VALUE NETWORKS IN NEW SERVICE DEVELOPMENT: EVIDENCE FROM A COORDINATOR ORGANIZATION

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Aino Halinen & Elina Jaakkola
Turku School of Economics, University of Turku
Address: Turku School of Economics, FI-20014 University of Turku, Finland
E-mail: aino.halinen-kaila@utu.fi; elina.jaakkola@utu.fi

Biographies:
Dr. Aino Halinen is Professor of Marketing at the Turku School of Economics, University of Turku. She has published articles on professional service marketing, relationship marketing, business network dynamics and longitudinal research methodology in acknowledged international books and journals including Journal of Management Studies, Journal of Business Research, Industrial Marketing Management and International Journal of Service Industry Management. Her current research focuses on value-creating networks in service business and qualitative methodology for the study of network dynamics.

Dr. Elina Jaakkola is a Senior Researcher in the Department of Marketing and International Business at Turku School of Economics, University of Turku. Her current research interests focus on knowledge intensive services, new service development, and the role of networks in service businesses. Her articles have been published in e.g. the International Journal of Service Industry Management, Marketing Theory, Journal of Marketing Management, and Scandinavian Journal of Management.
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ABSTRACT

Purpose – This paper presents preliminary findings from an on-going study investigating new service development (NSD) by organizations that act as coordinators of value creation systems. By applying the Network Approach and Service-Dominant logic perspectives to the study of an empirical case, the paper aims to shed light to the nature and coordination of value networks in the context of NSD.

Methodology/approach – The paper is based on qualitative empirical data on three service development projects from a Finnish foundation that designs new service concepts for business customers in cooperation with various inter-organizational networks.

Findings – A network coordinator may mobilize and integrate the resources of other actors into new value propositions for customers. Various actors and networks may participate in NSD by providing a range of resources into the value system but also expecting resources in return. The coordinator’s role is to manage a portfolio of networks, to align different interests and value propositions, and to reconfigure the value network over time.

Research implications – Future research should investigate the formation of value propositions from the perspective of different network actors, the value potential various network relationships offer for NSD and the resource integration within a value network that provides a new service.

Practical implications – The findings bring new light into the variety of network configurations and network management capabilities potentially needed to deal with NSD in professional and public service contexts.

Originality/value – The study addresses an emerging topic, NSD within value networks. It is based on fresh empirical data from the interface of private and public concerns that forms a fertile basis for extending current knowledge about value co-creation in inter-organizational networks.

Key words – inter-organizational networks, service development, value co-creation, value network, resource integration

Paper type – Research paper
Introduction

Past research demonstrates the crucial role of new service development (NSD) for the competitiveness of a service firm (Brentani 1995; van Riel, Lemmink & Ouwersloot 2004). More recently, service development has become a source of strategic competitive advantage also for manufacturing and industrial companies (Gebauer 2008; Matthyssens & Vandenbemt 2008). Researchers remark that in turbulent environments where service life cycles become ever shorter, new offers need to be brought to markets constantly (Stevens & Dimitriadis 2005), and in order to create superior value with services, a firm should be the first to handle customer problems in a new way, to apply new technologies, or to create innovative processes (Brentani & Ragot 1996; Kandampully 2002).

Literature on a broad front emphasizes the role of inter-organizational networks for innovation (Pittaway, Robertson, Munir, Denyer & Neely 2004). Networks in general are viewed as vehicles for transferring knowledge and resources in order to generate innovations. According to the Service-Dominant logic approach, companies’ survival in a networked economy requires ability to learn, adapt and change in order to integrate resources with other actors and to offer “competitively compelling value propositions to customers” (Lusch & Vargo & Tanniru, 2010). An innovative value proposition may be based on a new combination of resources, but also on changes in roles of actors that integrate the resources (Michel, Brown & Gallan, 2008). Normann (2001, pp. 24–25) suggests that actors who are able to organize and re-organize value creation beyond their boundaries are even able to create new markets. Such re-configuration of value creation systems is accomplished by unbundling and disintegrating resources, and then rebundling and reintegrating them into new value propositions (Normann, 2001, p. 61).

Despite of the increasing interest on value creation at the level of service networks, NSD research hardly mentions the networking aspect. A literature review on inter-firm collaboration in the context of NSD reveals that studies on the topic have been scarce and appeared in marketing journals only recently (Rusanen, 2009). Research has mostly focused on customer and user involvement (Alam, 2005; Matthing, Sandén & Edvardsson, 2004; Smith & Fischbacher, 2005), the general significance of inter-firm relationships for NSD (Eisingerich, Rubera & Seifert, 2009; Marshall, 2004; Windahl & Lakemond 2006) and the management of service innovation networks (Ojasalo, 2008; Heikkinen, Mainela, Still & Tähtinen 2007). In one of the few empirical network studies, Syson and Perks (2004) conclude that co-operation involving multifaceted networks of a wide range of actors may be a necessity for accessing the resources required for developing innovative services.

Whilst the significance of particular actor relationships and networks to service development have been acknowledged, research has, thus far, failed to offer a systemic perspective on service development networks as value creation systems. Very little research has either been conducted to study the role of a company as a coordinator of such value creation systems. Motivated by these gaps in the NSD literature, the purpose of this paper is to shed light to the nature and coordination of value networks in the context of new service development.

We adopt a value network perspective to the development of new services. We refer to two close notions of the concept, the strategic business net proposed by Möller, Rajala and Svahn (2005) and the value network proposed by Lusch et al. (2010). Value network
refers to “a spontaneously sensing and responding spatial and temporal structure of largely loosely coupled value proposing social and economic actors interacting through institutions and technology: (1) to co-produce service offerings, (2) exchange service offerings, and (3) co-create value” (Lusch et al. 2010, p. 20). Strategic business net (Möller et al. 2005, p. 1275), in turn, refers to “intentionally formed networks that contain a finite set of parties, at least three” and embrace a value-system, composed of actors and activities (cf. the value net concept proposed by Parolini, 1999). While Lusch, Vargo and Tanniru (2010) emphasise the loose character of the network, even its temporary nature, Möller, Rajala and Svahn (2005) stress its strategic purpose and systemic characteristics, the varying degree of stability, in particular. The concepts are strongly overlapping.

The paper reports preliminary findings from a case study conducted in a publicly funded organization whose task is to coordinate and combine the knowledge and skills of other actors into new service concepts. In other words, the studied organization designs new value propositions for customers in cooperation with various inter-organizational networks, forming value networks that co-design and co-produce service offerings.

In this paper we aim to combine the forces of network research and Service-Dominant logic research for bringing insights into new service development in interorganizational networks (Figure 1). The S-D logic approach has recently produced several conceptual ideas for the study of networks and value creation (Gummesson & Mele, 2010; Frow & Payne, 2011; Lusch et al., 2010), that have, however, not yet been applied or tested in empirical research. The network approach, i.e. the IMP School (Håkansson & Ford, 2002) and the strategic value net perspective (Möller et al., 2005), offer many empirically grounded and very close yet dissimilar concepts to be used in advancing research in line with the interests of S-D logic. We see here potential for bridge-building that benefits all parties.

In this particular study we intend to use the concepts and ideas from both streams to increase understanding of new service development in value networks, and at the same time, to bring insights into value creation within interorganizational networks more generally.

Figure 1. Theoretical perspectives applied to the study.
Method

The paper is part of a larger research project conducted under the auspices of the TSENET Group at Turku School of Economics (http://www.tsenet.fi). Thus far the study applies a single case strategy. We draw on qualitative data investigating three service development projects conducted by a Finnish foundation that operates in the interface of public and private sectors and designs new service concepts for business customers in cooperation with various interorganizational networks. The organization, hereafter called “Alpha”, clearly represents a business renewal net in the strategic net classification of Möller & Rajala (2007). Renewal nets typically seek to produce customer-driven solutions and offerings and their management is based on coordination of dispersed resources, trusting culture and balancing with tight and loose coupling (ibid, p. 902).

The study is explorative and aims at theory development. Case study research is considered as suitable strategy for studying complex issues with a view to identifying theoretical implications in a theory building approach (Woodside & Wilson 2003). Networks and networking were studied from the perspective of the focal organization (Halinen & Törnroos 2005), still having the value creation perspective of entire networks as its focus.

The on-going study still seeks its final focus, theoretical underpinnings and additional empirical material. The preliminary data utilized in this study consists of three thematic interviews and a seminar presentation by a representative of Alpha. The interviews were conducted face-to-face in the case companies’ premises by a group of researchers in January–September 2010. Interviews lasted around 1–1,5 hours each and they were audiorecorded and transcribed. The themes of discussion included the basic facts of the foundation and the services it offers, its activities in and experience of NSD, partners and networks involved in specific NSD projects, actors’ interests and roles in cooperation and resources they offered for it, and challenges and opportunities experienced in network cooperation and management.

Case description

The case organization Alpha is a private foundation operating in the intersection of business markets and public concerns. The mission of the foundation – owned and governed by an employer union, a number of private associations and government-funded organizations – is to enhance the business competence of small and medium-sized companies in Finland. As a professional service organization Alpha is first of all a service designer. It develops new service concepts for emerging business needs, mostly for market niches that private companies have not considered lucrative and where competition is minimal. Alpha positions itself as a neutral coordinator between various organizations and networks; i.e. a broker that develops innovative service concepts for SMEs by connecting other actors’ competences. Alpha’s task is to design a service concept, to plan the service process for its realization, to organize the service production, and to seek financing for the development work. In other words, it both designs the service and builds up the infrastructure needed for its provision. In some cases this has meant educating consultants for particular needs, in others building up of an internet-service. In accordance with Alpha’s business idea as a service designer, it seeks for outsourcing the production of the developed service to other actors.
The management of service development and networks form the core competences of Alpha. Networking, connecting different networks and even creating new networks form an important part of Alpha's everyday work. On one hand, it cooperates actively with various governmental organizations in charge of industrial and innovation policies and regional development as well as with government authorities such as tax administration and the National Board of Patents and Registration. On the other hand, it maintains strong networks with a variety of industry associations and unions, both nationally and regionally. For service development purposes it also collaborates with various business actors from potential small company customers to service and IT suppliers.

Our study investigates three major service concepts developed by Alpha to ease its customers’ access to professional knowledge, business contacts and public enterprise services. EnterpriseFinland.fi is an internet service which provides a national portal for public enterprise services. Alpha has made a contract with a number of public agencies for maintaining and developing the service into an electronic resource for SMEs. ExpertFinder.fi is an internet service that provides a channel for SMEs for finding consultants for various needs. The third major concept, TurnaroundHelp is a phone and internet service targeted to economically stressed SMEs. It includes consulting and self-managed web-based tools for analyzing a company’s economic condition and providing assistance in coping with a crisis situation.

Findings from the case

The study provides a number of interesting results related to the nature and coordination of value networks for new service development: first, we identify the networks, actors and resources coordinated by Alpha; then we discuss the coordinator’s role as a resource mobilizer and integrator, and finally, we present our observations regarding changes in network configurations in the context of NSD.

Networks, actors and resources coordinated

Most of extant research investigate service development from a single company perspective, looking at the company’s internal efforts in developing services (e.g. Lievens & Moenaert, 2000; Love & Roper, 2009) or its collaboration with single external actors or actor groups (Heikkinen et al., 2007; Syson & Perks, 2004). The study shows that new service development may require coordination between different networks or groups of actors, not only between single actors. An informant stated:

“Nothing we do can be done without networks. Delivering the service at a practical level requires operating as networks, and therefore the ability to develop and deliver service in a network, and the ability to manage networks are key things to us…”

New service development, particularly when it happens in the intersection of public and private sectors, may involve various networks or layers of networks. Table 1 indicates different actor groups that took part into the three studied NSD projects coordinated by Alpha. Alpha cooperates with several governmental organizations and private associations on a continuous basis, and contacts their key persons to mobilize resources for service development when a need arises. Often the whole association, the network of its members, is used as a source of resources. The result indicates the significance of managing portfolios of nets besides portfolios of relationships or single nets that have been more common perspectives to study networks and their management. The study thereby brings
<table>
<thead>
<tr>
<th>Service Concept</th>
<th>EnterpriseFinland</th>
<th>ExpertFinder</th>
<th>TurnaroundHelp</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal setter</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actors: MEE</td>
<td>Resource provided: financing, management by ownership; operation level partners</td>
<td>Actors: Alpha and MEE</td>
<td>Actors: FINNVERA, Alpha</td>
</tr>
<tr>
<td><em>Role of actors in NSD</em></td>
<td>Resource received: fulfillment of political aims</td>
<td>Resource provided: goals and motivation, management input</td>
<td>Resource provided: idea for the service, background work and benchmarking research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resource received: organizational success</td>
<td>Resource received: n.a.</td>
</tr>
<tr>
<td><strong>Financers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actors: MEE, TEKES,</td>
<td>Resource provided: public funding</td>
<td>Actors: MF, MEE, FINNVERA</td>
<td></td>
</tr>
<tr>
<td>Resource provided: public funding</td>
<td>Resource received: power/influence (membership in board of directors)</td>
<td>Resource provided: public funding</td>
<td></td>
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<tr>
<td><strong>Customers</strong></td>
<td></td>
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<tr>
<td>Actors: SMEs seeking public services</td>
<td>Resource provided: use of public services to improve business; giving feedback on the service (co-designer)</td>
<td>Actors: SMEs in need of consulting services; MEE</td>
<td>Actors: SMEs in economic stress</td>
</tr>
<tr>
<td>Resource provided: access to all public enterprise services via single portal; efficient service, saving time</td>
<td>Resource provided: potential business for consultants, rankings/evaluations of consultants (co-producing the service)</td>
<td>Resource provided: participation, free of charge</td>
<td>Resource provided: n.a.</td>
</tr>
<tr>
<td><strong>Co-designers</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Actors: nine partners</td>
<td>Resource provided: knowledge work (members in working parties); maintenance payment to show commitment</td>
<td>Actors: Management consultants, The Finnish Association of Professional Board Members;</td>
<td>Actors: TMC-consultants</td>
</tr>
<tr>
<td>Resource received: n.a.</td>
<td>Resource provided: business competence, knowledge, good personal relationships</td>
<td>Resource provided: knowledge of customer needs,</td>
<td>Resource provided: knowledge of customer needs,</td>
</tr>
<tr>
<td><strong>Co-producers &amp; suppliers</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Actors: consultants, SMEs as service users, IT-suppliers</td>
<td>Resource provided: content for the service, knowledge of consultants, IT-competence, technical advice, business plan competence</td>
<td>Actors: TMA-association; 15 selected TCM-consultants</td>
<td></td>
</tr>
<tr>
<td>Resource provided: free visibility, marketing site, contacts to customers, payment for service</td>
<td>Resource received: free visibility, marketing site, contacts to customers, payment for service</td>
<td>Resource provided: education and certificates for consultants, economic consultation,</td>
<td></td>
</tr>
<tr>
<td><strong>Marketers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actors: Association of Management Consultants, MEE-acknowledged consultants; Project Management Association</td>
<td>Resource provided: credible communication, new consultants to the service system; visibility in media</td>
<td>Actors: TMA-association</td>
<td></td>
</tr>
<tr>
<td>Resource provided: n.a.</td>
<td>Resource received: n.a.</td>
<td>Resource received: administrative support</td>
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</table>

1 MEE= Ministry of Employment and Economy; MF=Ministry of Finance; TMA=Turnaround Management Association
empirical support for the relevance of multiple levels of network management (Möller et al., 2005).

Table 1 also indicates some of the resources that actors or networks provide for service development and expect to receive from it in return. In addition to physical resources such as financing, different types of knowledge, competence, contacts and communication could be identified as crucial resource inputs. Expected resources or potential value in return was more difficult to determine on the basis of extant data, which is due to the fact that only the representatives of the focal organization have thus far been interviewed. However, similar to resources provided for service development, the resources received represent both intangible and tangible assets and ranged from realizing one’s organizational mission to payment for service.

It became evident that each network has its own agenda and motivation for cooperation: governmental bodies are fulfilling primarily social and political goals, trade associations promoting the interests of their members and suppliers and professional service providers seeking new business opportunities. The value perceived by each network or network actor in the collaboration differs accordingly. From Alpha’s point of view as a designer of new value propositions for SMEs, it is crucial to consider the resources each network brings into the development work, and the value that each network or network actor expects to get in return for collaboration. According to the interviews, one key resource that makes Alpha itself an attractive partner in cooperation is its network of relationships:

“Our kind of organizations are not very common, we have such powerful and influential communities representing industry and commerce in our background. We can lean on a solid support – everyone sees some bait that makes them interested in cooperation with us.”

The study thus indicates that the value propositions each network or network actor makes to the coordinator organization, and also the value propositions the coordinating makes to each network or network actor are potentially different. The use of the value proposition concept in further analysis of the data might bring new insights into value creation within a value network such as service development network as proposed by Frow and Payne (2011).

Another avenue to take would be to apply the concept of value function, or value potential of a business relationship, and to develop it in the context of value networks. Walter, Ritter and Gemünden (2001) distinguish direct and indirect value functions of a customer relationship for a supplier with respect to the activities the customer performs and resources it employs. Möller and Törönen (2003) apply the idea for studying the supplier’s value creation potential for a customer. Both studies give valuable insights into the value that network actors may offer to each other. Given their focus on business relationships, all aspects of value were not equally applicable to the public-private resource coordination of the studied case. Nevertheless, the indirect value functions: innovation, market, scout and access, could be clearly identified in the case data.

The role of the value network coordinator: a mobilizer and resource integrator
As a service designer Alpha plays the crucial role as a network coordinator, often called as a knowledge broker or a hub in network management literature. Alpha represents a particular kind of coordinator, as it concentrates on service concept development and in
this task combines and matches various both private and public interests. The data shows its crucial role in balancing different interests and its strong will to develop services that satisfy customer needs.

“When new needs emerge in the field...among the firms, it is the role of the Foundation to figure out how those needs could be met – either though private or public business services. Our role is typically to develop and design the service concept. Part of the concept development process is identifying potential customer needs…”

“Regarding service development... in our field of public business services, there are a number of independent actors... and there is always some friction between the actors that may hinder the development work, because they have their own interests that need be taken into account. And additionally, there is the practical, technical work related to development and coding and so forth. It is a whole lot of work. And there is always the danger of forgetting about the customer in that hassle.”

Frow and Payne (2011) argue for the benefits of using value propositions as a value alignment mechanism in a network. Alpha clearly perceived it as a necessity but also as a challenge to align and balance the interests of different stakeholders for developing a new value proposition for the customers. Whether the co-creation of value propositions would assist in the alignment remains to be shown in future empirical studies.

Alpha’s task as a coordinator involves various management activities. Network management literature identifies a number of management tasks – orchestrating, visioning, and strategizing (e.g. Möller et al, 2005; Harrison, Holmen & Pedersen, 2010), emphasizing the strategic role of management. The data indicates that Alpha has a strategic role, particularly in seeking unfulfilled customer needs, but brings even more evidence of the operative role of the organization as a coordinator in between different networks, that is, as a network mobilizer and a resource integrator. A network mobilizer utilizes its relationships to move other actors to work within the plans of the mobilizing company (Mouzas & Naudé, 2007). The strong political and social interests involved with Alpha’s activities would even legitimate the labeling of its efforts as building of “issue-based networks” (Ritvala & Salmi, 2010). It used different mechanisms such as framing the issue, agenda constructing and social networking to attract interest and to mobilize the resources of others (Ritvala & Salmi, 2010). As the informant described:

“At the moment, I spend the majority of my work day contacting different networks and tell them about the ExpertFinder. I try to make different organizations interested in getting involved with the development of the ExpertFinder service, and different networks to participate in the launch of the service by spreading the word about it. And also that experts would go an register themselves to the service. I’ve attended a range of managerial training and consulting events where I’ve been able to promote the service. So it’s taken a lot of legwork to get these experts on board.”

This finding gives further support to earlier results from R&D networks in the ICT sector, where the role or resource integrator was pronounced (Jokela 2006). “Integrators receive incoming flows of knowledge and other resources that they incorporate into the process of accomplishing the network outcome” (ibid. p. 212), in our case the new service concept. As Table 1 illustrates, each network potentially provides different key resources to the service development work, and the task of the integrator is to get the actors committed to resource integration through a common goal.

“If there is no will to really put resources together, but everyone is holding on to their own resources and wants to control them, then an organization’s own interest is always stronger
than the common [network’s] interest. When actors put resources together, the significance of common interest increases, and everyone concerns themselves more about it. In the EnterpriseFinland portal case, every one of the nine [partners] puts in an annual maintenance fee, which creates a joint interest to monitor what’s going on with the portal”.

Gummesson and Mele (2010) argue for resource integration as the main mechanism for value co-creation. They view companies as resource integrators in networks, and define resource integration as incorporation of an actor’s resources into the processes of other actors. In line with IMP-advocates (Harrison & Håkansson, 2006) they view resources to become valuable when they are matched and positioned in a value-creating network through interaction. Alpha is operating with fairly stable networks, which means that it needs to mobilize network actors and the resources they possess within the existing networks. In such conditions, value is created though combining the resource with other resources and activating it for use through inter-organizational interaction (Harrison & Håkansson, 2006).

**Altering network configurations**

The study findings indicate that different networks and actors are likely to be significant in different phases of service development, e.g. in concept development, service production, or launching. This is in line with the findings of Heikkinen et al. (2007) concerning the various management roles of network actors in the development of a mobile service. In the case of Alpha, the governmental policy-implementing organizations had a key role in the initiation of the concept planning and getting both political and financial support for it; Service suppliers participated actively in the creation of an infrastructure for service provision and also for the maintenance and further development of the internet-based services. Finally, various associations and their extensive membership networks were used both in the building up of the service infrastructure but also in communicating about the service in the launching phase.

From the coordinator’s perspective, identification of the target customer may be difficult; there are potentially several customer groups served at the same time. We found that same actors could function in different roles and provide a range of resources for the service development project. Customers, for instance, could contribute by using the service for their own benefit or by giving feedback on it for helping its further development. Public organizations could be perceived as customers, but also as major financers of the service, stressing Alpha’s important role in achieving political goals.

The results show that value is created in various ways for and with same actors. As posited by Michel, Brown and Gallan (2008), new value propositions are likely to change the role of network actors and to reconfigure the value constellations to which firms are connected. Our results further demonstrate that the company roles are likely to change even along the process of concept development, i.e. in the matching of the new value proposition. The role of the coordinating company is clearly to act as “a system reconfigurer”.

**Concluding remarks**

The findings of the study are highly preliminary. They are based on experiences from a single organization, although from several new service development cases. The results provide first round empirical evidence on highly theoretical notions of resource integration
(Gummesson & Mele, 2010) and aligning of value propositions (Frow & Payne, 2011) in value networks that develop and provide new services.

Overall the study contributes to several research areas identified as future themes for service science. It deals with three research priorities set for service development by the global academic society, namely, service innovation, service design and service networks and value chains (Ostrom et al., 2010). In addition, it tackles the systemic nature of value creation, innovation and governance issues within value networks – topics regarded as major areas for future research within the S-D logic approach (Lusch et al., 2010). The findings together with the theoretical ideas from two major schools of thought – the Network Theory and the Service-Dominant Logic – offer various directions to take in conducting empirical research on value networks in new service development. At this point the paper only reports work in progress. We intend to continue the study by complementing the data and collecting new data from other coordinator-organizations from service sectors in the near future.

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