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# A DESIGNERLY APPROACH TO ENABLE ORGANIZATIONS TO DELIVER PRODUCT-SERVICE SYSTEMS

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Design is not only just for products, logo's or websites anymore. More and more companies are embracing design as a way to enable their organization to adapt to changes in society. One of the challenges many organizations face at the moment is how to create value for their customers by delivering experiences. One of the ways to do this is to develop services to complement the service offering. These so-called product-service systems need to be designed just like products, logo's and websites. Their development requires a designerly approach in order to make them valuable for the company and the customer. But how can this designerly approach actually enable organizations to become better at delivering Product-Service Systems? And what is the role of design consultants in embedding this designerly approach in organizations? Does the application of Design Thinking play a role in this? And can they support organizations to adopt Design Thinking? Design consultants are able to compare the practice of different companies and are on the cutting edge of the field. This article is built upon a series of interviews with different consultants, to arrive at suggestions for professionals that wish to shift from a traditional product-centered approach towards delivering Product-Service Systems.

Keywords: design thinking, design consultant, product-service systems

# A CHANGING WORLD

In the last century, the introduction of technology has changed our lives drastically. Technology provided us with the possibility to live in comfortable houses, to travel and to communicate with each other in various ways. Technology also provided us with consumable products that enriched our lives. However, over the last decade, our materially oriented economy has been in transition towards an experience economy in which experiences are more important in the eyes of customers than products and technology as such. This implies that in order to generate true value for people innovations will have to entail an experience element on top of the product offering. Vargo & Lusch (2008) suggest that companies that adopt a goods-dominant logic insufficiently realize the need for delivering value instead of goods. They pose that the best way to deliver value is to adopt a Service Dominant logic that helps company's co-create this value with users. This requires a change in the organizational mind-set, as well as an integral approach to innovation of products and their encompassing services, so-called Product-Service systems (PSS).

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#### PRODUCT-SERVICE SYSTEMS

Both New Product Development (NPD) and New Service Development (NSD) have been well documented, the former from a product design perspective, the latter from a management perspective. NPD and NSD come together in Product-Service-Systems, and here we are still somewhat in the dark. Product-Service Systems can be regarded as "tangible products and intangible services designed and combined so that they jointly are capable of fulfilling specific customer needs" (Tukker 2004).

Not only intangibles are an essential part of services. Johne and Storey (1998) indicate two more differences between NSD and NPD: heterogeneity (the various channels, touchpoints, systems, business models and resources that play a role in service delivery) and simultaneity (the fact that in services 'production' and consumption occur simultaneously). Designers have to take into account this intangibility, simultaneity and heterogeneity when designing for PSS and that is not an easy task. Similarly, enabling organizations to deliver PSSs is quite complex, since it involves multiple stakeholders, departments and support systems, thereby typically having a larger impact on the organization than classic NPD projects.

# COLLABORATION IN DEVELOPING PSS

The development of Product-Service Systems requires a far-reaching integration of different knowledge domains from different stakeholders. This collaboration is difficult, because stakeholders have different interests and perspectives on the PSS (Bucciarelli, 1996; Dougherty, 1992). Furthermore, it is demanding for companies to manage the stakeholders toward thinking along the same line since stakeholders face difficulties in interpreting and understanding each other's knowledge (Adams *et al.*, 1998; Dougherty, 1992). Stakeholders from different disciplines use different languages and different representations of the PSS. Kleinsmann *et al.* (2007) showed that knowledge processes between companies differ from those within one company. Collaboration does not only take place between the design consultant and the organization, also within the organization collaboration takes place between different people and different departments.

#### **CHANGING AN ORGANIZATION**

When an organization wants to create added value for their customers, it can decide to transform from NPD focused towards being more Product-Service Systems focused. This transformation poses quite some challenges. It requires a shift from product dominant logic toward service dominant logic. Organizations have to become more customer oriented and co-create a new kind of value by providing services. Not only does this change require a different mindset, it also requires changes in the organization, involving the entire company, the innovation process and often its business model. The radical change this entails is often facilitated by the support of external consultants. At the moment the authors witness a new kind of consultant is emerging in this field of expertise, namely consultants with a (product) design background. These design consultants have a specific set of skills and approaches that might be valuable in enabling organizations to deliver PSS.

#### A DESIGNERLY APPROACH

Traditional design skills, including imagination, creativity, innovation and value creation (Gloppen, 2009), have already proved to be of great value for supporting collaboration between different stakeholders in developing the Product-Service Systems of the information age. This way of using design is often referred to as Design Thinking. Design Thinking frames design not as a new aesthetic layer around existing products. Rather, it looks at the cognitive, attitudinal and methodological aspects of design as a way to facilitate organizational change.

#### MINDSET OF DESIGNERS

The added value of a designerly approach does not only lie in the aspects most people think of: visualizing, prototyping, creativity, and such. The real value of a designerly approach lies in the mindset of designers. Designers tend to see problems as opportunities for the invention of new alternatives. They think more in terms of creating new possibilities than in terms of selecting between existing alternatives (Boland and Collopy, 2004). The very nature of design problems is that they are wicked problems (Buchanan, 1992). This makes design thinkers<sup>2</sup> able to deal with uncertainty, to take risks and to work in the fuzzy area of the design process. Design thinkers are people-persons, they have empathy for different stakeholders and have experience in dealing with people.

The one thing that seems to remain relatively stable, even in times of great change, is the need to understand human behavior. The exact thing Design thinkers are very good at. Therefore it's no surprise that increasingly, business managers look to the field of design to help them get in touch with their customers' (and other stakeholders') unarticulated needs and desires. When made a part of an organization's work processes and competencies, Design Thinking enables an organization to embrace change as a normal part of managing its business. (Coughlan and Prokopoff, 2006).

#### **HUMAN-CENTERED**

The design thinkers' ability to empathize with multiple kinds of people and the skill to cocreate enables collaboration to develop PSS. Empathic understanding goes beyond knowledge: when empathizing you do not judge, you 'relate to (the user) and understand the situations and why certain experiences are meaningful to these people, a relation that involves an emotional connection (Battarbee and Koskinen 2005). Empathic understanding can also be used when collaborating with different stakeholders. Using empathy, the design thinker can identify needs of the different stakeholders and react upon them. Through a complex and iterative process of synthesis and transformation of research data, design thinkers empathize with the stakeholders through revealing future design opportunities. Facilitating collaboration is a skill crucial in the skill set of design thinkers. Mattelmäki and Sleeswijk Visser (2011) state that in co-design the designers (or design researchers) typically facilitate the collaborative process but often also participate in the process as one of the contributors. The co-design activities typically aim at searching new potential directions and producing design ideas and solutions. However, they can also be about making sense of the topic or expressing experiences collaboratively. It is specifically in this direction that designers use their (visualization) skills in enabling stakeholders to express experiences and support them to make sense of the topic.

<sup>&</sup>lt;sup>2</sup> We refer to people who practice Design Thinking, one of the interviewed design consultancies is called Design *Thinkers*. Their name is spelled different to stress that we are referring to a company.

#### **FUTURE-ORIENTED**

Designers by the nature of their work are futurists. The least time it takes to produce a product and get it on the shelf is a couple of years. Sometimes it can be 10–15 years. So you're already dealing with the future when you sit at your desk in the morning. (Seymour, 2010) As nothing in the future has been decided upon, designers also need to deal with large amounts of uncertainty. This comes in handy when design thinkers work in processes of change. For an organization, it is difficult to deal with uncertainty. Design consultants can support an organization as they can draw on their own experiences. Design thinkers know how to adopt their way of work to the context and changes in their project. They do not have one way of working, each time they change their process according to the client's needs and situation. This enables design consultants to truly fit their client's needs.

# WORKING VISUALLY

The skill of design thinkers that most people are aware of, is their ability to translate, visualize and communicate, what to others are fuzzy insights, to inspire the change process. Design thinkers are able to make insights usable, by making abstract matters tangible.

Design thinkers know how to translate data and insights identified through collaboration and insights gathered from stakeholders into a form that is useful within future- oriented design projects. This transformation of information involves the designer drawing upon his or her creative, intellectual and visualization skills and results in the translation of abstract concepts into concrete instances of potential futures (Evans 2011). Rapid visualization may give stakeholders a concrete image of the future solution that words alone could never convey (Utterback et al. 2006). This is not limited to sketching alone. Designers are used to work with rich information and creating different kinds of representations. As Schön (1983) puts it, designers interact with these representations in a conversational way. These representations are thus far from being incidental outputs but are rather central inputs in the thought process. Designers uncover unmet consumer needs, wants and desires and use these insights to inform future generation products and services.

# **EXPLORING "HOW" IN PRACTICE**

Changing an organization completely towards PSS is an enormous challenge. Organizations do not take this endeavour lightly and often look for support. *That* Design Thinking can be of great value for organizations that wish to change is covered in many different books (ao Verganti 2009, Martin 2009 and Brown 2009,). Organizations see it as an opportunity to innovate better and change their organization to create value for their customers. But little is known of *how* Design Thinking is embedded in organizations in practice. Some authors try to provide elements as for example Liedtka and Ogilvie in their design thinking tool kit (2011). They give background information on the value of design and provide an overview of tools that can be used in 4 different phases towards growth. However, in our opinion the largest question still remains: how can these tools be implemented in practice? Design Thinking goes beyond applying tools. Rather, it is about building an organizational mindset. Design Thinkers often have educated themselves, based on their own hunger for more information, in an intuitive way. This process takes time, it cannot be taught with a tool kit. It can only be learned by acting and experiencing.

Unraveling the quest of an organization towards a designerly organization may help other organizations in their adventure. We will explore in this paper how design consultants in the Netherlands support organizations in embedding Design Thinking in their organization. By talking to them and by letting them explain how they have dealt with supporting

organizations to change towards delivering Product-Service Systems, we will draw upon their experience to make suggestions for others interested. The seven interviews we held are a starting point for our investigation of how Design Thinking is applied in practice to enable organizations to change.

We hope to show organizations what kind of challenges they might face and how they can prepare themselves for this process of change. We also show that there are different kinds of design consultants, each having a different focus but trying to achieve the same. As for Science, we will not focus on proving the value of Design Thinking, but show how organizations are trying to use it to change their organization to deliver PSS. In the near future more interviews will be held internationally.

# **DESIGN CONSULTANTS**

The design consultants we have interviewed have a leading position in the field of supporting companies to transform from NPD towards PSSD and are people with passion for their work. They are curious and go the extra mile to do valuable work. These consultants have a genuine interest in creating better organizations. They are 'people-persons'. None of the interviewed consultants is alike, each approaches changing organizations using design thinking from a different angle. Table 1 shows an overview of the seven design consultants we have interviewed. To illustrate in which perspectives they are different we have compared the consultants based on their background, which kind of stakeholders they primarily involve and which are the main points of focus in their work.

#### **BACKGROUND**

Some consultancies are built on the basis of teams, as for example with Design *Thinkers*, where people from different backgrounds strengthen each other. One comes from a design background where another has a business background. Other design consultants are primarily built on one background. Contextqueen is a solo-consultant often teaming up with other consultants, but coming from a strong design background. Booreiland, a two-partner firm, has its roots in designing media (either printed or web), so in the work they do, they rely on their media design background.

Table 1 overview of the interviewed design consultants

	Contextqueen	Zilver Innovation	Eye-D	DesignThinkers	STBY	Booreiland	Caracta
Background	Design Research	Business & Design	Design	Business & Design	Design Research	Design	Business & Design
Involving stakeholders	External	Internal & External	Internal	Internal	Internal & External	Internal	Internal & External
Focus	Empathy	Brand, Strategy, Innovation	From Products to PSS	Strategy, Service Innovation	Empathy, Service Innovation, Strategy	Strategy, Design	Brand, Strategy

#### INVOLVING STAKEHOLDERS

Involving stakeholders in a change project is one of the most important aspects. It depends however on the design consultant if primarily internal stakeholders are involved or external stakeholders.

#### **FOCUS**

Each design consultant has a different point of focus when it comes to changing the mindset of an organization. None of the design consultants focuses on all aspects of change.

As none of the consultants are specialized in the complete change process, they often team up with others to best suit the needs of an organization. In the case of OHRA, a Dutch insurance company, Erik from Zilver Innovation worked together with Design*Thinkers* and Contextqueen as well as with other partners.

#### **METHODS**

In the interviews with the design consultants we focus on HOW design consultants in the Netherlands support organizations in embedding Design Thinking in their organization to enable them to change from NPD towards PSS Design. Each of the interviews took about an hour.

To structure the interviews with the design consultants, 4 main questions were asked during the interviews:

- 1. What difficulties do you encounter when supporting an organization to change, enabling them to deliver Product-Service Systems?
- 2. What are the skills of a design thinker that are valuable in this change process?
- 3. What is your role as design consultant?
- 4. What does the process of changing an organization look like? What are important moments in this process?

The answers to these questions are each pieces of the larger puzzle of the process of changing an organization. Based on the data from the interviews with the design consultants we have derived themes, for example 'changing the mindset of the organization', 'the importance of facilitating collaboration' and 'implementing PSS in the organization'. In the following paragraph, these themes are explained in more detail and illustrated with quotes from the interviews with the design consultants.

#### **RESULTS**

Even though not one design consultant does the same, or comes from the same background, they all value and practice design thinking in similar ways. The design skills and tools they use are similar, but their starting point and focus is different. We will further elaborate on how they use design thinking based on the themes that came forward during the interviews.

#### **STARTING**

At the moment, organizations are often aware of the fact that they have to change and they are starting to realize that in order to change they need to adopt new ways/methods to innovate and adapt to change.

Booreiland (2012) mentions: 'Some time ago we got a lot of WHAT questions from companies. Recently they started to come with HOW questions. You notice companies more and more become informed on new ways to innovate and are aware of what it can mean for them. They just do not know how.'

This uncertainty of how they can change and what innovation route to follow, makes the start of a project difficult. Not only do organizations deal with a lot of uncertainty, quite often their problems are undefined or wicked (as mentioned by Buchanan, 1992). So the very start needs to be to formulate the underlying 'change' question. The design consultant helps the organization to define the question, give the project focus and unravel what exactly is the urgency for the company to embark on the change process.

Zilver Innovation (2012) puts it as follows: 'Companies may know they need to change but they don't fully understand why. As consultants we help them unravel the underlying question. We devote quite some time to pinpoint the urgency for change. In order to understand their own future and to remain meaningful in this very complex age, organizations need to understand not just what they do, but also why they do it.

A client of Booreiland (one of the consultancies we interviewed) asked them: 'we hear lots of things about apps, should we have one as well?'

Organizations hear buzzwords going around and see success-stories and wonder if they should do something with these new developments. They do not look what it does, or deliver, but only hear people talking about it. The question beneath is that the organization realizes that it should innovate, but does not know how.

### CHANGING THE ORGANIZATION MINDSET

When an organization realizes that design thinking can enable them to change and better adapt to changes in society, it will want to take some steps of action. However, Design Thinking is not something you can easily implement, or outsource. When using design thinking to change, it should become a mindset that will be part of an organization's culture.

Eye-D (2012) claims that you have to start with internal stakeholders: 'It is important to make use of 'hooks' inside the existing organization. You cannot start from scratch. By using what is already there, change will be more easily accepted by the internal stakeholders.'

All design consultants stress the need to use the internal strength in an organization. Stakeholders within have to be actively involved in the process of change. By giving power to people in an organization, and putting them in charge, the changes that are initiated will become theirs and will be adopted easier by the rest of organization.

Contextqueen (2012) says about working with internal stakeholders: 'One key aspect is to have respect for the people you work with and transfer this respect to them so they will have respect for their stakeholders.'

DesignThinkers (2012) mentions another aspect that is important for organizations to realize: 'The Key Performance Indicators (KPI's) have to match the new organization. Added value cannot be measured on the short term by asking customers to grade your services. Change needs time to be implemented and to create value. This is harder to explain to listed companies than to family-owned companies or start-ups. The latter have more attention for long-term value creation. This creates stability in the company and it gives more space to intuition and emotions.

Whether the design consultant has succeeded in enabling an organization to change can be assessed by gauging how the people in the organization have changed. How has their skill set developed and how has their willingness to embrace change grown in the course of time? The different consultants that were interviewed mention that in the course of their work with a client they've seen the organizational focus on the future change. They've seen a growing shared appreciation for change and an increasing will to generate knowledge together. This leads to little successes that in turn will give more confidence and more motivation to work together across departments and stakeholder groups. Decision processes become more comprehensible and transparent, and better arguments to make choices emerge. The innovation process in the organization has become more structured. Or better yet, people find it more acceptable to deal with the inherent chaos and uncertainty of the fuzzy front end of innovation.

# **COLLABORATING WITH STAKEHOLDERS**

The design consultant deals with two types of stakeholders: internal stakeholders, like people involved in the project or internal content experts, and external stakeholders like users, external experts, or distributors and such. The process of connecting with internal and external stakeholders is a main part of the work, where the design consultant is the connector and facilitator.

STBY (2012) even states: '50% of our actual time is spend on creating insights and ideas, the other 50% of our time is spent on communicating these through collaboration. For example by facilitating workshops.'

Caracta (2012) says: 'It's not only about content in projects, it is more about aligning people.' Employees who are willing to participate and contribute to the change process often encounter problems in doing so. These people have passion for their work, energy and personal initiatives to improve the organization they work for. However, they are swamped with their 'daily' work and are not supported by the organization to devote time to change projects.

STBY (2012) illustrates: 'Being involved in a multidisciplinary project is often not in a job description of an employee. The initiative to participate comes from personal interest, curiosity or as a favour to the project leader. There is a large threshold to participate in multidisciplinary projects, as participation is not supported by the organization. Such projects are in effect a form of bottom-up change of organisations. People already have time consuming jobs and make time available for such projects out of personal interest and the change it may cause over time comes with it. An organization should reward employees for their input, instead of maintaining structures that hamper collaboration between disciplines.' When dealing with changing an organizations stakeholders of all the different layers of an

organizations should be involved. They are the ones in contact with customers, or making decisions that will influence the perceived value of the customers.

Eye-D (2012) explains: 'Quite often the engineers are forgotten in the change process. It is important to involve them and let them experience what the effects are of their decisions.'

Zilver Innovation (2012) gives another example: 'We were asked to improve the call center experience of a telecom provider. We learned by talking to the call center employees that it was not the employees that were unwilling to change and improve their service, it was the imposed structured process of dealing with customers that caused most of the problems.'

#### TRANSLATING INFORMATION

When collaborating with different stakeholders great value lies in the ability of design consultants to communicate project progress. Visualizations that capture and communicate things like the urgency of the project, insights generated by research or the upcoming process steps contribute strongly to the ease with which change is adopted by the organization. Design consultants have the ability to translate these different types of information into a shared visual project 'language' that creates common ground amongst the stakeholders.

Zilver innovation (2012): 'design thinkers are able to gather rich information and make it digestible for others. There is great value in using design skills to visualize rich information enabling stakeholders to share their learning and gain mutual empathy. Quite often a project goes wrong when the results do not communicate the rich insights and reports disappear in a drawer of a desk.'

Being able to quickly move from gathering insights toward taking actions to design change is another strength of design thinkers.

Zilver innovation (2012) says: 'One of the main benefits of working with design consultants is their ability to directly move on form gathering insights towards designing solutions based on

the insights. Business consultants gather knowledge but are not able to directly move on towards designing and implementing the insights in the company. Design consultants make sure that their insights are viable and usable for design.'

#### ROLE OF A DESIGN CONSULTANT DURING THE CHANGE PROCESS

For an organization it is very difficult to find people within the organization with the right skills and experience to implement change. In most cases an external party is needed, for example a design consultant to guide the organization throughout the process. This is not a job you throw over the fence, where the consultant withdraws and comes back with a report a few months later. The consultant is constantly transferring his knowledge and skills to the client.

STBY (2012): 'Design Thinking to us is about training the internal stakeholders with skills (practicing tools, providing a toolbox) and helping them to build a design thinking attitude and mindset.'

Design consultants inspire, translate insights, facilitate the process, analyze the results and provide structure.

Caracta (2012): 'Effectiveness = quality + acceptance.'

All design consultants see themselves as a facilitator of the change process.

DesignThinkers (2012) say: 'We are not the classic consultants. Key to us is facilitating, building a relation of trust with the organization. We build a new way of consulting. Working together with the organization, not for the organization.'

As the collaboration between consultants and organization progresses, this relationship changes.

Caracta (2012): 'We build long relationships with our clients. Our role changes towards an educator, sparring partner. We work on a project basis, but gradually the intensity of our input changes.'

Within the organization the design consultant also takes his responsibility to the project leader within the organization.

STBY (2012): 'As consultant we help our project leader in an organization to create a basis, a support within the organization.'

Being a design consultant you do not have a fixed set of skills.

STBY (2012) mentions: 'As consultant you have to change yourself continuously, and grow. Otherwise you will soon not be relevant anymore. You have to work consciously on personal growth.'

#### **PROCESS**

There is not one specific process that can or should be followed. All design consultants mention that they are flexible and let the structure of the process depend on the organization, the question and the circumstances.

Caracta (2012) says: 'We do not have a standard approach, each time our approach is built through dialogue with the company.'

There is however one approach to the change process that all consultants share: taking small iterative steps that each end in a period for reflection. This approach is intended to create a stable basis within the organization for change and to engage the internal team of stakeholders.

Eye-D (2012) says: 'Time for reflection is of great importance as a consultant. Reflecting with the organization makes them realize what changes are made or are necessary.'

Contextqueen (2012): 'Service Design is a different market. It requires small iterations (See Figure 1). You have to start by focusing on changing and designing internal processes. Only

then can you redesign the products and services. It can not bee seen in a box, it covers different departments in an organization that need to be aligned.'

DesignThinkers (2012) agree on this: 'You have to limit taking risk by taking small steps at a time. There is no need to work on one big project.'

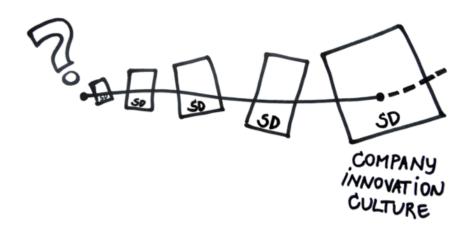


Figure 1 Taking small steps in the change process towards a new company innovation culture. Each step is a design project, each time becoming bigger and having a larger impact on the organization.

Booreiland (2012) stresses the benefits they experience from a traditional product design background: 'The benefit of being trained as an industrial designer is that the process steps of design are embedded in ourselves. Organizations like the stepwise approach and understand the value of each step. Using the basic steps of the design process makes change understandable and manageable.'

# **IMPLEMENTING**

The services emerging from a PSS project tend to remain concepts. They are notoriously difficult to get really implemented in an organization. This is the main issue that needs to be tackled to get change to really land in an organization.

DesignThinkers (2012) do it as follows: 'To implement ideas you have to make use of the trust you have built in an organization, create structures of dialogue (which is not sexy but necessary) and get to your goals in small steps building more trust as you go. You have to combine short term wins with long term thinking.'

STBY (2012) says: 'Implementing the results that are generated during the design phase is always one of the main difficulties. That's another reason why we work with small 'victories'. These victories are actually more organization changes than they are designs of Product-Service Systems that need to be implemented. These first victories in changing the organization are needed to let the organization gain confidence.'

#### **DISCUSSION**

# COMBINING BUSINESS AND DESIGN

Design thinking based solely on the grounds of design will not be able to truly change an organisation. It is only when we couple design process experts (with no vested interest in perpetuating the current way of doing things) with business content experts (who are looking for ways to think differently about their area of expertise), we create a capacity to envision and realize futures that are both desirable for people and viable for organizations. (Coughlan and Prokopoff, 2006). Business speaks the language of the organization while design

speaks the language of innovation. Both are necessary and need to be combined. Design thinkers realise the need to know both worlds. Design thinking can only create value if they make use of the organization's existing resources (for example existing reports and figures). Coupling design-process experts with business-content experts within a consultancy creates a capacity to envision and realize futures that are both desirable for stakeholders and viable for organizations.

# **DANGERS**

Reading back, it all seems like success will come as long as you take some things into account and try. But this is not the case. Success stories where organizations really realize change are limited. We may have heard companies like Deloitte. Hewlett Packard and Océ that are using design thinking to change their organization. Some of these stories have indeed led to success. But for most companies it's a long journey. Design thinking faces the problem that more and more people claim to be able to implement design thinking as if it were just a management or creativity tool. The risk exists that designers who are not trained for changing organizations or business people with no feeling of design will use the concept of design thinking in their communication without fully grasping its potential. In the long run this may hamper design thinking's reputation. Design thinking is not learned overnight. It is a field that requires experience, and feeling for both business and design. Also, design thinking is not only about working visually, organizing workshops and using lots of post-its. Changing an organization using a designerly approach is about getting the right mindset to think about the future, to be able to take risks, to see solutions where others see difficulties and to adopt an outside in view that co-exists with the inside out view. it really is quite a challenge that shouldn't be taken lightly.

Design consultants need to stay open for other peoples wants, and not become 'cocky' when becoming more established. All of the design consultants we have interviewed have their own specialization. This is very valuable and design consultants should exploit that more. There should be no fear of competition amongst consultants, there is ample opportunity to collaborate with other design consultants, teaming up for projects to get the right expertise at the table. The way Zilver Innovation, Contextqueen, Design Thinkers and others worked together for OHRA is an inspiring example for other design consultants. This culture of collaboration amongst design consultants is growing; just look at the many networks that are set-up where design consultants meet and work together.

# **IMPLICATIONS FOR PRACTICE**

Different aspects have come forward during the interviews with design consultants in practice. But what to focus on? During a personal conversation with Larry Leifer in May 2012, he explains that he sees Design Thinking as the combination of business, design and collaboration. This also comes forward when talking to design consultants. You need business thinking to understand the organization and get designs implemented. Design is necessary to innovate, and support an organization to really change their way of work. All of this is not possible without collaboration, collaboration between the design consultant and the organization but also collaboration within the organization, between stakeholders with different interests, and between departments. Design thinkers have to be aware that making a difference for an organization does not come solely from the design perspective. Appreciation for business thinking and the importance of collaboration should not be overlooked.

To provide a basic structure for the process of change we have combined the insights acquired during the interviews with the transformation process suggested by Kotter in 1995. When showing this process to design consultant they recognized aspects in their own way of

work. Based on the change process of Kotter and the insights of the interviews we propose the process of Figure 2.

The first phase addresses the need to find out what the urgency for the organization. As mentioned earlier, organizations often do not know what they want and how they can achieve this. By getting to know the people in the organization, how they work and what ideas they already have, a start can be made. As soon as the urgency for the organization is unravelled, the team can start with defining the focus for the project.

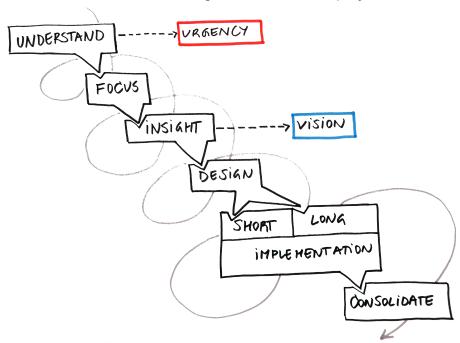


Figure 2 The process for changing an organization based on the interviews with the design consultants. By taking different steps the organization knows what the focus of each step will be and what it will deliver. The entire process has an iterative nature.

In the third phase insights are gathered, either internally or combined with insights from external stakeholders. These insights are necessary to design or improve the new or existing touch points of the organization. The main goal of the first three phases is to create a designerly mindset in the organization. This mindset is necessary to make the organization able to come up with ideas to implement in the organization. These ideas can be divided into two groups: quick short time wins to convince and strengthen the organization, and long term investments to prepare the organization for the future. The last two steps are often forgotten, the need to implement the design in the organization and to consolidate them for the future. This is often the moment where it goes wrong, to make sure the newly created value and its effect can be measured, new KPIs need to be introduced in the organization.

Throughout the process it is important to make use of the strengths of the organization and the knowledge that is already present, either by the people working in the organization or in existing data and already conducted projects.

For design consultants a future with many opportunities lies ahead. Design consultants should keep on challenging themselves, stay curious for the new, develop knowledge during their work, recognize their own strengths and team up to better serve organizations willing to change and create value for their customers.

#### **FUTURE STEPS**

At the moment we are already having interviews with design consultants internationally. Interviews have been conducted in for example Germany and the USA. More will follow in the future. During our interviews with consultants we also have been discussing the tools they have been using. Our primary focus in our research is to learn from the experience of design consultants, but we also want to elaborate on the tools they mentioned. We are going to look for the mechanisms behind these tools, and why design consultants are using them. Even though we have specifically chosen to interview design consultants we feel the need to be able to add the perspective from within organizations that wish to change. A story can only become richer by including more perspectives.

In the end the generated insights will be translated to the Smart Textile Services industry. This industry deals with the challenge of being a very product driven industry (producing garments, fabrics, etc) now face their products being combined with technology and value creating services. The first author is working in a project (CRISP, 2012) in close collaboration with this industry.

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