

Changing Healthcare Networks – Orchestrating Needed but Impossible?

Petri Parvinen, Ph.D.
Adjunct Professor
Helsinki School of Economics
Department of Marketing and Management
P. O. BOX 1210
FI-00100 Helsinki
E-mail: petri.parvinen@hse.fi

Pirjo Lukkari, M.Sc.
Researcher, Ph.D. candidate
Helsinki School of Economics
Department of Marketing and Management
Iso-Roobertinkatu 44 B 29
FI-00120 Helsinki
E-mail: pirjolukkari@gmail.com

Abstract

This paper discusses the coordination of change in healthcare networks. Drawing from research on the marketization of the Finnish healthcare system, we present that a) there is a clear need for orchestration and b) orchestration seems very challenging due to the institutional environment, rivers of activity and cognitive limitations. An extension of the discussion to the manageability of nets and networks research is given.

Keywords

Networks, healthcare, manageability, institutions

Submitted to IMP 2007

1. INTRODUCTION

Institutional change and organization-level governance are known to be related in an interactive way (Oliver, 1997; Baum and Oliver, 1991). Institutional environments are dynamically defined as the end-result of the processes of institutionalization, corresponding to institutions, mechanisms and channels of influence that relate to legitimacy in a particular market; a network of actors. Organizations and networks tend to adapt themselves to institutional pressures through renewing their governance logics, forms and practices (Grewal and Dharwadkar, 2002).

Healthcare systems are heavily networked, built on strong institutional frameworks of governance structures and heavily regulated. Therefore, institutions are an inherent feature of healthcare networks, and influence their economic and socio-political structures and processes, characterized by professionalism (DiMaggio and Powell, 1983). Research on institutional influences on healthcare systems (Touhy, 2003; Häkkinen and Lehto, 2005) suggests that institutions should not only be seen as a general environment, a setting or background which operative networks are embedded in (cf. Johanson and Mattsson 1991; Granovetter, 1992). Instead, institutions can be seen as an inherent feature of networks since they have an influence on actors in a network, and institutional bases are imported into companies as underlying invisible assumptions which shape their performance (Zucker, 1986; Salmi, 1995; Oliver, 1997).

Healthcare networks can be argued to be particularly good images of society and societal development. They are a key societal and economical function, constitute a large share of GNP and represent numerous different public, private and non-profit governance modes (WHO, 2000). Healthcare networks are organisms characterized by very complex stakeholder settings (Savage et al., 1991), heavy regulation and legislation, influential norms, rules, traditions, peculiar professional sub-cultures and continuous political interest.

Much has been written about the theoretical bases for the marketization of social and healthcare systems. Lunt et al. (1996) provide one of the most comprehensive reviews. They suggest that four schools of thought can make contributions to our understanding of the process; neoclassical economics (e.g. Culyer et al., 1990), transaction cost theory (e.g. Propper, 1993), Austrian economics and the new economic sociology (e.g. Ferlie and Pettigrew, 1996). Of these only the last two lie close to the industrial network perspective with their key issues of social network relations, interaction processes and non-price competition. (Easton and Poad, 2003)

In this study, we employ healthcare networks as an avenue for investigating mechanisms of change in such a densely networked and societal setting. In studying changes prompted by the emerging network society, particularly the issue of spontaneous ordering has emerged (Castells, 1996; Tikkanen and Parvinen, 2006). To stress the role of markets in the functioning of the modern society, Hayek (1937) introduced the concept of spontaneous order - the idea that a harmonious, evolving order arises from the interaction of decentralized, heterogeneous economic agents. This order could not be designed by a social planner, but merely emerges spontaneously from a seemingly complex network of interaction. It has been suggested that change is determined by spontaneous paths and rivers (Lamberg and Parvinen, 2003).

In our study, we address the phenomenon of spontaneous ordering in healthcare network transformation and discuss the need for orchestration and planned order. We observe that spontaneous change processes can lead to sub-optimal structures and fragmentation in healthcare systems. The caveats of non-orchestrated healthcare network change include e.g. rigid and institutionalized networks and actors: healthcare organizers' inability to partner strategically. In

addition, ideological institutions, isomorphism and mimicking stifle innovation during transformations. This hindering effect is deeply rooted. In addition, hurry seems to lock service producers to old-fashioned operation modes. In short, there would be a clear need for orchestration in the changing healthcare networks.

Traditionally, orchestration has been considered an organization-level issue, relating to matching the competitive and societal strategies of firms in competitive environments (Karreman and Alvesson, 2004; see also Miller and Whitney, 1999). In contrast, planned order has mostly been related to the planning of societal and institutional level structures, norms and rules. We argue that the case of healthcare transformations presents an example of the need to exercise orchestration at the level of networks and institutions. This contention holds the potential for remarkable practical implications for policy-makers, legislators, unions, associations and firms.

The manageability of networks and institutions has, however, been contested in numerous ways (Wilkinson and Young 2002; Ritter et al., 2004) and there seems to be little agreement on the extent of manageability. In this paper, we take an unorthodox angle to this discussion, and present examples of ways in which orchestrated changes could take place in networks and institutions. Our key argument is that once the corresponding spontaneous ordering process is known, orchestration seems more likely. In the case of healthcare networks, we argue that once likely outcomes (threats) of spontaneous ordering are understood, the orchestration of counter-measures is possible. Based on a round of interviews, this is currently not the situation in Finland. Without knowledge of the corresponding spontaneous processes, it seems that little can be done to harness the changes there.

2. THEORETICAL PERSPECTIVES ON NETWORKS: ECONOMIC ORDERING AND MANAGEABILITY

2.1. Spontaneous vs. planned ordering

The question of the organization of economic activity classically relates to the question of which institutions will most efficiently cope with the calculation, incentive and coordination problems introduced by economic change (Mises, 1936). A dichotomy between planned and spontaneous orders in the organization of economic activity was already highlighted in the Austrian Economics (AE) of the 1930s and 1940s (e.g. Hayek, 1937; 1945), and has aroused interest in various areas of social science and developed into New Economic Sociology in the early 1980s (e.g. Granovetter and Svedberg, 1992; Ferlie, 1992). 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 neo-classical and to some extent by Austrian theorists (Lunt et al., 1996). Social network relations and non-price competition are key issues of New Economic Sociology which resonate well with an industrial networks point of view (Easton and Poad, 2003). However, the ideas of spontaneous and planned ordering by the Austrian economists should not be overlooked in the analysis of changing networks and marketization within the industrial network perspective, since the interaction process is one of the key issues in both schools of thought.

Hayek's (1937) idea of a market process that coordinates economic ordering through numerous spontaneous decisions under limited knowledge is a central tenet in the way Austrian Economics

has traditionally explained economic change. An economic system consists of more or less calculative economic agents with limited knowledge, and spontaneous order arises from the interaction of decentralized, 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 economizes on each agent's scarce resources of cognition and focuses the attention of that agent on a particular range of options (Loasby, 2000). Austrian economics stresses that the more complex the system, the more central a role will limited knowledge assume, and thus the more important will the influence of spontaneous ordering become.

Hayek referred to planned order when discussing the purposefully designed governance structures in a societal context, e.g. in a planned socialist economy. In addition to institutions at the level of the society or the economic system as a whole, the notion of a planned order can be used to refer to most phenomena traditionally of interest to students of marketing, organization and management, in which the interplay between spontaneous and planned order is often observed, and can arguably be necessary (Tikkanen and Parvinen, 2006). The development of any economic order always seems to involve both evolution and design. Purposefully designed orders appear to be important balancing tools for governing outcomes of market processes, just like creative destruction seems to be necessary in unraveling outdated structures and constantly preparing agents for changes in the rules of the game through innovations (Schumpeter, 1942; Kirzner, 1973).

2.2. Strategic nets

In networks, spontaneous ordering has been seen to operate through a 'series of systematic changes in the interconnected network of market decisions' (Kirzner, 1973). This would imply that networks are highly spontaneous. On the other hand, the rise of the network society has emphasized the role increased planned order, e.g. the creation and management of diverse networks of tightening relationships with few strategic partners (e.g. Castells, 1996).

In marketing research, the same disagreement is somewhat evident in the discussion involving the manageability of change in institutions and 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 (Gadde et al., 2003; Wilkinson and Young, 2002; Ritter et al., 2004). Others insist that the manageability of business networks is possible and have explored intentionality within networks and the pursuit of shared goals and benefits (Möller et al., 2005; Klint and Sjöberg, 2003). In this perspective, network manageability has been argued to be contingent on having clear boundaries and a focal hub actor (Wasserman and Galaskiewicz, 1994).

The *strategic net* has been introduced as a concept encompassing the ability of organizations to exert intentional influence on network level organization of economics activity (Möller et al., 2005; Möller and Svahn, 2003). In manageability research preceding the idea of strategic nets, attention has primarily been paid to network characteristics, the nature of networks as organizations and intra-network dynamics (Jarillo, 1988).

In most developed countries today – and in many middle income countries – governments have become central to social policy and healthcare. Their institutional capacity in healthcare is strong and their involvement is justified on the grounds of both equity and efficiency (WHO, 2000). As

such, the healthcare business is often 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 these kinds of systems institutional changes are characterized by co-evolutionary and interactive processes. These processes can be understood as collaborative encounters of actors, which involve the management of difference: a variety of subjective positions and a range of organizational, professional and socio-political standings, which assemble to pursue mutually beneficial agendas (Williams, 2002).

2.3. Institutional entrepreneurship

Within the marketing discipline, less attention has been paid to institutional approaches to change. Our notation draws heavily upon the social constructionist account of reality (e.g. Berger and Luckmann, 1966; Zucker, 1977) and argues that collective beliefs emerge from processes of repeated interactions. Organizations develop categorizations or typifications, then they achieve the status of objectification, and ultimately a shared social reality is constructed. Over time, this emergent social reality becomes reinforced by regulatory processes involving state agencies and professional bodies, which normatively and/or coercively press conformity upon constituent communities (Greenwood et al., 2002).

In a highly institutionalized market, the management of networks and relationships is a challenging task since there are several strong and powerful socio-political actors and prevailing regulative ascendancy over actors. Both a 'power balance' between powerful 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 (Garud et al., 2002; Lawrence and Phillips, 2004). Institutional entrepreneurs (both individual and organizational) thus create new channels of influence and adaptation for the actors in the network with their intentional networking activity powered by social, technological, competitive and/or regulatory issues. While institutions may appear to give markets stability, the emergence of new players, ascendancy of actors, and institutional entrepreneurship causes institutional discontinuities and disruptions. These institutional discontinuities are part of a larger institutional change process, in which deinstitutionalization results in reinstitutionalization via various stages (Greenwood et al., 2002). Further, these processes of institutional change usually have an impact on the network, e.g. by opening the network to new actors.

2.4 Orchestration

Traditionally, orchestration as a concept has been attributed to organization-level control of complex work (Karreman and Alvesson, 2004). Hinterhuber (2002) 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 Parkhe (2006) 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." To us, orchestration is becoming a concept of the network economy.

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.

Insert Figure 1 about here

The empirical question arising from the picture is whether and how these trajectories do and could operate with the changes in the Finnish healthcare system. Furthermore, we need additional information on whether other trajectories should be drawn to understand new dynamics between traditional conceptions of planned and spontaneous order on the different levels of analysis.

3. DESCRIPTION OF THE FINNISH HEALTHCARE SYSTEM

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 taxation (Järvelin, 2002). Local government, currently in the shape of some 416 municipalities, plays a leading role both in the provision of care and financing. Municipalities often co-operate to provide services. Approximately 270 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 (OECD, 2005). On average, municipalities are small in size and therefore they need to join federations to fund and manage specialist services. The 20 hospital districts throughout Finland represent such federations. Long-term care is provided in hospices belonging to both the health and social service departments of the municipalities.

The Finnish system is both more decentralized 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 (Häkkinen, 2005). Private (corporate and out-of-pocket) finance accounts for almost 25% of total health expenditure and private providers play a significant role in the provision of some services (e.g. dental and occupational health services). Physicians employed in health centers and hospitals may work in the private sector in their spare time. About one third of all physicians work in both sectors. Patients can approach specialists directly in the private sector, without a referral from a general practitioner, and private specialists can refer patients to public hospitals. (OECD, 2005)

Figure 2. provides an overview of the main organization of health services in Finland.

Insert Figure 2 about here

4. RESEARCH APPROACH

We reviewed marketization-oriented changes in the Finnish healthcare system by interviewing 39 key decision-makers in Finnish healthcare service organizations or closely related professional organizations. The semi-structured interviews dealt with on-going, visible, coming or anticipated marketization-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 marketization and coordination in their own words. This approach provided open, fairly flexible, experiential and illuminating data to study complex, dynamic situations (Carson et al., 2001). Our interpretive method was suitable in addressing questions of change processes and dynamics of marketization, operational links needing to be traced over time with local grounding (Lee, 1999).

The unit of analysis in the interviews was marketization changes. This was reflected in the semi-structured interviewing methodology. The interviews attempted to cover all key marketization change related issues including a) identifying functions and areas prone to marketization, b) identifying actual on-going change projects potentially leading to marketization, c) discussing the pace and probability of marketization, d) determining the possible or probable forms of marketization (changes in organizations and governance modes), e) anticipating the potential mid-run outcomes of current marketization-oriented changes, and f) discussing the impact and magnitude of marketization-related changes (in terms of number of employees influenced). The level of analysis in the interviews was a regional care network. This was reflected in the selection of respondents, as persons responsible for managing and reorganizing healthcare in 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 an entire care network, not just single organizations. The interviews overlapped geographically to the extent that all major regions were covered with a minimum of two interviews.

The interview was collaborative, meaning-making work by dialectical analysis of participants' descriptions and perceptions of changes in the network. Transcribed interview records function as recollections of conversations, and help focus the conversation analysis on the "actual details" and sequences, which make sense of conversations in the interviews (Silverman, 2005). The data analysis focuses in 1) the search and identification of patterns of spontaneous and planned ordering within the data and 2) interpretation of their meaning to organizations, and not on the narratives told by the participants. It is a reasoned decision not to build analysis and coding through the use of software programs or to use them as instruments for pursuing arguments about data.

5. CHANGES IN THE FINNISH HEALTHCARE NETWORK

Marketization-related changes are imminent due to institutional pressures

Over recent years the Finnish government has followed the general European-wide convergence towards "new public management" ideas into the funding and organization of health and social

services. Public finance for these services has been retained, but radical changes have been made – and are being made – to the ways in which services are delivered. Finland mimics European-wide convergence through health system level imitation and through modeling by norms of “quasi-markets”. In-house provision is subject to competition and it has also increasingly been replaced by externally contracted services; service providers now compete in “quasi-markets”. Central and local governments have new primarily roles as purchasers and commissioners of services.

The current trend towards a more liberalized and market-accommodating system is imposed by new EU and national regulation of competitive bidding and tender processes. More economic exchanges are released from public-political control and turned over to wide variety of provision contracts at the national and fractioned county or municipal level. The outcome of this development is that healthcare providers are more autonomous, free-standing corporate bodies (Lister, 2005). But, within certain sectors of healthcare system (i.e. services related to home care of senior citizens), regional norms and regulations designate rights and duties to organizations, which cause fragmentation to the national market. Companies have to modify their activities and resources to meet local standards in order to enter the network or to maintain their position in the network during the marketization.

On the other hand, in some markets the institutional change processes are market unifying forces. For example, the ongoing Finnish project to restructure municipalities and services is endogenously generated, planned institutional change to enhance functional rationality and productivity of public services. It is powered by political consensus of various institutional actors. The aims of this project are to be realized through the amalgamation of municipalities and public healthcare organizations into larger regional and national entities. This amalgamation is enhanced by substantial financial inducements by the Finnish government.

Heterogeneity in understanding changes

In the interviews, we 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.

Typical to the industry (cf. Savage et al., 1991), current actor positions and status influenced their perspective on what marketization is and how it is occurring. For example, directors of large organizations tended to play down the significance of a dramatic change in a single function (e.g. the incorporation of all occupational healthcare within a large primary care organization). Decision-makers in smaller organizations regarded the same change as a major step towards marketization. When asked about the mergers of surgical units, the directors of large organizations perceived it as a local adaptation in the operational network and the decision-makers in smaller organizations perceived it as a major change of the whole operational network. There was also variation in the views of directors in large organizations depending on their perception of their own ability to influence the changes. Actor position, instead of actor characteristics, seemed to contribute to the observed heterogeneity.

This highlights the relevance of actor cognitions in how decision-makers perceive changes in networks, in this case the marketization of a healthcare system. This can be argued to play a critical role in determining final outcomes.

Distinct rivers of activity observed

Another clear result was that marketization-oriented changes were taking place, or were at least perceived to be taking place, in distinct and rather unconnected rivers. The first river was characterized as a clear-cut issue, where private involvement and business-like behavior and markets play an obvious, important part. The key argument was that of resourcing and capacity utilization efficiency. Repeatedly mentioned parts of the healthcare networks were laboratories, medical imaging, elective surgery and more residential service type elderly care.

A second river clearly consisted of functions in which the most agile private players were able to exploit the rigidities of the rest of the network. Public healthcare organizations in particular have been notoriously slow in adapting to macro-level or institutional changes in their environments – even when these changes were very significant. This was perceived to lead to a number of areas of activity going “wild” with marketization, usually due to the public system running into trouble or even desperate situations. These include basic occupational healthcare (in which large and numerous employers suddenly started seeking new care providers), health station and ER worker outsourcing (in which staff shortages emerging from union contract rigidities created a shortage of qualified workers, which private players utilized nimbly), hotelling-type wards (in which financing and investment decision-making gave private players overwhelming advantages) and dental care (in which changes in legislation placed such demands on the public sector that it could most often only manage with extensive public-private cooperation). All these can be characterized as slippery, in which the benefits of marketization to the public sector were largely lost in the optimizing behavior by the private actors.

The third river dealt with major changes in organizational roles, which shifted parts of the public sector to a market-oriented relationship with the rest of the public system. Entire hospital districts were being planned to be incorporated. Alternatively, service producing units in many regions faced being subjected to a strict purchaser-provider system, 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 us to propose that attaining orchestration is very challenging due to the continuous spontaneous ordering processes (coined ‘rivers of activity’), the role of the institutional environment and managers’ cognitive limitations.

Signs of the need for orchestration

The interviews also provided evidence of the need for orchestrating the ongoing marketization-oriented changes. For the first part, very little evidence or opinions for marketization bringing immediate or even rather direct cost savings were recorded. Contrary evidence of escalating costs due to marketization, usually due to earlier miscalculation of costs or witty profit-maximizing business models with lock-in features, was ample. Six respondents mentioned the same private player whose ability to use deficiencies of public sector human resource management and consecutive staff shortages led to a suboptimal outcome at the system level. On a more general scale, spot work contracting and overtime pay was heavily criticized as a feature of increased marketization in the labor market. Furthermore, five respondents raised, referred to or implicitly emphasized the fact that, in parts, the healthcare system is 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 would open up.

6. CONCLUSIONS AND IMPLICATIONS

Potential practical implications

In this paper, we take an unorthodox angle to this discussion, and present our understanding, based on the interviews, about the ways in which orchestrated changes could take place in networks and institutions.

Implication 1: Form primary care networks

There are two key issues which need to be addressed by the reform of primary care. Firstly, the convergence towards marketization of public sector calls for more competition at the primary care level, since local healthcare centers have a monopoly over the public services in their region. Secondly, lack of general practitioners (GPs) and specialists curbs down performance in health centers, and increases the number of patient referrals to hospital care and dependency on private sector providers. Many municipalities report that they have little control over spending on hospital districts and expenditure on private services, which have monopoly over the region. Formation of national primary care networks, which compete for local primary care service contracts and have a role as commissioners of hospital services, could increase the efficiency of health sector by competition (both at the primary and hospital service level, which calls for the development of a uniform national method for pricing), and by provision of more resources at the local primary care level (network effect).

Implication 2: Merge private and public to avoid overcapacity

The governance of the health system in Finland is decentralized and has parallel arrangements for municipal and National Health Insurance (NHI) funded private services. The 416 municipalities are free to produce health and social services themselves, to contract with other municipalities or to contract with the private sector for their provisions. This freedom to outsource can lead to much diversity in methods of delivering services as well as production overcapacity. The system is further fragmented by the parallel arrangements for partial NHI funding in occupational and private health services (hospital, specialist and occupational health). The municipal and NHI arrangements are somewhat complementary and overlapping. In the case of patients who rely solely on municipal health services there is GP gate keeping, whereas in relation to private hospital, occupational health and specialist services there is no GP gate keeping. There is a risk of supplier induced demand and overcapacity. Therefore parallel arrangements for funding and access to care for private and public sectors should be harmonized in order to avoid overcapacity.

Implication 3: Agree on pace

When the private sector started growing rapidly in the Nordic countries in the 1990s with the trend towards a more liberalized and market-accommodating system, many of the operations

became private sector clones of old and existing public sector operations. Policy-makers should understand that private/third sector service producers need time to react to institutional changes with their business models, production capacity, service offering and many types of contractual issues. In addition, the public sector needs time to adopt new roles as purchasers or commissioners of services and as competitive providers. Without sufficient time for anticipation and adaptation during institutional changes, policy simply creates more of the same instead of something new. Tiny micro level changes take place instead of a macro level transformation.

Implication 4: Tackle the strongest institutions

Institutions have a tendency to structure as hierarchical networks with institutionalized network positions and routines for interaction. The strongest institutions, like professions, lie deepest and are sheltered by more peripheral institutions. Planned order institutional dynamism usually has to start with the outer layers before change in core institutions can be addressed. However, medical professions have often thwarted healthcare reform, since diffusion of new principles into practice is not adopted within professions. Therefore, when core institutions need to be altered, the establishment of new interaction process and instigation of spontaneous, endogenous change could be the way to achieve successful change with the engagement of professionals and collective leadership.

Reaching consensus and implementing orchestration

Based on interviews, consensus or common understanding does not prevail in Finland among the key decision makers in the healthcare service organizations and related professional organizations. Without knowledge of the corresponding spontaneous processes and capability to understand configurations, processes and the evolution of value activities, it seems that little can be done to harness the changes there.

Productive orchestration of changes in the Finnish healthcare network would thus seem to bear resemblance to orchestration processes in other contexts. The key processes are managing knowledge (about relevant alternatives), monitoring the appropriation or legitimacy (of changes) and ensuring network stability (cf. Dhanaraj and Parhke, 2006). As in other contexts, the role of a hub actor in performing these processes is vital. In the complex stakeholder context of the current healthcare system, the identification, defining and empowerment of hub actors is the first step in coming up with an orchestration strategy.

Theoretical contributions

We propose that understanding the nature of underlying economic ordering is a key issue in the manageability discussion (cf. Parolini, 1999; Garud et al., 2002; Jarillo, 1988; Möller et al., 2005). Our key argument is that once the corresponding spontaneous ordering process is known, orchestration seems more likely. In the case of healthcare networks, we argue that once likely outcomes (threats) of spontaneous ordering are understood, the orchestration of counter-measures is possible.

In networks various reciprocal episodes of interaction can intertwine or re-enforce each other by their content or time frame, depending on the role/roles and subjective positions of actors involved in the system of economic and socio-political structures and processes. Therefore, it is

proposed that the range of actors' relationships and how they are managed as portfolios (e.g. as cross-functional aggregates according to particular therapies or across service provision units) has an impact on how influence is exerted and how adaptation to changing institutional environment is received at the individual, organizational and network level.

Evolving network governance calls for the differentiation of marketing practices. 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 changes of institutional environment and institutional disruptions opened the network to new players and boosted the competitiveness of the business. This development changes the old patterns of co operations 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 is decreasing, which gives rise to a new kind of cooperation and reciprocal relationships.

In the focal study the empirical data indicates that the influence of the authorization and acquisition mechanisms of the validating process enhance the co-evolutionary and interactive nature of institutional change and the reinstitutionalization by changing the nature of decision making, trust and power -dependence of relationships in the network. The data suggests that the formalization and centralization of decision making has decreased as healthcare providers have become more autonomous corporate bodies.

However, our data suggests that part of the quality and dynamics of relationships can be controlled by patterns of personal trust and/or power in a business network built on strong institutional governance structures. Therefore, it is proposed that successful service providers need to manage their interactive processes as relationship portfolios and build them on both types (personal and system) of trust and power across economic and socio-political processes.

Trust and/or power are suggested to be central mechanisms which take on specific forms and engage in specific relationships to each other. Bachmann (2001) argues that while in a less strongly regulated system, social actors, to a large extent, need to secure the effectiveness of the co-ordination 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 system 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 utilize both system and personal trust and power (i.e. Luhman, 1979; Zucker, 1986; Giddens, 1990).

In line with previous literature, we argue 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. The structural emphasis of network analysis can be considered an advantage, but the formal modeling of relations calls for reference to cultural and subjective aspects of action. DiMaggio (1992) argues, firstly, that network analysis cannot do without a theory of action, a set of guiding assumptions about situated actors' orientations toward one another and the world. Secondly, network analysis must take account of the substance of cognition (i.e. institutional aspects of role systems, action-scripts and typifications). It cannot dispense with data on actor attributes and attitudes, since outcomes of institutional change are ultimately filtered through actor cognitions.

Finally, orchestration research should continue to span different levels of analysis. As spontaneous and planned processes permeate institution, network, organization and individual levels, so should orchestration. The healthcare system is characterized by tight regulation and a strong institutional order. They jointly define the proportions of trust and power, and their governance over relationships (Bachmann, 2001). Co-evolutionary and interactive nature of institutional change and reinstitutionalizations calls for understanding of the influence of institutional processes (e.g. normative authorization of activities according to socially acceptable standards) at all levels of the system.

REFERENCES

- Bachmann, R. (2001), "Trust, Power and Control in Trans-Organizational Relations", **Organization Studies**, Vol 22, No 2, pp. 337-365
- Baum, J. A. C., and Oliver, C. (1991), "Institutional Linkages and Organizational Mortality", **Administrative Science Quarterly**, Vol 36 No 2, pp. 187-218
- Berger, P.L., and Luckmann, T. (1966), **The Social Construction of Reality: A Treatise in the Sociology of Knowledge**, Doubleday, New York
- Carson, D., Gilmore, A., Perry, C. and Gronhaug, K. (2001), **Qualitative Marketing Research**, Sage Publications Ltd, London
- Castells, M. (1996), "The rise of the network society", **The information age: economy, society and culture**, Vol. I, Blackwell Publishers, Oxford
- Culyer, A. J., Maynard, A. and Posnett, J. (1990), **Competition in Health Care**, Macmillan, London
- Dhanaraj, C. and Parkhe, A. (2006), "Orchestrating innovation networks", **Academy of Management Review**, Vol 31 No 3, pp. 659-669
- DiMaggio, P. J. (1992), "Nadel's Paradox Revisited: Relational and Cultural Aspects of Organizational Structure", in **Networks and Organizations: Structure, Form and Action**, Nohria N. and Eccles R. G. (eds.), Harvard Business School Press, Boston, pp. 118-142
- DiMaggio, P. J., and Powell, W.W. (1983), "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields", **American Sociological Review**, Vol 48, pp. 147-160
- Easton, G. and Poad, M. (2003), The Marketisation of Health Services; A Case Study of the UK General Practitioner Fundholding "Experiment", paper presented at the 19th IMP-conference in Lugano, Switzerland in 2003
- Ferlie, E. (1992), "The creation and evaluation of quasi-markets in the public sector: a problem for strategic management", **Strategic Management Journal**, Vol 13, pp. 79-97
- Ferlie, E. and Pettigrew, A. (1996), "Managing through Networks; some Issues and Implications for the NHS", **British Journal of Management**, special issue Mar1996, Vol 7 No 1, pp. 81-99
- 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**, Vol 45 No 1, 196-214
- Gadde, L.-E., Huemer, L. and Håkansson H. (2003), "Strategizing in Industrial Networks", **Industrial Marketing Management**, Vol 32 No 5, pp. 357-364
- Giddens, A. (1990), **The Consequences of Modernity**, Stanford University Press, Stanford

- Granovetter, M. (1992), "Problems of Explanation in Economic Sociology", in **Networks and Organizations: Structure, Form and Action**, Nohria, N. and Eccles, R. G. (eds.), Harvard Business School Press, Boston, pp. 25-56
- Granovetter, M. and Swedberg, R. (1992), **The Sociology of Economic Life**, Westview Press, Oxford
- Greenwood, R., Suddaby, R. and Hinings, C. R. (2002), "Theorizing Change: The Role of Professional Associations in the Transformation of Institutionalized Fields", **Academy of Management Journal**, Vol 45 No 1, pp. 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
- Hayek, F.A. (1945). "The Use of Knowledge in Society", **American Economic Review**, Vol XXXV No 4, September, pp. 519-30
- Hayek, F.A. (1937). "Economics and Knowledge", **Economica**, Vol 4, Feb, pp. 33-54
- Hinterhuber A. (2002), "Value Chain Orchestration in Action and the Case of the Global Agrochemical Industry", **Long Range Planning**, Vol 35 No 6, pp. 615-635
- Häkkinen, U. (2005), "The Impact of Changes in Finland's Health Care System", **Health Economics**, Vol 14 No 51, pp. 5101-5118
- Häkkinen, U. and Lehto, J. (2005), "Reform, Change, and Continuity in Finnish Health Care, Journal of Health Politics", **Policy and Law**, Vol 30 No 1-2, pp. 79-96
- Jarillo, C. J. (1988), "On Strategic Networks", **Strategic Management Journal**, Vol 9 No 1, pp. 31-41
- Johanson, J. and Matsson, L.-G. (1991), "Strategic Adaptation of Firms to the European Single Market – A Network Approach", in **Corporate and Industry Strategies for Europe**, Matsson, L.-G. and Stymne, B. (eds.), North-Holland, Amsterdam, pp. 263-281
- Järvelin, J. (2002), "Health Care Systems in Transition: Finland", **European Observatory on Health Care Systems**, Vol 4 No 1, pp. 1-92
- Karreman D. and Alvesson M. (2004), "Cages in Tandem: Management Control, Social Identity, and Identification in a Knowledge-Intensive Firm", **Organization**, Vol 11 No 1, pp. 149-175
- Kirzner, I.M. (1973), **Competition and Entrepreneurship**, University of Chicago Press, Chicago
- Klint, M.B. and Sjöberg, U. (2003), "Towards a Comprehensive SCP-Model for Analysing Strategic Networks/Alliances", **International Journal of Physical Distribution & Logistics Management**, Vol 33 No 5, pp. 408-426
- Lamberg, J.-A. and Parvinen, P. (2003), "The River Metaphor for Strategic Management", **European Management Journal**, Vol 21 No 5, pp. 549-557

- Lawrence, T. B. and Phillips, N. (2004), "From Moby Dick to Free Willy: Macro-Cultural Discourse and Institutional Entrepreneurship in Emerging Institutional Fields", **Organization**, Vol 11 No 5, pp. 689-711
- Lee, T. W. (1999), **Using Qualitative Methods in Organizational Research**, Sage Publications, Thousand Oaks
- Lister, J. (2005), **Health policy reform: Driving the wrong way?**, Middlesex University Press, London
- Loasby, B. J. (2000), "Market Institutions and Economic Evolution", **Journal of Evolutionary Economics**, Vol 10 No 3, pp. 297-310
- Luhman, N. (1979), **Trust and Power**, John Wiley & Sons Ltd, Chichester.
- Lunt, N., Mannion, R., and Smith, P. (1996), "Economic Discourse and the Market: The Case of Community Care", **Public Administration**, Vol 74, pp. 369-391
- Maguire, S., Hardy, C., and Lawrence, T. B. (2004), "Institutional Entrepreneurship in Emerging Fields: HIV / AIDS Treatment Advocacy in Canada", **Academy of Management Journal**, Vol 47 No 5, pp. 657-679
- Miller, D. and Whitney, J. (1999), "Beyond Strategy: Configuration as a Pillar of Competitive Advantage", **Business Horizons**, Vol 42 No 3, pp.5-18
- Mises, L. von (1936), "Wirtschaftsordnung und politische Verfassung [Economic order and political government]", **Wiener Wirtschaftswoche** (Vienna, Austria), Vol 5, pp.51-53
- Möller, K., Rajala, A. and Svahn, S. (2005), "Strategic Business Nets – Their Types and Management", **Journal of Business Research**, Vol 58, pp.1274-1284
- Möller, K., and Svahn, S. (2003), "Managing Strategic Nets: A Capability Perspective", **Marketing Theory**, Vol 3 No 2, pp. 201-226
- OECD (Organisation for Economic Co-operation and Development), **OECD Reviews of Health Systems - Finland**, Paris, 2005
- Oliver, C. (1997), "The Influence of Institutional and Task Environment Relationships on Organizational Performance: The Canadian Construction Industry", **Journal of Management Studies**, Vol 34 No 1, pp. 99-124
- Parolini, C. (1999), **The Value Net: A Tool for Competitive Strategy**, John Wiley & Sons Ltd, Chichester
- Propper, C. (1993), "Quasi-Markets and Regulation", in LeGrand, J. and Bartlett, W. (eds.) **Quasi-Markets and Social Policy**, Macmillan, Basingstoke
- Ritter, T., Wilkinsson, I. F., and Johnston, W. J. (2004), "Managing in Complex Business Networks", **Industrial Marketing Management**, Vol 33 No 3, pp. 175-183

Salmi, A. (1995), **Institutionally Changing Business Networks. Analysis of a Finnish Company's Operations in Exporting to the Soviet Union, Russia and the Baltic States**, Publications of Helsinki School of Economics and Business Administration A-106, doctoral dissertation, Helsinki

Savage, G. T., Nix, T. W., Whitehead, C. J., and Blair, J. D. (1991), "Strategies for Assessing and Managing Organizational Stakeholders", **Academy of Management Executive**, Vol 5 No 2, pp. 61-75

Schumpeter, J.A. (1942), **Capitalism, socialism and democracy**, Harper Row, New York

Silverman, D. (2005), **Doing Qualitative Research: A Practical Handbook**, 2nd ed., Sage Publications Ltd, London

Tikkanen, H. & Parvinen, P. M. T. (2006), "The role and interplay of planned and spontaneous orders in the network society", **Journal of Business and Industrial Marketing**

Touhy, C. (2003), "Agency, Contract and Governance: Shifting Shapes of Accountability in the Health Care Arena", **Journal of Health Politics, Policy and Law**, Vol 28 No 2-3, pp. 195-215

WHO (World Health Organization) (2000), **World Health Report**, WHO, Geneva

Williams, P. (2002), "The Competent Boundary Spanner", **Public Administration**, Vol 80 No 1, pp. 103-124

Wilkinson, I. and Young, L. (2002), "On Cooperating: Firms, Relations and Networks", **Journal of Business Research**, Vol 55 No 2, pp. 123-132

Zucker, L. G. (1986), "Production of Trust: Institutional Sources of Economic Structure", **Research in Organizational Behaviour**, Vol 8, pp. 53-111

Zucker, L. G. (1977), "The Role of Institutionalization in Cultural Persistence", **American Sociological Review**, Vol 42, pp. 726-743

Wasserman, S. and Galaskiewicz, J. (eds.). (1994), **Advances in social network analysis**, Sage, London

FIGURE 1
New and recent trajectories of planned order and orchestration

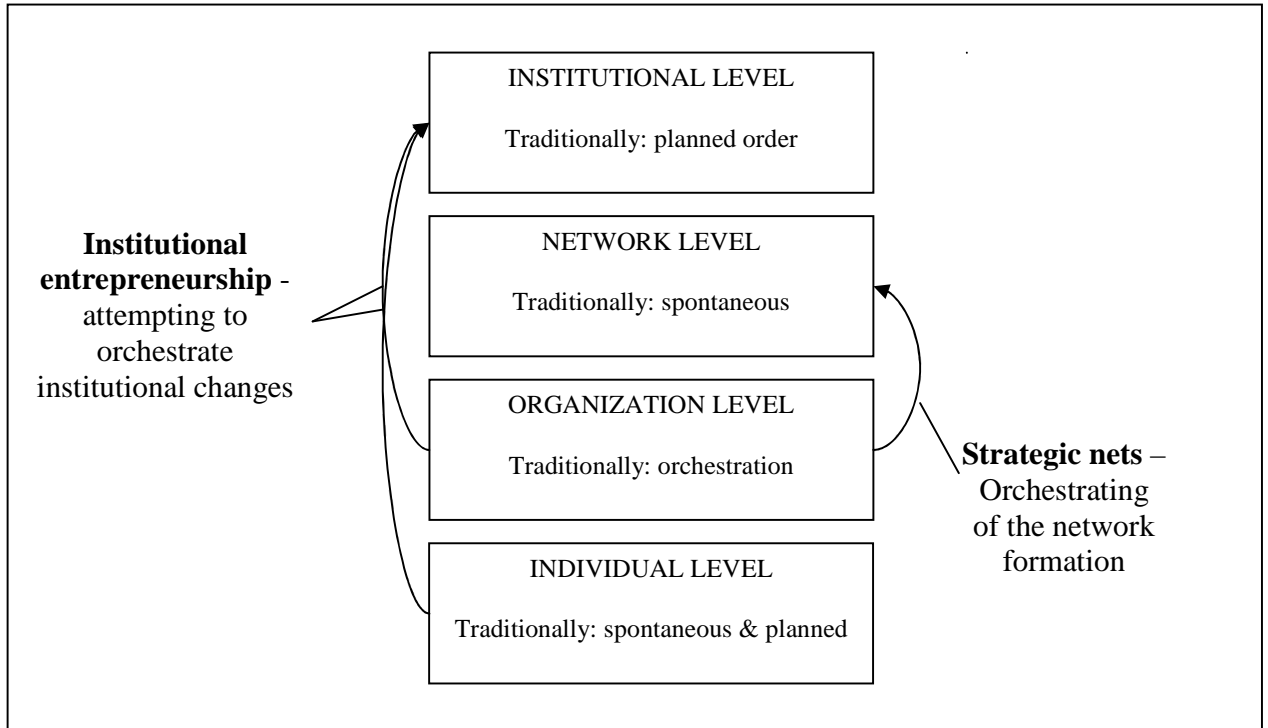
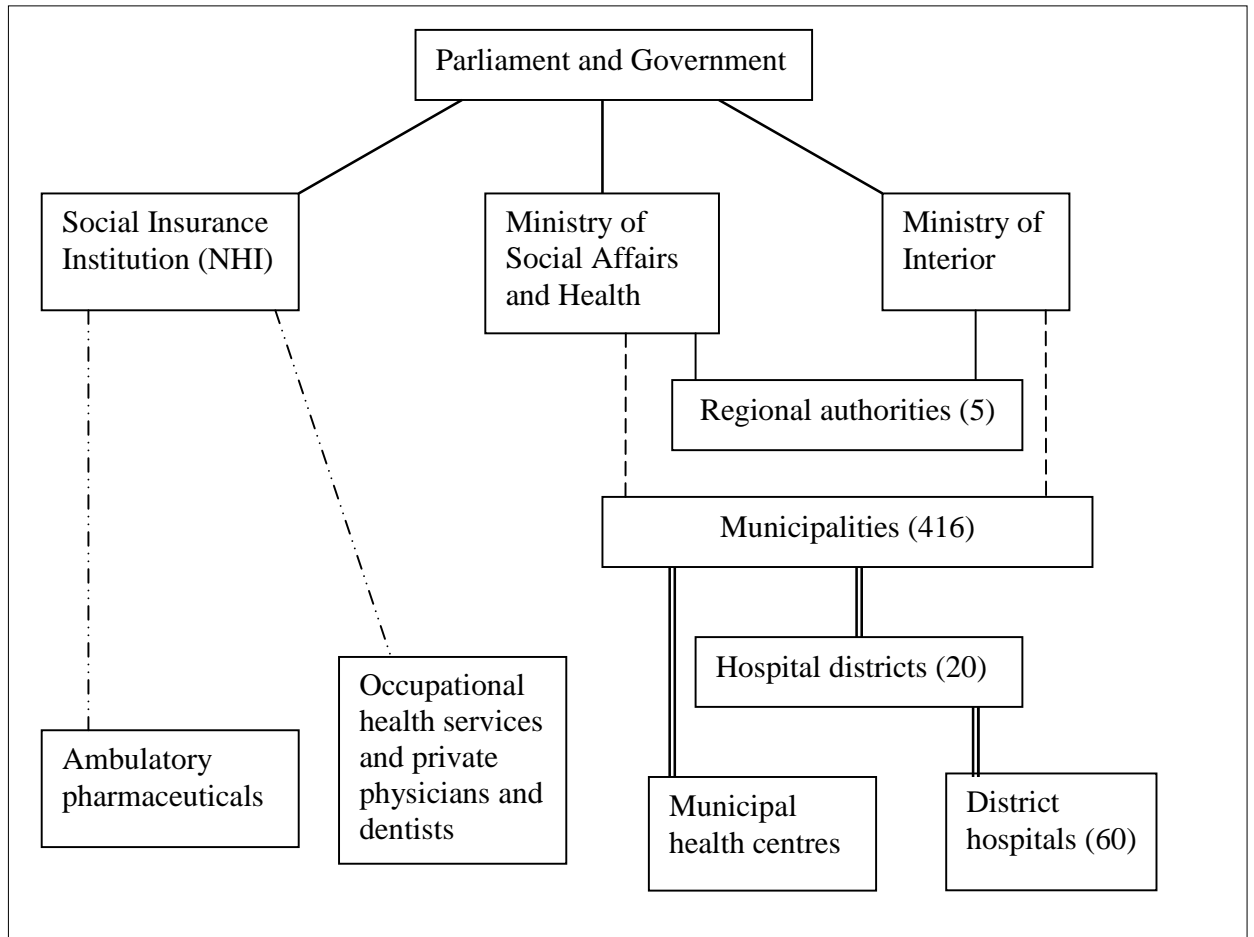


FIGURE 2
Organisation of health services in Finland (e.g. OECD 2005)



Legend: — governance, -.- reimbursement, -- state subsidies, == ownership and management