Value Creation Networks in Mobile Telecommunications: Creation and Management of Strategic Nets

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Introduction

Value creating networks or chains have become the focus of strong managerial interest in many high technology, high knowledge fields like telecommunications, new media companies, genetics and biotechnology. In a nutshell the core issue is of how to combine and co-ordinate the value activities of multiple actors in order to form competitive or 'value creating' end products and systems, Anderson and Narus (1999). This phenomenon is of outmost importance in fields where single actors cannot master all the technological bases needed in creating offerings or where the product/service component of one actor must be combined with products or systems offered by others in order to deliver it its value potential for the end customers. The need for co-operation is enhanced by turbulent environment as change puts pressure on learning and mastering new capabilities that are very difficult to create within one company. Another force driving networking is the pressure on economic efficiency from the globalisation of competition (Möller and Halinen 1999).

The view that companies are inter-related through a web of resource ties and activity links is, of course, the core proposition of the Industrial Network Theory (Easton 1992, Håkansson and Snehota (1995), and network relationships have been examined in an increasing number of empirical studies during the 1990's (IMP conference proceedings between 1990-1999). Why then another study of networks and network creation? We argue that much of the past research has focused on organically developed nets of actors basically examining their structure and – to a lesser extent – their development process. Much less attention has been paid to the intentionally developed nets and especially on the management of creation and

maintenance of this kind of 'strategic nets.' For a few notable exceptions, see Håkansson and Eriksson (1993), Juttner and Schlange (1996), Loeser (1999), Ritter (1993). Also within the strategic literature management of networks from a value perspective is gaining attention (see Cravens et al., 1993, Doz and Hamel 1998, Jarillo 1988, Norman and Ramirez 1993). The idea of managing value creative nets forms also the cornerstone of the supply chain management approach, started in logistics but widening its scope into the strategic management of the firm (Christopher 1998, Cooper et al., 1997).

Objectives and Research Approach

Our study aims at developing conceptual framework models of and managerial tools for creating and managing intentionally developed strategic networks of firms that we call value creating nets or VCNs. In order to be able to development this kind of tools we need:

1. to identify and describe the processes through which VCNs are created and maintained;
2. to identify and describe the capabilities needed in the creation and management of VCNs.

The creation of VCNs are believed to be very contextual, that is, the situation and industry have a strong impact on such issues as who are the actors and what kind of coalitions or VCNs are actually developed. On the other hand, we expect that the processes and managerial and organisational capabilities involved in VCN development and management are more general in nature.

We start with a pilot study examining the development of strategic value creating nets in the telecommunications industry. The number of actual nets studied is under consideration. In case we get access to a complex strategic VCN only this single case will be examined. At the moment access is negotiated with the Nokia Networks, a unit of the Nokia Group. In case we end up with a more limited, and shallow, cases the number can be expanded to 2-3. We conclude the abstract by a brief description of the kind of value creating networks identified within Nokia Networks.

Nokia Networks – Messaging and Service Platforms

Nokia Networks produces telecommunication solutions and services to mobile network operators. Messaging and Service Platforms (MSP) is a business unit which concentrates on a wide range of mobile value added services (VAS). The main categories are Information Retrieval Services and Transactional Services. Even though the focal area for MSP is the platform side of VAS business, a thorough understanding of the VAS creation is needed in order to consult the state-of-the-art solutions to the operators.

To build value on top of the MSP core products, Nokia has established a specific Application Developer Program. This global program aims to help the operator to meet their local market demand. Nokia introduces the operator to partners that demonstrate their services and provide expertise in mobile VAS creation. Thus, the operator gets a customised VAS portfolio up and running in a relatively short time.

There are various players and many perspectives in VAS creation. Evolving technology constantly changes the value creation chain and may create new network actors. From a functional point of view, at least the following actors can be identified: content provider, content packager, service provisioned, access provider and the bandwidth provider (owner of

the physical channels). In some cases, like mobile banking, the word 'content' should be replaced by 'Transactional Service'.

The division of the value activities between firms varies, too. The whole value chain can be taken care by one or two firms. Using an example of banking, MeritaNordbanken, a leading on-line bank service provider in the world, offers services, which can be accessed with a WAP phone from any operators network. The only requirement for the network is the common data call functionality. In this case the operator is fairly invisible, it acts as a mere 'bit-pipe' and gets revenue from the airtime only. The second chain in Figure 1 illustrates this case.

The well-known news agency Reuters provides international news to Yahoo, which Yahoo 'packs' to its mobile portal. The Finnish operator Radiolinja's subscribers can access this mobile portal with their WAP phones. The third chain in Figure 1 illustrates this actor chain.
Of course, the revenue sharing between the actors is not even. In the first phase, when the basic technology is not widely available and only a few commercial applications exist, operator has the best position to control the value creation chain and create revenue. This is the common situation now (the undermost chain in Figure 1). When the range and quality of services increase, it becomes increasingly hard for a single operator to satisfy the demanding subscriber. The next mobile network technology, GPRS, will change the rules dramatically. Other future technologies, like Wireless LAN and Bluetooth, will most probably provide birth for competing value creation chains where the operator is no longer needed.

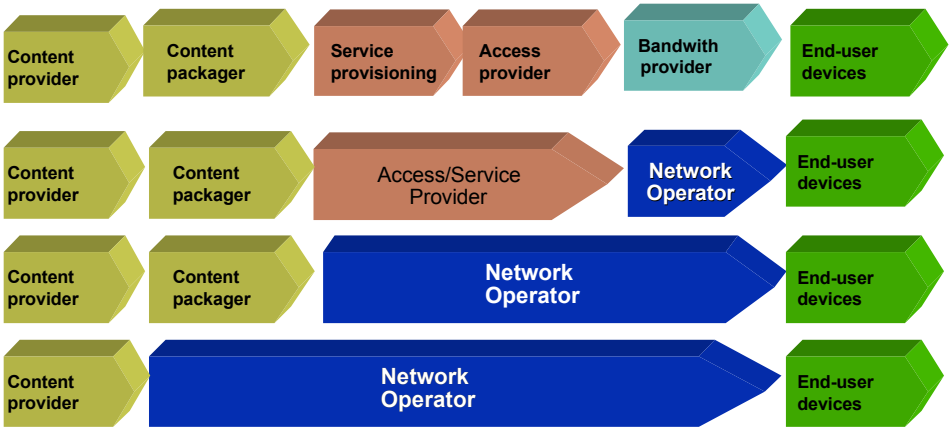

Figure 1

Currently the mobile value-added service (VAS) creation is a liquid, on-going process. Each of the mentioned actors will be affected by future technologies. Once a specific service chain or VCN is created, it begins to evolve. From Nokia's Application Developer Program's point of view, this may mean a long-lasting relationship with the operator, or a very short one. The fluid view concerns also the partner companies. Co-operation in all possible forms exists between companies resulting in frequent mergers. One logic governing these structural changes is the aim to streamline and govern the value creation chain.