CREATING MORE VALUE THROUGH THE INTERNATIONAL NETWORK
- The Case of a Business-to-Business E-Commerce Software Producer and Value Added Resellers

Olli Kuivalainen,
Telecom Business Research Center,
Department of Business Administration,
Lappeenranta University of Technology,
P.O.BOX 20,
53851 LAPPEENRANTA;
FINLAND
e-mail: olli.kuivalainen@lut.fi,
tel: +358 (0)5 621 6641,

Sami Saarenketo,
Telecom Business Research Center,
Department of Business Administration,
Lappeenranta University of Technology,
P.O.BOX 20,
53851 LAPPEENRANTA;
FINLAND
e-mail: sami.saarenketo@lut.fi,
tel: +358 (0)5 621 2635,

Jani Jaaskelainen,
Sonera SmartTrust Ltd,
P.O.BOX 425,
00051 SONERA;
FINLAND,
e-mail: jani.jaaskelainen@sonera.com,
tel: +358 (0)40 502 8790,

ABSTRACT

For systemic software products the role of channel intermediaries is twofold. There is a need for a distributor/retailer and the product co-developer at the same time. In this paper, a network model describing the business-to-business software industry is proposed. This model presents activities that enhance value creation.

INTRODUCTION

Growing e-commerce markets are a challenge for software producers willing to internationalise. As technology advances rapidly there is a need to be present at the marketplace extremely fast. In fact, the products may become obsolete before the markets have even been reached. There are several alternative routes for a firm to enter international markets. This paper focuses on the internationalisation through the network of value added resellers (VARs). The marketing dictionary defines the role of VAR in the channel as a retail

intermediary, which modifies equipment, integrates several components into a system solution, or provides additional services to offer customised solutions to the customer (Bernet 1996). The main advantages of VARs compared to traditional exporting are that by using a VAR it is possible to respond more effectively to market needs and through the good relationship the value of the product increases.

VARs are particularly beneficial for high-technology firms as their products usually require supporting activities, adjustments to the customer's own applications and technologies and education of the users. Additionally, the offerings are often systemic, i.e. part of the more complex product/service packages. Relationships between the producer and VARs at different market areas are normally dyadic. The situation can be seen as a "hub and spoke" arrangement, in which the exchange occurs only between the producer and a single VAR. In the worst case, the flow of information is even one-way traffic. The producer trains the reseller and gives advice when needed without getting any real information about the end-user needs. On the other hand, the firm may not communicate enough with VARs.

The aim of this research is to build a conceptual model of the network, which could be applicable for a systemic software producer and its value added resellers. The suggested model emphasises the importance of communication and transfer of the tacit knowledge. There are many benefits to be achieved in the product development if the whole network interacts and collaborates frequently, i.e. changes ideas and experiences. However, also some challenges need to be overcome before the win-win situation can be reached in the relationship. In practice, the issues that should be dealt more carefully include e.g. learning, commitment, trust, benefit sharing, information and motivation. This paper presents early drafts of the model and it is based on our earlier experience from software industry and conducted interviews and discussions with anonymous professionals in the field. The model rests on the network theory.

THEORETICAL BACKGROUND

In business-to-business markets relationships are often complex. There are a number of actors involved in these relationships. However, it was not until the 1980s that relationships gained importance in research earlier, and before, according to Håkansson and Snehota (1992, p. 24): "…the phenomenon [of long-lasting relationships] was largely ignored". Today their importance is recognised and there are several models and frameworks which have been developed to describe business relationships, first, mainly within the Industrial Marketing and Purchasing Group (IMP) (e.g. Håkansson et al. 1982; Ford 1980), and later on also by others. Studies focusing on relationships can be found in different fields of research such as relationship marketing, purchasing and supply chain management. Until recently, distribution and channel intermediaries have been rather a neglected research area.

The first model by the IMP group stated that both the parties (i.e. buyer and supplier) are active participants in the market and there are different elements and processes of interaction between them. Furthermore, the environment and the atmosphere within which interaction takes place have an effect on the process (Håkansson et al. 1982). Later, this 'interaction approach' that focused on dyadic relationships has been enlarged into 'network approach' in which the whole business network is observed (e.g. Håkansson and Snehota 1989). Business networks can be seen as sets of connected relationships between the firms. Network approach has been found useful in the research focusing on internationalisation of the small and medium-sized (SME) firms, especially in the field of software firms (see e.g. Bell 1995;

Coviello and Munro 1995; 1997). Johanson and Mattsson (1988) emphasised that the internationalization of the firm means that the firm develops positions in relation to counterparts in networks at the foreign markets. However, there has been a lack of studies which focus on value functions in the software industry. This may be due to the fact that the concept of value and value creation has not been defined clearly (Blankenburg Holm et al. 1999; Ramírez 1999). Here the assumption is that the value is built through the linkages in the network and the emerging concept of value network is used. In a value network, a company makes the most of the strengths of each value provider and coordinates production and delivery across companies (Weiner et al. 1997, p. 30). In this study the concept of value network is employed to describe the interaction between the software producer and its VARs, which at the same time develop and add the value of the core product.

CHANNEL ALTERNATIVES IN B-TO-B SOFTWARE SECTOR

There is a range of possible channel alternatives available for the business-to-business software provider to be present at the international markets. These are shown in Figure 1. Although there has been considerable research on channel relationships in general, Matear et al. (1999) stated that international channel relationships have not been examined widely.
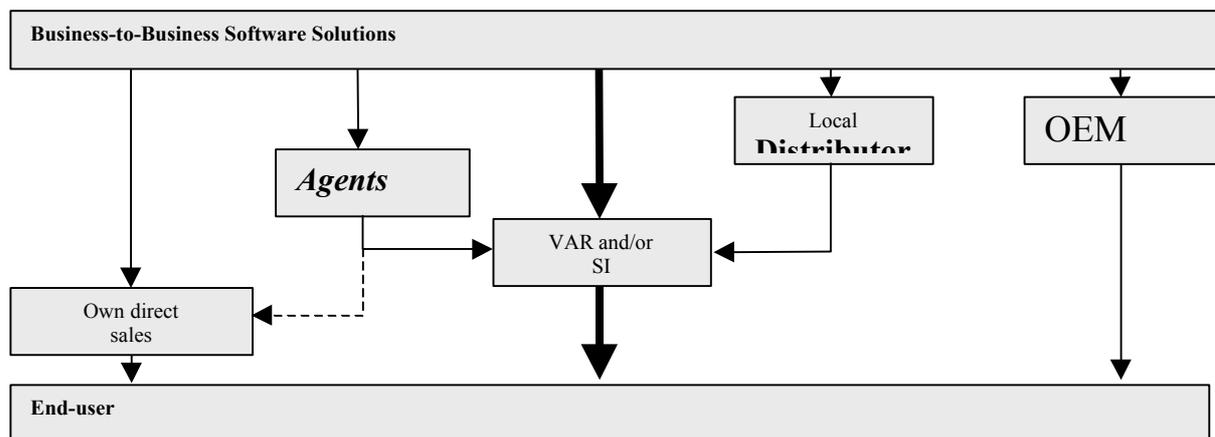

Figure 1.
Main Channels in B-to-B Software markets

Direct sales by the software company might be seen as the most favourable and efficient channel. This view is supported by the fact that setting up the solutions requires diverse competencies, which may be difficult to find in the market. The company is most familiar with its complex solutions and thus, able to serve the end-users in the best possible manner. Also the feedback is acquired directly from the end-user with no filtering by the channel intermediaries. However, all these potential benefits are frequently offset by the high costs of arranging the direct sales in global scale. The role of agents in the channel is to locate the potential customers. Typically, agents are not technically experienced. They are not capable of handling the implementation, training and technical support services. Therefore, they must cooperate with e.g. VARs or system integrators with the needed skills. Furthermore, this makes the channel structure rather rigid and more difficult to manage.

The OEM (Original Equipment Manufacturer) channel refers to the situation where the company's product is sold as an integrated and inseperable component of another company's software. This approach provides "easy access" distribution to some market segments. However, the negative side of this alternative is that only OEM manufacturer's brand is

visible. If the company is dedicated to building its own brand and visibility, an OEM cannot be considered as a feasible choice.

In this paper, the suggested major channel for the software solutions is the VAR network. VARs are expected to be able to conduct the supporting activities and adjustments to the customer's own applications and technologies. A software producer may lack this expertise or does not desire to devote its resources to the required skills and knowledge (Virolainen 1998, p. 184). More specifically, VARs are supposed to be capable of providing at least (value adding) services such as project management, sales, implementation services, post sales technical support, end-user training and post-sales consulting.

The resources of the software producer are usually limited. Therefore, all the mentioned external resources play a significant role for the company. By employing VARs, the financial risks can also be reduced. Additionally, entrance to new markets becomes easier since VARs may already have the desired contacts and local market knowledge. (Eklund 1999, p. 37)

The requirements for the B-to-B software VARs are rather high. Indisputably, the relatively complex product and rapid technological advancements necessitate expertise in many fields. Therefore it is not effortless to find new companies willing and able to become VARs. It is a real challenge for a software provider to build an attractive proposition for the potential partners. Another problematic area related to VARs is their independence. The VARs control the direct contacts to end-customers and thus may behave opportunistically, e.g. by filtering the market information to serve their own interests before transferring it to the software producer. The case could be different if the software company was larger and had established status. To avoid the distortion, a company could try to handle some key end-user contracts directly in order to stay alert for the changes in market preferences. This should be done very sensitively so that VARs do not misunderstand it as a hostile competitive move. There are also cultural issues which need consideration. VARs commonly have other principals' products in their assortments as well. Consequently, the essential prerequisite from the software producer is that these other products do not compete with his own offerings, preferably complement them.

INTERACTION BETWEEN SOFTWARE PRODUCER AND VAR

As stated before, there is a need for closer linkages between software producer and VARs. In our study the focus is on the small and medium-sized firms (SMEs). However, there are still a lot of complexities in the relationship. Firstly, power and dependence factors are very ambiguous: a multiple skilled VAR may consider the producer only as a licensor, whose technology can be used as a basis for further product development. On the other hand, less capable VARs may not get enough advice and guidance from the producer. Secondly, the division of returns between the actors in the network is unclear. The product consists of "core" product and multiple augmented products and services and their valuation is difficult. What is the value of the product development and the core, which enables all the other elements? In Figure 2 interaction between the software producer and VAR is presented and the most important issues in the environment and atmosphere are highlighted.

In the literature there have been many suggestions recently concerning the determinants or factors that enable successful business relationships between the interacting firms. These include e.g. trust, dependence, commitment, cooperation and information exchange (see. e.g.

Johnson et al. 1999). To enable these for the firms operating in our focal industry we suggest the usage of certain facilitating tools already referred to in Figure 2.
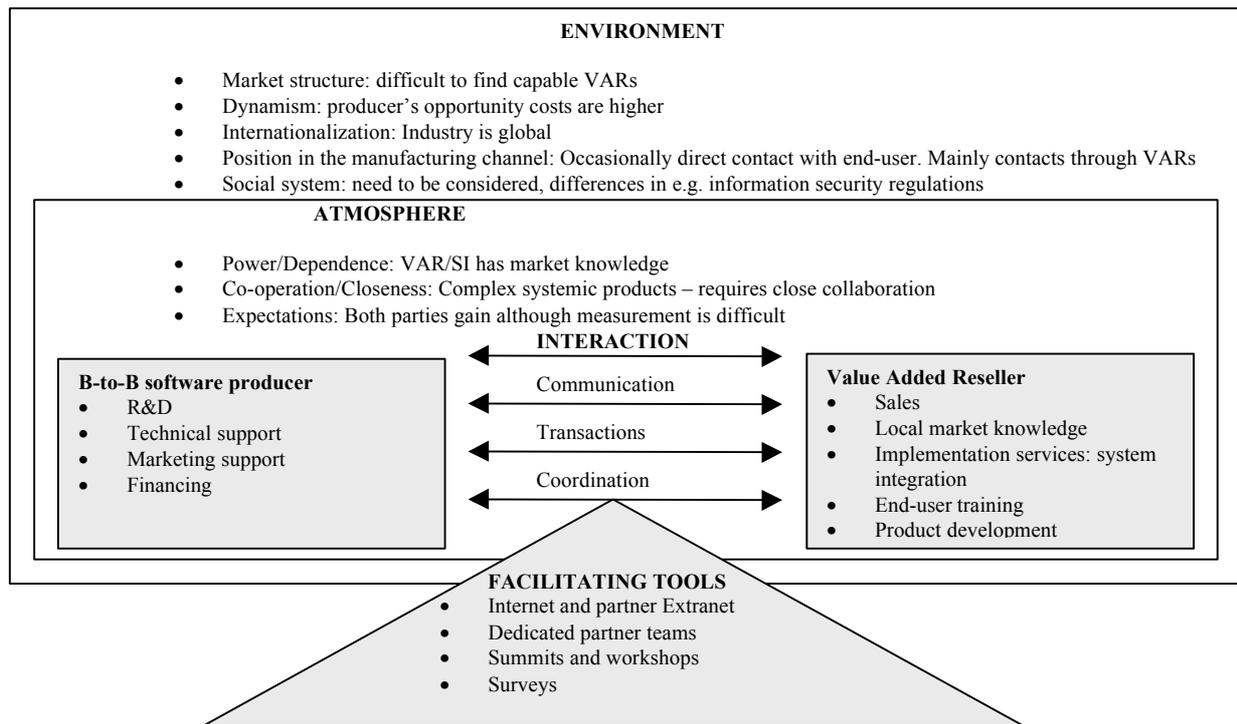

Figure 2.
Dyad between the B-to-B software producer and VAR (Modified from Håkansson et al. 1982)

A range of tools can facilitate interaction between the parties. Internet and partner Extranet are seen as important and efficient means of communication and feedback collection. Partners are able to leave support requests and other questions via web. Also a special partner news site may be established. VARs can read messages sent by others and leave their replies. This is one way of linking partners together and screening their "feelings". In addition Web is speeding up the interaction enabling the partners to save both time and costs.

In order to improve the interaction between the software company and its VARs, each partner has a dedicated partner team. In practice this means that a VAR has to communicate only with a few people within a software company. Social bonding is important for trust building and information exchange. Partner summits and workshops may also function as a mode of facilitating interaction. VARs are regularly invited to participate in these events. The purpose is to provide the partners with up-to-date information on the software company's product and service offerings. However, it is just as important to encourage discussion on how partners see the current state of affairs in general. This information can then be processed and applied in developing partnerships and the Partner Programme. The further objective of these summits and workshops is to link partners together, e.g. to find common ground for future cooperation.

Another means of collecting feedback from the channel network is to construct a survey on the partner satisfaction level. This survey is created to gather information on how partners see the collaboration with the company and what could be improved in the relationship. The software company may also conduct an "end-user satisfaction survey", which collects

information from a different angle. On the other hand, this survey will also help in monitoring the partner's capabilities.

SUGGESTED MODEL

The benefits for the software producer have been explained above. However, also VARs should gain from the collaboration if they are going to support their principal with more market information. Traditionally, as the producer's market knowledge and business volume increase there is a tendency to drop a VAR and establish fully owned foreign operations. Hence, the main question is how both the parties find the deeper cooperation advantageous.

The conventional model of internationalization through distributors/retailers/VARs can be seen as a hub-and-spoke arrangement. Often the communication between actors has not been guided efficiently and the coordination of activities has been limited within the software industry. Firms have been technology oriented and there has been lack of skills in marketing and sales. Globalisation, rapid advances in technologies, shortening product life-cycles etc. have made this approach a questionable one. In the field of systemic B-to-B software it is argued that a new model is needed. The model should be able to facilitate innovation, transfer of tacit knowledge and lateral cooperation between organizational units. The role of system integrators and VARs should be defined more accurately and value activities identified. The suggested preliminary model categorises actors based on their knowledge and position in the value adding network. The actors include software producer, first and second tier VARs and end-users. In addition, VARs can be supplemented by separate system integrators, though in this study they are headed under VARs.

The tasks of software producer and VARs were covered in the dyadic model presented. If we turn our focus on the network as a whole, the question is how to make the firms at the spoke level interact with each other. The VARs may have similar problems with their customers for example and thus, could benefit from the solutions provided by the others. Another interesting issue is the division of work within the network. Many skills are needed, e.g. knowledge of software, hardware and data communication in general and ability to understand the related businesses. Share of the workload and focusing on core capabilities of the different actors could enhance the value. In practice this could mean a more precise definition of roles within the network. In Figure 3 the paradigm shift from the hub-and-spoke to the network and the conceptual model is illustrated.

Key:
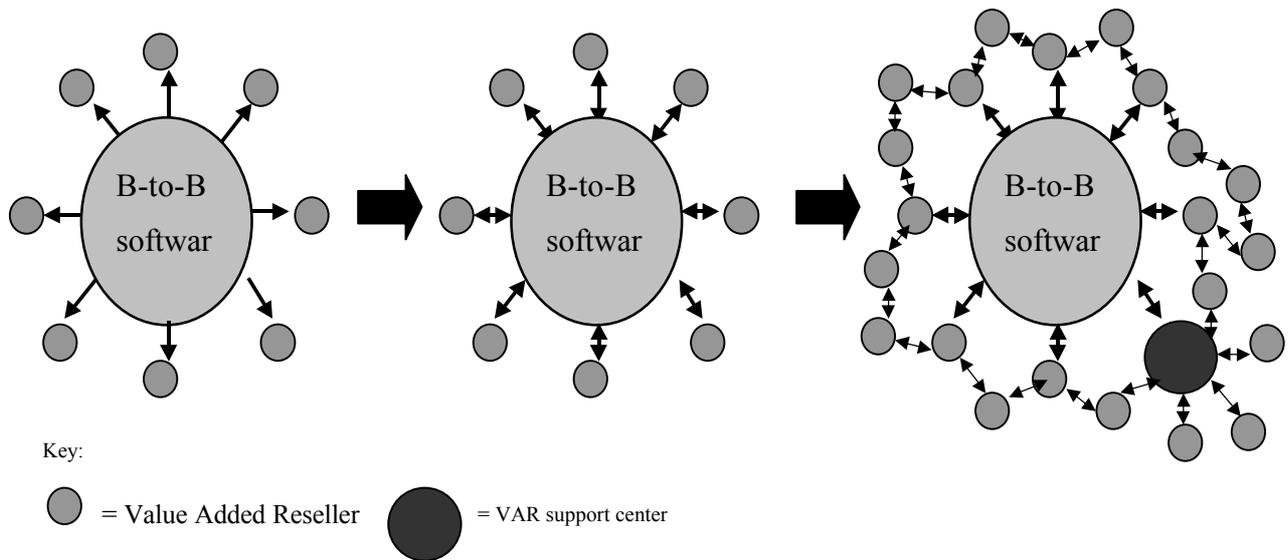
◯ = Value Added Reseller   ● = VAR support center

Figure 3.
Paradigm shift from hub-and-spoke to value adding business network

It is suggested that there is a need for supporting units if markets are distant or large. In Figure 3 these units can be seen as linkages between the home base of the producer and independent VARs. However, it is important to define the roles of all actors clearly as the network becomes more complex. There is also a question of cost sharing, which needs to be discussed.

CONCLUSIONS

The suggested model is still at its infancy and more research is needed. At this point we have only started the empirical study. The aim is, however, to test the model empirically and develop it further. The study will be conducted in a qualitative manner and the empirical data will be gathered mainly through interviews conducted with an established e-commerce software producer and its VARs in different countries. These interviews will include questions related to network position, interaction between the actors within the network, risks, cultural and environmental aspects which shape the interaction, assets and knowledge which are transferred between the actors in the activity links.

It is believed that such a complex network, in which the product development is done in many places within the (added) value chain, needs specific attention both in theory and in practice. The importance of value creation and the analysis of the competencies each actor in the network possesses are important to recognize if the aim is to enhance the competitiveness. Several managerial implications are going to be presented. Guidelines for the development of VAR and distribution partnerships in b-to-b e-commerce sofware business will be suggested. One of the important notions is that there is a need for a producer to build a solid and attractive partnership programme offering to VARs as the long-term cooperation provides more benefits for both parties. A complex software product involves learning and transferring of tacit knowledge and there are no quick sales. VARs expect training and clear guidelines for profit distribution. Creation of these policy rules is clearly a challenge.

REFERENCES

Bell, Jim (1995), "The internationalization of small computer software firms – A further challenge to "stage" theories," *European Journal of Marketing*, 29 (8), 60-75.

Bernet, P. (1996), Dictionary of Marketing Terms, 2nd edition. American Marketing Association.

Blankenburg Holm, Desirée, Eriksson, Kent and Johanson, Jan (1999), "Creating Value through Mutual Commitment to Business Network Relationships," *Strategic Management Journal*, 20, 467-486.

Coviello, Nicole and Munro, Hugh (1995), "Growing the Entrepreneurial Firm – Networking for International Market Development," *European Journal of Marketing*, 29 (7), 49-61.

--- and --- (1997), "Network Relationships and the Internationalization Process of Small Software Firms," *International Business Review.* 6 (4), 361-386.

Eklund, Caj (1999), "Evaluating Value Added Reseller as a Potential Marketing Channel: The Case of Nokia Dedicated Networks in Russia," Master's Thesis, Lappeenranta University of Technology.

Ford, D. (1980), "The Development of Buyer-Seller Relationships in Industrial Markets," *European Journal of Marketing*, 14 (5/6), 339-354.

Håkansson, Håkan, ed. (1982), International Marketing and Purchasing of Industrial Goods – An Interaction Approach By IMP Group. Chichester: John Wiley & Sons.

--- and Snehota, I. (1989), "No Business is an Island: The Network Concept of Business Strategy," *Scandinavian Journal of Management*, 4 (3), 187-200.

--- and --- (1992), "Analysing Business Relationships" in Developing Relationships in Business Networks, H. Håkansson and I. Snehota, eds. London: Routledge, 24-49.

Johanson, Jan and Mattsson, Lars-Gunnar (1988), " Internationalisation in Industrial Systems – a Network Approach," in Strategies in Global Competition, Neil Hood and Jan-Erik Vahlne, eds. London: Croom Helm, 287-314.

Johnson, William, C., Chinuntdej, Norapol and Weinstein, Art (1999), "Creating Value Through Customer and Supplier Relationships," in Proceedings of The 15th Annual IMP Conference, Damien McLoughlin and C. Horan, eds. Dublin: University College.

Matear, Sheelag, Gray, Brendan J., Irving, Gregory P. (1999), "A Network Perspective on International Channel Management" in Proceedings of The 15th Annual IMP Conference, Damien McLoughlin and C. Horan, eds. Dublin: University College.

Ramírez, Rafael (1999), "Value Co-production: Intellectual Origins and Implications for Practice and Research," *Strategic Management Journal*, 20, 49-65.

Virolainen, Veli-Matti (1998), Motives, Circumstances, and Success Factors in Partnership Sourcing. Research Papers 71, Lappeenranta University of Technology.