Creating a strategic net to commercialize a radical innovation

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ABSTRACT

Commercialization of a radical innovation is known to be a very demanding task. However, a network may help a firm in the commercialization efforts. This study concentrates on how networking is contributing to marketing activities related to radical innovations. The study aims to describe, how the network approach and strategic issue based innovation net can be utilized in commercialization of a radical innovation. Theoretical background of the study stems from network and innovation literature, referring to studies on industrial networks, strategic networks and innovation networks. The empirical part of the study concentrates on a single case, describing how a small firm that developed a radical invention is utilizing a network in the market creation. The results indicate that radical features of the innovation necessitate particular attention on trust creation. The resource intensiveness of radical innovation commercialization may require an innovating firm to turn its portfolio of dyadic relations into a commercialization net consisting of equal actors.

Creating a strategic net to commercialize a radical innovation

1 INTRODUCTION

When companies develop new complex products for a market that is not well defined or does not exist, traditional marketing tools are of limited use (Dhanaraj & Parkhe, 2006). Especially, in case of radical innovations, demand, markets and delivery channels have to be created. Radical innovations can be defined as new products or services, which require considerable change in customer behavior, are perceived as offering substantially enhanced benefits, and are also technologically new (cf. Veryzer, 1998). The newness of these innovations creates various challenges for the innovating firms. Since these innovations "involve dramatic departures from existent products or their logical extensions" (Veryzer, 1998) and involve, for example, credence qualities, customers tend to resist them. However, the resistance often extends far beyond the customers; distributors, partners and other actors in the business environment may find it hard to accept a new product that significantly alters the prevailing market structure (Christensen, 1997).

In order to become an innovation, an invention has to be commercially successful (Schumpeter, 1934), which presumes both a successful product or service launch and diffusion in the market. According to Urban and Hauser (1993, 39), launching is "the difficult task of 'making the product happen' in the market". Investment in the innovation may be considerable by this time, and the risk of rejection is still quite high. This makes the manner in which the launch is handled important. Past studies (Beard & Easingwood, 1996; Easingwood & Koustelos, 2000) have identified three basic ways in which firms launching radical innovations are inclined to influence their customers: awareness building, customer education and the opportunity to try the innovation before buying it seems to be especially important in radical innovations. All these actions are rather demanding and usually do not come without a significant sacrifice of scarce resources.

A network may help a firm to overcome the challenges inherent in the commercialization of a radical innovation. A network can provide access to resources of other firms (Håkansson & Snehota, 1995), to information, markets and technologies, and allow the firm to achieve its strategic objectives (Gulati, Nohria & Zaheer, 2000). A network of complementary organizations may help to promote the innovation to the customers (Sandberg, 2005). Nowadays, innovations tend to be multi-technological, knowledge-intensive, and increasingly based on solution-oriented product-service combinations, that are difficult to understand and communicate, and thus new complementary competencies, for example, in marketing or distribution are required (Bullinger, Auernhammer & Gomeringer, 2004).

SMEs, especially, encounter problems in the commercialization, because they lack economic and competence resources needed to reach potential customers and they may need collaboration with larger firms to achieve required managerial, financial marketing and distribution resources (Alvarez & Barney, 2001) and to provide legitimacy and reputation spillover effects for the radical innovation (cf. Teece, 1986). According to Ritter and Gemünden (2003), the ability to initiate, handle and utilize a portfolio of inter-organizational relationships increases innovation success. Collaboration seems to reduce the uncertainties associated with radical innovations and new markets (Slater & Narver, 2000). Networking of SMEs for competitive advantage in marketing is acknowledged (e.g. Dennis, 2000; Alvarez and Barney, 2001), but IMP-literature and innovation network literature have not sufficiently addressed to this issue so far.

Previous research on innovation networks and strategic networks has mostly focused on R&D networks, production and distribution (e.g. Ritter & Gemünden, 2003), whereas commercialization and marketing as the function of a network has been mentioned only very briefly (Möller, Rajala & Svahn, 2005; Bullinger et al., 2004). Therefore, this paper concentrates on how networking is contributing to marketing activities related to radical innovations. The aim of the paper is to describe, *how network approach and strategic issue based innovation net can be utilized in commercialization of a radical innovation.* This paper discusses intentionally-developed issue-based nets, their goals, actors, structures, creation process, and manageability. The paper aims to answer the following questions: What are the preconditions needed to intentionally create a net that aids in commercialization of innovation? Through what kind of process a net can be created? What kind of actors and resources are needed in innovation commercialization net? What kind of structure can be? Is low-central network of multidimensional actors manageable and what are the challenges in managing this kind of strategic net?

This study builds mainly upon network and innovation literature. We refer to studies that follow the industrial network approach, strategic networks, and innovation network studies. Parkhe, Wasserman, & Ralston (2006) see that the network research can be considered as temporal, when time dimension is used as an organizing

principle and focus is on antecedents, management, evolution and dissolution, or topical, when it focuses on central topics, such as motives, member selection and characteristics, control and stability/performance, along the phases of a network's life cycle. Our approach is topical, and we emphasize more the motives and characteristics of the network formation than the actual process.

The empirical part of the study concentrates on a single case, where several organizations are joining their resources to a formal issue-based network (cf. Araujo & Easton, 1996; Melo Brito, 1999). The case describes how a small firm that developed a radical innovation needs network in the market creation. The firm starts to build up an association consisting of several international and domestic firms and non-profit organizations in order to create the market for the product. Intentionally developed nets have had less attention in previous research (Möller et al., 2005). Furthermore, innovation networks are mostly high central networks, where a hub firm acts as an initiator and "orchestrator" (Dhanaraj and Parkhe, 2006). We assume that intentional network formation and management are different in low-central nets and especially challenging for the initiator; how to transform a portfolio of relationships into an effective net of equal actors so that it fulfills the goals of all actors?

2 COMMERCIALIZATION NETWORK - ISSUE BASED STRATEGIC INNOVATION NETWORK

2.1 Perspectives and concepts to outline the commercialization net

Networks consisting of focal firm and other actors can be analyzed on several levels, and thus. Commercialization networks can be considered as the portfolios of dyadic relationships or as 'autonomous' nets (Figure 1). At portfolio level, the attention is on the view of innovating firm and on the relations it needs to commercialize a radical innovation. Thus, the main challenge lies in how to develop and manage an optimal portfolio. At net level, the focal firm is seen as a network actor in a net and the question is what kind of actors are needed and how the net is intentionally created, coordinated and managed. (cf. Möller et al., 2005) The role of the focal firm seems to be particularly challenging when there is a shift in its position, for instance in a situation a portfolio of dyadic relations is turned into effective commercialization net consisting of equal actors.

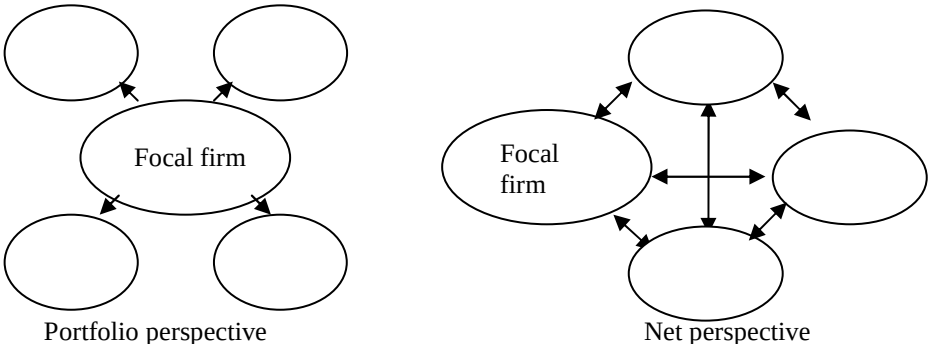

Figure 1 The portfolio of the commercialization relations and the commercialization net

The commercialization network can be seen as a part of *the innovation network*. Innovation network is built to develop, produce and market innovations (Ritter & Gemünden, 2003). However, the studies on innovation networks often consider only R&D-networks, and issues related to commercialization of innovations have been tackled very little. (Möller et al., 2005; Bullinger et al., 2004)

When a network is formed in order to commercialize an innovation it is *intentionally created*. To put it more specifically, it can be called also *issue-based net*. Issue-based net is formed because of a specific 'issue', e.g. in order to influence operational environment or to create demand in the future (Melo Brito, 1999). According to Melo Brito (1999, 93): "An issue-based net constitutes a form of association mainly based on cooperative relationships amongst actors who aim to cope with a collectively recognized issue by influencing the structure and evolution of the systems to which they belong through an increased control over activities, resources and other actors." Actors of an issue-based network share mutual interests – not only economic, but also social and political interests and the form and structure of an issue-based network can be formalized or non-formalized (Melo Brito, 1999).

Network relations built to commercialize a radical innovation can also be characterized as a *strategic net* or *strategic alliance*. The goal of the strategic net is to achieve long-term competitive advantage and mutual

benefits through increasing the efficiency of value system or developing completely new business concepts. Several activities, such as R&D, production, logistics, and marketing, can be carried through the strategic net. The power in the net can be centralized or decentralized and the permanence of the net can vary from permanent and continuous to temporal. (Möller at al., 2005; Möller & Svahn, 2006; Jarillo, 1988)

2.2 Preconditions: trust and common goal

Preconditions for forming new network relations are based on social embeddedness and trust. Pre-existing social relations among individuals and reputational knowledge (personal reputations and firm reputations) and track records provide a receptive context for the initiation and evolution of strategic economic exchange and create trust and mutual obligation (Larson, 1992, Jarillo, 1988, Eisenhardt and Schoonhoven, 1996). Trust is a critical component of both effectiveness and efficiency of the strategic network. Lack of trust may create free rider problems and lead to opportunistic behavior. Trust can be generated by identifying partners' motivations and by choosing the partners with i.e. similar values and requiring some kind of track record and reputation. (Jarillo, 1988; Dhanaraj & Parkhe, 2006)

The decision to enter into a commercialization network can be based on multiple, multilayered short- and long-term economic criteria and goals. Even though the partners may have *private goals* there should also be a *common goal* to motivate the formation of a commercialization net (cf. Gulati et al., 2000). The potential goals may be according to literature (Larson, 1992; Ojasalo, 2004; Ritter & Gemünden, 2003; Ritter et al., 2004; Gulati et al., 2000; Bullinger et al., 2004; Melo Brito, 1999) the following:

- growth and profit
- access to new business relations access to information, knowledge and learning
- access to new markets
- ease of communication and organizing activities
- enhancement of reputation and image
- need for support because of complexity of product
- access to finance
- aligning strategies and roadmaps
- and, gaining negotiation power.

It is worth noting that if the network is based on very radical change from value creation perspective, the goals may remain somewhat blurred. At the most radical level, strategic innovation value nets are formed with a view to creating new technologies or new business concept and this requires complex collaboration and learning processes, and this kind of co-operation can be difficult to specify clearly in advance. (Möller et al., 2005) According to Larson (1992) networked firms form common strategy during the last phase of relation formation, but we assume that in intentionally created nets the common strategy and coherent goals can also be the trigger to the actual network formation.

2.3 Forming the net

Initiation activities are required when firm identifies potential partners, since interorganizational relationships do not start their own (Ritter & Gemünden, 2003), thus one actor have to act as an initator (Larson, 1992). In innovation networks, it is usually the hub firm who acts as *an initiator*, i.e. prime mover (Dhanaraj & Parkhe, 2006). On the contrary, in low-central networks, there might be one or several initiators – for example horizontal actors without the central position or power- who are interested to cooperate and launch the negotiations to form the network, and thus their role and power as initiators differ from a hub firm as an initiator.

Network *actors* can be persons, business units, firms or other organizations and the interaction can be based on business or non-business exchange (Håkansson & Snehota, 1995; Ritter et al., 2004). Actors in the innovation nets can be e.g. competitors, distributors, buyers, consultants, suppliers, research institutes and universities, government agencies and industry associations (Ritter & Gemünden, 2003; Möller et al., 2005; Bullinger et al., 2004).

Resources of actors in commercialization net can be related with technical competence, knowledge, customer knowledge, market knowledge and relations itself. The joining of complementary resources allows firms to focus on one's own resources and utilize partners' resources in the marketing of innovations and to offer complete solutions instead of only product (Bullinger et al., 2004). Firms do not benefit just from their direct ties, but also from the ties of the actors to whom they are connected; direct relation to another actor offers indirect relation through other actors' relations and these indirect and direct relations can provide access to e.g. technological or

knowledge resources of their counterparts (Håkansson & Snehota, 1995; Ritter, 2000; Gulati et al., 2000).

We may assume that characteristics of the radical innovation influence on what kind of actors and resources the launching firm requires from the network (cf. Guiltinan, 1999). In case of radical innovations, it is important to build awareness, educate customers and give them opportunity to try the innovation before buying. Some radical innovations have to be bought in order for customers to perceive their advantages, but there are also those whose advantages cannot be detected before purchasing. This difference, together with how easy or difficult it is to use the innovation, can influence on what kind of actors are required; innovations that are easy to use seem to benefit from word-of-mouth communication and opportunity of lend and trial, and those that are difficult to use, seem to require hand-in-hand customer education and other support services and demonstrations where experts use the product skilfully. (cf. Beard and Easingwood, 1996; Easingwood and Koustelos, 2000; Guiltinan, 1999) Hence, we may assume that in a commercialization net, actors and resources related to education, distribution, expert power and supporting services might be required.

Grandori and Soda (1995) note, that the selection of partners and access rules are related to the nature of co-ordinated action among firms, and thus *selection systems* give a view to examine the intentional net formation more deeply.

The *structure* of the commercialization net can consist of vertical or horizontal relations or it may be multidimensional. *Vertical nets* are often supplier and channel nets. *Horizontal nets* can consist of i.e. competitor alliances and cooperative arrangements. However, horizontal nets are seldom purely horizontal, and they often contain vertically positioned supplier and distributor companies. (Möller et al., 2005) *Multidimensional* value nets are usually formed by a hub organization that "creates its market offer by integrating the products and services required from a group of different types of suppliers and channel firms" (Möller et al. 2005, 1278). Multidimensional networks can offer to a commercialization net a wide range of information, relations, and views about technology changes, customer and market trends.

Creating a network can be considered as *a process* consisting various phases, during which actors sustain continual negotiation of mutual expectations and evaluate commitments for future action (Ebers, 1997). For example, Larson (1992) identified three phase: firstly, preconditions for exchange are set and foundation for the net is formed by reducing uncertainty, expectations are cleared and early cooperation is enhanced. Secondly, the conditions of dyadic relations in networks are built during a trial period when reciprocity and trust are created and expectations are set, and rules and procedures, implicit and explicit, begin to form. Thirdly, actors concentrate on integration and control; they focus on operational integration, strategic integration and social integration.

The features of the formation process may be different depending on whether the process is conducted by a hub firm or equal actors. In high-central innovation networks, hub firm can impact on network membership (size and diversity), network structure (density and autonomy), and network position (centrality, status) by its strategic choice of partners (Dhanaraj & Parkhe, 2006). In low-central innovation networks, firms widely co-operate and monitor the competencies, ideas and activities among their potential partners (Bullinger et al., 2004), and the cooperation during formation should be perceived as activity of group, rather than at a mere dyadic level (Melo Brito, 1999).

According to Gulati et al. (2000), both exogenous and endogenous forces shape how networks evolve over time. Previous relations and already established network relations stimulate further networking relations. However, a network can be seen both 'a constraint and as an enabler'; existing relations both enable and constrain further networking, since actors can be locked in to cooperate with each other and locked out of cooperating with others. Lack of resources and time constraints enable a firm to have only a limited number of alliances. Besides, many alliances are monogamous and preclude the parties from allying with similar others either on the basis of explicit contacts or implicit expectations of loyalty. (Gulati et al., 2000)

2.4 Managing the net

The manageability of networks has been subject to diverse discussion: while the resource-based view assumes that large firms are intentionally able to create and control the network, the IMP-approach assumes that inter-organizational relationships cannot be controlled by one actor because of constantly changing sets of direct and indirect relationships (Möller et al. 2005). Möller et al. (2005) state, that even if a network cannot be completely managed, the management in networks still is a crucial issue, since opportunities and coordination of different kinds of networks need conducting. Network co-operation can be managed through communication, decision and negotiation mechanisms, social control, common staff, hierarchy, planning and control systems, and selection systems (Grandori and Soda, 1995).The duration of the net, rewards gained from the net, fundamental meaning of the net, the nature of the networked organization, planning, control, the centralization of power, trust, hierarchies, authority, and coordination seem to influence on the management of innovation nets (Ojasalo, 2004;

Dharanaj & Parkhe, 2006; Möller et al., 2005).

Business relations are governed by either formal or informal agreements. In strategic nets, the social dimension, reciprocity, the coherence of goals and trust seem to be more important than formal agreements (Larson, 1992; Dhanaraj & Parkhe, 2006; Gulati et al., 2000). In high centrality innovation nets, where hub firm is an orchestrator, it can enhance socialization, promote knowledge mobility and ensure knowledge sharing within the network through formal and informal communication channels. However, in small high density nets actors can operate without a hub player since a high level of interaction replaces active coordination of a central player. (Dhanaraj & Parkhe, 2006) In this case, the cooperation may play a key role in shaping the 'rules of the game' (Melo Brito, 1999), even though there may still be confusion between the roles of orchestrator and other network actors.

2.5 Synthesis

The Figure 2 below summarizes the a priori framework, formulated based on previous studies. The framework is used to guide and focus on the investigation. Since it is a preliminary attempt to combine the findings of past studies, it does not provide a good enough basis for hypothesis testing. On the contrary, the framework is left open for modification based on what emerges from the empirical data.

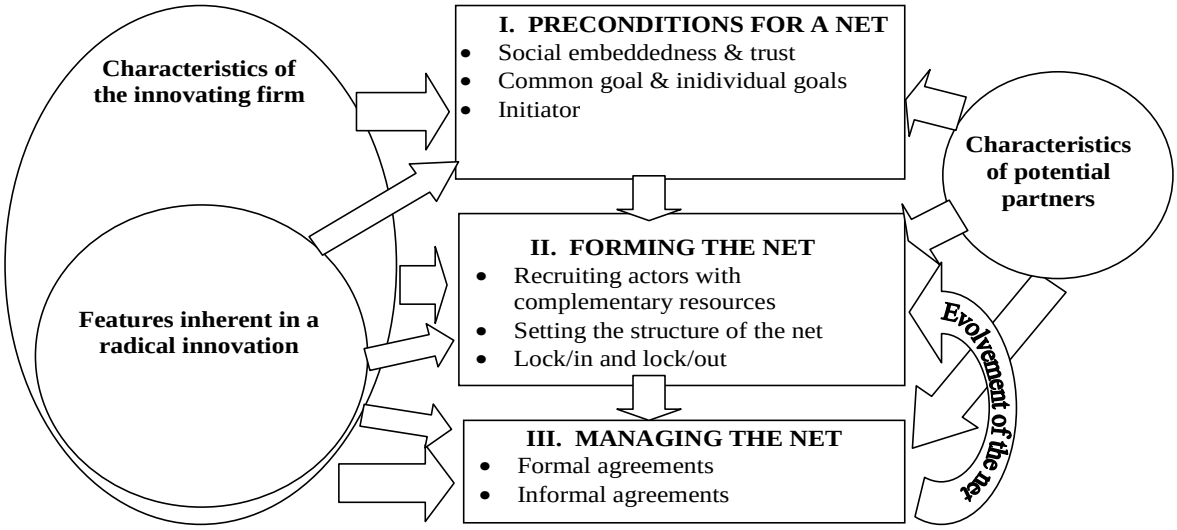

Figure 2 A Preliminary framework describing the creation and management of a net needed to commercialize a radical innovation

Hence, we may assume that the characteristics of the innovating firm and the basic features of the radical innovation and, equally, potential partners with their resources and relations influence on the creation and management of the innovation commercialization net. Since radical innovations may bring in considerable return on investment, it is assumingly rather easy to evoke the interest in potential partners. However, since radical innovations are risky, trust creation among potential partners may become very exhausting, particularly if the innovative firm is small and lacks both resources and existent social relations.

3 A SINGLE CASE STUDY

This study focuses on a single case and describes how a small Finnish company Newtest Ltd, is trying to utilize a network in the commercialization of a radical invention it created. Currently, we are in the middle of the data collection. The main data for this paper consists of an interview made in Newtest. This data is supplemented with a vast amount of secondary data. Since the net we are interested in is currently being formed we will be able to monitor the net creation and management in a longitudinal research setting. During the next months, we will interview the main actors in the net and also collect secondary data related to the new net. Although "studying a single large network is, in general, an extremely complex task, if not impossible in most cases" (Melo Brito, 1999, 92), the task is easier in this case since the network of interest is an association, i.e. a formal network.

Newtest is a small company; it employs 7 people and has a turnover around 600 000 euros. The company was found in 1993. It specializes in the development, manufacturing and sales of the human performance testing and

assessment products by utilizing technological innovations. Their invention is a small activity monitor worn on the hip during daily activity, called Newtest Bone Exercise Monitor. It was created to help people to prevent osteoporosis, which is becoming a serious health threat and burden on national health and economy in many industrialized countries. It has been known for long that the right kind of exercise strengthens the bones and prevents osteoporosis. Newtest developed the first product in the world that allows people to monitor that the amount and quality of their daily exercise are enough to develop a bone's density and prevent osteoporosis. Bone Exercise Monitor is based on the patented inventions in which an accelerometer is combined with a microprocessor.

The newness of the product is illustrated by the fact that Newtest had to create also a new concept 'bone exercise' to describe the exercise that strengthens the bones. On contrary to many health care technologies, Bone Exercise Monitor is primarily targeted to consumers, 30-50 year old women being the main target group. The product was launched in Finland in November 2005. Currently it is sold in big pharmacies, health food stores and some department and sports equipment stores, and it is also exported to various European countries. The global market potential for bone-health-related products is expected to grow steeply in the future, since it is estimated that every other woman and every fourth man over the age of 50 will suffer from osteoporotic facture. Thus, it was rather easy to evoke interest among the potential partners and the media:

"Sure, it interests people. Osteoporosis prevention is a very sexy topic. When we introduced the monitor there were journalists from over 30 newspapers. Radio and television states were there as well." (CEO)

The commercialization has, however, been very difficult, since the product is first of its kind and thus would need considerable investment on awareness creation, as the CEO of Newtest commented:

"We know that we have got a brilliant product. We have scientific evidence supporting it. And there is a market out there. We know that the need is there. It is a challenge that the need is not recognized. We have to create the market and, after that, break through with the monitor. But we know that we don't have money to do that..."

Hence, Newtest has not had resources to create awareness in the market in such a big scale than this kind of radical innovation would have needed. Besides, the distributors have not been very keen to take the new product onto their shelves, since there was no guarantee of success. The only option seems to be to form a net and to create a market together with supporting vertical and horizontal actors (see Figure 3). In May-December 2006 the firm ran a project for clarifying the structure and potential actors in the net, and the emerging net was named as "*Bone Health Association*". It was concluded that the net would aim at creating the market for products and services related to bone health. It was believed that through synergistic marketing promotion and knowledge sharing it would be easier to raise awareness about the importance of early osteoporosis prevention. Thus, the common goals of net were to create a clear concept concerning bone health, to gather research information about the topic for participating organizations, to produce common promotional material, and to create new synergistic concepts that offer marketing advantages for participating firms. It was seen very important to find synergistic vertical and horizontal actors – from various industries with synergistic products and services – who would supplement each others on markets. Since the device was targeted at international markets it was considered important to get also global firms to the net.

The 'issue' of the commercialization net could have been *bone exercise* or *bone health*. Bone health as a more extensive and holistic approach was chosen, and therefore in addition to obvious health care and fitness actors, some food companies were also pursued in the net, because milk products containing calcium contribute to bone health. Consequently, the potential actors in the case could be pharmaceuticals (e.g. Orion), healthcare companies (e.g. Roche Diagnostics), food companies (e.g. Danone), fitness clubs (e.g. SATS), and insurance companies (e.g. Tapiola). Non-profit organizations (e.g. national osteoporosis foundations, innovation promotion organizations) were also considered important since they could provide more credibility for the monitor and more support for the company. Getting these actors to commit to the net was rather difficult, because of the newness of the idea, the risks inherent in the radical innovation and the small size and unfamiliarity of Newtest. Hence, the creation of trust played an important role in the actor recruitment. Furthermore, it was very important to be able to recognize the individual goals of each potential actor in order to get them motivated.

The focal firm did not have strong existent relations to the big international firms and it was forced to utilize indirect relations to get contacts with those firms. It became clear that particularly those firms were very cautious risk takers. For those firms it was important to know who the other actors in the net would be. It was also clear that it would not have been possible to get competitors to join and stay with the same net. Thus, after an actor from a certain industry joined in, other companies within the same industry were not actively approached. Danone was the first international company that was interested to commit into the net and it also motivated others to join in. However, it withdrew later from the negotiations.

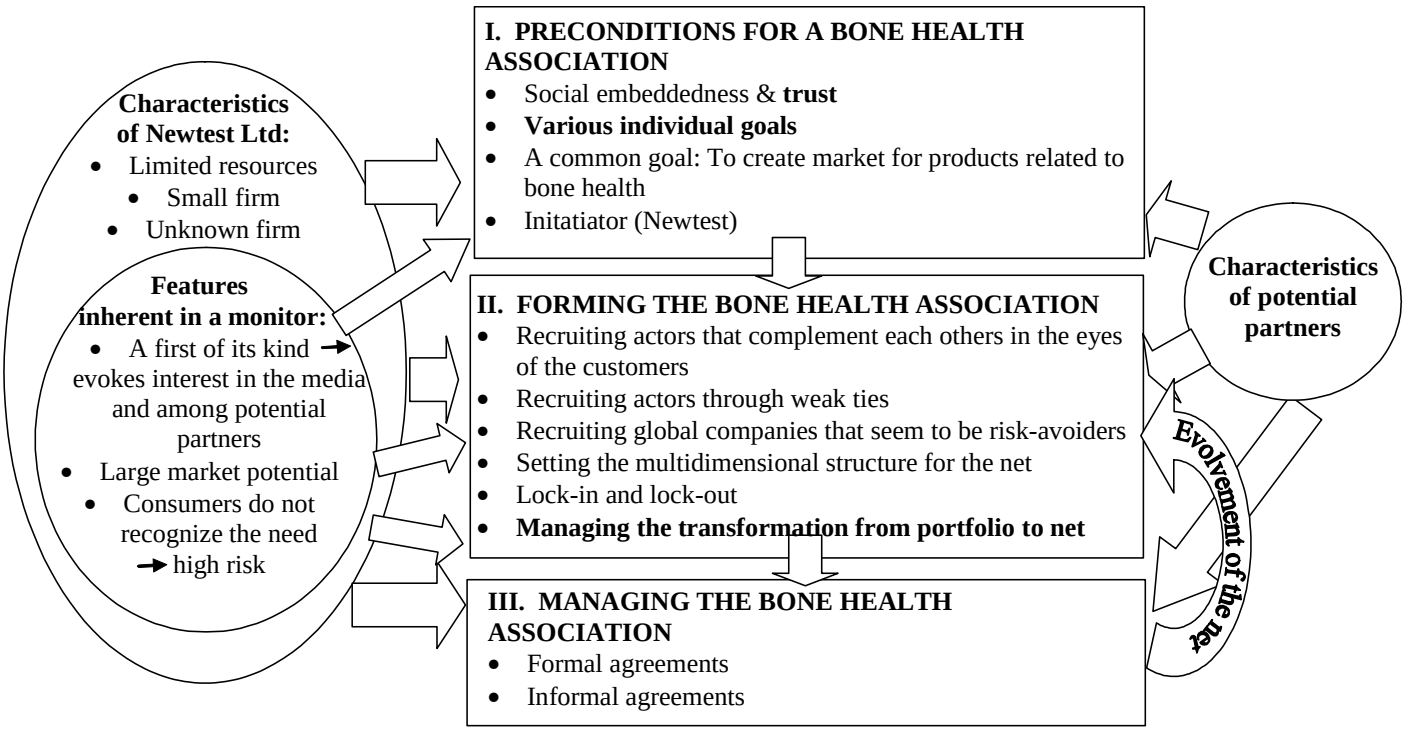

Figure 3 A framework describing the creation and management of the Bone Health Association

Consequently, in March 2007 there was a meeting to set up the Bone Health Association. The founding members of the association were Newtest, Roche Diagnostics (provider of products and services related to medical testing), Steripolar (distributor of health care technologies), Suomen Terveystalo (private health care service company), Tapiola (insurance company), Respecta (provider of products and services related to prostheses and aids), Orton Hospital (specialized in treating fractures), Vitala's Finland (wholesaler of nutrients), and city of Oulu. However, negotiations with some complementary actors, such as food product manufacturers and fitness service providers, are going on. The form of the association has been agreed to be formal, but possibly there might be informal hang-around members.

The main challenge for Newtest at the moment is how to get on board larger companies and how to get other actors to adopt active roles in the net. Since the awareness creation requires considerable amount of resources, Newtest would willingly give the leader's and the promoter's role over to one of the big actors. Therefore, in the future we will study low-centrality and power diversity questions. Transformation from portfolio to net may not take place smoothly and the management of the net would require extra efforts. This issue will also be tackled in our further studies.

4 DISCUSSION

This study demonstrated how the network approach can assist in marketing and market the creation of radical innovation. If the net is formed intentionally by gathering several horizontal and vertical business and non-business actors, the resources of the focal actors are complementary and the organisations are not competing with each other, there might be an opportunity to gain competitive advantage in marketing by sharing openly information and knowledge and by conducting common marketing activities. However, this kind of networking requires customer-driven orientation from firms, since it seeks to offer complete solution for the demand emerging from customers' needs.

The asymmetry of resources, power and goals has not been widely discussed in previous studies concerning strategic networks. Nevertheless, the heterogeneity of actors involved in the Bone Health Association indicates that, in fact, a network may be 'strategic' only for some actors. For instance, the studied network is strategic for Newtest but not necessarily for Danone. Further studies should contemplate how the asymmetricity of strategic network influences on the network creation and management. A clear collective offering or parallel marketing communication can support all network members, but still there can be collisions and disagreements regarding to what kind of actors and activities of the net would support an individual actor (such as the focal innovator firm) and what kind of actor would support the net as a whole.

The both similarity and dissimilarity of actors in the net would offer competitive advantages. Similarity of

actors can be related to the parallelity of the goals, values, and common activities and the dissimilarity to the complementarity of the offerings. Thus, the dissimilarity and multidimensionality of the network actors may improve marketing and the commercialization of the radical innovation by offering several kinds of thematic support and, for instance, non-profit organisations and associations can offer more objective shades in marketing.

In networks consisted of dissimilar or multidimensional actors, new kind of networking across industries can occur. It is important to have both weak and strong ties (originally defined by Granovetter, 1973) in innovation networks; weak ties with different ideas and approaches – compared to strong ties with similar ideas and approaches – bring new ideas and therefore they are most potential for innovations (Möller & Svahn, 2006). Thus it might be valuable to gather several different types of actors, and the distant actors as well, to gain new fresh ideas or totally new relations through the net. However, if diversity and dissimilarity of actors increase, the manageability and communication of actors will become more complicated.

It has been acknowledged that both the ideation and development of radical innovations often require co-operation across industry borders; by combining knowledge and know how from different branches firms may be able to create something truly new (cf. Christensen, 1997). However, this study indicates that also the commercialization of radical innovation may require intra-industry networking. Namely, only by joining the efforts firms from different branches could be able to convince prospective customers about the latent need for a completely new kind of product.

The generalisability of these results is limited due to the context specificity and embeddedness of each particular network. However, the results of the study seem to emphasise the importance of a common goal and parallel individual goals of network actors in marketing network. Thus, the future research may focus on the selective systems and continual evolvement of the network. That is, who decides what kind of actors will have access to the network and what kind of resources are required, how the common goals are defined and how the goals will evolve in formal marketing association. Will the goals be related only to marketing and promotion, or will there emerge other common goals and opportunities?

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