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## **Governance of network organisations from the building owner's perspective**

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***Abstract.** A growing number of building owner organisations are experimenting with the new network way of organising their businesses. The literature on construction and facilities management provides little information on the dimensions and characteristics of business networks and network organisations. This article studies the management trends that affect governance network organisations from the building owner's perspective. Building owners' organisational networks are analysed by means of a comparison of general network management literature, literature on construction and facilities management and prevailing case experiences in a Finnish building owner organisation. The article compares general independent variables of network organisation governance, such as client centrality, self-governance, flexibility, specialisation, virtuality, joint objectives, and joint marketing to building owner organisation network management trends, which are discussed in order to increase knowledge of the changing business environment.*

***Keywords:** network organisation, building owner, literature review, facilities design and service delivery.*

### **1 Introduction**

There has been much confusion over just what networks and network organisations are and how they operate. In some industries and organisations, networks imply a set of external relationships – a global web of alliances and joint ventures. In others, networks mean informal ties among managers – floating teams that work across functions and manoeuvre through bureaucracy (Charan 1991). Networks and the independent variables for network organisation governance have mainly been introduced in studies conducted in other industries, mostly in the assembling engineering.

The facilities management environment consists of the mixed network actor

roles of service providers, building owners as contract managers, and the end-users of services (Bröchner 2003; Tuomela 2003; Kadefors and Bröchner 2004; Tuomela and Toivonen 2004). In this article the network paradigm within the facilities management environment is investigated from the building owner's perspective.

A building owner's construction and facilities management environment has generally been characterised as divisive and fragmented. The construction industry has been characterised as having a 'quasi-firm' form (Eccles 1981) and as being an environment of virtual networks (Cheng *et al.* 2001a; 2001b; Mohamed 2003), where the interaction between the different stakeholder groups is being newly facilitated with the aid of technological evolution. The facilities management environment, on the other hand, has been characterised as being dependent on governance by the creation of joint strategies and objectives (Alexander 2004) for network organisations (Tuomela 2003; Tuomela and Salonen 2003).

The Finnish property market has rapidly shifted towards a model in which services are mainly provided by a variety of professional operators. The services marketplace has swiftly assumed a structure similar to that of the most progressive national markets. The selection of professional services available has expanded and basic service provision has become more versatile.

In this article the network organisation perspective is used to elaborate the network organisation context, from the network governance (Jones *et al.* 1991; Benassi 1997) perspective, in a building owner's business environment. First, the different characteristics of network organisation governance are presented through a generic management literature review. Second, the building owner's role as a focal firm in the network is defined. Third, the building owner's two perspectives of network governance are defined, facilities design and management of service delivery. Fourth, the defined independent variables of network organisation governance are compared to the building owner organisation's network management trends with concise literature reviews and case examples at the Senate Properties. The article indicates that the character of the network organisation managed by a building owner has similar variables that affect the governance of its business networks to other industries. The article aims to discuss the distinctive features of the industry in order to improve knowledge network organisations within building owner organisations.

## **2 Changing Network Perspective**

According to Achrol and Kotler (1999), much of the early analysis of network organisations focused on mapping patterns of interpersonal ties within and between organisations. These networks consisted of informal social ties, more a collection of dyadic bonds than a formal network, and functioned in the shadows of the formal organisation. What has changed the field significantly in recent years is the emergence of large-scale managed networks. The basis of the paradigm

shift is a move away from studying networks as informal social structures and towards studying them as formal governance structures that represent a legitimate alternative to markets or hierarchies (Galaskiewicz 1996; Powell 1990). Applied network analysis (Tuomela and Salonen 2003) and other interpretations of the networks (Krumm *et al.* 1998) in facilities management environment have mainly dealt with the informality and formality of personal networks. The construction management literature has mainly focused on network alliances (Cheng *et al.* 2001a).

The network analysis perspective adopted in this article is similar to Achrol's (1997) perspective, which argues that the mere presence of a network of ties is not a distinguishing feature of a network organisation (Baker 1992, p. 399). Rather, the quality of the relationships and the shared values that govern them differentiate and define the boundaries of the network organisation. The relationships are characterised by non-hierarchical, long-term commitments, multiple roles and responsibilities, mutuality, and affiliational sentiments (Gerlach 1992, p. 4). Thus, a network organisation is defined in this context as follows: the network organisation is an interdependent coalition of task- or skill-specialised economic entities, independent firms, or autonomous organisational units, that operates without hierarchical control but is embedded, by means of dense lateral connections, mutuality, and reciprocity, in a shared value system that defines "membership" roles and responsibilities (Achrol and Kotler 1999).

Erdil and Erdil (1998) suggest that to understand network organisations and networking it is useful to analyse the conditions in which they are formed. In doing so, it is important to explain both the conditions and environmental forces that lead to networking, and their roles. This article focuses on the analysis of the conditions and environmental forces that foster networking in a building owner's network organisation.

### ***General Independent variables for Network Organisation Governance***

Despite the plethora of titles in the management literature, the new forms are generally seen as being responses to the same variables for change as can be found in the move towards an information economy; rapid environmental change, customer orientation, and new ways of working. While network organisations have been studied in very different circumstances, the independent variables behind network organisation governance have also been divergent. In order to identify the main variables for the phenomena, a theoretical framework was conducted among general network management literature. The most frequently-occurring independent variables for network organisation governance were identified as client centrality, self-governance, flexibility, specialisation, virtuality, joint objectives, and joint marketing (Table 1). On the basis of the literature review, it appears that the early network organisations focused on modifications to organisational theory and that the more recent ones have focused on technological and virtual management issues.

**Table 1.** General independent variables of network organisation governance.

Perspective	Some references	Concise definition
<b>Client centrality</b>	Miles <i>et al.</i> 1986, 1992, 1995 and 1997; Snow <i>et al.</i> 1992; Jarillo 1993; Bueno 1997.	Network organisation (NO) is formed around a central actor and is based on market mechanisms and quantity benefits. Suppliers are managed through contracts and all operate for the benefit of the central actor.
<b>Self-governance</b>	Eccles and Crane 1988; Baker 1992; Kanter and Eccles 1992; Richardson 1995; Birkinshaw 1998.	NO is a cluster of firms or specialised units coordinated by market mechanisms and autonomy rather than a strict chain of command. Instead of hierarchical client-supplier management, the network is capable of self-organising and adjustable to client requirements with its autonomous teams and task forces.
<b>Specialisation</b>	Achrol 1991, 1997; Nadler <i>et al.</i> 1992; Baker 1992; Kanter and Eccles 1992; Achrol and Kotler 1999.	NO is an organisational alliance involved with different tasks and skills and based on interactivity, mutual financial benefit, sharing responsibility, and jointly-set goals and values.
<b>Joint objectives</b>	Miles <i>et al.</i> 1995,1997; Achrol 1997; Achrol and Kotler 1999.	NO is formed of internal and external teams that share and commit to joint objectives and shared goals on all network levels.
<b>Flexibility</b>	Feneuille 1990; Baker 1992; Cravens <i>et al.</i> 1994.	NO is a “living organism” which provides better flexibility, modes of operation, and policies than traditional organisations and their vertical and horizontal networks.
<b>Joint marketing</b>	Cravens <i>et al.</i> 1994; Cravens and Piercy 1994; Achrol and Kotler 1999.	NO develops the skills and resources needed to identify and move innovations quickly to commercial success. Also provides flexibility to cope with the rapidly-changing and intensely competitive marketplace.
<b>Virtuality</b>	Zeffane 1994; 1995; Baker 1994, 2000; Chinowsky and Goodman 1996; Lipnack and Stamps 1997; Winch <i>et al.</i> 1997; Ahuja and Carley 1999; Levy and Foster 1998; DeSanctis and Monge 1999; Kraut <i>et al.</i> 1999; Wiesenfeld <i>et al.</i> 1999; Black and Edwards 2000; Symon 2000 (information need-ties); Coulson-Thomas 2003.	NO is a graphically-distributed, functionally and/or culturally diverse virtual team as a group of people who interact through interdependent tasks guided by a common purpose that works across organisational boundaries with links strengthened by webs of communication technologies.

Like network organisations, facilities management and construction organisations and networks have been an emerging field of research since the late nineties. The building owner's network organisation environment is composed of multiple fragmented clients and service providers. In order to analyse the governance of such networks by means of case studies, the building owner's role in the network has to be explained.

While the earlier definitions of network organisations focused on self-governance, specialisation, and joint objectives, the current interpretations of network organisations focus on the vastly-increased use of information technology and shared databases (Winch *et al.* 1997; Symon 2000; Cheng *et al.* 2001b). In this article the described general variables of network organisation governance are analysed from the perspective of a Finnish building owner organisation. However, before the analysis the characteristics of building owner's network are described.

### **3 Network Organisation of Building Owner**

Networks are, in many cases, studied through firms that have somehow become central in the network. These centrally-acting firms are commonly known as 'focal firms' (Gadde and Håkansson 2001, pp. 57-117; Möller and Halinen 1999; Tikkanen 1998) or 'central firms' or 'hub firms' (Jarillo 1988; Piercy and Cravens 1994). According to Wasserman and Faust (1994) and Gnyawali and Madhavan (2001), centrality refers to the position of an individual actor, in this context an organisation, in the network, and denotes the extent to which the focal actor occupies a strategic position in the network by virtue of being involved in many significant ties. In general, the focal firm perspective has been found to be more valid than the analysis of the complete network, because of the central role of the firm being studied. In this study Senate Properties is considered as a focal firm of its network acting as a strategic centre of design and service delivery activities.

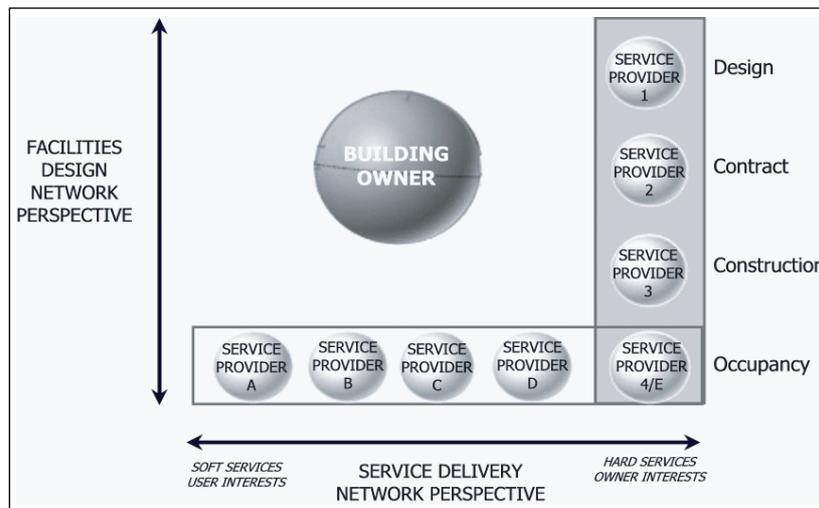
Gadde and Håkansson (2001, pp. 57-117) suggest that a company acting as focal firm need to acquire some of the knowledge of other companies for itself, or wish to develop its own knowledge through interaction with the other company. According to Lorenzoni and Baden-Fuller (1995) focal firms, which see themselves as strategic centres, expect their partners to do more than follow rules and meet traditional contractual obligations. Involvements beyond traditional sub-contracting include issues such as developing the competencies of the partners, borrowing, developing, and lending new ideas, and sharing perceptions of the competitive process and customer needs. Lorenzoni and Baden-Fuller examine strategic centres through three dimensions: (1) as a creator of value for their partners; (2) as leaders, rule setters, and capability builders, and (3) as simultaneously structuring and strategising.

#### **3.1 Building owner's network perspectives**

In order to truly understand the effect of the network paradigm in the building

owner's environment, the network organisation's networks are, in this context, divided into two perspectives. First perspective is the facilities design which refers to the management of specialised organisations for such activities as designing, contracting and construction. Second network perspective is the management of service delivery which refers to the management of various specialised service firms, or separate activities delivered by a single service provider, during the occupancy of a building. According to Brown *et al.* (2001) and Bröchner (2003) the facilities design, production and service delivery should be more integrated. The development of new technologies enables remote monitoring of building owner's network activities in terms of lifecycle planning and management. Bröchner *et al.* (2004) describe that several building owners pursue various strategies for providing bundles of services to the building users.

While the service providers consist of various professionals, such as architects, who plan, project managers, who manage, contractors, who do, and FM managers and facilities service providers, who maintain the building, the building owners have two perspectives to network organisation governance (Figure 1). In Senate Properties' case partnership programs for contracting and for maintenance are established with the service provider firms. This means that the same service provider firms are simultaneously involved in the facilities design and management of service delivery in the occupancy phase.



**Figure 1.** Building owner's two network perspectives.

Both the construction and facilities management literature discuss the industrial trends affecting a building owner's network organisation governance. The following chapters explain the general network organisation management trends in the building owner organisation's environment by drawing on the insights provided by authors dealing with construction and facilities management.

### **3.2 Purpose of the study**

In this context, the network organisation approach aims at making sense of what happens in the complicated business environment of a building owner's organisation. The variables for network organisation governance that are identified are used to explain and simplify the general network organisation trends in the building owner's organisation's environment. For the sake of further simplification, the building owner's network perspectives are divided into: (a) the facilities design perspective, and (b) the management of service delivery perspective. The network management trends in both facilities design and management of service delivery have been interpreted in a parallel manner; these are discussed separately in the following chapters.

## **4 Facilities Design Network**

The construction sector is being described as extremely complex, divided and fragmented particularly in the case of a larger project, where the number of separate supplying organisations could number many hundreds (Dainty *et al.* 2001). This fragmentation has been seen as having significant impacts to the performance-related problems facing, such as low productivity, cost and time overruns, and conflicts and disputes, resulting in claims and time-consuming litigation (Froese *et al.* 1997; Cheng *et al.* 2001a; Mohammed 2003).

According to Weippert *et al.* (2003), much of the traditional project management literature focuses on the well-known challenges in managing complex project organisations. The unique and highly-fragmented nature of the construction industry requires numerous design firms, consultants, contractors, subcontractors, and suppliers to be involved in almost any project. The industry is faced with the ongoing challenge of changing and improving current work practices in order to become more client-orientated and more competitive, as well as productive. The changing and improving of current work practices have increased the level of self-governance of the traditionally fragmented network actors. Cheng *et al.* (2001a) suggest that a construction alliance that is an informal, voluntary form of relationship has been raised as part of a supply chain management strategy to improve their organisational performance and that of projects they are involved with.

### **4.1 Client centrality**

Similar to the network management literature handling client needs both from a strategic and from other perspectives, the client needs have been a central topic in construction literature (Evbuomwan and Anumba 1998; Smith *et al.* 2001; Smith and Love 2001). Vakola and Rezqui (2000) and Mohammed (2003) suggest that a fundamental problem of the traditional supply chain approach is that the role of customer (end-user) interaction has not been correctly acknowledged. In contrast to the manufacturing industry, the product is, to a large extent, unspecified at the

launch of the project organisation. In a construction project, the target is highly uncertain at the outset and the whole supply network participates in the process, attempting to transform changing business and organisational needs into project requirements. Kamara *et al.* (2000) describe a general need to facilitate better understanding and the representation of different customer requirements in the design and construction process.

#### **4.2 Self-governance and flexibility**

The ability to interact in an agile and responsive manner is becoming increasingly crucial within the construction environment. According to Loraine (1994), the traditional fragmented structure of the construction supply chain is seen as lacking responsiveness and discouraging innovation. This is because project participants work on their own duties and only fulfil their contractual requirements, without considering any improvement in relationship and performance (Love *et al.* 1999). The main reason for this is assumed to lie in communication problems (Cheng *et al.* 2001a), which is indicative of a need for the development of network interaction.

Construction project teams are unique entities, created through a complex integration of factors, with inter-disciplinary players and varying roles, responsibilities, goals, and objectives (Chinowsky and Goodman 1996). The fragmented contractual relationships are considered to be impersonal and hierarchical, with information diffusion being restricted and not flowing sufficiently (Cheng *et al.* 2001a).

Another fundamental issue is that the management of the project organisation is treated as a deterministic pre-specified task, to be optimised. The most significant characteristic of the process is the project organisation, which has been described by Cherns and Bryant (1984) as a “temporary multiple organisation”. Such an organisation is usually project-focused, with a short-term perspective, emphasising competitive bidding as the main tool in the evaluation of contractors, subcontractors, and suppliers.

According to Evbuomwan and Anumba (1998), there is a lack of integration, co-ordination, and collaboration between the various functional disciplines involved in the lifecycle aspects of the project. Poor communication of design intent and rationale, which leads to unwarranted design changes, inadequate design specifications, unnecessary liability claims, and increases in project time/cost, has been a cause of poor flexibility within the industry.

In the traditional supply chain approach, the contract manager organisation, such as the building owners, is regarded as working as an intermediary between the end-users and the supply chain. The contract manager has thus been given the role of being the interpreter of the demand side and the transformer of user demands to project requirements. This indicates that, traditionally, construction networks have been dense networks with structural autonomy (Gnyawali and Mahdavan 2001) with limited flexibility and possibilities for self-governance.

Different network actors occupying the buildings, such as facility managers, clients, occupants, visitors, cleaners, repair staff, etc. might all have different perspectives on the design of a facility. Building owners acting as focal actor have a remarkable challenge if they are to harness the different requirements and information within the network organisation. However, modern technology and specialised network actors have made possible better control over these issues.

### **4.3 Virtuality**

Tools within the construction environment are developing constantly and the interaction between construction parties is becoming increasingly crucial. Similarly to other business environments, the construction and facilities management industry is undergoing a noticeable change and is moving towards virtual organisations. The network organisation (virtual firm) creates a demand for tools to cope with the requirement for increasing client interaction, such as higher usability and business need satisfaction requirements, which have become key variables of change (Smith and Love 2001).

According to Mohammed (2003), a core issue in construction networks is the effective management of information, both in the form of information flows that permit quick inter-organisational transactions between partners and in the form of information accumulated, coded, and stored in database structures. While such prescriptions are reasonable, they do not address the fundamental structural flaw in the standard approach. The development of virtual tools and the emerging firms specialised in using them have formed a new set of network organisation actors in the industry.

### **4.4 Specialisation**

Anumba *et al.* (2001) suggest that the geographically-distributed range of disparate professionals clients, architects, structural engineers, building services engineers, quantity surveyors, contractors, and materials suppliers – in the construction industry needs intelligence agents that are able to tackle specialist problems and transform them into a collaborative network form. Relevant issues include, for example: (1) identifying client requirements and translating these requirements into an initial project specification (design constraints); (2) communicating the parameters that define client requirements to the appropriate task agents, and (3) allocating different design tasks to appropriate functional agents, so that these agents use their internal knowledge to propose design solutions that meet the constraints.

The facilities design network, governed by the building owner, creates a demand for tools to cope with the increasing client interaction requirements, such as those for higher usability and business need satisfaction that have become key drivers of change (Smith and Love 2001). According to Anumba *et al.* (2001) this means that there exists an emerging market for intelligent agents.

A multi-agent system of intelligent agents provides an enabling environment for interaction and negotiation by agents that represent various participants during distributed asynchronous collaboration in project design. The agents encapsulate different levels of knowledge of the problem domain, including knowledge of the availability and location of potential external resources, which would enable an agent to execute their design tasks.

#### ***4.5 Facilities Design Network Governance at Senate Properties***

A brief review of the literature on different network management trends in construction management indicates that client centrality has also become the primary variable for network governance in the industry. Additionally, self-governance, virtuality and specialisation have become significant variables for network organisation governance in facilities design networks.

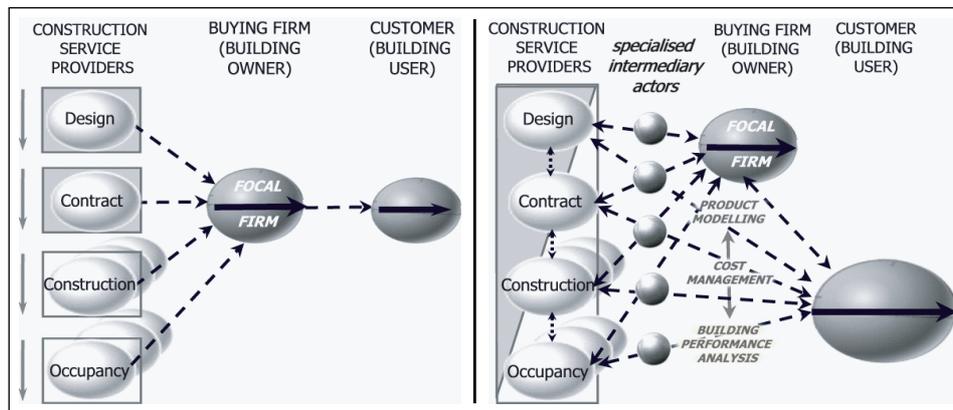
In the network organisation managed by Senate Properties there is an enhanced demand for the distribution of new competencies. These new skills are, for example, in modelling technology (model checkers, model servers, project databanks, collaboration platforms), building system integration, and the integration of business and engineering knowledge. Senate Properties have established service provider roles that act as intermediaries and catalysts between the traditional building users, owners, and service providers. In the current transitional stage of the industry, Senate Properties acting as focal firm need to involve a parallel network of specialised firms to ensure that the traditional players will be able to play their role as components of a network.

Increased business demand for new network players indicates the new demand for specialised expertise in this traditional industry. Client satisfaction, design requirements, and the translation and modelling of building use and ownership requirements can be improved by the new specialised information. The customer interaction between the building user's organisation and the service providers can also be upgraded from traditional modelling to cost and lifecycle modelling. The clients are able to understand the cost generation and the outcomes of the project. Specialised facilities design knowledge makes possible the systematic participation of the property and facility manager in the planning process, resulting in improved performance and lifecycle goal-setting practices, and the creation of joint objectives for the whole network organisation.

A dense supplier network works as a closed system in which shared norms and common behavioural patterns develop easily. Structural autonomy, on the other hand, indicates that there are structural holes between the functions that are controlled by a focal actor who coordinates the resources. This implies that there is a general need to increase service providers' self-governance in interaction with building user organisations.

At Senate Properties, a change is taking place, from traditional construction networks towards modern networks that increase end-user organisation interaction (Figure 2). In the modern model, the building owner's organisation makes possible

a concurrent design and implementation process, in direct contact with the users of the building. As the structure of the network changes, the role of the focal firm (the building owner) is fundamentally altered by the creation of a more open network for interaction. Specialised intermediary actors are brought to the network in order increase end-user organisation interaction, flexibility, and iterative facilities design. This 'co-design' approach provides a virtual multidisciplinary contact with the customer with the product modelling, cost management modelling and building performance analyses.



*Figure 2. From a traditional construction supply chain to self-governance.*

## 5 Service delivery network perspective

As potential carriers of facilities management experiences to designers, facilities managers are to be found in what is basically three organizational contexts, by companies that use particular facilities, and as part of the organization of companies that coordinate and deliver facilities-related services (Bröchner 2003). While, from a production perspective, facilities design networks have been driven by client centrality, self-governance, and virtuality issues, the service delivery networks of facility management seek to leverage horizontal synergies across different and fragmented on-going business support roles.

According to Joroff and Bell (2001), the modern workplace and facilities management environment consists of a network of roles and links that involve specific knowledge of the businesses being supported. When the business support functions of facilities management are scattered to different support departments and services managed as 'silos', the initial step is to view them as a centre of people responsible for the core business support (Bogle 1999). The responsibility for purchasing support services is found to be scattered to CRE, HR, or IT departments (de Zwart 1995; Lambert *et al.* 1999; Young 2001), which indicates the need to seek to leverage horizontal synergies across different fragmented on-

going business support roles. The vision of a network's service concept is not just an idea in the minds of a few managers. The industry literature indicates that the service delivery network of facilities management distinctive features from the point of view of the network organisation governance.

### **5.1 Client centrality**

A demand for continuous communication with the core business customers has been a popular topic in both the corporate property (Joroff *et al.* 1993; Lambert *et al.* 1995, 1999) and facilities management literature (Alexander 1994; Barrett (ed.) 1995, 2000). One of the most heavily emphasised success factors of facilities management is the informed or intelligent client/buyer function (Carder 1995; Atkin and Brooks 2000). This refers to the continuous and close communication links between the different horizontal facilities management network actors, on different strategic levels, and their building user organisation counterparts.

However, a distinctive feature of horizontal facilities management networks is the emerging need to organise the continuous service processes to meet business and user needs and promote the corporate identity. In the network organisation context this indicates that horizontal facilities management networks have an emerging need to set joint objectives and a readiness for joint marketing efforts to build more dense networks. From the network organisation perspective, the empowerment of people indicates the self-governance of network actors and harnessing the potential of new technologies the virtual embeddedness of the network actors. In horizontal facility management, these management trends are similar to the network organisation variables presented with the vertical construction network.

### **5.2 Joint objectives**

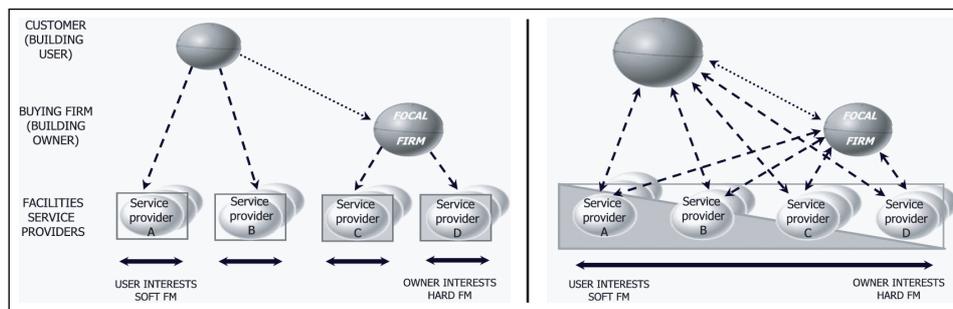
According to Alexander (2004), the generic management of a cross-disciplinary environment requires the development of new roles and profiles, which implies an increasing specialisation. Three emerging management roles in facilities management organisations are those of managing customers, managing services, and managing assets. These management roles concentrate on: (1) the empowerment of people in organisations so that they are at their most effective; (2) harnessing the potential of new technologies, and (3) organising the service to meet business and user needs and promote the corporate identity. Alexander also lists the following implications for the facilities management organisation's strategic role: formulating and communicating a facilities policy; planning and designing for the continuous improvement of service quality; identifying business needs and user requirements; negotiating service level agreements; establishing effective purchasing and contract strategies; creating service partnerships, and systematic service appraisal quality, value and risk.

A concise review of the literature dealing with different network management trends in the facilities management environment indicates that the

primary variable for service delivery network governance is also client centrality. Self-governance and virtuality have also been significant variables for network organisation governance in facilities management networks. Joint objective setting has become a distinctive feature of the facilities management environment.

### 5.3 Service Delivery Network Governance at Senate Properties

At the Senate Properties the interaction of service delivery network actors is evolving from traditional supplier relationships towards partnering. Long-term alliance relationships involve multi-level interaction, on both the strategic and operational levels, between the supplier and client organisations. While the service relations and functional services have traditionally been seen as separate 'silos' instead of bundled activities, in the modern networks interpersonal connections and learning infrastructures are seen as cross-disciplinary network relations (Figure 3).



**Figure 3.** Traditional 'silo network' compared to a modern service delivery network.

To conceptualise the joint objectives based on client centrality, building user organisation's needs, Senate Properties has developed structured approaches for triadic network actor interaction. Senate Properties is showing tendencies to gather building user and service provider organisations to collective joint objective creation. Although the company only has a staff of two hundred, a network of several thousand people must be made to function according to the company's own value system and the set goals. A special challenge is the management of the service network where suppliers form an essential part of the Senate Properties' client interface. The purpose of the services is to support the client's purchasing function by offering a service solution in cooperation with service provider partners. Senate Properties is widening its services offering based on end-user relationship specific plans for joint service delivery network marketing. Also a number of virtual tools are developed in cooperation between the service delivery actors. Senate Properties' aim is to manage the service provider organisations so that they operate as a single client central and flexible network organisation with joint objectives.

From the perspective network organisation governance the facilities design network can be characterised as a dense network, meaning in this context a closed system where shared norms and common behavioural patterns develop easily, the service delivery network is thus suffering from a lack of density. The network actors involved in facilities management have their scattered personal links to the customers they support and views on the joint objectives of the network. This implies that there is a general need to increase the interaction of service providers with all network actors.

## **6 Concluding Remarks**

Van Wagenberg (1997) and Bröchner (2003) have pointed that there can be a difference between what existing facilities managers really do and what writers wish that facilities management should include. In the case at the Senate Properties the new perspectives to the network governance is thus far limited to a number of business cases. However, the business cases indicate a larger scale change for traditional practices. In this context, the network organisation approach is used at making sense of what are the changes in the complicated business environment of a building owner's organisation.

The network organisation approach is a widely-understood concept in current management literature. In line with other industries, the governance of building owners' business environment is under the influence of common variables of network organisations. This article presents the independent variables of network organisation governance by means of a network management literature review, short-listing them as client centrality, self-governance, flexibility, specialisation, virtuality, joint objectives, and joint marketing.

In a complex and cross-disciplinary facilities design and service delivery network the conceptualisation is challenging. Even though the construction (Cheng *et al.* 2001a; Matthews *et al.* 2000) and facilities management (Lambert *et al.* 1999; Incognito 2002) literature emphasise the engrossment of partnerships within the industry, interaction of different independent organisations and individuals of clients and multiple service providers has received little attention in the literature. However, the strong focus on client centrality and other forms of network organisation governance variables indicates that studies of interaction and cooperation will gain increasing attention and have more industry-specific case examples in the future. The network interpretations within industry literature indicate that network organisation governance in building owner organisations is at an exploratory stage compared to those industries in which network management literature originally commenced.

The identified network management trends and the building owner's emerging role as a focal firm in the network are used to explain and simplify the general network organisation trends in the building owner organisation's environment. For the sake of further simplification, the building owner's network

perspectives are divided into the facilities design network perspective and the service delivery network perspective.

Facilities design networks were studied by means of a concise review of construction management literature and a descriptive case at Finnish building owner organisation, Senate Properties. The governance of the facilities design network is primarily driven by client centrality, but also by self-governance and virtuality. Modern construction networks are driven by a high degree of specialisation. This specialisation is formed by the emergence of specialised intermediary firms that ensure stronger end-user organisation ties and that the traditional players will be able to play their role as components of a network organisation, instead of functioning as passive doers.

Service delivery networks were studied by means of a concise review of the literature dealing with facilities and corporate property management, which indicated that client centrality is the primary management driver for the governance of horizontal facilities management networks. Also a concise case description was made of the service delivery management at Senate Properties. A highly distinctive feature of the governance of facilities management networks is joint objective setting.

The article gained added academic value by presenting a literature review comparison between the independent variables of network organisation governance and the industry specific management trends of facilities design and service management. The governance of building owners' network organisations has distinctive characteristics that are identified in the article. The network trends identified in the industry literature indicate that network organisation governance in facilities design and service management environments is at an exploratory stage, compared to those industries in which network management literature originally commenced. The practitioners have a possibility of learning from the other industries by benchmarking some network governance practices from them. In order to increase the utilisation of the existing network organisation governance scholars and practitioners have to continue developing the conceptualisation of the network phenomena in the building owner's environment.

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