Juhani Warsta, Minna Lappi, Veikko Seppänen

Screening of partner relationships in software business: From commencement to continuous assessment

University of Oulu, Department of Information Processing Science
P.O. Box 3000, 90014 Oulun yliopisto, Finland

phone +358 8 553 1973
fax +358 8 553 1890

juhani.warsta@oulu.fi

Abstract

The establishment and development of business-to-business relationships are commonly evaluated from the customers' perspective. In this paper we look the process mainly from the opposite direction. We define the supplier's partner selection process as continuous assessment of relationships with customers, rather than merely commencement needed during the early contract negotiation phase. We have investigated Finnish software companies entering into the USA, to analyze the processes and factors related to establishing partner relationships. We will depict relationship screening as consisting of the commencement process and the continuing screening process.

Keywords

commencement screening process, continuing screening process, company vision, management experience

1. Introduction – the customer's viewpoint

Although software business is increasingly complex and fast changing, networks of relationships are being established more and more for long-standing collaboration. The reason is that a single company is rarely able, in practice, to sustain the required growth by itself using only its own resources and competence. Successful software companies have to build both formal alliances aiming at win-win type of partnerships and more informal collaborative webs of relationships (Hoch, Roeding et al. 1999, 21). Other compelling reasons for partnering in software business are needs to increase market penetration and accelerate the time to market. In general terms, partners have to fill the knowledge gaps that the focal software supplier company has - and may even not have the possibility or interest to fill.

Since a business relationship is dyadic and includes aspects related to both sides, we will first study the customer side and then move to the supplier side, using the empirical data gathered from twelve Finnish software companies. In the customer side we will discuss both software acquisition standards, rather clear-cut transactional views to software purchasing, and the relationship perspective that assumes longer-lasting and more diverse interaction between the customer and the supplier.

1.1 Software acquisition standards

There exist a few software acquisition and procurement standards that provide rather formalized and deterministic guidelines for companies that consider purchasing software products. Buying organizations have also used maturity models to support their software procurement processes (Rugg 1993), for example the CMM Software Acquisition Model (www.sei.cmu.edu). A software supplier company can also use these as guidelines, when preparing to give an answer to the request of proposal. In the following we analyze the ISO and IEEE standards that concern the software acquisition.

The software acquisition process is a part of the so-called Primary life cycle processes that serve the parties during the life cycle of the software in the ISO/IEC 12207 standard (1995). In the ISO/IEC defined initiation activities the customer should prepare, document and execute an acquisition plan where the software acceptance strategy and conditions are defined. The contract preparation and update activities include tasks meant to establish a procedure for supplier selection, including proposal evaluation criteria and requirements compliance weighting.

The ISO/IEC 14598-4 standard is intended for organizations that are planning to acquire an existing or pre-developed software product (1999). It contains requirements, recommendations and guidelines for the systematic measurement, assessment and evaluation of software quality during the acquisition of commercial-off-the-shelf software products (COTS), modified-off-the-shelf software products (MOTS), professional software service products (tailored), and modifications to existing software products. The standard may also be used for software product selection purposes, deciding on the choice or acceptance criteria of the product. The processes described in the standard aim, however, more on ensuring the quality of the software to be acquired than on evaluating the supplier's capabilities and processes.

IEEE Computer Society has published two standards related to software acquisition. IEEE Std 1062/1998 gives recommendations for software acquisition (1998). Among other things, it describes practices for evaluating and qualifying the supplier's capabilities to meet the customer's requirements. This standard uses recommended practices to classify software products by the degree to which the acquirer may specify the features of the software: commercial-of-the-shelf, modified-off-the-shelf, and tailored items. In the IEEE standards one of the key milestones of the Software acquisition process is contracting that includes three steps: (i) identifying potential suppliers, (ii) preparing contract requirements, and (iii) evaluating proposals and selecting the supplier.

The process for evaluating proposals and selecting the supplier is designed to ensure that only skilled and responsible suppliers are being selected. This includes at least the following activities: evaluate supplier proposals, visit supplier facilities, select a qualified supplier, and negotiate the contract. The recommended supplier evaluation checklist addresses the following aspects: financial soundness, experience and capabilities, development and control processes, technical assistance, quality practices, maintenance service, product usage, product warranty, costs, and contracts.

The IEEE standards provide for more exact supplier screening processes than the ISO standards. In particular, the former include rather precise checklists for the evaluation purposes, whereas the latter are more open. The standards include also some guidance for software suppliers, but mostly for fulfilling the customers' quality requirements.

1.2 Software purchasing as a supplier relationship

"The characteristics of a company's customer relationships are not the outcome of unilateral 'sales' activity by the seller. Instead, they are the result of combined actions and intentions of both supplier and customer and of other companies elsewhere in the network that surrounds them (Ford, Gadde et al. 1998)*."* This statement holds for the present business relationships of software purchasing companies better than ever before. Rapidly changing technologies and software product markets make it hard for customers to plan for and implement successful software purchasing strategies. For example, changes in the market structure may demand sudden reductions in the number of suppliers, and the scope of supply may need to be extended to services to be bought from outside. These factors set requirements not only for the present, but especially for the future supplier relationships. Successful building of supplier relationships demands rational thinking, but involves people rather than faceless organizations. As the supplier relationship portfolio may very well be one of the customer's most important assets, its management is a strategic task.

Because for example new Internet and Web-based software technologies – and thereby businesses based on these technologies – are still very turbulent, screening and evaluation of the customer-supplier relationship is not done only during the early relationship building phase, but during the whole life cycle of the relationship. Both parties should be continuously sensitive for changes in the market and in the other party's commitment to the relationship. Market sensing includes, at least, defining the market, monitoring competition, assessing value, and gaining feedback from customers and partners (Anderson and Narus 1999).

Success of the customer-supplier relationship depends on several factors, e.g. how much parties have to invest resources – money, labor, equipment, and training – in the relationship. Do both parties invest uniformly in the relationship? How close to the partner's core competence and business will the intended co-operation come? Since the relationships are all different from each other and change over time, there are no uniform answers to these questions.

From the relationship perspective, the customer company has to formulate its software supplier relationship portfolio according to its business strategy and vision. To build a supplier relationship is an expensive task that must be managed and updated constantly, not only to minimize the risks, but also to maximize the value.

It can be thought that building of a supplier relationship with a start-up software company is easier than collaboration with a large and well-established company, whose existing customer relationships may cause both strategic and operational inflexibility from the viewpoint of new customers. But this must be done consistently and goal mindedly from the first beginning. However, especially in the case of rapidly growing small software suppliers, the customer must ensure both that able operational management exists and that there is a realistic vision for the future of the company. Moreover, it is not only the supplier that should develop a clear picture of its desired future customer relationships. The customer must on its own behalf make sure that it will hold an appropriate position in the portfolio of these relationships. In other words, the customer needs actually to evaluate the supplier's view to its future market, e.g. using descriptors that characterize and delimit the kind of relationships that the software supplier company intends to establish.

A start-up software company shaping its future market strategy and customer relationship portfolio should discuss thoroughly at least the following fundamental questions (Anderson and Narus 1999): What do we know? What do we want to accomplish? How will we do it? In order to be able to answer these questions the company has to know what its core competence, knowledge base and targets in the selected businesses are, and how it will manage to get there together with its customers and other partners. The latter may actually affect more on the developments than the supplier company itself. Indeed, according to Rao and Klein the customer selection process is of great importance for software companies, to gain access to new markets and to improve marketing, distribution, and sales operations. In particular software companies spend relatively much on building R&D, marketing, development, and technology alliances (1994).

According to Möller and Törrönen "*the issue of supplier value can be seen as a 'mirror problem' to that of analyzing customer value that has attracted considerable interest*" (2000). In this paper we will try to look behind the mirror, to evaluate business relationships from the software supplier's point of view. We will focus on the customer screening process conducted as part of relationship building and management. First, we will propose the initial customer screening process model, based on an analysis of related research. Then, we will describe our empirical case data and the method used to analyze it. The customer screening processes of twelve Finnish software companies will be made explicit and analyzed. Some of the companies have focused on building distributor relationships, other on direct or system integrator type customer relationships. Based on the results of the analysis, we will modify the initial customer screening process model. Furthermore, we will discuss about the need of the continuous customer screening, in addition to commencement type of early evaluation of new customer relationships.

2. Initial model of the customer screening process

In this paper we will focus on the phase in the software business life cycle that occurs *after* the customer and the supplier have recognized each other. Therefore, we will not examine the search for customers, but the matching process between identified partners. According to Ford, the development of customer-supplier relationships in business markets can be viewed through the following phases: 1) pre-relationship stage, 2) exploratory stage, 3) developing stage, and 4) stable stage (1982). A fifth “latent stage” could be included in this model, to emphasize the role of the passive and dormant phase in relationships, which we have found to be more common among the US companies than in the Finnish business culture. In the USA a business relationship may be in a ”positively dormant” state, waiting to be wakened up. According to the more straightforward Finnish thinking, such a relationship is usually forgotten and not seen as any great future opportunity. Also Grönroos has indicated the existence of a latent relationship that the company or the customer can activate when the need comes (1997).

Each evolutionary stage may provide feedback for the preceding stages, as is depicted in Figure 1. In this paper we are most interested in the pre-relationship stage comprising the commencement screening process, as we will call the first of these evaluation processes.

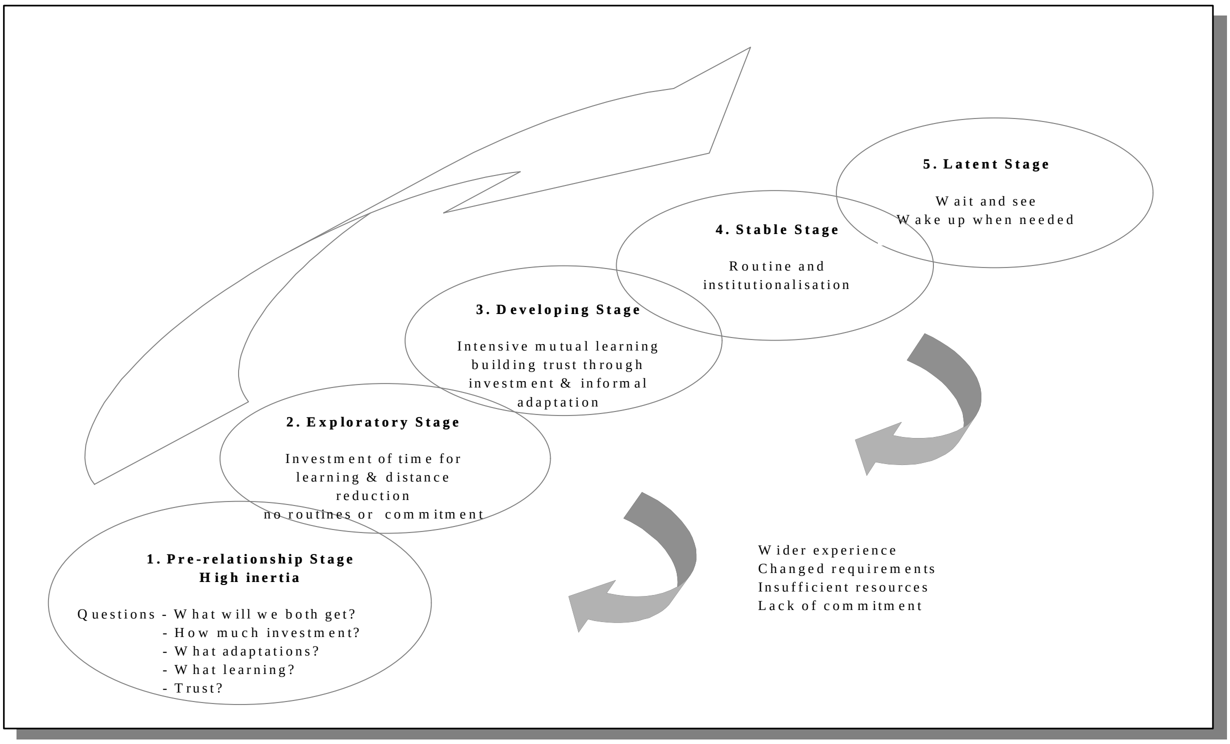

Figure 1. The development of buyer-seller relationship in business markets, adapted from (Ford, Gadde et al. 1998, 29).

After we have described the commencement screening process we will introduce the second screening process - the continuous screening process - that also includes the exploratory, developing, stable, and latent stages. We expect that during the whole life cycle of the software purchased by the customer it is important to regularly evaluate the supplier relationship. This evaluation is used to re-assess how well the co-operation meets the immediate and strategic business needs, because both keep changing. The supplier and buyer companies must keep tracking the changes and evaluating how they affect their mutual relationship (Peterson and Carco 1998, 49).

Varis and Salminen have recently classified partner selection criteria found in several studies and in different contexts, according to the partnering focus (2000). They criticize that most of these studies lack the specific features of the turbulent software business environment, especially in the so-called Infocom market of information and communication technology based products. Yet, the survey provides for a rather comprehensive picture of the proposed selection criteria.

Abel notes the importance to carefully prepare for the partner selection process (1992). The more thoroughly a company makes preparations for partnership negotiations, the better are the chances for beneficial results, which give a good basis for successful realization of the planned co-operation strategy. In particular, the supplier company has to plan carefully for its own core competence, i.e. what it has to offer to the other parties of the relationships. On the other hand, it must define the knowledge base and resources of the desirable partners. Only after these preparations have been made, the company should start searching for and selecting its partners (ibid).

We join to this above life cycle framework a process perspective from Anderson and Narus that allows studying the gaining customers phase of the screening process in more detail (1999), Figure 2.

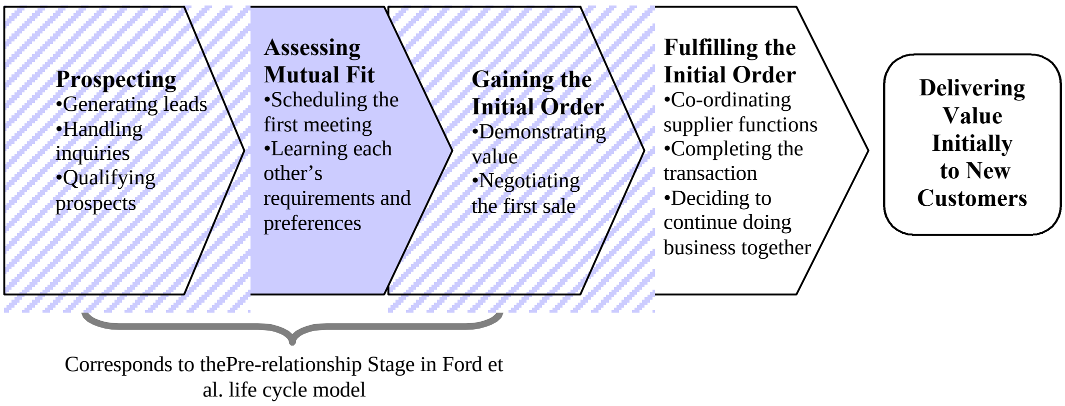

Fig 2. Gaining Customers in (Anderson and Narus 1999, 296), modified.

3. Case description and research method

The empirical data was collected from eleven small software supplier companies and one software purchasing company. Many of the interviewed companies are start-up SMEs producing Internet-based software, e.g. application platforms, telecom-munication services and database software (Appendix A).

What makes the data further interesting is that eight out of these thirteen companies are Finnish firms operating or having just started their operations in the USA, mostly in the Silicon Valley area. The remaining four companies are local Finnish companies, which export their products to foreign countries. The data was collected during spring and summer 2000 by two interviewers in the USA and Finland, each interview consisting of one to two hour sessions. Using several interviewers gives also more reliability to the study with different pre-understanding of the cases (Eisenhardt 1989). The total interview time surpassed 15 hours. The semi-structured interviews were taped and later transcribed and analyzed using qualitative data analysis methods and a supporting tool (Kelle 1995). The letters from A to L in brackets indicate the interviewed companies, as described in Appendix A.

4. Case analysis

We have categorized the case companies into four classes, based on their approach to market and sell their products: 1) through distributor channels, 2) together with systems integrators, i.e. they complement the partners software or hardware, 3) directly to their customers, e.g. COTS or MOTS products and 4) resources in a tailored software production business. We will in the following separate two main categories, one comprising the above mentioned categories from one to three – software product companies, and the second category being the last one, software production services companies.

In this chapter we will first analyze and describe two different customer screening processes identified from the case data, then discuss the various elements of the screening processes, and finally introduce the enabling factors of the processes. The enabling factors make the screening processes viable in software companies. In the last paragraph of the chapter we will discuss about the importance of continuous customer screening and outline a revised model for the customer screening process.

4.1. Foundations for the customer screening process

From our case data we found two main types of customer selection processes that coincide with the types of software the companies are producing. The first one is for the companies selling products that co-operate in the COTS or MOTS business or complement their products with their partner's offerings. This selection process emphasizes distribution channel selection, typically resellers but also system integrators. The supplier companies do not usually meet their end-customers directly, but operate through the partners. The second selection process involves the companies developing tailor-made software, which establish direct customer relationships.

Referring to literature, building of a *reseller partnership* is the process of a supplier and its reseller trying to fulfill commitments they have made to each other, strengthening the overall channel performance, and working progressively together to continue to achieve changing marketplace requirements. Building of a *customer relationship* is the process of fulfilling mutually agreed requirements in the best possible way, and pursuing a targeted share of the customer's business through mutual self-interest (Anderson and Narus 1999). In this paper we understand the *customer screening process* to be evaluation and assessment of the partner's capabilities to accomplish the expected future performance. The customer can be any kind of partner, e.g. a company buying software for its own use, systems integrator, distributor, or another kind of channel partner. We will use the terms evaluation, screening, and selection interchangeably.

In the reseller partnership type of co-operation it is also important, according to the interviewees, that the partners can independently push the software products through the channel. Anderson and Narus describe, how the business market managers gather information on capabilities, required costs and investments, potential competitive advantages, forward-thinking attitude, and customer satisfaction that the prospective channel members introduce in the relationship (ibid).

When selecting channel partners, proactivity appears as one of the most important elements, even over the exhaustiveness of the channel in terms of the reseller's geographical coverage or number of shops. This valuation depends, however, on the type of the software to be sold, for example the need of associated services:
"*We value skilled, service minded, consultative approach. Our partner must be able to adapt and sell our solutions to the customer, not just wait for the next order. The channel must have its own profile. We are also interested to get more business in auxiliary services e.g. installation, support, and training [G]*."

These findings are well aligned with Rao and Klein, who found the high degree of customer interaction and degree of post-sale customer support services to be a decisive supplier selection criterion (1994, 35). Personal relationships are important in this regard, too. Although the partners have obvious benefits from the co-operation, still if the persons who are negotiating about the relationship do not find mutual understanding, it is hard to produce any constructive solution. However, there may be situations also the other way around. As one of the interviewed CEOs stated, sometimes people prepare contracts because they find a good personal relationship between themselves, even though it has nothing to do with business [I]. To start partnership building may thus be based more on personal hopes and beliefs for the co-operation than on calculations of the expected business benefits. This kind of speculation on the future partnerships is more usual in the USA than in Finland, as one of the interviewees told us [C]. The employees of American companies tend to create unofficial networks of their own, people exchange often their business cards in meetings and seminars, and so on. The latent network actors may in the future become suddenly active and appear to be of great value, compared to the investments made.

The customer can be the impelling force that initiates the relationship. Co-operation starts when the customer discovers that he has a need, i.e. he recognizes some problem that must be solved. From the software supplier's viewpoint, it would be indeed be beneficial if the customers were aware of partners that could have a possible solution for their needs. Suppliers have, however, to be productive and active. They cannot rely merely on the customers' ability to find out all the potential problem solving partners. Suppliers must contact the potential customers in several different ways. This may be done through exhibitions, seminars, phone, e-mail, or other such means – all these came up in the interviews, as one may easily guess.

Still, the suppliers have to be in the right place in the right time, to be able to create the relationship. In particular, they should try to perceive all the time the markets, especially those companies that they aim at getting as their new customers. The interviewees pointed out that it is peculiarly important to be well timed with contacts with the prospective customers. If the supplier comes too early with its solution, the customer may not be interested. After some months, the need may already have been solved using some other supplier's offering. It is therefore utmost important to know thoroughly the markets and companies in the supplier's field of business [I]. As one of the CEOs explained, the selection of customers is easier if the supplier is a start up and in earnest in the market. Although several times new customer contacts come more by accident than by active and systematic selling efforts, it is advantageous, if the supplier could perceive who can be the real future customers. Many times there is a lack of knowledge about what the customer already has and does not have. The supplier may, for example, try to offer something that the customer already possesses.

4.2. Observed elements of the screening process

In this paragraph we will study more closely the basic elements of the customer screening process - business, contacts and references, technology, and commitment and trust - based on our findings of the case material.

Business

One of the main elements that became visible in the case data is *business benefit* provided for the relationship parties. The companies ask themselves what benefit they can bring to and what benefit they will get from the joint efforts, be it a channel selection or a customer project selling endeavor. In his framework Ford calls this as a learning concept (1998) and in the Anderson and Narus framework it falls in the gaining the initial order category (1999). The future co-operation possibilities as well as reputation and credibility are important for a small (start up) software companies entering in a new market. Especially these companies have to select the customers and partners carefully to benefit from the relationship [D].

The supplier company must also assess the possible *business risks*. This includes finding out how much the potential partner's ideas and visions for the future are based on facts and what is just wishful thinking. Several CEOs expressed their desire to form long-lasting relationships, in order to develop skilled teams for joint projects and to learn thoroughly how to operate with each other, because "it makes the life easier" [D, L]. These teams would form the core assets for the future joint business efforts.

Suitability of the partners for the company's foci business segments, the customer's financial situation and selling volumes are also interesting as selection criteria:
"*We must know exactly who the prospective customer is. We do both technical and business level evaluation of the new customer. We are also interested about the business level success. However, it is just like this, it is very hard to determine this with plain numbers. The understanding is based on experience [J]*."

The uniqueness of the supplier's software product helps to enter into heavily competitive markets. Although the company would be small, it has a possibility to establish relationships with big customers, who are interested in the unique offering. This may make it possible for the company to survive the competition:

"*As we have a unique product, we can sell who ever we like. But with the real big ones you must just be that much odd that you regard yourself equal with them. Of course we run if some of the big companies tells us to run, but only if we know that there is a good reason for that [J].*"

A representative of one of the case companies told frankly that they would hope to have a situation, were they could screen the potential customers. However, there was enough work to do to find the next customer, so they had not really had many chances to evaluate and select their customers. Two other software producing companies did not even mention customer evaluations. These companies were operating either in extremely competitive markets or they did not have special skills that could have brought them a clear competitive advantage over other suppliers.

One of the interviewees mentioned the customer project's size as a simple decision parameter. They calculated straightforwardly, how much each project would produce income and revenues. The projects should also provide for future product opportunities in the off-the-shelf markets [A]. Their strategy was therefore to use customer projects as stepping-stones to more attractive MOTS or COTS businesses. This was not seen always possible, because some customers did not agree with and allow the use of the accumulated knowledge in the supplier's own products. However, usually the customers understood the benefits of this kind of business evolution: they would get better and more secure upgrades and maintenance of the developed software in the future, and services related to the software product would be more likely offered.

One of the interviewed companies producing MOTS and tailored software told that past relationships helped them to approach new prospective customers. They utilized these relationships systematically and were, according to their own opinion, able to take from the first beginning very demanding projects that supported their vision for the future [B].

Contacts and references

One criterion to select a new customer is to what extent the relationship would provide for a good reference. For a company establishing its venture in a new market, even in a new country, it is important to become well known and build a reputation from the first beginning. This can be done by co-operating with branded customer companies. Also Blomqvist as well as Möller and Törrönen have pointed out that the partner's reputation gives leverage to the small software company (1999; 2000).

Without right partners it is hard and time-consuming to create any brand name, or even perilous, if the markets evolve as fast as for example Internet-based businesses [D]. In some cases the software company would first try to find an end-user type of customer for their product, and only afterwards approach a systems integrator partner together with the existing customer, to broaden co-operation [K].

Möller and Törrönen call this the "scout function", it yields to the software company market-related and other information, obtained through the customers (2000). Customer contacts are interesting, if they bring along projects to develop new

products. In particular, companies are interested in joint development projects with customers representing large markets and customer bases [A]:
”*We expect from our customers a strong strategic partnership. We have at the moment certain know-how, we have technology know-how, and we have in some extent marketing skills, too. Combining this knowledge base into a strategic partnership is the core that we hope will help us to achieve larger market position. That is what we are after [D].*”

The partners can also provide for channels that will open doors for new customers in the Fortune 500 range. Normally small start-ups companies do not have access to this level of corporations, and must therefore seek for alliances with better-known actors. Personal relationships of the supplier company may be of remarkable help in this regard.

Technology

Companies try to find partners who are lacking and have the need for the expertise that the supplier can provide. This means that the software company must have some core competence that *complements* the customer’s expertise. If the customer has already been successful in building new businesses with software suppliers, it is more likely that the customer will benefit also from new relationships [D]. However, to get into this kind of a positive situation, the software supplier must know the needs of the partner, and often the needs of the partner’s customer’s, too. If the relationship involves systems integration, the software company faces technical challenges:
“*We have to evaluate and make sure that our platform performs well together with the customers solution [J].*”

One case company that is working with a big telecommunication customer indicated that they did not perform the screening of this customer in any systematic fashion. However, they evaluated at first how strong the customer commitment was to the supplier’s software *platform* and *technology.* Rao and Klein view the co-operation, i.e. alliance building, highly important for software companies in the light of strong complementarity and technological combination between hardware and software (1994), see also Blomqvist (1999). The case companies that we interviewed were also interested in knowing the possible risks that technological co-operation might cause in the future [F]. According to Ford et al. the relationship development includes investing in tangible as well as in intangible resources during the pre-relationship part (1998). Based on our interview material, during this evaluation period the future investments (tangible or intangible) were more like tentative and explorative as the concrete investment decisions waited for the actual contracts to be formulated after successful negotiations.

One of the interviewed VPs explained that the customer screening process, especially if the customer project would require changes in their own plans and road maps, was done carefully. An example would be that the company needed to customize some features or screen layouts of their software, to make the product better suited for the customer. The customer may also demand some special stress tests to be done for the software, or tests on the compatibility of the software with some proprietary equipment. The VP further he explained the situation as follows:

“*In our company we have a custom to produce a synopsis about the extraordinary business cases. It includes what is coming, how big and what are the risks. Based on this we make the final decision, do we want the case or not [G].* “

These kinds of evaluations are done especially, when the customer demands for resources that are scarce. If the case is not that special in terms of resources, the company may let their salesmen to prepare the deals. One element in this type of screening is also what kind of implications the new partnership may cause for the IPRs or other kinds of proprietary solutions owned by the software company. This can be a strategy-level issue for the supplier company, because it may open or close future or existing doors with other possible partners and customers [I], see also (Håkansson and Snehota 1998). Software project skills emerged also from our case data as one of the smaller facilitating elements of relationship building. The supplier companies are interested to know how software development and maintenance can be worked out with the customer company, e.g. how co-operation with the customer’s software experts would most likely succeed [F].

One interesting finding comparing the Finnish and US business cultures is that in Finland software companies often depend more on some technology, where as American companies are market driven. This can be due to the fact most Finnish software start-ups have been this far founded by technology-minded people, engineers and software development professionals. The situation in the USA may be the opposite, software companies are founded by business-minded entrepreneurs, so that engineers are used as technical resources by the business people. In some cases US companies advertise their future products only with specifications at hand, to find out if the market were interested of the product. Finnish companies would first try to finalize the product with many initial features, even if the market would not exist yet.

Trust and Commitment

Anderson and Narus state that trust and commitment are the foundation of all successful working relationships (1999, 384). One of the main problems is how to find out and specify partner’s real commitment and trust level when considering long-term co-operation and further disclosing company’s business secrets and strategies [E]. Negotiators can try to confirm it by introducing at the beginning of discussions a “Non-disclosure agreement” (NDA) and including in it payment demands for the joint future efforts. In the NDA the level of commitment and a conditional imposition of a fine may be included explicitly [A].

The clarity of the NDAs is a common problem when the company is in its early stages eager to get into business and the negotiators are too cautious to introduce in the beginning of negotiations formal requirements. Because there is no general formula to measure the commitment, the most common measure is money. If the negotiators are insecure they can always discuss about the money that must be put into the joint effort. Often this opens the eyes of the negotiators and then they find out, if the other party is just experimenting. This kind of ‘free-riding’ problem may raise e.g. in joint R&D efforts, when it is difficult to assess whether both partners are contributing to full extent in the joint effort (Nooteboom 1999, 100). In a dyadic environment with two actors this problem is less likely to occur, because the other party reacts, if the other one does not contribute to the provision of the collective goal (Brito 1998, 157).

If the software company has decided to operate through value added resellers (VAR), they have to perform contract negotiation with several prospective companies and try to find out the partners' motives to become as selling partners (Moore 1991). The company has to go through in detail every single partner candidate, concerning their business plans, past tracks of marketing, selling, and delivery. The resellers' market situation has also to be scrutinized closely. To establish an extensive distribution channel takes time and resources, especially if done in a foreign country.

In one case long and eventful discussions with *four* prospective partner candidates yielded in average to only *one* contracted partnership. However, from these formally agreed partnerships only *every tenth* was viable and active. The efficiency was just one in forty, which is in the same range as Anderson and Narus indicate the sales contact yield to be from one to two percent (Eisenhart 1990). It is therefore a very cumbersome and resource consuming process to establish smoothly working distributor relationships. When entering foreign markets it is more than just to screen the possible partnership companies. The management has to make the same analysis for the markets, in order to be sure that the product fits the existing culture, legislation and standards. It is a common occurrence that even the software interface may be different depending on the mainstream software products [A].

Past acquaintance between the persons helps the relationship building. This was the case with one the companies that we interviewed. The management had been in the communication software line of business in the past and had had time to build extensive personal networks that they were now able to exploit. The trust had been established already during the early days. The company was able to get demanding state-of-the-art projects that were in line to their knowledge building process [B]. The same CEO continued that during the talks between the partners it is important to create an atmosphere that inspires confidence. This is the phase to exchange tacit knowledge. On the other hand, the company should not get blinded of the fact that the interested contact person may operate alone without any own company backing [E]. Also Blomqvist finds the trust as an obligatory element in the relationship. This includes understanding and appreciation of the other party's skills and culture (1999).

4.3. Enabling factors for the screening process

In this part of the paper we will examine the companies from two different perspectives. We will study experience (of the management) and vision (of the company) that we found to be compelling factors to the screening process to exist at all. In the present-day world it may be hard to discuss about the age of the companies, especially if the companies work and operate in the Internet business environment. Most companies have been operating only for a couple of years. In an ideal situation, any software company that is starting a new business should carry out customer screening. However, when the company grows rapidly, its normal business cycle speeds up considerably and the management has less and less time to active client and partnership contemplation [I] Also Ford et al. has found further reasons why the customer screening is done only in a limited number of cases as the supplier do not have enough resources to do the evaluation, especially the small ones. In some cases the changing partner may include unknown problems, or supplier may have to change their own products or procedures (1998).

The experience of the management

Do the small and start-up companies have a possibility to carry out this kind of scanning process or is the need for customers so impetuous that the company just takes any customer or partner it can get? According to our case material seven companies out of eleven software producing companies did screening in some extent. Two companies told us that they seldom do. This seems to depend on the company culture, the people, and the situation of the focal company.

One obvious finding was that more experienced the management was – usually they were also the company founders – so more they were interested to carry out a proper customer evaluation process. Often they were on their second or third round to start a new business. From the past they had gathered business experiences and as they had been in business for a longer time they usually had also more extensive understanding and know-how about how to start a new operation. They also had build in the past a extensive network of experts and financiers in the business line and corresponding companies. So for them it was easier to start systematic discussions and meetings with prospective partners and customers. During this preliminary survey process also the first elements of trust has been established as the needs of business was mapped. Further they progressed into a thorough going discussions and the customer needs' clarifications in more detail. After this process also the resource requirements was determined and compared to the existing ones.

Möller and Wilson have scrutinized in their Dyadic Interaction Model the role of the interaction experience factor that refers to the level and nature of the past obtained know-how about customer – supplier relationship building and managing. They state as follows: "*As 'learning by doing' can be assumed to represent the strongest form of organizational learning this factor is an important moderator of the influence of all the other organizational and contextual contingencies* (1989, 20)*."* This is in good concordance with our case observations. The software development manager in one of the interviewed companies had experienced that the managers of smaller companies were also more capable to discuss about the matters than the big companies' salesmen. They possessed so called 'founder's experience' [C].

The vision of the company

As one of the interviewed CEOs stated the company must have a clear and lasting vision, or may it be described with terms like company philosophy, bigger picture of the business, or business idea about what the company will be in five to ten years time. However, the start up must have a clear picture of what its core business is and what it wants to accomplish in the future. This message must be easy to understand and easy to distribute for all relevant actors in and outside of the company. This enhances the possibilities for the company to get more appropriate invitations to submit tenders to the point and the company employees understand clearly the long-standing objects of the company [B]. As the employees are the experts to fulfill the future obligations they usually take part, at least in the smaller companies, to these evaluation processes during the more technical phases.

Following the vision the company acquires the needed know-how through systematic project selection. This is the way to form the existing and future knowledge base. The manager of the Internet portal organization expressed the need for a focus and clear vision for the small start-ups. They have to have clear understanding of their skills and firmly set goal where they are aiming with their product [C].

This straightforward goal-oriented approach may in some situations be a hard challenge for a young company short of financing. However, to learn to say no-thank-you for bids that do not support the company's vision would be useful and economic in the long term. On the other hand, if the company's vision is resource selling, it may be appropriate to take any project the company can get. The financial situation may also require this. In her study about asymmetric partnership characteristics Blomqvist states that "*small firms do not necessarily 'strategize' formally, but a strategy emerges as a result of the owner-manager's decisions. Lack of strategy and lack of conscious choices may also result in poor choices in the long run* (1999, 23)*".*

4.4. Revised model

The interesting fact we found was that some of the more mature companies did the commencement screening process as well as the partnership evaluation along the co-operation within a continuous partner evaluation process. This continuous evaluation was done in order to fulfill the conditions of a good partner and the partnership to be viable and profitable for both parties [E]. One CEO told that they do not perform the evaluation process expressly, but:
"*We follow actively and also through the co-operation we learn future trends and sometimes quite confidential things that we can then on later utilize in our own strategy discussion and contemplation sessions. We analyze the movements of the markets and how competitive our business partner is and how good strategy they are equipped with [F].*"

Still several managers expressed their desire to carry out the continuous screening, but due to lack of time or lack of understanding of its importance in the present day hectic environment they were not able to realize this process. The continuous screening process is part of the relationship management and according to Tähtinen the management of relationship is a central task during the whole life cycle of the co-operation that includes the establishment and development of relationship as well as its termination process (1999, 11). The continuous screening process has its counterpart in the customer's acquisition process described and defined in ISO/IEC 12207 Standard where the supplier monitoring activity consists of tasks to follow the supplier's activities during the whole life cycle of software development process (1995). These tasks include joint reviews, audits, informal meetings, reporting, approval, acceptance, etc. Mature companies do not only evaluate and compare the customer value constantly against their own strategic goals, but they also evaluate the relationships outcomes and value provided as well as the working relationships (Anderson and Narus 1999).

Our own interpretation is that the enabling factors and secondary elements are not only for the commencement screening process but they also indicate the need for a continuous screening process for the whole duration of the relationship's life cycle. Especially, as the global software technology business today is in a turbulent situation with Internet and forthcoming mobile Internet the software companies are building and breaking up relationships and different kinds of alliances according to their business needs.

Figure 3 outlines the dependence of the enabling factors and the secondary elements of the screening processes. The enabling factors are vital for the existence of the screening processes, the secondary elements are those along which the nascent relationship is primarily evaluated and they with the company vision and management experience establish the need for the continuous evaluation of the partner.

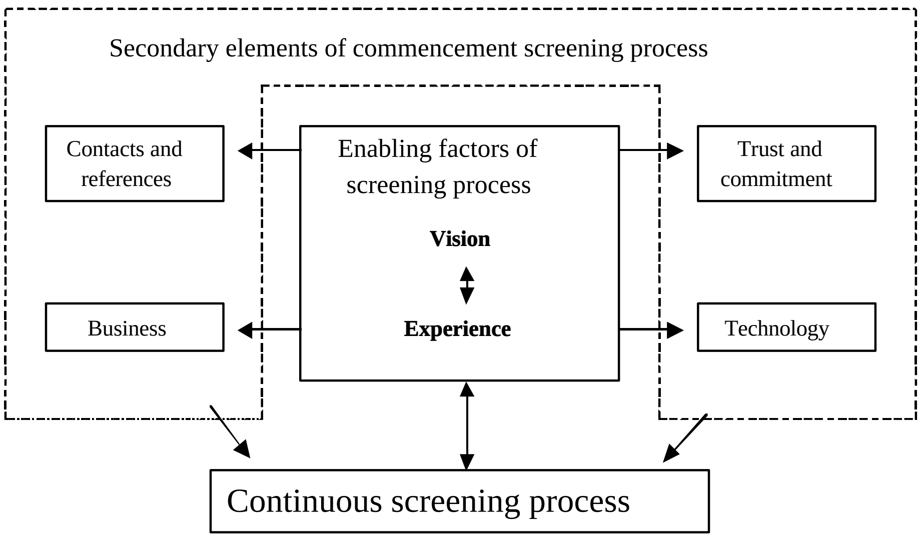

Figure 3. The elements and enabling factors of the screening process.

In Frazier's studies about marketing channels, he also suggests in his three-stage model that the third stage after initiation and implementation should be an evaluation of partner's performance (in Cheung and Turnbull 1998). Liljegren has also drawn attention in long-term industrial relationships to the need of partners' evaluation of each other. He found that the companies have different aspirations in a long-term relationship vs. the short-term benefits of the relationship. The efficiency and evaluation criteria were appraised only when there were changes in the partner's strategy or in the structure of the exchange practices (1988).

4.5. Analysis of the revised model

We found close fit with both the Ford life cycle framework and the Anderson and Narus process framework. The secondary elements business, technology, and trust and commitment could be found from these frameworks correspondingly. Still both frameworks have elements that are not included in our model. The Ford framework's adaptations element does not appear in our screening process model as this element constitutes of the future (in)formal aspects that come in the picture only after the contracts are achieved and are thus not central matters at this early evaluation stage of relationship. Again the prospecting process depicted in the Anderson and Narus framework exists only partially in our framework from its qualifying partners part.

We have defined above the focus of this paper to be the phase in the software business life cycle that occurs after the customer and the supplier have recognized each other. Thus the discovering the partner and all the work to be done for that is not in our focal interest in this paper. On the other hand in the above mentioned frameworks the element contacts and references were not mentioned. From our case material this came out as an important element. The small and young companies need other (well) established companies for levering them into the new and broader markets faster and more systematically.

In this model we use the taxonomy found in the Möller and Wilson model (1989; 1995). Next we evaluate more our adaptation of the Möller and Wilson model in the software company environment.

In the Möller and Wilson Dyadic Interaction Model the Interaction processes form the core processes that refer to the basic business processes necessary to carry out the tasks. The exchange process has two sub-processes, exchange of resources (e.g. products, services, technology, information, etc.) and social exchange (e.g. beliefs, attitudes, values, norms, and goals). The second process is the adaptation process, which realizes one or both partners in the relationship to change their behavior – mentally or physically – to better serve the purpose and aim of the co-operation. The third sub-process is coordination process that steers and evaluates both partners' behavior in order to fulfill the common object (1989).

Using the above taxonomy we define the commencement screening process as one of the social exchange processes. The business negotiations usually start with scouting and discussions about the future possibilities in common business efforts, i.e. finding out the common "chemistry". In this moment the beliefs and hopes of joint business goals, attitudes to relationships building and its co-ordination, also business values and norms are in a central position. The exchange of resources is still insignificant as well as the actual adaptation process.

Table 1. The Möller and Wilson Dyadic Interaction Model taxonomy included in the Screening Process Model.

Screening Process Model	Dyadic Interaction Model
Commencement screening process	Exchange process; Social exchange process
Continuous screening process	Co-ordination process
Vision and experience	General characteristics; Interaction experience and Managerial orientation
Business	Organizational characteristics; Comparisons
Contacts and references	Organizational characteristics; Expectations
Technology	Task characteristics; Complexity, Innovativeness, and Importance
Trust and commitment	Outcomes; Bonds

We can further specify the continuous screening process to belong to the co-ordination processes in which the co-operating partners constantly evaluate other partner's resources, activities and future possible actions. This screening process of course gives stimulus for the adaptation process.

The compelling vision and experience factors corresponds with the general characteristics of the interaction experience and the managerial orientation. They relate to the level and nature of experience accumulated from various relationships. They also depict the managerial skills and the orientation of the company managers. We found these factors to be the key qualities of a company manager to have in order to adopt the screening processes in constant use.

In Table 1 we can find the business element to include the comparison factors as well as the contacts and references to be connected with the expectations factors. Organizational characteristics are described for instance with the comparisons and expectations factors. The previous one indicates the various costs and risk related to the relationship. The latter one depicts the expected efficiency, effectiveness, and adaptability of benefits to be gained from the relationship.

The technology element in our model corresponds with the task characteristics that refer to the inherent characteristics of the focal task(s) of the interaction, e.g. complexity, innovativeness, and importance of the relationship. In our software company context we find these factors essential as the products and services that these companies produces are of technological by nature and by definition complex and innovative.

Further the trust and commitment element corresponds with the outcomes that define the intentional and unintentional results of interaction behavior. We can find outcomes as commitment of the joint effort as well as trust between the partners.

5. Discussion

We suggest that the customer screening process of software companies has two perspectives and two levels. The management first analyses the potential customer from the *strategic point of view*. The company's vision and experience of the management are used in this sub-process, which is to some extent intermingled with a provisional secondary element evaluation, although these elements are studied through strategic lenses. If the first sub-process gives a positive result, the company shifts to the second level, where the customer is evaluated in more details from the *functional point of view.* This sub-process includes a comparison of the secondary elements of the commencement screening process: business, contacts and references, technology, and trust and commitment.

These two viewpoints and sub-processes constitute the *commencement screening process.* If the software supplier company finds the prospective customer case to be interesting, it starts preparations to respond to the customer's request for proposal, in order to win the bid or to start e.g. R&D co-operation. However, the software company to operate effectively, the commencement process has to be followed by a constantly ongoing evaluation process that lasts the whole life cycle of the relationship. This process involves the software specification, development, use, and service. In other words, the *continuous screening process* is needed, too.

We found the *maturity of the company* as the most central factor associated with the customer screening process in a software producing company. In this context the maturity includes the experience of the management and the existence of a company vision. On the contrary, for example the age of the company does not seem to affect customer evaluation. Because most of the companies were small SMEs, the individual managers' skills are essential for the maturity of the company.

The processes of the customer selecting a supplier and the supplier selecting a customer are mirror images, but they arise from different starting-points. The customer selects the supplier to fulfill its needs to solve some software-related problem. In this process the customer may use different kinds of methods to achieve the wanted result. On the other hand, the supplier may respond to the customer's request for a proposal on a short-term basis, just to comply with the customer's demands. However, in order to build a relationship in a sustained manner, the software company needs a clear vision and strong management commitment.

The secondary elements are also classified by Blomqvist to be motives (advantages) for small technology-based firms to enter partnerships with larger firms (ibid). The business, contacts and references as well as the technology elements unfold in several categories depicted by Blomqvist. Only the more personal and tacit trust and commitment element is not among the motivation categories found in the study, but it could be found though among the firm characteristics.

The companies that did not yet have any special expertise to form core competence were mostly unable to conduct the customer screening process. They had to take any customer they cold find, because they did not have any competitive edge compared to their competitors. However, the situation can also be viewed the other way around. The lack of a clear vision and management devotedness may be the reason to the lack of core competence and competitive edge.

The lack of the customer screening process may also follow from the fact that although the company has an interesting and clear idea of its aims, it is still so small that it cannot select its customers or partners, but just to make them interested in the company's aims and future product. This holds especially for the question of making investors interested to invest in the company [H]. However, even this kind of a company can act more professionally and successfully, if it has its goals clearly expressed and then acts according to these aims.

To summarize the results of our research, we found the case data to be in concordance with the existing models that we used as references in our study. The Ford buyer–seller life cycle relationship framework together with the Anderson and Narus customer process framework were used to position the customer screening process among the business processes, and the elements of the screening processes could be subsequently bound with the Möller and Wilson Dyadic Interaction Model. Because the case data consisted only of twelve companies, we are not able to draw too far-reaching conclusions from the study. Still, the results and observations provide insights and ideas to the subject matter, and further studies in this field.

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APPENDIX A

The case companies

Company	Interviewee	Business	Employees	Founded	Location
A	CEO	Communications solutions software	11 – 50	1992	FIN
B	CEO (Co-owner)	Telecommunications software for Internet	11 – 50	1997	FIN
C	Technology Development Director and Software Development Manager	Internet portal division	11 – 50	1998	USA
D	VP of Sales and Marketing (COO)	Internet tools and platform software	11 – 50	1994	USA
E	CEO	Business intelligence software	51 – 100	1991	USA
F	CEO	Mobile Internet platform	11 – 50	1982	USA
G	VP of Global Business Operations	Security solutions	51 – 100	1988	USA
H	CEO and Co-owner	Virtual communities	1 – 10	1997	FIN
I	CEO	Wireless Internet	11 – 50	1997	USA
J	COO	Data management solutions	101 – 200	1992	USA
K	VP of R&D (Co-owner)	Engineering software	11 – 50	1989	USA
L	CEO	Systems house	11 – 50	1989	FIN

*)
CEO (Co-owner):
The interviewed CEO is also a co-owner of the company.

CEO and Co-owner:
The interviewees were the CEO and one of the company’s co-owners.