Innovation Management Challenges of a System Integrator in Innovation Networks

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Abstract: The paper describes findings from a multiple case study about innovation management challenges of a system integrator whose operation as a system integrator is characterised by a high demand of innovation and whose focus of integration capabilities is, accordingly, changing from component assembly to knowledge integration. The study involved six diverse case firms, and it applied the methodology of qualitative research. Innovation networks orchestrated by the system integrator were categorised according to the way how knowledge and intellectual property were explored and exploited in the network to sourcing (transaction) and co-creation types of networks. The research question of the study was, what aspects of sourcing networks and of co-creation networks support or hinder networked innovation from the viewpoint of a system integrator and innovation management? After recursive cycling of lessons learned from literature and empirical case findings, sets of supporting and hindering aspects were introduced as implications of the study.

Keywords: open innovation, innovation network, system integrator, innovation management, intellectual property

1 Introduction

Since the 1990’s, there has been a strong trend towards outsourcing in Western companies. Outsourcing is nowadays used for a variety of activities, including core processes such as new product development. Global corporations are seeking for a few
suppliers from whom to buy more complete and complex systems or subsystems. Accordingly, locus of competition through innovation has been shifting from discrete product innovations to innovations in increasingly complex products and to the design and development process of these complex products itself (Pavitt, 2002). Such complex products often consist of ‘pieces’ from various suppliers put together by an actor called system integrator (SI) (Hobday et al., 2005).

The call for more complete and complex systems requires changes also in value network configuration. Accordingly, a system integrator has an important and challenging role in the value network. The challenge of a SI is that how to successfully composite the various pieces in the value network into a successful innovation, that is, how to manage open or networked innovation? (Möller, 2005, Valkokari, 2009)

System integration developed in the 1940’s and 1950’s in the military arena, and then spread to other capital goods and high-volume industries, especially to automotive, consumer electronics and telecommunication industries (Sapolsky, 2003, Becker et al., 2003, Hobday et al. 2005, Möller et al., 2005, Dittrich and Duysters, 2007). In the 1990’s and 2000’s the system integration developed rapidly in the production of product systems consisting of hardware, software and services (Davies, 2003, Hobday et al., 2005). Such product systems are typically, to some extent, tailor-made for each customer (i.e. low-volume systems). System integration has always been characterised by two central capabilities: component assembly and knowledge integration (Prencipe, 2003). While good component assembly capability may bring special competitive advantage in high-volume production, low-volume system integration emphasises the knowledge integration capability of SI because tailoring often requires some kind of joint-innovation activities at the interface between network actors.

In this paper, we consider innovation management challenges of system integrators when the focus of integration capabilities is changing from component assembly to knowledge integration. We have a multidisciplinary approach consisting of networking, business and legal theories. The three approaches, however, were fused together in the study, as they do also in the real business process of firms. The goal is to increase current understanding in linking the theory of innovation networks to innovation challenges and practices of SIs.

2 System Integration and Innovation

Hobday et al. (2005) defines system integration as the capabilities which enables firms and other agents bring together high-technology components, subsystems, software, skills, knowledge, engineers, managers, and technicians to produce a product in competition with other suppliers. System integration capability is the capability needed to manage outsourcing as well as “joint sourcing” and “insourcing” to enable system integrator firm to gain the advantages of both outsourcing and vertical integration through different phases of the product life cycle.

The increasing complexity and diversity of technologies and competences suggests that firms may be forced to access new, unrelated knowledge and innovation networks. That raises the issue of dealing with technology-rich and knowledge intensive network companies (suppliers) in a manner that creates shared knowledge assets. Thus, when the products incorporate a range of technologies, firms have to rely on external partners and configure networked innovation models to be competitive. The orchestration of these
network actors challenges the SI to configure the mutually beneficial collaboration models, which support knowledge sharing and creation between the network actors. In both alliance and network research there is an intense debate on the most favourable collaboration models between customers, suppliers and system-integrators (Dyer, 2000, Dash and Teng, 2002, Wilkinson and Young, 2002, Grant and Baden-Fuller, 2004, Möller and Rajala, 2007, Valkokari et al., 2009).

Brusoni et al. (2001) argue that networked innovation requires twofold approach: variety and specialization between network actors foster the process of discovery of novel solutions whereas some degrees of integration among network actors coordinate dispersed learning processes carried out within network actors. Accordingly, they describe how the system integrator has an important role in balancing between specialization and integration. Based on that, we suggest that the critical capabilities of SI include networking capabilities and absorptive capacity, e.g. ability to utilize and integrate external knowledge bases (Cohen and Levinthal, 1999). In addition to that, capability to manage customer relationships is highly important to a SI as well as to orchestrate the innovation network, including both customers and the actors of the integration network.

3 Sourcing and Co-creation Networks of Innovation

Until now, the literature has mainly focused on how a system integrator is able to manage supply networks in order to integrate products (see e.g. Hobday et al., 2005, and references therein); whereas we argue that the most important question for future competitiveness is how the system integrator is able to utilize and manage networked innovation (Möller, 2005, Valkokari et al., 2009) in order to strengthen its position within value networks and create future business opportunities. Thereby, system integrator needs ability to manage horizontal networks with several equal, but known, partners or even utilize the paradigm of open innovation.

In network management literature, the operational structure of networks is often described by two models according to how and by whom the network is managed: in the hub-and-spoke model the network is controlled by a hub company, while in the multiplex model the firms in the network have more or less equal voice in controlling the network activities (Doz, 2001). While the approach has been successfully used in characterising the operative structures of networks integrating existing products and services, it may not be the best approach in characterising innovation networks creating new.

Knowledge management offers an alternative approach to the characterisation of innovation networks. Building on March’s (1991) distinction between the knowledge generation (exploration) and knowledge application (exploitation), Grant and Baden-Fuller (2004) derived a theory on knowledge management within inter-firm alliances that distinguished between knowledge acquisition and knowledge accessing alliances. Knowledge accessing alliances are for the exploration of new business, while knowledge acquiring alliances are aimed at exploiting an earlier innovation outcome. Valkokari et al. (2009) expanded the theory of Grant and Baden-Fuller from horizontal alliances to vertical networks between non-equal actors and divided the networked innovation into two categories: transaction networks, which are characterised by a transaction of an earlier innovation outcome (knowledge exploitation), and co-creation networks, which are characterised by co-creation of new knowledge and intellectual property (knowledge
exploration).

Thus, in a transaction network the ownership and rights of intellectual property (IP) are transferred to the system integrator responsible for the exploitation or commercialisation of the results. From the viewpoint of the SI, it comes close to sourcing and, therefore, it is justified to speak about sourcing type of network, as a synonym to transaction network. In a co-creation network there can be more options about how the management of IP is arranged. Suppliers and technology developers may keep the IP that they have generated and the rights of its use are agreed with the system integrator.

In the context of complex innovations consisting of ‘pieces’ from various suppliers put together by a SI, we argue that the knowledge management based approach may serve a SI better in the orchestration of innovation than the operational network management approach.

From the business perspective, the SI needs, at first, to control the activities of the participating companies in a way that the contribution of each company is as valuable as possible and that they are motivated to give their best effort in the development of the innovation (value creation), and, secondly, to ensure that the value from the innovation is divided so that it is profitable for each company to participate in the collaboration (value capturing).

In the sourcing type of network, where the relationships are usually dyadic between the SI and a subcontractor (supplier), the challenge related to networked innovation can be stated as a contract design problem. This problem is studied extensively in the principal-agent literature (for a review, see Eisenhardt, 1989a), where a contract is made between the principal (such as the SI) and the agent (such as a subcontractor) about work to be done by the agent on behalf of the principal. However, the information asymmetry in the form that the principal can not completely observe the quality of the agent’s work gives rise to moral hazard and adverse selection. One alternative to diminish these unwanted effects from the SI’s point of view and to align the incentives of SI and subcontractor is to contract for the outcomes (the desired result of the contracted work) rather than agent behaviour (the work itself). This, however, transfers more risk to the subcontractor agent from the SI principal as the outcome of agent’s work is not only a function of the quality of the work but is also dependent on uncertain factors outside agent’s control. Another alternative diminishing agency problems is repeated collaboration (Lambert, 1983; Axelrod, 1984). In longer-term relationships, past performance and company reputation decrease the potential for agency problems.

In the context of networked innovation, the intellectual property ownership structures can be seen as a way to align the incentives of the two companies (see e.g. Teece, 2000; Arora et al, 2001). When the IP resulting from the subcontracted work is transferred to the system integrator, the subcontractor might not see the further development of that IP in its interests. On the other hand, when part of the IP that belongs to the developed innovation is retained by the subcontractor, further future development of the technology is easier (Leiponen, 2008). That may potentially transform the relationship from a pure sourcing towards the co-creation type of relationship.

With co-creation networks, the contractual relationships between the SI and the suppliers can be more complex and multilateral. To avoid suboptimal performance of the network arising from the potentially opportunistic behaviour of single companies or company coalitions in the network and the associated free-riding problem, jointly-agreed innovation incentive mechanisms need to be designed so that each company is encouraged to utilise their best knowledge in the collaboration rather than keeping that
Contracts are often seen only as legal documents for protecting against risks. Contracts can, however, also work as tools for organizing cooperation and introducing flexibility into the network. Functions of contract can be divided into two categories: framework functions and practical functions (Eckhard and Mellewigt, 2006, Argyres and Mayer, 2007, Nystén-Haarala, 2008). The framework functions are for value creation and binding parties into collaboration. The practical functions are connected with concrete clauses in contract contents, such as coordinating, safeguarding, contingency planning and dispute settlement. According to Eckhard and Mellewigt (2006), when cooperation in the network increases, contract terms on coordinating and dealing with contingencies will increase compared to terms dealing with safeguarding the contracting parties against risks. Based on Eckhard and Mellewigt’s findings, Nystén-Haarala et al. (2010) call operating with precise and unchanging safeguarding terms hard contracting, and focusing on organizing cooperation and contingency management in a flexible way soft contracting. These soft and flexible elements of contracts are often missing in the contract documents because firms heavily rely on rigid model contracts or are unfamiliar with the use of flexible elements that would allow further specifications later on.

A system integrator may have to manage a variety of different contracts, from software licenses and typical subcontracts to complex consortium agreements. The contracting process and the content of the contract document itself should take into account the type of the innovation network and the actors in the network. In some relationships the safeguarding risk management aspect is highlighted, while in other relationships flexible coordination aspects may be more important.

In sourcing networks the transferred knowledge is mainly explicit with clear formal protection. Accordingly, relationships and interaction are typically simple, and we argue that the collaboration is emphasised by formal contracts where safeguarding risk management aspect plays an important role.

Table 1 Two models of networked innovation from the viewpoint of system integrator and their characteristics related to the knowledge and IP management of innovation

<table>
<thead>
<tr>
<th></th>
<th>Transaction/sourcing networks</th>
<th>Co-creation networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of knowledge</td>
<td>Explicit knowledge, IP managed by formal methods (patents etc.)</td>
<td>Tacit knowledge during co-creation, possible explicit background IP, explicit outcome knowledge</td>
</tr>
<tr>
<td>Ownership of generated IP</td>
<td>SI</td>
<td>A variety of options how the ownership is arranged</td>
</tr>
<tr>
<td>Rights to use generated IP</td>
<td>SI (exclusively)</td>
<td>A variety of options how the rights are arranged</td>
</tr>
<tr>
<td>Nature of contracting</td>
<td>Safeguarding and hard terms</td>
<td>Coordination and contingency management crucial (soft terms and flexibility)</td>
</tr>
<tr>
<td></td>
<td>Crucial</td>
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</tbody>
</table>
Co-creation networks are characterised by nested and interconnected relationships. In co-creation networks there may be explicit background IP as a starting point of the co-creation, but tacit knowledge plays a highly important role in the actual co-creation. In co-creation, the cooperation is largely based on shared interests and trust between partners. Regardless of trust between the partners, we argue that there still has to be a formal contract protecting the rights and obligations of the parties and bringing the collaboration from personal relationships to firm levels. However, flexible coordination aspects should play an important role in the contracts of co-creation networks because the innovation outcome may not be sufficiently clear before or during the co-creation.

Central characteristics of the sourcing and co-creation networks are summarised in Table 1.

4 Research Question and Methodology

Compared to traditional innovation management, managing networked innovation induces additional challenges for system integrator companies. As the innovation activities and the intellectual property resulting from those activities are no more under the direct control of a single company, the SIs with the responsibility of combining and offering the result of the joint work to customers have to manage both innovation development and the network collaboration, i.e. they have to manage networked innovation. The knowledge management based approach for networked innovation suggests two characteristic forms of collaboration depending on how new knowledge and IP is generated and how the ownership and rights to use the generated IP is arranged in the network: knowledge transaction networks (or sourcing networks from the viewpoint of SI) and co-creation networks (Grant and Baden-Fuller, 2004, Valkokari et al., 2009). The innovation management challenges of a SI in these two kinds of networks are not the same, and it may not be obvious for a SI which type of network is preferable for a particular case. That is what we are studying in this work in relation to innovation oriented activities of system integration. Accordingly, the research question of the study is the following:

What aspects of sourcing networks and of co-creation networks support or hinder networked innovation from the viewpoint of a system integrator and innovation management?

We used qualitative research methodologies – a multiple case study method and qualitative data - because an in-depth understanding of a little studied area was necessary (Eisenhardt, 1989b, Yin, 2003). We had selected six companies whose role in their value network is a system integrator and whose offering is more or less (complex) product systems, see Table 2. Some of the companies are also brand owners with direct relationship to end-user customers, while others have brand owners as their customers. Each company brought 1-3 cases (product systems) for the consideration. These companies were selected because their operation as a SI is characterized by a high demand of innovation from the viewpoint of their customers which are forcing or have already forced them to change the focus of system integration capabilities from component assembly to knowledge integration. The companies represented different sizes and they came from four different branches of industry in order to bring diversity in the research. Neither of them represented high volume industries, but still there were
essential differences in the production volumes of their offerings ranging from tailored turn-key solutions to series production.

A series of thematic group discussions with the authors and representatives of six case companies played the key role in achieving deep understanding on the subject both empirically and theoretically (Lukka, 2000). The group discussions consisted of both small company specific sessions focusing on individual cases and business specific viewpoints and large sessions where all parties were involved focusing on overall viewpoints. We have a multidisciplinary approach to the research question by combining networking and business management approaches to legal ones. The work started by the case presentations, followed by a preliminary analysis of the cases taking into account viewpoints from extant literature. The results of the preliminary analysis were then presented and discussed in the thematic group discussions, where the representatives of the companies include senior corporate, R&D or IP managers, patent engineers and lawyers. The theory-building process then involved recursive cycling of the case data, emerging theory, extant literature and group discussions.

Table 2 Case companies involved in the series of thematic group discussions

<table>
<thead>
<tr>
<th>Firm</th>
<th>Industry / products / services</th>
<th>System integration</th>
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</thead>
<tbody>
<tr>
<td>Arcusys</td>
<td>IT services</td>
<td>Solving of customer’s IT needs by integration of open source and application software with hardware</td>
</tr>
<tr>
<td>Blanco</td>
<td>Software, ICT</td>
<td>Data erasure solutions integrating various open source and application software elements</td>
</tr>
<tr>
<td>Medisize</td>
<td>Manufacturing industry</td>
<td>Industrialisation of product systems for healthcare business</td>
</tr>
<tr>
<td>Outotec</td>
<td>Metals and mining industry</td>
<td>Process automation solutions combining engineering knowledge, hardware and software and related services</td>
</tr>
<tr>
<td>Sandvik Mining and Construction</td>
<td>Mining and construction</td>
<td>Mining system solutions combining engineering knowledge, hardware and software and related services</td>
</tr>
<tr>
<td>Tamlink</td>
<td>Technology transfer</td>
<td>Co-ordinating networked innovation development projects and ensuring the commercialisation of results</td>
</tr>
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</table>

5 Case Findings

In this section, we present central case findings related to the innovation management challenges of the SI case companies. Theoretical implications of the case findings are given and discussed in the subsequent section.

Two clearly different kind of product systems could be identified in the cases: 1) systems where the innovation comes from a novel combination of more or less existing...
'pieces' (which could be hardware, software or services), and 2) systems where the innovation evolves at the interface between two 'pieces'.

The first kinds of systems were produced, without an exception, in a sourcing type of innovation network where the SI has a strong role as the orchestrator of the innovation network. Essential networking capabilities of a SI in the sourcing network include good capability to identify all necessary pieces of the planned product system and to have necessary basic understanding over them in order to be able to integrate them. Serial production and low demand for tailoring clearly favoured the SI's operation in the sourcing type of innovation network.

The development of the second kinds of system requires opening of knowledge by both the SI and technology suppliers in order to co-create missing pieces of offering. The characteristics of co-creation networks could be found in some cases where co-creation played the key role in innovation, but there were also examples of co-creation cases including elements from both the sourcing and co-creation types of networks. Demand for high degree of tailoring favoured the operation in co-creation kind of innovation network.

The SIs, which were not brand owners of the integrated system, had sourcing kind of relations to their customers. The fact, however, did not affect to the way they managed their own suppliers: both sourcing and co-creation networks were in use depending mainly on the production volumes and the degree of required tailoring. Nevertheless, we got an impression that the innovativeness of a SI was not at its best when the customer had a strong control over the IP related to the offering of the SI.

Incentives for innovation were in the sourcing networks based on contractual single-compensation of the work done for the SI. The contractual single-compensation was a common form of incentive also in the co-creation case, although there were more options in use for the compensation in the co-creation networks, including non-monetary compensation such as reputation for the members of open source software community. Independently on the model of collaboration, an innovation challenge of SI related to incentives is how to commit their suppliers for long-term collaboration in a way which is beneficial for all parties. On the other hand, sometimes a SI was uncertain about whether it wants short- or long-term collaboration with a supplier. Such an uncertainty obviously had an effect also to the chosen form of collaboration because successful operation in co-creation networks requires good level of trust and shared interests from all actors in the innovation network.

The cases showed that in a successful co-creation, the actors must open up their tacit knowledge to other partners. However, an actor may not always want to do that in a sufficient depth, the fact which may hinder the use of co-creation model of networked innovation. It requires good network management capability for the SI to create an atmosphere where the actors can share their knowledge to other partners.

Initiatives for the business renewal came in all cases either from the SI or from their customers. There were no examples where the initiative had come from a supplier. They may have suggestions for incremental improvements of existing product system, but not for a completely new system. That may be due to the lack of direct contacts to end users or due to non-ideally working incentive policy of the SI which does not encourage sufficiently well the innovativeness of suppliers.

The representatives of the firms emphasized the importance of customer relationship management in their role as a SI. Understanding and aligning of the business models of both downstream (customer) and upstream (suppliers) actors with the business model of
the SI is one part of the customer relationship management. However, that is not easy and sometimes not even possible.

Legal challenges of a SI related to innovation management are mostly related to the IP management of the innovation outcome and to contracting. In the sourcing networks the ownership and exclusive IP rights to the innovation are transferred to the SI (and sometimes further to the customer). That has both pros and cons. By this way, the SI has a strong control over the IP and can be sure that the IP cannot be used against the SI, which could take place in two ways: at first, a supplier (if owning the IP) might get interested in supplying directly to SI’s customers, and, secondly, the IP (if not owned by the SI) might end up to SI’s competitor, for example through a merge or acquisition of the supplier. On the other hand, the supplier may not be interested to further develop the technology if the IP related to the technology is owned by the SI (or its customer). That fact has made a couple of the case firms to change their strategy towards the ownership of IP created in collaboration: a technology supplier may retain the ownership to the jointly generated IP but the SI gets exclusive rights to the use of the IP in specified markets. The change of IP management strategy may be related to change to the co-creation type of innovation network operation but the collaboration may retain in the transaction type of network as well. Examples of joint ownership of IP between a SI and a supplier or a customer were rare. Joint ownership of IP was considered as a complicated and risky situation.

Good contracting capability was named important by all representatives of the case firms. However, there were differences between the firms on how well they used flexible terms of contracts. Although flexible contracting is less important in the sourcing kind of networks than in co-creation networks, all case companies (independently on the networked innovation model they are using) were interested in introducing more flexibility in contractual clauses because change is more common than stable conditions.

The contracts between a SI and its suppliers were typically dyadic. In co-creation networks, the contracting strategy was to keep the contracts lean and equal to both parties. In that way, trust was created in the contracting process.

6 Discussion and Conclusions

In this study we searched for answers to the question, what aspects of sourcing networks and of co-creation networks support or hinder networked innovation from the viewpoint of a system integrator and innovation management? After the recursive cycling of lessons learned from the literature (Ch. 3) and case findings (Ch. 5), we were able to identify aspect that support and aspect that hinder networked innovation from the viewpoint of SI and innovation management. The aspects are collected to Tables 3 and 4 for the sourcing and co-creation networks, respectively, and presented as theoretical implications of the study.

The practical implication is that the aspects of sourcing networks and co-creation networks that supports or hinders networked innovation will help system integrators in their creation of innovation network strategies. The results could also improve their contracting capabilities through new knowledge in defining alternative ways of innovation management in the innovation networks of SIs.

In this study we aimed to get a broad viewpoint to the subject and therefore we chose innovative SIs from several branches of industry. The other side of the approach is the
shortage of any sectoral analysis. It is well known that there are sectoral differences in the innovation patterns of firms (Tidd et al., 1997) as well as in the patenting and licensing activities of the firms (Hagedoorn, 2003, Hanel, 2006). Furthermore, the study has also internal and external validity limitations (Gibbert et al., 2008): at first, the research framework of the study was focused on innovation management challenges and it could be that we have omitted some relevant perspective which comes outside the chosen framework (such as risks taking capability of SI), and, secondly, the number of case companies was small. Therefore, further studies of innovation management challenges of SIs in innovation networks should focus on sectoral analyses (and consider similarities between product system integration and high-volume system integration in the automotive and consumer electronics industries) as well as to broaden the perspective beyond innovation management to a wider viewpoint of business management.

Table 3  Aspects of sourcing networks that support or hinder networked innovation from the viewpoint of a system integrator and innovation management

<table>
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<tr>
<th>Transaction/sourcing networks</th>
<th>Supporting aspects</th>
<th>Hindering aspects</th>
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<tbody>
<tr>
<td>Supporting aspects</td>
<td></td>
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<tr>
<td>Effective when the innovation</td>
<td></td>
<td>Further development of offering (technology) may be difficult if the</td>
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<tr>
<td>comes from a novel combination of</td>
<td></td>
<td>IP has been transferred from a developer to the SI (and perhaps further to an end-customer); New ideas of developers may be exploited through another path and the integrator may become stacked with old technology.</td>
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<tr>
<td>existing ‘pieces’.</td>
<td></td>
<td>Depending on incentives used, suppliers and technology developers may not be encouraged to give their best solution for the use of SI but save that to other situations where they could get higher value for their efforts.</td>
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<tr>
<td>Then the SI can easily manage</td>
<td></td>
<td>The network may not be agile enough in reacting fast to external changes requiring innovation actions by the network if flexible elements of contracts are weak.</td>
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<tr>
<td>the network:</td>
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<tr>
<td>SI do not have to open its</td>
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<td>knowledge to suppliers because the innovation is based on a new combination of existing pieces (and IP).</td>
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<tr>
<td>Initiatives for business renewal are within the hands of SI (if the SI have rights to the IP used).</td>
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<tr>
<td>Clear control of IP through formal contracts and formal IP protection.</td>
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<tr>
<td>Hindering aspects</td>
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<tr>
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<td>Further development of offering (technology) may be difficult if the IP has been transferred from a developer to the SI (and perhaps further to an end-customer); New ideas of developers may be exploited through another path and the integrator may become stacked with old technology.</td>
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Table 4  Aspects of co-creation networks that support or hinder networked innovation from the viewpoint of a system integrator and innovation management

<table>
<thead>
<tr>
<th>Co-creation networks</th>
<th>Supporting aspects</th>
<th>Hindering aspects</th>
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</thead>
<tbody>
<tr>
<td><strong>Supporting aspects</strong></td>
<td>Effective when the innovation evolves at the interface between two ‘pieces’ and when there is high demand for tailoring. Several options available for incentives of innovation for suppliers/technology developers so that they could be motivated to give their best effort for the joint work and to further develop the technology. When the SI has good capabilities for IP management and contracting, co-creation networks offers several options for the IP management and to introduce flexibility in contracts in order to be better prepared for changes requiring innovation actions.</td>
<td>Management of co-creation network requires good innovation network management capabilities from the SI: Successful co-creation requires aligned interests and trust between the actors which may easily change along with the work. Co-creation networks are characterised by nested and interconnected relationships. The options for incentives of innovation for suppliers and technology developers are ineffective unless the SI is capable to effectively use these incentives and align the business models of the actors of the network. Co-creation requires that the actors are willing to share their tacit knowledge to the other actors of the innovation network; this is not always the case. Management of IP can be complicated if not well agreed beforehand or if trust is missing between partners.</td>
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</table>

7 Acknowledgements

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