



# 5 The Transition to Networked Innovation

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# The Transition to Networked Innovation

Once a company decides that collaborating in networks is a better means to innovate than to be the only party in charge, it has to get ready for the changes that lie on the road: the transition path to networked innovation has to be designed.

Though – what has to be designed exactly, and which of the familiar structures have to change? One would suppose that setting up networked innovation cannot be so different from innovating with external partners who stay within the customer-supplier chain. Yet this is the moment where the first and often eminent obstacles to a successful collaboration arise.

In our part of the research project, we analyzed how the companies that took part in the research started networked projects. As all of them were pioneers in networked innovation, they had no best practices available to refer to yet. Their experiences, good and bad, lay the base of this chapter. We divided the chapter into three parts which feature characteristics of starting networked innovation:

Throughout the research project, we saw that the companies, who had difficulties to start a networked innovation project, insufficiently realized that they were not yet ready within their own organization to perform it. First, we will therefore discuss factors which are critical to embedding networked innovation into your company.

The second part of this chapter focuses on the setup of joint projects, and how they differ from traditional innovation projects.

We finish this chapter by discussing a number of factors that influence the collaboration with the partner.

This order, however, is only chosen to keep a clear overview for the reader. In networked innovation reality, these steps are not nearly as linear and orderly: internal and external preparations mostly run simultaneously, but we also studied several cases where the commitment from external partners predated internal commitment.

All innovation projects in our study had an important common factor: they depended on the commitment of a person who is convinced of the benefits of networked innovation. This is the core actor of an innovation project within a company as well as the link towards external stakeholders. Equivalent to the leading role in traditional innovation projects, we call him the networked innovation champion. Typically, he will be a middle manager from R&D and, considering the various challenges he has to face, champion is a really deserved title. This chapter is dedicated to him/her. We hope that the lessons learned by his predecessors whom we describe here may help him/her to avoid some of the pitfalls in a difficult innovation journey.

# Content

From our four-year study, we have chosen topics you are likely to meet when you start with networked innovation. All of them arose during the interviews we held with the industry partners of our project and were indicated as key factors.

They are grouped into three areas: how to get your own company ready for networked innovation; factors that are important when creating joint projects; and

topics which concern the actual collaboration with partner companies.

All sections have the same structure: a discussion of the topic related to the company and to the networked innovation champion, followed by an example from innovation practice.

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# 1. Embedding networked innovation within the company

## 1.1. Getting network-minded

Where does the idea for a networked innovation project originate and who supports it? We saw that many networked innovation cases originated somewhere in the hierarchical middle field of an organization. A single person or a small team – mostly middle managers from the R&D department – initiated the development of a networked innovation project. They were deeply convinced that a new way of innovating would offer a solution for the company's existing or impending problems. In this stage, the project is owned by the small core team where it originated. There is yet little knowledge of the idea in the board or in other company divisions; and at this moment, the acceptance of a networked innovation project by the rest

of the company can be still far away. In this stage, typically, a person stands up and becomes the networked innovation champion: a person who is convinced of the idea, who is trying to persuade the board of its necessity and who is building first contacts with possible external partners. In the companies that had little experience in networked innovation, this person was pivotal to keeping the project alive and nurturing it. One of his first steps will be to get the support of the company board and, consequently, of the rest of the organization. Often, it takes the whole power of persuasion of the champion to get the acceptance of the company. Sometimes, as we see in the following example, even then a company needs much more time to become network-minded.

### Company Case | The persistency of the champion

*A small team of engineers at the GKN Aerospace Engine System company was convinced that the future of their company would vastly profit from an addition of 'soft products' (services) to their traditional value propositions, which had been so far limited to 'hard' products, such as engine parts. The new products would be a significant innovation for both the company and the sector. As the company itself had no experience in professional software development, the engineering team considered the possibility to develop the services together with an external partner. At the moment that the product idea was developed, the board completely disapproved of extending the product range into new areas; working in partner networks was unmentionable as well. For the board, the topic was closed with this decision. The champion team, however, continued to elaborate the idea clandestinely during the following years. Only the search for a network partner could not be started without the knowledge of the board, which would have closed down all further developments immediately. In the meantime, however, external circumstances changed when new competitors from upcoming economies were entering the market and challenging the position of Volvo Aero. The champion team took the chance and re-introduced the product/service solution to the board, who this time agreed that it could be a way to safeguard the future of the company. The networked innovation project was finally realized after several years after all.*

The example shows that convincing the board can be one of the first challenges. Within our research project, we saw several cases where the board had been reluctant to change to networked innovation, even if they accepted the innovation idea as such. The reasons for it could be

different: in some cases, the board was convinced that the innovation could just as well be realized with an internal division or a sister company; in other cases, there was a deep mistrust in the reliability of potential partners. In all cases the progress of the project had been delayed.

### 1.2. Know and guard your boundaries

Different insights and constant changes during the project and are one of the hallmarks of networked innovation. Being flexible makes that you can reach goals you would not be able to achieve on your own. Yet, you should set some boundaries for yourself to determine if the developments of a networked project are still profitable.

Our studies showed that companies who had difficulties to carry out successful networked innovation, had omitted to define their own boundary conditions before entering the network. This resulted in misunderstandings between the partners, a network that got dull, prolonged processes and costs that grew beyond what the companies wanted to invest in the project.

Define your goals as a field of options that are interesting for the company rather than as a single achievement: this allows you to stay flexible to changes, yet to keep

the conditions clear. Even before entering the network, you should define within your own company in which area your goals lie and what your boundaries are. What are the core innovation topics? How big is the budget you intend to spend on the networked innovation? – we saw that projects often expand and take much longer than expected, so calculating the budget over a longer time span will be a wise decision. How much time do you want to spend on the project? – in total as well as in time units (per week, per month...). How many people of your company will be working on the project? From which divisions will you need input? On how many other projects are these people working and how do these relate in importance to the networked innovation project?

Be flexible, but know your boundaries. If you go too far beyond the conditions you have laid down for yourself, the best choice may be to leave the network. Otherwise, the efforts may be much larger than the gains.

#### Company Case | Define a set of requirements before entering a networked project

*Philips Design wants to be able to decide as quick as possible whether a networked project is worth pursuing. Should this not be the case, the project will be shut down immediately, in order to limit losses. They employ a set of routines for this purpose. As soon as Philips Design detects new trends or developments, they quickly start to create a network with other companies and knowledge institutes to seek out the state of the art – the relevant knowledge sources, the target audience, the composition of the market, the value network – in order to find out if it might be interesting for Philips to play a role in it. The conditions to enter the new development are clearly set from the beginning. The market has to be big and lucrative enough; there has to be prospect of intellectual property for the company; the needed knowledge is either present in-company or can be added by partners who have proven to work well together in order to develop a long-term collaboration. If these conditions cannot be met, the project will be shut down as quick as possible.*

### 1.3. Identify diverging strategic goals within the company

The switch to networked innovation has its impact on the company structure as

well. As the initiative to use innovation networks is not always taken on board level, its impact on strategic goals of a company can be difficult to assess.



### Company Case | Choosing internal or external partners?

*At the GKN Aerospace Engine System company, a subsidiary of the Volvo Group, a strong innovation case had been built that needed external partners for its realization and which took a long time to get accepted by the board (see also: Company Case | The persistency of the champion in paragraph 1.1). At the next step after acceptance, the Volvo board, however, urged its subsidiary to realize the innovation together with a sister company, Volvo IT, instead of the external partner. Due to the strategic position of the company relative to its future clients, an additional internal partner would have meant a much weaker position for the innovation on the market. This lengthy phase of the innovation route centered upon tuning the different interests of internal stakeholders, even before external partners were contacted. Finally, the board has been convinced to choose the external partner.*

However, the attitude of the main company towards networked innovation can differ radically. In some cases, networked

innovation was fully supported by the main company who realized it as a strategic tool.

### Company Case | Strengthening the position of the whole enterprise through networked innovation

*Zodiac is the owner of Driessen as well as of several other companies operating in the aircraft sector who deliver a great part of their products to OEMs (Original Engine Manufacturers) such as Airbus or Boeing. Within the OEMs, there is a tendency to make a selection of their former suppliers partners. In the role of supplier, a company is only responsible for appointed targets, whereas a partner will be more motivated to engage in long-term innovations. As the OEMs want to keep the number of partners limited, Zodiac made a strategic choice to open their different subsidiaries to networked innovation. In this way, the company could offer a variety of solutions to the OEMs, while keeping a strong company image.*

#### 1.4. Collaboration changes between company divisions

The internal collaboration between divisions can differ in networked innovation. In day-to-day practice, divisions of large and medium companies have a well-established routine of who is collaborating with whom within the company and at which moment of the process. Networked projects, however, often demand another team composition than those within supply chains: to explore the full potential of an innovation idea, multidisciplinary teams with representatives from different divisions of the same company may be needed. Depending on the project and the tasks of the network partners, internal

stakeholders that are normally not involved in early stage developments have now to be included in the preparations of a project. In the new setting, these stakeholders will often still hold on to the targets they are held responsible for in daily practice. A quite understandable frame of reference – yet, the pursuit of goals that have high importance in later-stage developments can lead to frictions when networked projects have to be prepared.

The following example shows how goals of different divisions that can be aligned only with difficulty, lead to frictions within the internal team and to a time delay for the start of the networked project.

### Company Case | The different goals of business units

*In preparation of a networked innovation project, DAF Trucks NV put together a multidisciplinary internal team with representatives of all relevant units. It comprised of units which mainly operate in the early innovation stage, as well as those who are responsible for later stage developments. When the business units had to decide together which external partners to choose for the innovation project, their divergent goals became apparent. A unit such as purchasing, which is a later stage activity, is held responsible for different targets than R&D: low-cost buying versus developing new concepts. R&D preferred to choose an external partner at an early stage, because this is likely to result in a higher quality of concepts. Purchasing, on the other hand, wanted to choose the partner as late as possible, to maintain a strong negotiation position. At that decision point, the team realized insufficiently that the established targets of the business units themselves would have to shift to get a well-tuned goal that could be approved of by all internal stakeholders. Additionally, it became apparent that internal decision makers who are normally only consulted at a later stage, tend to be reactive rather than proactive, perhaps because of the novel setting. This can be overseen easily: as the different business units all are part of the innovation team from the beginning on, one takes it for granted that they will actively take part in the early innovation stages.*

#### 1.5. Creating a shared attitude towards networked innovation

Starting a networked innovation project means that a new internal team has to be formed in a company. This team will consist of representatives of different expertise, depending on the demands of a project. It goes without saying that a basic requirement is to provide enough space and flexibility in the organizational structure to adapt to the new needs. Yet, we learned from our study that even companies who carefully composed their teams had expectations upon their efficiency that would not come true. Among others, teams were created that could be employed on demand for networked innovation. In between networked projects, the team members would go back to

their original business units and operate as usual. In this way, it was supposed, the networked innovation team would build up expertise in conducting networked innovation that could be transferred from one project to another, while operating efficiently. In practice, however, the team quickly fell apart. Team members tended to turn back to their original units as soon as possible. There was no reason for them to keep up relationships with operatives from other divisions which had no usefulness after the networked project had stopped. It showed that bringing internal actors together in a team is not enough to develop a long-term vision on networked innovation.

### Company Case | Re-aligning the focus of different company divisions

*DAF Trucks NV has experienced that their team members often work focused on the interests of their own unit, and not so much focused on the interests of the company as a whole. Consequently, the interests of different divisions are not aligned from the beginning; when working on a networked project, goals will be aligned for a short time. Yet, when the project is about to be finished, these goals start to fall apart again. Theo Pas from DAF Trucks NV: "It is as if you need an external force to bring people together. But as soon as the tie is loosened because the project is finished, everybody withdraws into his own domain and does for the rest of the year what he thinks is important."*





### 1.6. Maneuvering between hierarchies and flat networks – different roles of team members

For the employees of a company, maneuvering between the hierarchy of one's own organization and the 'flatness' of a network can be disturbing. As networked innovation is in most cases conducted simultaneously together with closed innovation projects, team members have to switch constantly between roles. In a network team, an actor can fulfill the role of an important expert for the innovation

project. In this role, he communicates directly with internal and external partners. As networked innovation teams tend to be rather flat in composition, and rather small compared to most companies where their team members come from, an actor can have a quite big influence on the representation of his company and decision making within a project. His responsibility, but also his leverage, will be much bigger than when the same person operates in a large and hierarchical organization.

#### Company Case | Adapting teams to networked innovation

*Philips Design has experienced that the dynamic, highly complex processes of networked innovation feel awkward to some team members. In closed innovation projects, people in design teams are accustomed to complete their tasks before going public - this is unthinkable in networked innovation. Here, they have to collaborate in a very early phase with non-designers and have to respond quickly to new developments. A change in behavior is imperative: instead of avoiding conflicts and taking on an omniscient attitude, the members of a networked team have to seek confrontation at all time and with all parties involved in order to profit from their comments.*

*To ensure efficiency, Philips and their network partners keep their respective teams apart during a project. They are linked by team leaders - each partner provides one - who meet several times a week and even stay working at the partner company for whole days, so that matters can be aligned immediately. They distribute relevant information to their team. The rest of the team does not meet on a regular basis; only if issues require the exchange of special expertise, experts of the partners are put together.*

## 2. Creating joint projects

### 2.1. Continuously aligning goals

One of the appeals of networked innovation is that the efforts will be split between the partners – and the rewards, too. In order to get as far as to being able to harvest the first profits, the path leading to the innovation has to be fine-tuned carefully by all partners involved. Companies who are new to networked innovation often focus on a clearly defined result of the innovation project, such as a product with certain desired features. To pursue and

to get exactly that result is unlikely even in closed innovations. In networked innovation, however, we see that first ideas often are completely unrecognizable in the final development. One of the reasons is that goals between partners have to be constantly re-aligned and will shift from the original goal.

In the beginning of a networked innovation project, the aspired results are often seen as a clearly defined target

– consisting mainly of the goals each single company has in mind for itself. In this stage, the goals of the different companies exist next to each other and are not yet aligned. In the next stage, the network partners will negotiate towards a development that can be agreed upon and that will benefit all partners. It is very likely that this stage will become unstable soon, and for different reasons. Just to name a few: perhaps one or more of the partners decide that they will not gain enough to justify the efforts and will leave the network. Unforeseeable developments in the market may enforce changes in the innovation goal. Getting the project financed may prove to be more difficult than estimated. These changes will not

affect every network partner in the same way; it is therefore likely that they will adapt in different ways to the new situation. As a result, we saw that the goals of the networking companies developed in totally different directions. In some cases, interests could be re-aligned with some effort, in others, the difference became so big that there was no common ground anymore for the partners and the network dissolved.

All companies in our study acknowledged that the success of a networked innovation project depended on identifying the goals of each party, to align them and to re-check regularly if the goals were still on track.

### Company Case | Different goals and decision making

*The Senseo coffee maker which introduced coffee pads was the result of a collaboration between Philips and Sara Lee/Douwe Egberts. Both companies agreed upon what it should be: a user friendly product that would make good, portion-sized coffee. During product development, it turned out, however, that the companies had fundamentally different goals, the reasons of which lay in the very nature of their organizations. As a company that produces fast moving consumables, Sara Lee/Douwe Egberts tended towards a concept with a low selling price that would, consequently, ensure a bigger turnover in coffee pads. They also aimed at a strong brand identity which had to be immediately recognizable by its characteristic design. The interests of Philips, on the other hand, known for its high-quality appliances, would not be served by a product in the low price range. On the contrary: they aimed to expand the concept towards a high-end Senseo version made of aluminium. Due to technical reasons, the original design had to change from the original curved version towards a right-angled one, thus losing the brand image Sara Lee/Douwe Egberts desired. These and other differences in goalsetting led to conflicts between the partners. The partners, however, learned during the process that identifying the goals and making binding decisions about them, smoothed the collaboration.*

#### 2.2. Be aware of non-linear processes

Networked innovation processes are not linear. Conventional process models, such as state-gate models, are strongly based on the causality of steps. They are based on the theory that if you go through process step one, and do it right, you will automatically get to process step two, and so on. And if you follow the whole process, one will be rewarded by a successful project. Even in tightly controlled closed innovation processes, this can be an oversimplification that may not lead automatically to a successful innovation.

Networked innovation, however, is characterized by loops: sequences of steps that may repeat themselves several times before any progress is booked, especially in the beginning of a project. Aligning goals in a partner network typically leads to these loops: in the course of a project, goals will shift through new insights. Each partner company then tries to react in its own way: does the course of the project remain interesting enough to pursue it or do we want to quit? What consequences does this shift have regarding internal organization and necessary resources? Are



additional partners needed? Simultaneously, the network as a whole has to adapt to the changes, and to re-align the goals (see 2.1 Continuously aligning goals). Changes in a project and the necessary adaptations do not only lead to repetitions and a resulting loss of time. The

companies in our study reported that the loops also had a negative impact on the mood in the network: the momentum of innovating together slowed down and partners became hesitant, not daring to set the next step.

### Company Case | Networked innovation processes in practice

*Geert Christiaansen, responsible for networked innovation at Philips Design about the unpredictability of networked innovation: “People who describe networked innovation as a linear process have probably never seen it happen in practice. Because there is no linear process. There really is no process at all. More likely an approach - this is approximately how it happens. In this approach, you can define some steps where you know: this happens before that. But that does absolutely not mean that if you take one step, you will automatically get to the next one. The word process postulates that if you begin somewhere, it will lead you to a certain end – this is a misconception in networked innovation. It is very probable that you will go pop ten times over several years ... or that some things die very early.”*

### 2.3. Expect delays

Speeding up the time to market of an innovation was one of the motivators why the companies who took part in our study chose networked innovation. Through networking, new developments can be detected earlier, more knowledge will be generated, knowledge that is beyond the expertise of the own company can be brought in, and decisions can be made faster.

In theory, these assets sound like the panacea to all of a company's problems. Unfortunately, while the abovementioned assumptions showed true in themselves, the innovation process as a whole did not become faster. On the contrary. Getting a company ready for networked innovation and then building the actual network took much longer than the companies had expected. In fact, all topics which we are discussing in this chapter, have contributed to the delay of networked innovation projects.

### Company Case | Projects take longer than usual

*Wouter Noordman of Friesland Campina has experienced that networked innovation with many partners remains difficult even if you are experienced in this kind of collaboration. It causes delays, because partners keep searching for innovation topics and often cling to topics that finally prove to be irrelevant. In later phases, drawing up a contract often takes much too long and slows down the innovation process. Noordman recommends to clearly establish milestones on which the network decides if to proceed with the project or not, and to hold on tight to them. Otherwise, projects will continue only because they are still externally financed or because partners do not dare to break up the collaboration. Even then, networked projects still take more time than is customary for a fast moving consumables business as Friesland Campina. The projects he refers to are expected to take four to five years.*

#### 2.4. Simultaneity of different collaboration forms

Closed and networked processes happen in parallel. We saw that all companies in our study used networked innovation next to their common innovation activities within a supply-chain. Sometimes, the same combinations of companies acted as network partners and as customers/suppliers, depending on the project. This requires a constant switch between roles. In section 1.5 “Maneuvering between hierarchy and flat networks – different roles of team members”, we discuss the impact on the actor.

On organizational level, switching between different collaboration forms has especially an impact on the development of trust between companies. We see that the attitude towards suppliers and towards network partners differs greatly. A supplier, who probably also works with a company’s competitors, will be given information on a strict need-to-know

base, limited to the part of the project he takes part in. Thinking along for a larger part of the project is not expected from him and will not be compensated. One of the attractive features of networking, on the other hand, is that a partner who will share the final profits, is motivated to make the most of the situation for all partners, and to think along with them. Provided that the partners trust each other and share information that potentially can make them vulnerable.

Most companies in our study struggled with this trust issue and were still experimenting with different ways of handling it. Yet, they did not opt for an apparently simple solution: safeguarding trust by legal agreements. Especially in the early phases of networked innovation, which centered on conceptual development, they found legal agreements too stifling. Later on in the development and closer to the value proposition, gradually more and more agreements were formalized.

#### Company Case | Creating trust while switching to networked innovation

*Ola Isakson of GKN Aerospace Engine System describes the difficulties of shifting from a customer/supplier role into a partnership: “The main challenge is probably that you shift roles. You have another role. If you want to have a more open collaborative way of searching for common solutions rather than specifying and buying from someone, then the competences are the same but you have to share. In the case of the supplier you have to give him more access to the business side. Perhaps you have to arrange for collaborative mechanisms like sharing personnel or sharing systems or interfaces. And also to manage expectations and really regain some trust in a new way of working. You know the people and you know the organisation. To shift then to a mode where you have a collaborative mode with a common business interest, then you have a new situation. If I share with you on a deeper level, how would you then use the information? Because I know that you are also engaged with our competitors. Some of that you can probably arrange with agreements. It is not very easy to write such agreements when you already had another parallel agreement which states another way of working together. So somehow you need to believe in that on a strategic level. You also need to get around on the operative level. That is because the same people that have been used to have a little bit of interface, a little bit of distance but still professionally working together are not supposed to give me your specification or see what I can do. That is something different than brainstorming or commonly solve problems.”*



## 3. Collaborating with a partner company

### 3.1. Finding a partner

When we asked the innovation champions in our study how the innovation network was formed, we got quite similar answers: they had met likeminded people from other companies who were convinced that

together, they were able to realize better innovations. As the next example explains, a clear picture of one's own goals and a close fit of goals, combined with the right timing, are essential to find good partners for networked innovation.

#### Company Case | Rich encounters

*Marc Groenewegen, Director Business Development at Driessen-Zodiac Aerospace Group: "Some of our partners come from our existing network. Yet, sometimes I go searching for partners. I knock on every door I see and I am convinced that people will open that door. But that does not mean that this is the place where I am meant to be. You have to encounter each other, you almost have to trip over each other. When I am searching for a partner, he has to be searching as well, at the same moment. He has to have made up his mind to invest extra time, and he must have the intention to connect our businesses. He has to think: Driessen is already on my radar, and I have to think the same about his company. And, of course, he wants to do something in our business domain. This is what I mean by 'encounter'. Chance plays a big role, especially during the first meetings. But, more and more, I am adding a bit of analysis to prepare this process. We want to act on a certain market. Who are the relevant partners? What do we need? Then, we make a selection and see if we can come together. We invest lots of time in it, but we also appreciate those lucky shots. That's why networking is so important."*

### 3.2. Explicating goals

Networked innovation is all about setting and pursuing goals together, as we have already seen. Goals that do not match will be the end to a networked project. However - are you really sure that your goals and those of your network partner are aligned? Have you checked it? Really? There are different reasons why goals between partners are not as aligned as they should be. For one, playing your cards at the moment you see fit, and not all at once, simply is part of good entrepreneurship. In collaborations where trust still has to be built, you will give information sparingly to test the ground. Another reason: the course of an innovation project is continually shifting, as we discussed in

section 2.1. As a consequence, your goals, and those of your partners will change as well. We saw that little attention is given to discuss that, and how, your goals have changed and which impact this might have on the project. One often wrongly assumed that the partners were still holding to the direction that they presented at the start of the project. Thirdly, the goal setting in a project may be attuned among the innovation champions of the network, but that does not mean that it will automatically also match on the level of the different company teams (see also section 1.6). During a networked innovation project, you will regularly have to check together with your partners if you are really still working on the same project.

#### Company Case | Transparent communication

*One of the most striking findings of our study was that network partners firmly believed that they were communicating clearly over their goals. In fact, they were not. In a workshop we organized to discuss the problems of different companies in starting networked innovation projects, we asked each company to describe the*

*case they wanted to discuss. Each company had two opportunities to describe it completely from their own point of view: first, in an interview which took 1-3 hours, then in a short presentation during the workshop. Afterwards, making use of different methods, we discussed each case with all companies together. The same picture emerged: limited to their own point of view, each company told only about one third of the stakeholders which were relevant for the case; it also showed that the reasons for failures that were given when the company described its own case, shifted to sometimes completely different reasons during the discussions.*

### 3.3. Balance collaborations

In theory, all companies that are motivated can collaborate in networked innovation. However, quite early in our study we discovered a topic all companies we interviewed agreed upon: don't collaborate with a company that is significantly larger or smaller than your own. We learnt that most of the industry partners in our study had already experimented with collaborating with different-sized companies and that the result was never successful. The collaboration had disadvantages for both small and large companies. For one, the power balance is off, mostly in favor of the larger company which will become dominant, especially from business case definition onwards.

Another factor is that size has a direct effect on processes and decision making. Large companies have, as a rule, more detailed processes and strictly defined procedures for decision making. It takes time to get an initiative that is born in middle management accorded by the company board. Among same-sized companies this does not have to be a problem in itself, as the timing of processes will match by and large. A small company, however, might get out of financing by the time its large partner finally has made a decision. Yet, sometimes the agile David outmatches Goliath, as the following example of DAF Trucks shows.

#### Company Case | Too different to become partners

*Theo Pas, director product & services planning at DAF Trucks NV describes two cases where the differences in organizational structures prevented the building of a network. "When collaborating with SMEs, you see a culture clash. I just met a guy in England who had bought himself two motor test cells. If we want to do this, it costs us lots of effort. He's just the owner of a SME, somebody riding trucks and making inventions and going to get motor test cells. We have to write it down, think about it again, and motivate it. He just does it: 'Where did you get the test cells from?' - 'I just met a dealer who had spares. I had a look at them and bought them.' That's their style of working. It's interesting to think about it, because it can cause a conflict if the organization culture and structure do not match." ... "We also once had the idea to collaborate with a company in India. They were entrepreneurs with a large IT company, telecommunications, and the whole deal. They thought: let's do something with trucks, as a sort of hobby. This is an immensely rich 27-year old guy who thinks: let's build trucks. Overnight, they bought a complete painting line from Mercedes somewhere in Argentina. They talk about it on Thursday and on Monday, they already have bought it. It was a spare and it cost 7 million. It takes us a year to get this done, you know. Having to talk about profiles and batches when you have such structural differences... you simply don't understand each other anymore. The frames of reference for decision making, what's right and wrong, laying down criteria, clout... You tell me that a lot of partners change, and this is also a consequence of coming together and deciding: it does work or it does not. If it does not, you go on."*



### Company Case | A balanced team

*At Design Initiatief, one of the premises at the start was to build networks around “big future questions” of large companies. These questions would form the “hub” for SME’s and creative agencies to join in. In practice this turned out to be more difficult than expected. Company cultures and practices turned out to be important factors in building trust and commitment for the innovation project. SMEs have a very open attitude, and with the owner around the table, they are capable of quick decision making. The people in the team from the larger companies always had to turn to their organizational board for approval and innovation budget. SMEs often felt that they were not valued for their capabilities, and were afraid that the larger companies would in the end take more revenues out of the potential project. SMEs amongst themselves, however, turned out to be very capable to progress an innovation project, for their scope and sense of urgency matched. After learning that, Design Initiatief focused more on facilitating the teams in getting to know each other’s goals and building trust within the network.*

#### 3.4. Network Innovation is based on relationships as well as on activities

Another reason why common stage-gate models are not suited for networked innovation is that they focus on the necessary activities within a project, and not so

much on the relationships between the actors. The way how network partners collaborate, however, is as least as critical to the success of a project as focusing on the content.

### Company Case | How a great idea died by different views on its execution

*As program manager of Design Initiatief, Rianne Valkenburg supported starting networked innovation teams. “Sure enough, a team can be a quite arbitrary group of people who is expected to work together. This can sometimes cause problems. I once had a team where one member had this great idea about social support in a neighborhood. Other parties were very interested, too. Yet, the originator of the idea did not dare to enlarge the scope of the project beyond his own capabilities, despite we already had a team to participate. Somehow they did not click. In the beginning, everybody was enthusiastic: team members contacted their own municipalities and other companies. But somehow it did not take roots. A pity, because everybody believed in it. The guy who came up with the idea thought: let’s start small, in my own district and with a website, then it will grow slowly. The other team members, on the other hand, had great plans to add services to the idea. But then you need bulk. The meetings were really pro-active, but gradually we saw that we would not get it off going ... I think, the reason was a culture clash. One person says: ‘this is what we can manage’ and the others think: ‘this is what we need if we want to get external financing’. Then it is going to blow over: it gets increasingly difficult to make agreements and then you see that the collaboration hits rock-bottom. The originator of the idea did not dare to leave his own safety zone and the rest of the team was not able to get the project going without him.”*

#### 3.5. An innovation network is an open structure

Most of the companies were still experimenting with team structures that would work: in some projects, whole teams of

the respective partner companies were collaborating on the same site. Each team member basically had access to all other members and the related information. The idea was to connect as much as possible

with the partner company to exchange knowledge, but it resulted in an unwanted effect: team members were overwhelmed with knowledge which they could not judge for its relevance. In other projects, the companies had decided to keep the collaboration surveyable and closer to the traditional hierarchy: only the champions of each company kept close contact, the respective teams stayed on their own

site and collaborated only with members of the other team when information exchange was desired.

A network is also a 'living' creature: along the way people or parties may change, some partners leaving the network, others joining in. In the experimental phase of networking this can lead to situations to deal with.

### Company Case | Flexible network

*At Design Initiatief innovation networks started at working conferences, where people from different organisations and backgrounds teamed up and brainstormed about a future challenge. The best pitched idea got an innovation voucher at the end of the day to develop the idea further. For one of the ideas this resulted in an initial team where team members still had to explore the feasibility of the idea for their organisation and the viability of the concept itself. After having worked on the idea for 3 months one of the team members switched jobs. This initiated the discussion whether he could take the innovation project with him to the other company or whether he should provide a successor for the team from his former organisation. The other team members, who had expected to work with the company, didn't really like the idea that the company was changing, but everybody realized that nothing was formalized yet, and by having the people around the table, there was no automatic guarantee that the organisations behind the people were also involved.*

Design Initiatief realised that they had to pay much more attention to the commitment of the organizations behind the team members. And – even in an early stage – to get some commitment to participate in the networked innovation. They developed an approach to analyse

the knowledge and skills needed for the development of the innovation. It enabled them to help the teams to identify potential lacks of knowledge as well as value for all partners within the cooperation. In this way, a starting point for a sustainable network was made explicit.





## 4. Conclusion

All of the companies that took part in our study were convinced that networked innovation is a necessary addition to their usual ways to innovate. They combined expertise and were able to make much larger innovation steps than they would have made on their own. The same companies, however, showed us as well how complicated networked innovation is when it is brought into practice. This chapter has focused only on one aspect of networked innovation: the coordination activities within one's company and between companies when starting up innovation networks. Yet we see that only this part alone requires a diversity of considerations, preparations and actions

that have to be initiated and re-checked continually. A company that decides to use networked innovation, should therefore be prepared to allow for an extended fuzzy front end and it should be able to finance the required activities.

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## About the authors

### Dr.Dipl.-Des. Christiane Maurer



Dr. Dipl.-Des. Christiane Maurer is an industrial designer who worked as a senior researcher for the Centre for research and development at The Hague University of Applied Sciences until January 2015. Christiane studied industrial design at the Fachhochschule München and at the Universität der Künste in Berlin. She also studied arts history at the Technische Universität Berlin. Christiane did a PhD on ‘affordances and the use of the public space’ at Delft university of Technology. She received her PhD in 1994. After her PhD she started working as a self-employed designer in the textile industry and she became a teacher in industrial design.

Christiane Maurer became a member of the research group Designerly Innovation in 2009. Within the IOP/IPCR-project “A Designerly Approach to Networked Innovation” she focused on innovations in industry networks. With the use of in-depth interviews, she gained an understanding about how networked innovation projects are executed in industry. Christiane’s research focused on the early stages of the networked innovation projects; the fuzzy front end. She was particularly interested in the early stages of new collaborations between partners. She focused on subjects such as organising for networked innovation, the search processes for possible partners, and the way partners share and integrate their knowledge (or not share their knowledge).

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### Dr.ir. Rianne Valkenburg

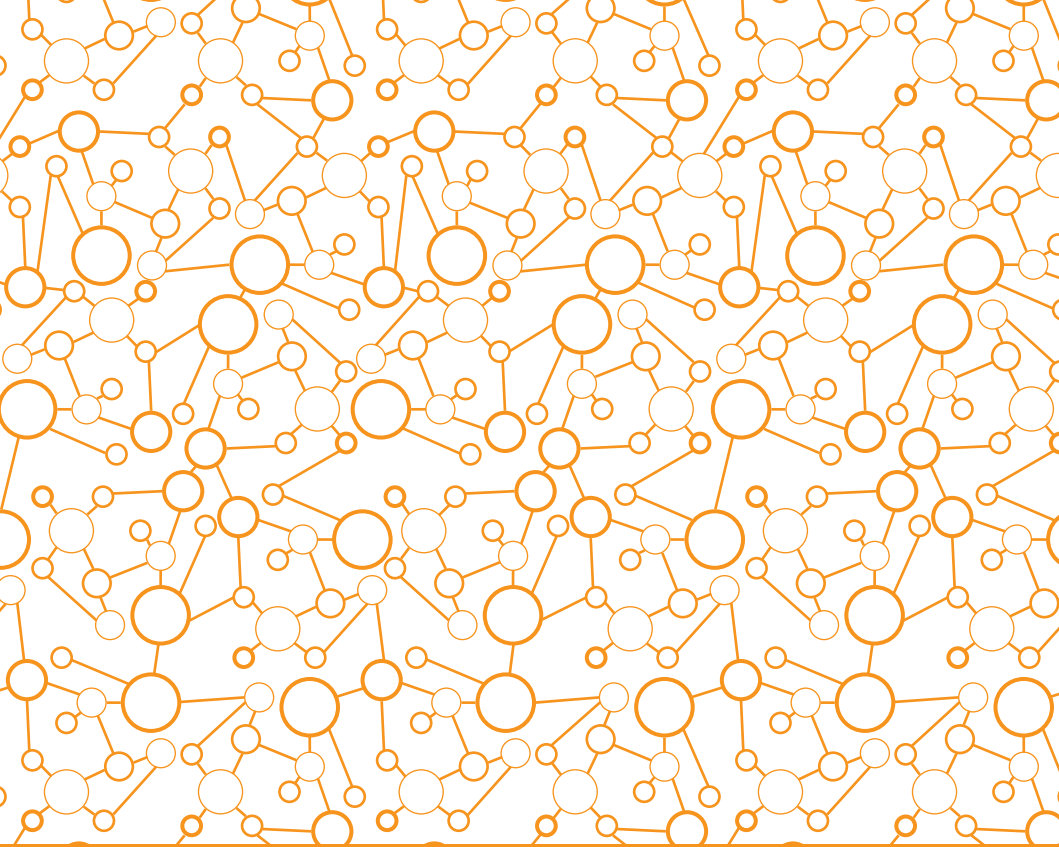


Dr. ir. Rianne C. Valkenburg is professor Designerly Innovation at The Hague University of Applied Sciences. The designerly innovation approach involves 3 research theme’s. (1) The Future Telling research approach helps to shape future visions through context related future scenario’s as ‘food for thought’. (2) Research into Design Thinking explores the value and impact of a ‘designerly way of thinking’ for innovation and organisations. (3) Participatory innovation engages people to work together to make the difference. We develop tools and expertise to reframe understandings and colearn in teams, organisations and ecosystems.

Next to her scientific position, Rianne is partner and value producer of LightHouse/ experts in smart lighting and smart cities @TU/e. LightHouse is founded to disclose the knowledge of the TU/e through knowledge-intensive projects for clients in the field of innovative smart lighting and smart city solutions.

In the combination Rianne unifies contemporary theoretical insights with ample practical experience in networked innovation.





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