# Inter-Organisational Service Innovations

## - A first introduction -

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# Inter-Organisational Service Innovations

## A first introduction to development issues

Understanding how the innovation process should be supported is key to create value and growth in our economy. Many innovation processes follow a formula that is well understood within its scientific community and application areas. This is true for many technical innovations with prototypes, alfa and beta versions and lab schemes in natural sciences that follows laws of nature.

If you can exercise the experiments over and over again and they provide the same result you are close to have *verified* the innovation from a scientific point of view. When launching new drugs or chemical products, it is obvious that we in most cases have to demand scientific verification. But for service innovations it is very different. How do you *verify* an organisational innovation or a new business model? We do not have the methodology and tools to judge consequences of organisational innovations compared to the case of product innovations.

Service innovations do not follow any innovations formula that is even close to what technical innovations do. Service innovations belong mainly to the *social sciences* where no laws of nature can predict what is going to happen. The *nature of service innovations is not very well understood* and accordingly we do not really know how to support the development.

First of all we have to differ between *service innovations* and *innovations within service companies* on the other hand. You can find service innovations everywhere in any industry, not only in service companies. As a matter of fact today most industrial companies base their development on service innovations. That is true for Ericsson and its business area Global Services, and that is what IBM has been through all the way to become a genuine service company – by in-sourcing services (e.g. with the acquisition of Price Waterhouse Coopers) and out-sourcing computer manufacturing (e.g. to Lenovo).

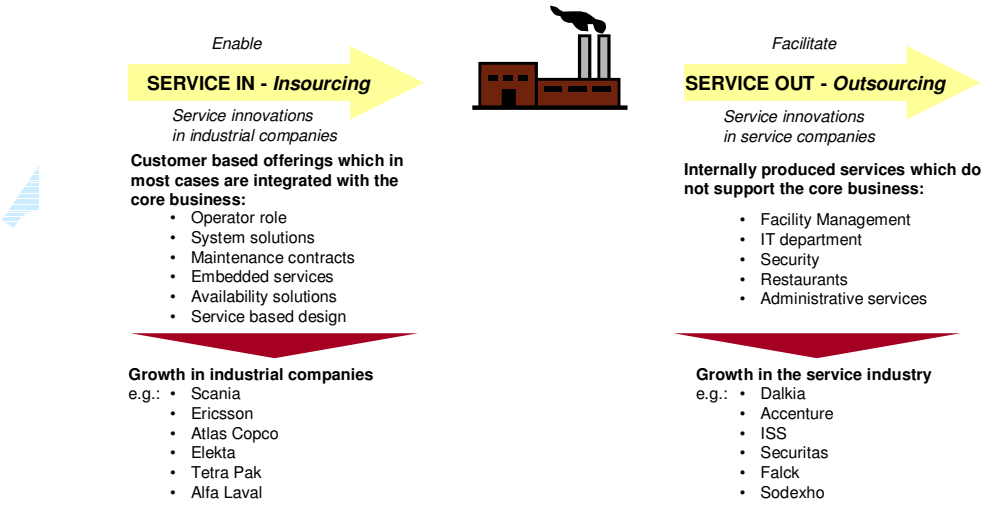


**Figure 1. The difference between service innovations and innovations in service companies**
Source: Industriföretagens serviceinnovationer, Nutek 2006:6

From the illustration above we can see how in-sourcing of service innovations into industrial structures can act as an enabler to develop industrial companies, parallel to the fact that industrial companies out-source internal services that is not part of the core business and thereby facilitates the development of the industrial companies. This also adds to the development of the service sector with a number of new and growing service companies that mainly are based on and grow by the out-sourcing of services from industrial companies.

This illustrates how *service innovations create growth in both the industrial and the service sector* and that *service innovations will be found in both sectors*.

The illustration also shows how meaningless it often is to try to *define a company* as an industrial company or a service company. The more industrial companies in-source services, the more they tend to become a company where both the industrial and the service aspects are functioning together and often are integrated in the total offering to the market. It is more appropriate to talk about *industrial logic* and *service logic* and that both logics can be found and also are integrated within the company – you might say that the company has a *service dominant logic* even if it is not a genuine service company.

Tetra Pak is another example of a global player that has never been a pure industrial company nor a genuine service company but rather a company that from the start has created an offer to the customers where technology and service are integrated parts of a systems solution.

We have seen that there are at least two different kinds of innovations – service innovations and the better-known technology based industrial innovations. The traditional definition of innovation emphasises technology, the R&D-department, new products and new productions processes and focuses on the centre part of the value chain, as illustrated below.

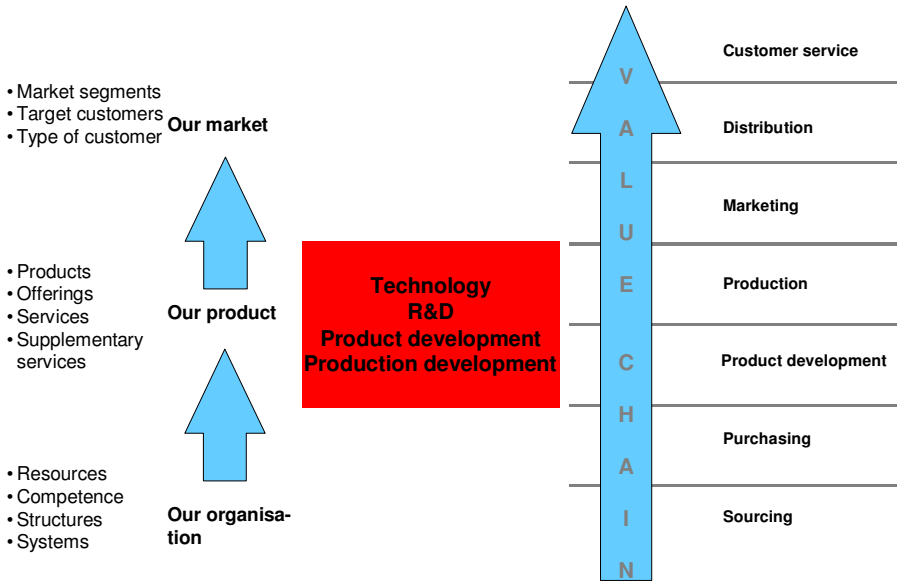


**Figure 2. Innovations along the value chain – traditional focus**
Source: De Nya affärsinnovationerna, Nutek 2008:1

You can of course be innovative in other parts of the value chain, but then the activities are not so well structured and organised – probably not belonging to the R&D department or part of the R&D-budget, not so visible and well recognised.

You can certainly find customer related and user driven innovations, down-streams from the product and production process innovations in the value chain, as well as organisational innovations up-streams, illustrated below.

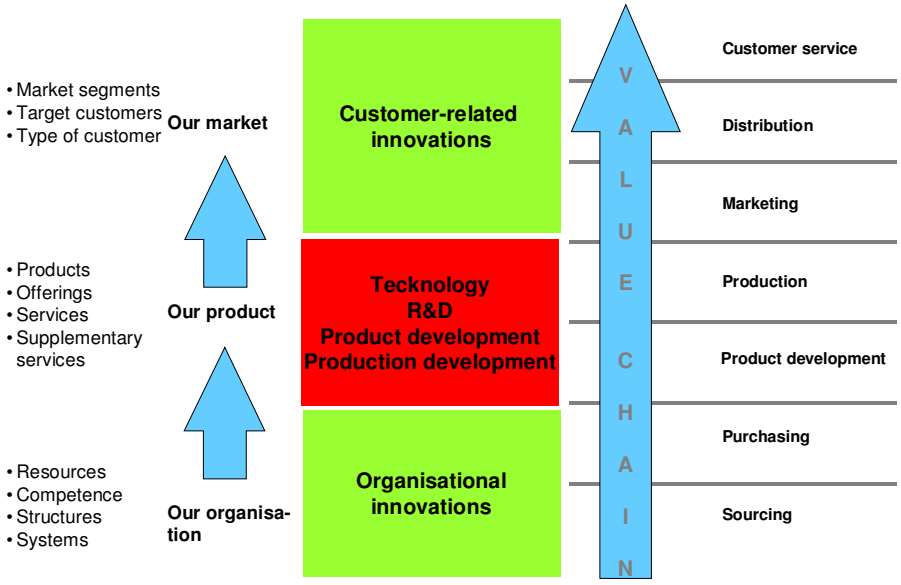


**Figure 3. Innovations along the value chain – different kinds of service innovations**
Source: De Nya affärsinnovationerna, Nutek 2008:1

But from the traditional technology based industrialists customer related and organisational innovations are often not regarded as real innovations. You can also see from the definition of the word innovation that it several decades ago was defined as *technical renewal and industrial development*[1]. Today you will rather find the definition *implementation of a novelty or renewal*[2], without any comment on *technical* or *industrial*. Still the old meaning of innovation exists and also old structures and traditions that will not support the development of different kinds of service innovations.

Even if we have changed the meaning of the word innovation in the dictionaries, we still do not have a proper *language* to talk about service innovations. We still tend to use concepts from the technology based innovation area when we for example try to analyse a service innovation – we ask about possibilities for patents, how large is the R&D budget, is it a sufficient technology level, etc? This is also a problem with calls for research projects and evaluation of public financed projects within the area of service innovations.

Successful companies can no more only focus on product and technology based innovations, but rather on all kinds of innovations along the value chain. These innovations will develop the company and create a unique value chain that differs the company from its competitors. To become unique in a relevant way is one of the most important success factors for a company and also illustrates the basic importance of a well functioning renewal process within the company.

[1] Translation from Swedish Academy Dictionary 1973
[2] Translation from Swedish Academy Dictionary 2006

A successful business development has to include innovations along the value chain and it is more relevant to talk about business innovations that create new business development.

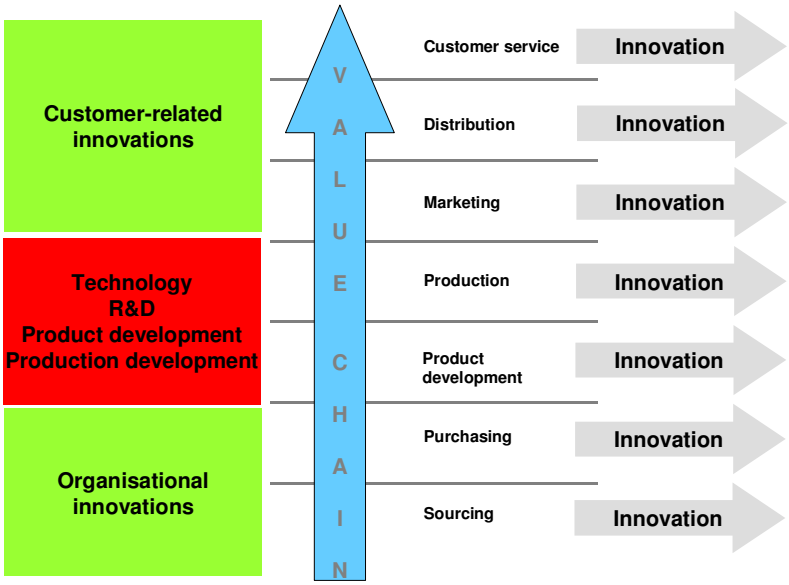


**Figure 4. Innovations along the value chain – business innovations**
Source: De Nya affärsinnovationerna, Nutek 2008:1

It is also easy to understand that product development, and hence product innovation, is only a small part of the business development, as illustrated below. Product development is a common main focus when it comes to business development. Product development is an ever-ongoing process and product companies often have a product development department and a product development budget.

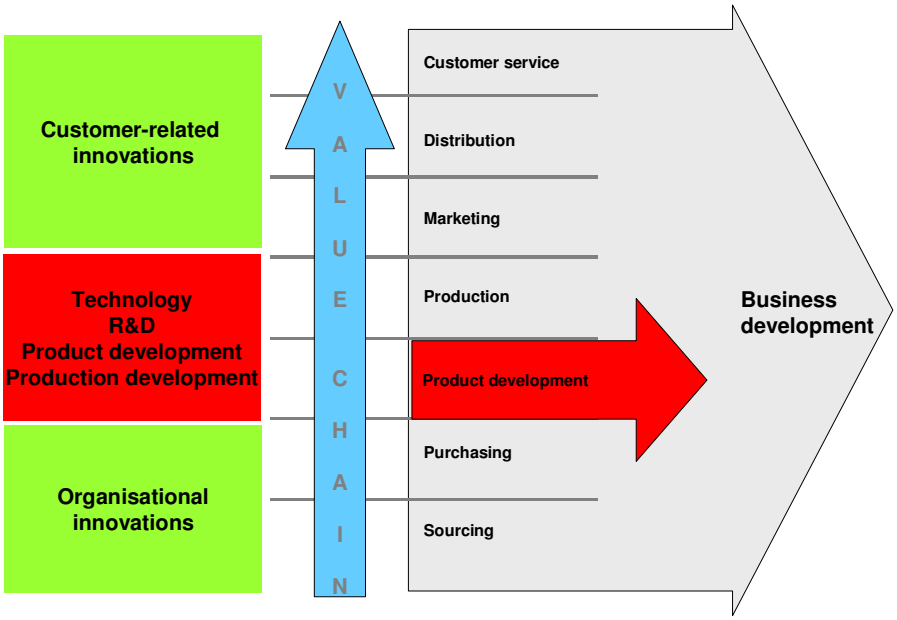


**Figure 5. Product development is only a fraction of business development**
Source: De Nya affärsinnovationerna, Nutek 2008:1

When it comes to the other innovation areas along the value chain, it is often not that well structured. In most companies there are development activities in most of the other parts of the value chain, but what kind of development processes are we talking about? Is it genuine innovation or more of normal improvement?

We tend to think about innovations as something rather well organised in an R&D department with its own R&D budget, but when it comes to service innovations the activities going on are not so well captured. To create a new service offering you can not, as in the case of industrial products, relay on a product development process – the service product is often produced in the meeting with the customer and hence has to include the development of the service delivery system with its service innovations, organisational innovations, etc. They are all integrated into the service offering, as illustrated below.

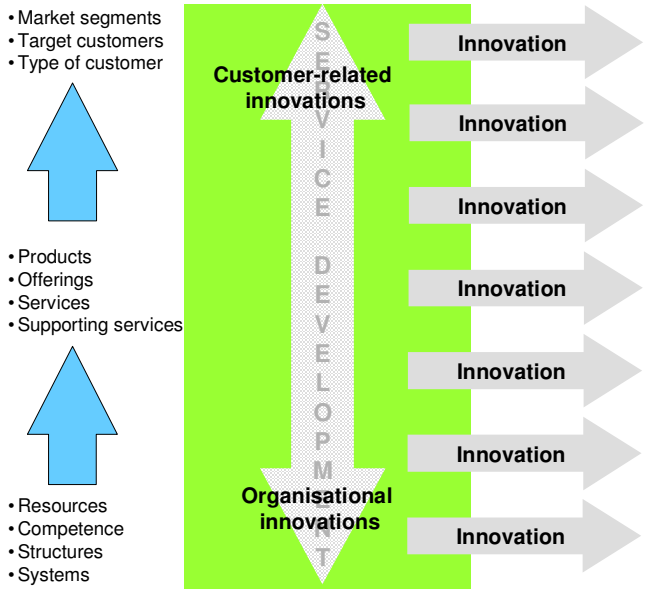


**Figure 6. Service development includes many different disciplines/departments**
Source: Innovativa tjänsteföretag och forskarsamhället, Almega 2008

What we have referred to above as the value chain is however not always a chain. The value can also be created in a network of different actors – a *value creating system* or a *value constellation*. We have earlier mentioned globally leading companies such as IKEA and Tetra Pak, operating with a business model that is more of a systems model than a genuine industrial or service based business model. These companies integrate different kinds of innovations into their business model and build on a network thinking rather than a traditional industrial process that normally is managed totally within the company. They rather operate a network with different kinds of co-producing partners contributing to the total offering presented to the market.

We are going into a phase of economic development that comprises an increasing number of networks rather than large self-containing corporations. We have since long seen just-in-time delivery with close partners; focus on core competences and out-sourcing of the rest, etc? This is why inter-organisational service innovations will grow in importance. We have to understand the specific characteristics of service innovations and we have to understand how

innovations can be facilitated within the growing number of large networks with partners working together and innovating together.

From the illustration below we can see how IKEA operates a network and develops its business model together with different kinds of partners, e.g. the suppliers and production units not owned by IKEA, the architects and construction companies continuously creating new innovative department stores, the customers with whom IKEA has committed a co-production agreement including home transportation and assembling the knocked-down furniture. The inter-organisational innovation processes are key to the success of IKEA becoming the world's largest furniture and home decoration store.

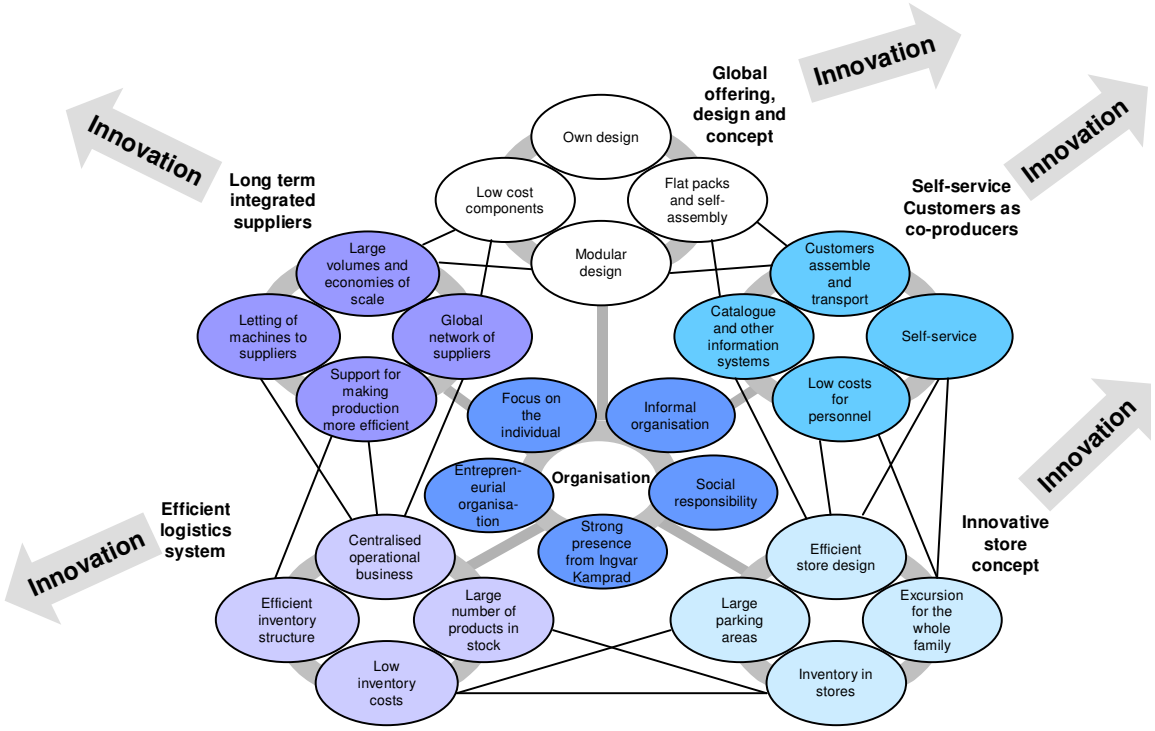


**Figure 7. Service innovations include a number of network partners**
Source: Based on illustration in De Bortglömda Innovationerna, Nutek 2005:4

IKEA is sometimes called a retail company but as a matter of fact IKEA carries out design, development, industrialisation and manufacturing of thousands of new products every year, and accordingly is a *giant production network* – or should have been called a corporation if IKEA had chosen to be the owner of the productions facilities. IKEA has chosen to focus on the customer-oriented part of the value network by ownership and operates with partners in well-defined areas with its own specialities. This illustrates both that the categorisation of industrial or service companies is often irrelevant, and that service innovations also can be found and are crucial in industrial contexts. In IKEA's network we will find both organisational and customer related service innovations, but it lacks technical innovations of its own and also patents.

This also raises the question if national and regional *statistics* on industries are relevant. Is IKEA a furniture company, a retail company or a production network, but certainly not a production company in the statistics – how do the value creating systems show up in

statistics? What happens with the national export-import statistics and the employment statistics when IKEA opens up a store in Madrid – we cannot capture global networks with present statistics? Are IKEA's or other service dominant companies' innovation activities part of the national R&D statistics? Inter-organisational service innovations are not well measured.

IKEA does not only have systems relations with external partners but also operates the whole corporation as a value creating system. From the network illustration below you can also easily understand that the service innovations driving IKEA forward are not organised in an R&D department but rather happen all over the organisation. You will probably find a large number of innovations process going on in a value-creating network as IKEA and its partners. Here you will imagine a large number of inter-organisational service innovations going on, but not so visible and *without an R&D department and R&D budgets*.

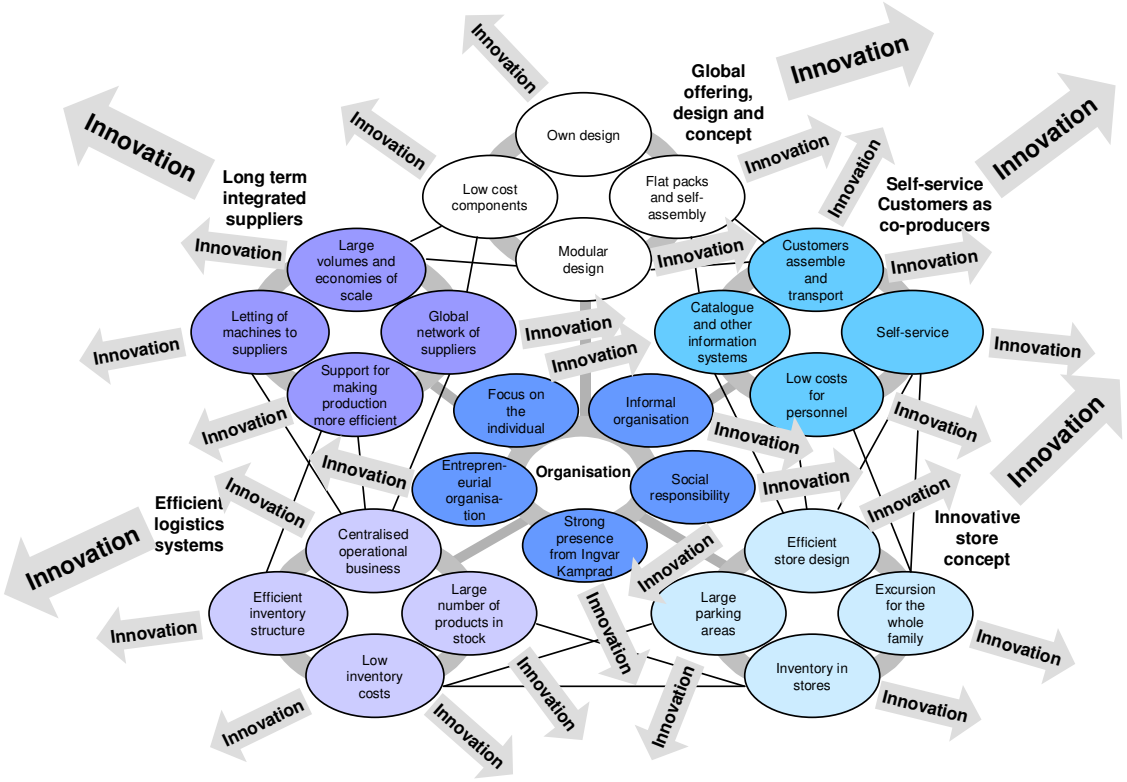


**Figure 8. Service innovations seldom take place in an R&D department**
Source: Based on illustration in De Bortglömda Innovationerna, Nutek 2005:4

We can easily see that these networks are very *open innovations systems*. It also raises the question of how to *protect the service innovation*; with patents/IPR-type of actions or just by being the fastest developer, less time to market, knowledge advantage, strong company culture, etc. Anyone heard of IKEA patents?

You may also ask the question where the *value creation* is taking place. In the case of the value chain it is obvious with its linear model, but for the network model it is not that obvious when the innovation is created in cooperation between several parts in the value-creating network.

The illustrations of value creating systems above also reveal that service innovations do not necessary lead to the establishment of a new company - more seldom compared to technical innovations. Service innovations often lead to new ways of interacting with customers, new ways of distribution, new business models and sometimes not even a business related improvement. We often put the *wrong expectations on service innovations* – we believe that the innovation process should lead to a new company, we hope for patents and we demand R&D budgets, etc.

Service innovations could for example lead to organisational innovations in the society like societal innovations forming national movements to fight inefficiencies as an alternative to forming a company that build on customer dissatisfaction. On the other hand there are a lot of examples of so called *invaders*[3] that have seen inefficiencies in an industry, redefine old industry borderlines, invade the old industry with new radical solutions created outside the industry tradition, threatening the establishment and take on a strong position on the customers side. These invaders illustrate interesting cases of successful implementation of service innovations with strong societal relations and hence inter-organisational innovations in a large context.

Even in larger systems you can find inter-organisational service innovations, e.g. in the cluster networks where a number of different organisations are supposed to interact and hence create value as some kind of private-public value creating system. In a study[4] of the creation of a greenfield cluster in Sophia Antipolis in southern France you can see how different actors established to improve the dynamics within the system, facilitate the growth of cluster companies. Service innovations were created between the actors in the cluster and the cluster system started to transform into a dynamic system creating its own new resources from research, education, exits from the venture capitalists, etc.

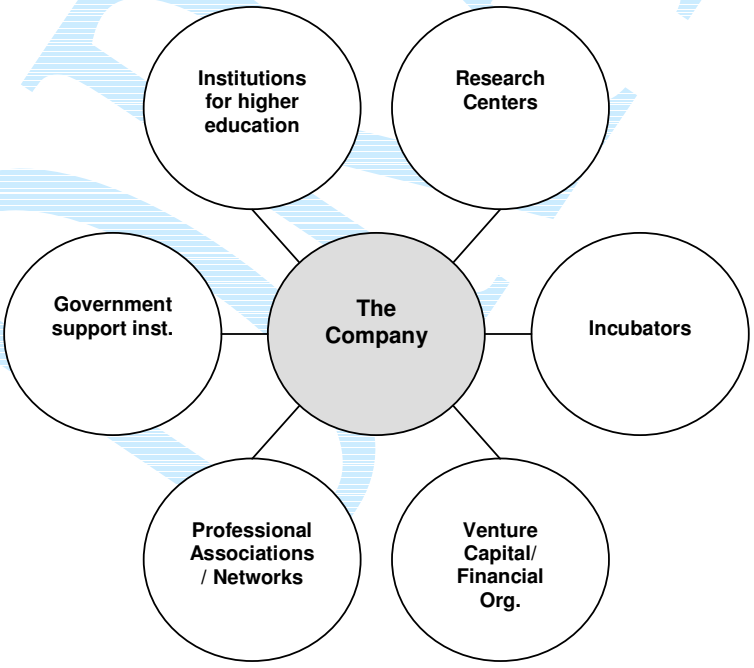


**Figure 9. Actors in a greenfield cluster**
Source: Sophia Antipolis – creation of a greenfield cluster

[3] Read more about the invaders in Invadörerna, Nutek 2006:7
[4] Sophia Antipholis – creation of a greenfield cluster, SMI 2001

We can imagine that innovations can be anything from small molecular particles for product development to large societal organisations incorporating a number of not only business but also other organisations. Some innovations based on technology, or other disciplines within the natural sciences, follow the law of nature, and others are service based following the logic of social sciences.

Inter-organisational service innovations are facing both the difficulties that service innovations do to be understood and relevantly supported as a major driving force for value creation and growth in our economy, and the difficulties that complex systems of value creating networks comprise as they neither are well understood compared to the traditional view on the company and how value creation is managed within the old company structures.

## Issues for discussions

We have now illustrated how inter-organisational service innovations are crucial for value creation and growth in our economies, but we have also seen a number of difficulties and barriers to fully implement and gain from these important service innovations. It is a mixture of old problems that for a long time have been facing service innovations, and more recent inefficiences when trying to understand the systems society, with value creating systems and its inter-organisational service innovations, on top of the old still existing service innovation problems.

Below you will find a list of issues we have adressed in this paper. Some are, as we just said, old service innovation problems still not solved but they add up being part also of inter-organisational service innovations.

1. We tend to hesitate to implement certain types of organisational innovations, e.g. societal innovations because we do not have sufficient methodologies and tools to find out the consequenses of these kinds of innovations. When can we start to commersialise service innovations; test when you first hear about them if you believe in them or wait until you have learnt about them in a scientific project? Should service innovations be scientifically verified before commersialisation, or what other demands should we put on service innovations to be sure that we do not create negative effects?

2. Service innovations belong to social sciences but we tend to put demands from the natural sciences that we are better aware of. We use demands from technical innovations like patents, technology level, R&D budget, number of started companies, etc The nature of service innovations is not very well understood and accordingly we probably do not really know in all parts how to support the development? What kind of false demands do we tend to put on service innovations and what demands would you like to see?

3. We tend to look at service innovations as something for the service operation rather than the vitalisation of industrial operations – do we fully realise that service innovations could be found anywhere? Service innovations are not something only for the service industries, they rather cut across all industries. Most industries have their reseach institutes but how should we organise the service innovation research?

4. It is often meaningless to try to define a company as a service company or an industrial company – you should rather talk about service logic and industrial logic, and both could

be present in the same company and even integrated. Systems companies often have both logics and it is even more obvious when you have a network or a value creating system of several partners acting with different business logics. In these networks inter-organisational innovations of different kinds are prospering; which are the most important significant contributions that inter-organisational service innovations are bringing to the facilitation of value creation and growth in our economies?

5. The traditional innovation focus is on technical development, products and the R&D department – innovations down-streams like customer related innovations, or up-streams like organisational innovations are often neglected and not looked upon as real innovations by the traditional view on innovations. Are these innovations less important or is it only a matter of the traditional view defending what it knows about and feels comfortable with?

6. Service development integrates many of the innovation areas to be able to innovate the service offering and hence also implies a number of partners and often the customers in the innovations process. How should service development be organised to be really efficient?

7. We are going from a situation with fully integrated corporations to the break down of the value chain and entering into a society where value creation systems are increasingly important. This makes a lot of old frameworks obsolete and we are fooled by false statistics. Which are the new winning approaches, concepts and tools to better understand innovations in value creating systems?

8. Value creating systems are not using R&D departments, R&D budgets and innovation activities are found all over the network – what do the innovation process look like and how are the value creation process progressing – how can we see that we are creating new values from innovations in a network?

9. Service innovations are often innovations within existing networks, new business models or customer interaction – the incubator model where we tend to support creation of new companies might provide the wrong support in many cases. How should we best support the commersialisation of service innovations and how should a "serviceincubator" be designed?

10. Should you try to protect your service innovation or apply a more open innovations view and just keep up the development speed, build up a knowledge advantage and create a strong corporate culture?

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