was that the current

PRSI system benefited some companies more than others, depending on their product portfolios. Some products got a higher reimbursement rate than others and, in general, the higher the reimbursement rate the easier it is to sell the ambulatory pharmaceuticals. Hence, while its members appeared to support PIF's argumentation at the general level, interviews showed that, given the chance, they would speak especially for their own products to get a higher price or a higher reimbursement rate as described by one of the interviewees: "We've competed more over which therapy-group medicines are reimbursable with the basic or the special rate... --- So here we have perhaps more friction [between PIF members in the current system], because the members are not equal in that... --- In an insurance-based system you wouldn't have this contradiction..."

Our analysis also indicates that some member companies are questioning to some extent PIF's institutional capacity and perceive that its relationship value has decreased, e.g., since it has not been able to hinder the wholesale price cuts. The PPB exercised coercive power in the form of a five-percent wholesale price cuts during the 1990s and second round for all reimbursed medicines from the beginning of 2006. One of the interviewed executives highlighted this view as: "In our society the focus should be shifted higher up in the political and labor market discourse ...The pharma industry has failed to communicate..."

### **5.5 Disruptions and International Harmonization of Regulation**

The Finnish pharmaceutical market was fairly "closed" before the 1990s. Personal trust in and the power of opinion-leaders were notable. In accordance with the European Economic Area agreement (EEA-agreement), EU membership and European Medicines Agency (EMA), the Finnish market has "opened up" and experienced rapid harmonization of the regulation pushed through by the coercive power of Finnish health authorities. This sudden imposition of direct constraints caught PIF by surprise.

In 1994 Finland signed the EEA-agreement and the PRSI system changed so that the marketing authorization process and the pricing-reimbursement processes were split in two. PIF and its members had not really analyzed what the change. One reason why PIF and its members did not seem to take the new situation seriously enough was that they did not believe that the authorities really meant to enforce the changes. After all, the industry was used to settling these kinds of situations by having informal discussions with the authorities. This time, however, the authorities were in earnest about following the law and the regulations, and there was no room for discussion, as one of the interviewees described: "But 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. And after the EEA contract came into force and this PPB was founded... And even though the PPB organized this information session about what are the demands of the new application processes, and these demands were also on paper, even at this point the industry did not actually believe in the demands. We thought that everything would go on as before, you know, via negotiations."

After a while, the situation normalized and new strategic cohesiveness emerged with new goals and interests. PIF set up processes to follow up and lobby for changes in the processes of marketing authorization, pricing, and reimbursement, e.g., international comparisons with the claim that the Finnish system is not as efficient as it could be. This was described by one of the executives as: "...then we naturally started to try to make sure that the NAM operated in an efficient manner in approving marketing authorizations...And the other element is that we started to monitor the newly founded pricing process, you know, as they founded this PPB."

The EEA-agreement and the EU-membership triggered off the on-going debate and authorities' interpretations: to what extent health care is or should be a local issue? The establishment of EMA has had a profound influence on the harmonization of local procedures and processes of marketing authorization, pharmacovigilance and provision of medical information. But, some local variety still exists (e.g., the two-year mandatory waiting period of new medical substances for national reimbursement) and has a profound impact on the mutuality of goals and interests within PIF. For example, prior 1995 the patent legislation was only for the production method of pharmaceutical substances. The Trade Related aspects of Intellectual Property Rights (TRIPS) -agreement changed the principles of the patent protection and established the patent of medical substances, which had a great impact on the domestic, generic production and leveled down legislative obstacles to the generic substitution. TRIPS-agreement caused also friction within PIF and disrupted the strategic cohesiveness among the members. 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..."

This aim for the regulative harmonization across the EU causes disruptions in the Finnish institutional environment and they are potential moments of influence for institutional entrepreneurs. Drug companies

have developed great industry concentration, and this cohesion of information and interest reveal increasing power to face regulators with system trust and power. One of the interviewees from the institutional side (a SII director) stated: “It is essential that we have channels of communication ... Otherwise one could easily make decisions, which could harm the whole business...We all serve the same customers. Without well-functioning dialogue this field would soon get inflamed. There are so many strong and influential actors in this business...” In case of PIF’s institutional entrepreneurship activities this favors emergent strategies and practices in manipulating the local channels of influence and to urge the change (e.g., PIF appealed to the European Commission, which complained to the European Court of Justice. Its judgment was favorable for PIF: Finland breaks the transparency rules of governing in decisions on special reimbursements for medicinal products and does not honor given deadlines). The following comment by an executive praised this collective power of PIF: “I think PIF and influencing via it 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.”

## **6 Conclusions and discussion**

In this paper we are interested in the interplay of the influence of institutional environment on a strategic network and institutional entrepreneurship by the network. To explore this issue we conducted a case study on Pharma Industry Finland, a strategic network of Finnish pharmaceutical companies. We found several different examples institutional forces as well as entrepreneurship.

In general, our case study shows how the institutional environment can have clear impacts on the strategy making inside a strategic network. In PIF’s case, there were several different types of institutional forces that either increased or decreased PIF members’ strategic cohesiveness. For instance, tightening cost awareness as well as related tightening regulation forced PIF members to find a tighter common focus, a mutual strategy. On the other hand, some new legislation, e.g. the legislation on generic substitution, also had a decreasing effect on PIF’s strategic cohesiveness.

We also identified several different types of institutional entrepreneurship activities by PIF members. Some of these activities were based on a cohesive, mutual strategy by PIF members and some were based on less cohesive strategy. For instance, PIF was well united behind its efforts to change the PRSI legislation in both short and long run. However, in some cases such as when the law on generic substitution was introduced, PIF’s attempts at changing or blocking the law were not united; on the contrary, PIF members’ activities to lobby legislators were uncoordinated and chaotic.

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 may be closely intertwined – each having an influence on the other. For instance, the voluntary marketing regulation is an entrepreneurial activity by PIF to avoid legislative changes. However, this activity is itself bounded and influenced by the institutional environment: the tightening external socio-political pressures have forced PIF to tighten their voluntary marketing regulations.

Our study thus shows that the institutional environment and the institutional entrepreneurship of a strategic network are closely and diversely intertwined. This has many managerial implications. For instance, exercises of coercive power by the regulative institutions may cause friction and decrease the cohesiveness of a strategic network. This may reflect into the perceptions of the network as a unified, mutually cohesive strategic unit. In addition these exercises of authorities’ coercive power may erode to some extent the network’s position as a (normative) institution in the field.

In order to be successful companies should be capable to sense and evaluate which matters could be effectively dealt with collective institutional entrepreneurship, utilizing the collective power of the strategic network, and which matters could be solved more effectively by a company’s own entrepreneurial activity. A third option would be to use both approaches. For example, available resources, timing and strategic value of the issue at hand may be used as decision making criteria.

## **References**

- Baron, D. P. (1989), Design of regulatory mechanisms and institutions, in Handbook of industrial organization 2, R. Schmalensee and R. Willig, eds., North Holland, Amsterdam, pp 1347-1439
- Baum, J. A. C. & Oliver, C. (1991), Institutional linkages and organizational mortality. *Administrative Science Quarterly*, 36 (2), 187-218
- Berger, P. & Luckmann, T. (1967), *The social construction of reality*, Doubleday, New York, U.S.A.
- DiMaggio, P. J. & Powell, W.W. (1983), The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-160

- DiMaggio, P. J. (1988), Interest and agency in institutional theory, in Zucker L. G. (ed.), *Institutional patterns and organizations: Culture and environment*, Ballinger, Cambridge, MA, U.S.A., pp 3-22
- Fligstein, N. (1997), Social skill and institutional theory, *American Behavioral Scientist*, 40, 397-405
- Gadde, L.-E., Huemer, L. and Håkansson H. (2003), Strategizing in Industrial Networks, *Industrial Marketing Management*, 32 (5), 357-364.
- Garud, R., Sanjay, J., and Kumaraswamy, A. (2002), Institutional Entrepreneurship in the Sponsorship of Common Technological Standards: The Case of Sun Microsystems and Java, *Academy of Management Journal* 45 (1), 196-214.
- Gill, L. E. & Stern, Louis W. (1969), Roles and role theory in distribution channel systems, in *Distribution channels: Behavioral dimensions*, L.W. Stern, ed., Houghton Mifflin Company, Boston, pp 22-47
- Greenwood, R., Suddaby, R. & Hinings, C. R. (2002), The role of professional associations in institutional change, *Academy of Management Journal*, 45, 58-80
- Grewal, R. and Dharwadkar, R. (2002), "The Role of the Institutional Environment in Marketing Channels", *Journal of Marketing*, Vol 66 No 3, pp. 82-97
- Gulati, R., Nohria, N., and Zaheer, A. (2000). "Strategic Networks." *Strategic Management Journal*, 21(3), 203-215.
- Hargrave, T. J. and Van De Ven, A. H.(2006), A Collective Action Model of Institutional Innovation, *Academy of Management Review*, 34 (4), 864-888.
- Hensman, M. (2003), Social Movement Organizations: A Metaphor for Strategic Actors in Institutional Fields, *Organizational Studies* 24 (3), 355-381
- Jarillo, J. C. (1988). "On Strategic Networks." *Strategic Management Journal*, 9(1), 31-41.
- Järvelin J. (2002), Health Care Systems in Transition - Finland. European Observatory on Health Care Systems, 4(1), <http://www.euro.who.int/document/e74071.pdf>
- Klint, M. B., and Sjöberg, U. (2003). "Towards a Comprehensive SCP-model for Analysing Strategic Networks/Alliances." *International Journal of Physical Distribution & Logistics Management*, 33(5), 408-426.
- Lawrence, T. B., and Phillips, N. (2004), From Moby Dick to Free Willy: Macro-Cultural Discourse and Institutional Entrepreneurship in Emerging Institutional Fields, *Organization* 11 (5), 689-711.
- Lukkari, P. & Parvinen, P. (2007), Pharmaceutical marketing through the customer portfolio: Institutional influence and adaptation, *Industrial Marketing and Management*, doi:10.1016/j.indmarman.2007.08.003
- Maguire, S., Hardy, C. & Lawrence, T. B. (2004), Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada, *Academy of Management Journal*, 47 (5), 657-679
- Meyer, J. W. & Rowan, B. (1991), Institutionalized organizations: formal strategy as myth and ceremony, in *The New Institutionalism in Organizational Analysis*, W. Powell and P. DiMaggio, eds., University of Chicago Press, Chicago
- Meyer, J. W., Scott, R. W. & Deal, T. E. (1981), Institutional and technical sources of organizational structures, in *Organization and human services*, H. D. Stein, ed., Temple University Press, Philadelphia, pp 151-178
- Möller, K., Rajala, A., and Svahn, S. (2005). "Strategic Business Nets - Their Type and Management." *Journal of Business Research*, 58(9), 1274-1284.
- Möller, K., and Svahn, S. (2003). "Managing Strategic Nets: A Capability Perspective." *Marketing Theory*, 3(2), 209-234.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16 (Jan.), 145-179
- Oliver, C. (1997), The Influence of Institutional and Task Environment Relationships on Organizational Performance: The Canadian Construction Industry, *Journal of Management Studies* 34 (1), 99-124
- Pentland, B. T. and Rueter, H. H. (1994), Organizational Routines as Grammars of Action, *Administrative Science Quarterly* 39 (3), 484-510
- Pfeffer, J. & Salancik, G. R. (1978), *The external control of organizations*. Harper & Row, New York
- PIF (2007), see: [www.pif.fi](http://www.pif.fi)
- Scott, W. R. (1987), The adolescence of institutional theory, *Administrative Science Quarterly*, 32, 493-511.
- Scott, R. W. & Meyer, J. W. (1983), The organization of societal sectors, in *Organizational environments: ritual and rationality*, J. W. Meyer and W. R. Scott, eds., Sage, Beverly Hills CA., U.S.A., pp. 129-153.
- Selznick, P. (1957), *Leadership in Administration: A Sociological Interpretation*. Harper & Row, New York
- Touhy, C. (2003), "Agency, contract, and governance: shifting shapes of accountability in the health care arena," *Journal of Health Politics, Policy and Law*, 28 (2-3, April-June), 195-215
- Zucker, L. G. (1977). The role of institutionalization in cultural persistence. *American Sociological Review*, 42, 726-743.
- Zucker, L. G. (1983) Organizations as institutions, in *Research in the sociology of organizations*, S. B. Bacharach, ed., JAI Press, Greenwich
- Zucker, L. G. (1986), Production of Trust: Institutional Sources of Economic Structure, *Research in Organizational Behaviour* 8, 53-111.