Consulting Innovation

A Critical Perspective on Innovation Practices
in Human-Centred Innovation Consultancies
through Actor-Network Theory

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“Everyone has a plan, until they get punched in the mouth”

Michael Gerard Tyson

Undisputed heavyweight boxing champion of the world

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Abstract

Human-centred approaches are proclaimed as a new way of solving problems related to competitiveness and globalization. These approaches to managing innovation have become popular in the private and public sector and in academia. As a result an industry of *human-centred innovation consultancies* (HCIC) has emerged over the last 10-15 years in Denmark. HCICs offer clients an outside-in perspective on their organisation through qualitative studies of the clients' users, and consult in managing innovation projects through design methods. However, many projects strand and do not result in any materialized change.

This thesis is a qualitative study of innovation processes in the relation between HCIC, clients and their users. The objective of this thesis is through a case study to provide a critical perspective on how innovation projects are managed in HCICs. With Actor-Network Theory and the framework of translation, it analyses fieldwork and interviews within seven Danish HCICs.

The research of this thesis finds a strategically governing discourse inside HCICs that new knowledge diffuses into client organisations through "Eureka moments", which by itself will lead to innovation over time. A desire to produce innovations free of organisational habit, as part of HCICs' design methods, is sustaining that governing discourse. From a practice perspective this thesis confronts these discourses in arguing that the trajectory of an innovation is a process of translation depended on the innovation's ability to find followers both in and outside the client organisation. The thesis argues that the becoming of an innovation is partially a political process by which the innovation's spokespersons influence others to become attached to the new idea. If an organizational perspective is not addressed through an innovation project it runs the risk of becoming nothing but pies in the sky to the client organization.

Finally, this thesis argues for a dynamic stakeholder analysis throughout a project. For this, the Actor Action Model is proposed as a model for strategically managing actors and actions for an innovation to become. The Actor Action Model facilitates a reflective exercise to accompany the design and qualitative methods practiced in HCICs.

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01 INTRODUCTION

> *"Innovation-based economic growth will bring greater income, higher quality jobs, and improved health and quality of life to all U.S. citizens."*

From President Obama's *Strategy for American Innovation*[1]

Innovation sounds quite promising as the modus operandi for ensuring continuous growth. From President Obama to chief executives to organisations like OECD, innovation-based economies are the western world's *plat du jour*. However, research suggests that only one third of all innovation initiatives achieve any success at all (Beer & Nohria, 2000). Therefore figuring out how to *break the code of change*[2] is a significant and present topic on the agenda in policy-making, product development, organisational change and academia research.

01.1 The field of human-centred innovation consultancies

One approach of engaging into innovation endeavours is the human-centred approach. Although the term might speak for itself, human-centred innovation is about placing the users of a specific product or service's needs, wishes or pains at the core in designing innovations. The approach is inspired by how artists and designers work, where the result emerges as an interaction between object and artist. In this approach rests a promise of novelty, which traditional methods cannot provide. This quote from an innovation consultant, Thomas, can illuminate what human-centred innovation offers:

> *"The client came to us with a problem: They didn't understand why they weren't selling as many televisions as they wanted. Their strategy had until then been giving their TVs as many technical features as possible, pushing the price down, etc. We went out into the*

[1] http://www.whitehouse.gov/innovation/strategy

[2] *Breaking the code of change* was bringing together the most experienced scholars in organisational change, which resulted in a book by the same name (Beer & Nohria, 2000).

field and studied tv-buyers, and in our study we discovered how women was buying TVs in most households. Our study showed that to them, technical features weren't valuable, instead they saw TVs as furniture and what was most important to them was that it looked nice and fit their living room. These insights innovated how our client design and sales are going up." (Interview with Thomas from Ideas That Transform Markets)

Ideas That Transform Markets is a human-centred innovation consultancy (HCIC) that offers qualitative user studies in designing innovation. Through qualitative studies of users, HCICs explore and develop business opportunities for their clients - free of many years of organisational habit. In this story, the innovation process seems straightforward. There is a problem, which is explored and finally exploited. The client *wishes* to sell more televisions but does not know how to. They hire *Ideas That Transform Markets* to *explore* their users, thus producing valuable insights, which the client *exploits* in the design of a new television.

In this story of innovation it is almost like *insights* holds the potential of agency in itself, i.e. it was <u>user insights that innovated</u> the way the client now designs televisions.

As researchers searching to learn how organisations innovate, what is the lesson to be learned from this story? Engaging in innovation processes seems fairly simple from this perspective. Lets take a closer look on the organisational perspective to innovation.

01.1.1 An organisational perspective to innovation

Turning to empirical studies of organisational innovation projects, they indicate that everyday work-life in which an innovation is developed and adopted, is both messy and unpredictable (Van de Ven et al., 1999). American researchers Van de Ven et al. argue that innovation can be seen as a process negotiated through compromises of a manifold of interest both in, and surrounding the innovating organisation. In order for the innovation to become, it needs people who commits to the ideas, and carries them to legitimacy throughout their organisations. To rephrase, innovation is inducing novelty in an existing context through negotiation and compromises between many stakeholders. Matters such as different actors, political interests, technical feasibility, costs, law, etc. all have a say. French sociologist Bruno Latour (2005) argues, from studying innovation in the making, that innovation can be seen as a translation of a concept or idea into a local practice. In his works, he shows how ideas or concepts translate through trials of strength between the manifold of actors who give shape to the innovation. Through a translation, an idea or concept can either be adopted into a local practice or rejected.

01.2 Problem statement

Returning to Ideas That Transform Markets' story, we are left wondering what happened to all the trials of strength? Technical difficulties? Did everyone just agree that designing TVs for women was the way to go? Did the client have to hire new designers who knew what women want? Was it not expensive? What did the engineers say when they were told to make fewer features? When questioning the story one question takes another, and we are left wondering what happened to the manifold of actors making the new TV design a reality.

Stories like Ideas That Transform Markets' are not only promising value propositions to clients, they are also discourses of accusations that governs strategic decisions of managing innovation in the relation between users, clients and themselves.

As a starting point for this thesis, we therefore ask the question:

01.3 Research question

> *How can studying innovation in practice as a process of translation provide a critical perspective to the discourses of value present in human-centred innovation consultancies, and how can this analysis enhance their practice?*

01.3.1 Explanation of research question

The HCICs we study consult clients in innovation. They have different *discourses of value* on how to innovate through qualitative studies of users. These discourses govern strategic decisions on how they manage innovation projects. In this thesis, we want to follow the becoming of an innovation *in practice as a process of translation* providing a *critical perspective* to the discourses. In answering this, we develop a theoretical framework from the critique that can *enhance HCICs' practice* of helping clients innovate.

01.3.2 Sub-questions

To answer our research question, we will answer three sub-questions, which will accordingly structure the chapters throughout this thesis:

1. What are the discourses of value present in HCICs?

To answer this we will identify different discourses on value present in the HCICs we study. These discourses are determent of how the innovation consultants study users, and how they manage their relation to client organisations.

2. How is innovation consulted through qualitative studies of users?

To answer this we will describe the methodology of HCICs and what theoretical foundations they build on. From this methodical understanding we will explore how they study users and the implications for using human-centred methods in real-life practice through innovation projects.

3. How can we understand innovation as a translation of a concept or idea into a local practice?

To answer this sub question, we will describe different innovation projects in practice through the framework of translation. We will return to this framework in chapter 3.

What has not been addressed with a sub question is *how this analysis can enhance their* [HCICs] *practice?* The reason for not addressing this is that the answer is a product of our analysis. Through analysis we identify barriers for innovation in the relation between HCICs, clients and users. In chapter 6, *Discussion*, we will engage in a discussion of these barriers and how to overcome them, to *enhance their practice*.

01.4 Object of study

In the following we will present a brief description of HCICs, followed by a description of this thesis' cases. The purpose of this section is two-fold; first, we will establish a foundation for understanding HCICs and second, we will present the main actors. The thesis is an empirical case study and throughout, we will return to the presented cases.

In Denmark human-centred approaches for innovating is a tradition from trade union action research, known as the Scandinavian tradition (Greenbaum & Kyng, 1991). However, around the millennium a newfound focus of the potential of qualitative studies of users, inspired by companies such as IDEO, gradually found its followers in private and public sectors in Denmark (Lykketoft, 2013). The industry of human-centred innovation consulting has grown largely over the last decade, e.g. all regions in Denmark now have an internal incubating innovation unit serving the hospitals in the region. Also privately held consultancies offer this methodology in servicing both the public and the private sector.

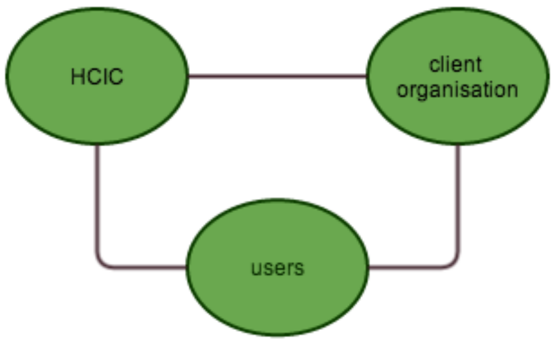

Illustration 1: The dominant actors

Studying users' is placing them as the source of innovation. It is practiced from the belief that if user insights or concepts resonate in the client organisation, a shift in awareness of their users can be exploited in new value creating practices. Innovation is in this form practiced through project-based work in the relation between the three dominant actors: client organisation, innovation consultancy and users (Illustration 1). In practice the innovation projects take a point of departure in areas or problems where the client sees a potential for improvement. Teams are formed between the innovation consultants' and client's representatives. Their object of study is the relation between users and the client organisation. The study has certain time resources and the outcome is user insights and ideas that can diffuse from the project group to the whole client organisation - ultimately leading to materialized change.

Summing up, these HCICs' unique value proposition it is to help clients explore new possibilities through qualitative studies of users for the client to exploit in designing value-creating innovations.

01.5 Case descriptions

In this section we will present the HCICs participating in this thesis. All of the consultancies have had their names changed in order to secure anonymity. We will return to the reasoning for this later. The aim of this section is two-fold, as it simultaneously defines and describes our object of study.

Acknowledging that not two organisations are the same, there will be some multiplicity within our sample. The descriptions are constructed by information retrieved from each HCICs' webpage, annual result reports, strategy documents, slides and other material produced and shared publically by the organisations themselves. To provide our account of each HCIC in a livelier manner, we will add a description of their office space, as we observed them in our interview encounters.

01.5.1 Cases

The following is a table of the cases:

Case 1	**Designing Gov**
	Designing Gov is a cross-governmental public innovation unit owned by three ministries. Projects within Designing Gov are conducted in relation with the ministries and their underlying public agencies. Designing Gov counts 18 employees with various backgrounds like political science, anthropology, design, social science etc.
Value proposition	The vision for Designing Gov is to create better public service using fewer resources or use resources more effectively. They operate with four public sector bottom-lines: outcome, service, productivity and democracy. This is practiced through innovation projects with civil servants from the ministries. Through user involvement they create new solutions for society by capturing the subjective reality of citizens and businesses. Their definition of value is when both the users and the public sector gain from innovation. This is from the belief that this does not have to be a contradiction. Designing Gov's methodologies are anchored in design thinking, qualitative

	research and policy development. They interview, observe, brainstorm, use personas, mapping like e.g. service journeys, prototypes etc.
Office space	Designing Gov is placed inside a ministry building, but as soon as you enter their office you know that this is no regular public sector office. The floors and walls are “designers’ white” and filled with graphical decorations. Most furniture is on wheels and can be moved, so the rooms do not experience ossification. In the back of their office space is a large round, egg-like meeting room sheading an odour of creativity and futuristic aesthetics to the office.

Case 2 Health Lab

The regional council of Southern Denmark and EU funds Health Lab. The different departments within Health Lab work with hospitals, psychiatry and social institutions. Health Lab has 67 employees with various backgrounds from designers and architects, to anthropologists and engineers from all sorts of various master degrees, mainly from social science and humanistic.

Value proposition	The vision of Health Lab is to professionalize the innovation process by changing the innovation culture within the hospitals of the region. This means their aim is not just to develop, but also to ensure growth in the region of Southern Denmark. To promote innovation capacity, they perform innovation projects, education and provide a platform for public-private collaboration. Their methods are based on open innovation, user driven innovation and prototyping. Their foundation builds on co-creation and Design Thinking. The leader of Health Lab has a Design Thinking education from Stanford d.school. They conduct research by interviews, observations, brainstorms, workshops, body storming, cultural probes etc. The project portfolio ranges from a three-year long 1:1 prototype installation of a decentralized ventilation systems for the new “super” hospital, to a project aiming at creating more efficient meetings for the psychiatry in a nearby municipality.
Office space	They are placed in the outskirts of Odense together with other companies within health and welfare technology. Once you enter the main door, you are in a huge hangar resembling office space, filled with movable objects that both screams do-it-yourself mentality and raw industrial architecture. The tables are made of staked palettes with big industrial wheels underneath and thick glass on top. The customary whiteboards are replaced with huge three-sided plywood constructions with a gigantic roll of paper on the top. The floor is concrete and the decorations on the walls are graphical conceptualizations of their methods and cases, presented in coherence with their otherwise graphical identity.

Case 3 Centre for Health Innovation

Centre for Health Innovation is funded through the region of Zealand and EU. They have 16 employees ranging from various backgrounds within sociology, architecture, social- and political science, engineering, communication, and also counting a physiotherapist and a psychologist.

Value proposition

The overall strategy of Center for Health Innovation is to contribute to the continuous development of the hospitals in the region and thereby to ensure growth for the private sector in the region. Therefore, their main interest is in facilitating and providing a platform for public-private collaboration. They understand innovation as creating new knowledge, better technologies and better processes and workflows. They work to improve productivity and a better patient security and quality of life.

Methodically this is practised through patient empowerment and co-production with healthcare professionals, patients and relatives. They have an “idea-line” with the purpose of generating ideas from patients and employees. As an educational and idea generating activity, they facilitate workshops and three-day courses in innovation for the departments within the hospitals in the region.

Office space

Center for Health Innovation is situated within a hospital. Their office gives the impression of an overnight makeover where a bunch of white designers’ furniture was put into an old hospital ward. Although, being the top floor, they had sloping walls creating a cosy loft atmosphere in their main office space. Many employees were working side by side in a rather crammed open office milieu. In the small lunchroom a large horizontal poster with the skyline of Manhattan had hidden the hospital atmosphere and replaced it with a metropolitan vibe.

Case 4 We Know People

We Know People’s clients are both public and private organisations. They are funded according to contracts and take on projects from the state, municipalities, regions and EU who often funds and pools for enabling innovation projects.The organisation has 15 employees with a strong business and anthropology emphasis, supplemented with a designer and an engineer.

Value proposition	At We Know People they see themselves as facilitators and partners in midsized to large innovation projects. They define their strategy as a contributioner to growth and welfare. The understanding of innovation at We Know People is to accept uncertainty.They work from this acceptance of not knowing what a process will produce, but they trust that their methods and analysis will reach an innovative foundation. Innovation to We Know People departs from studying the human condition - our needs, how we relate to each other and how we interact with technology. As an attempt to fulfil this, they make “living labs.” A living lab is method for collaboration with multiple actors in trying to solve problems in a concrete setting. This is a holistic approach, which defines a milieu, identifies their problems and creates solutions for them in order to scale to a broader context.
Office space	In the industrial area of Valby, next to repair shops and the rails, We Know People has an office space in a shared office hotel. We only saw the common meeting room, but the entire floor resembled some public institution office building. Their office did not, like the other HCICs we have studied, have a design identity.

Case 5 Innovate Now

As the smallest organisation in our sample we have Innovate Now. The consultancy has grown from two persons to ten over the last two years. The employees have anthropology, sociology or design backgrounds, and judging from their profiles on the webpage, studying abroad seems to be a common trait. Innovate Now is a privately held consultancy, working for both public and private organisations.

Value proposition	Innovate Now stimulates, counsels and manage innovation processes. By identifying patterns in user behaviour from ethnographic methods, Innovate Now explores the needs, pains and wishes of users. Insights from studying users, combined with market trends, is transformed into concepts that create new opportunities for clients. They also offer to work with what they call organisational innovation capacity. Innovate Now train managers and employees in thinking differently. Theoretically and methodically they are drawing on social science, behavioural economics and design thinking.
Office space	In an office hotel in Copenhagen’s hip meatpacking district we find Innovate Now. The atmosphere is urban, creative and entrepreneurial. The reception is

	made from expensive wood in organic forms. Build in the reception desk is a large aquarium. The walls are behind floor to ceiling stabled wood logs and a bar serves a variety of coffees, just like a regular Copenhagen café.

Case 6 Ideas That Transform Markets

	Ideas That Transform Markets is a strategy and innovation consultancy. They study human behaviour through qualitative methods known from social science. They are a mix of sociologists, anthropologists, economists, journalist and designers. The total list of employees is not available as with the other cases, but we guess from our visit at their office, that they are approximatly thirty employees in their Copenhagen department. They call their overall method applied business anthropology and practice this from their offices in Copenhagen and New York. They work for larger international private companies and public institutions.
Value proposition	By looking at people in their environment, their habits, what they think and do, Ideas That Transform Markets compiles this as data and patterns. From this they build theories and test them with users to develop new marketplaces for clients. They use insights to form actionable strategically recommendations for clients.
Office space	With an address you would normally associate with high profiled law firms in the centre of Copenhagen they have a straight view to Rosenborg castle. The hall and staircase leading to the office is made of marble, it is spacious and looks like the inside of an old renaissance castle. The inside of the office has wood panels and ornamentations giving grandiose connotation. The furnishing is modern and minimalistic.

Case 7 Strategic Design

	Strategic Design is a design agency that consult private and public organisation in innovation projects. The company has departments in several locations in Denmark and Europe with their head office in Århus Denmark. Strategic Design employs more than 300 people with a background design, etnology, anthropology, sociology, economy, management, etc.
Value proposition	Informed by qualitative studies of users, Strategic Design offers design that challenge conventional assumptions about humans, to create what they call

	disruptive and future-ready solutions across an entire customer experience. Through user studies, they create services and products that focus on a holistic experience.
Office space	In an old factory building in Copenhagens first-mover neighborhood NV we find Strategic Design. The atmosphere is urban and the arsenal of iMac computers gently distort the office's former history as a factory. Account managers, salesmen, managers and HR share one open office and "the creatives" share another. The rooms are "designers' white" and flooded with 3D printed objects and pictures from old projects.

Tabel 1: Descriptions of cases

This table is representing our cases. We will return to these cases throughout this thesis, as these provide us with the empirical material needed to answer our research question. The reasoning for choosing exactly these seven cases is something we will return to in chapter 4; Method.

01.6 Motivation

As a finale to this chapter we want to present the reader with the authors' background for writing this thesis. As we argue in chapter 4 Method it is important to acknowledge and give the reader insight in the propositions we as researchers carry into this thesis.

Our motivation comes from one corner of our curriculum in our master programme dealing with human-centred approaches to innovation. This has inspired us both to engage in internships in organisations that consult through human-centred innovation methods. Initially, our interest was to study and learn human-centred methods by experiencing them in a real-life workplace. This we did and we are grateful for what we have seen and learned by engaging in various innovation projects. We have worked side-by-side with competent and talented innovation consultants in the field.

Focus

In observing how innovation is practiced in real-life we noticed the following:

- How unexpected actors, such as persons, laws, costs, etc. would often barge in and exert a significant role in the trajectory of a project. However, these issues were rarely addressed in the project group.
- How some projects seemed, by the consultants we followed, to have an inherent destiny either declaring the project "dead on arrival" or the project would have a positive connotation and momentum signifying them.

From this we gathered that the consultants' human-centred methods were not sufficient in explaining the becoming of an innovation. We therefore wish to shed a light on the discourses of value, like the one presented earlier in this chapter, present in HCICs from a real-life practice perspective. In our experience the innovation consultants' methodology appeared to be: "If we free ourselves from organisational habit and create excellent knowledge of users, this will over time diffuse through the client organisation - leading to innovation."

Furthermore, we were curious of why many of the innovation projects we participated in ended in diagnosing clients as *"resistant", "not ready for change", "bureaucratic", "stubborn", etc.,* when projects stranded and were rejected. What motivates us in writing this thesis is to critically access these discourses to show they govern practices in HCICs.

Furthermore, when interviewing various innovation consultants, we have been met with a great deal of interest for our project. What characterize the interviewed consultants, are their eagerness to learn and their willingness to be challenged on their methodology. This means that even though this thesis takes a critical reflective position towards this industry, we have been met with their full support in writing it.

01.7 Structure of this thesis

Chapter 1 establishes our field of interest, our problem and presents the cases laying ground for the study,

Chapter 2 contains a literature review about innovation and human-centred approaches. Here we establish a theoretical discussion between *management* and *innovation* and how design and human-centred methods is a product of a dichotomic relation between the two.

Chapter 3 presents Actor-Network Theory and relevant concepts from this theoretical landscape. Which we make use of in our analysis.

Chapter 4 explains our choices of methodology and research design. Our ontology with a background in ANT is explained, how we combine this with case studies and what we did to gather our empirical material.

Chapter 5 is our analysis. Here we present our empirical material structured to answer the three sub questions to this thesis' research question.

Chapter 6 will discuss the analysis and develop a theoretical framework to encompass barriers for innovation in the relation between HCICs, clients and users. This chapter will present the Actor Action model, and discuss what our analysis implies to the role of an innovation consultant.

Chapter 7 is the conclusion to this thesis.

02 MANAGING INNOVATION – A REVIEW

The HCICs we have studied manage innovation processes from a certain starting point. As part of their distinctiveness, they contrast themselves to traditional management thus creating a dichotomy. Their methods for innovating are inspired by artists and designers. Inherent in these methods is a qualitative starting point of exploring.

In this chapter, we will present a literature review of innovation management and how HCICs' position themselves as opposed to traditional management. We do this both to put HCICs in a theoretical and historical context, but also to give the reader an insight in some of the literature that has shaped the industry.

First, we will describe a rising innovation discourse within HCICs based on design methods as a new way of solving problems by placing users at the core of the innovation process. The main argument present in this innovation discourse seems to be: "*It is time to reconceive the future and stop replicating the past."* (Goodwin & Mucha, 2008, p.2). Hjorth & Kostera (2007) contrast the dichotomy further by defining traditional management as planning and executing, i.e. drawing on past experiences, and define innovation management as the act of creating something that does not already exist.

Second, we will describe theory on the use of qualitative user studies as a source of innovation. Like with innovation management, these are by HCICs seen in dichotomic relation to quantitative knowledge and requirements to validity.

Third, as the two first sections deal with theory meant for application in management of innovation processes, we finish by presenting an organizational perspective to innovation processes provided by Van de Ven et al.

02.1 The innovation discourse

To describe the innovation discourse, we will present different, yet similar, understandings of a dichotomy between innovation management and traditional management. From this, we will present theory on how users become the source for innovation, and finally we will address some implications for the position HCIC hold in this dichotomy.

Some fundamental shifts are taking place in the post-industrial age, calling for a new type of management. With the decline in manufacturing, a new economic structure known as *information society* or *knowledge economy* emerges (Dean & Kretschmer, 2007, p.573). It is from this shift that new theories of innovation and economic growth have raised (Ibid.). It is reasoned herein that innovative thinking is required to stay on top of the game in this new structural landscape and in this discourse, innovation management becomes the rescuer, and the traditional form of management becomes the old way of operating - only capable of reproducing the past (Goodwin & Mucha 2008, Birkinshaw et al. 2007, p.67).

Austin & Devin (2010) point toward methods from art and design as the solutions to encompass this new landscape, as well as a body of literature is proposing such methods like *Aesthetic Intelligence* (Goodwin & Mucha 2008), *Artful Process* (Austin & Devin 2004), *Fine Art Thinking* (Barry & Meisiek 2010), *Design Thinking* (Brown 2008), and *The Design of Business* (Martin 2007).

02.2 Design to the rescue

To give examples of this dichotomy, we will present three different theories of managing innovation from a design perspective. They all establish a dichotomy in describing two fundamentally different forms of management.

- Boland and Collopy in differentiating the **design** and **decision attitude**
- James March in differentiating **exploration** and **exploitation**
- Roger Martin in differentiating **invention** and **administration of business**

02.2.1 Boland & Collopy on design and decision attitude

According to Boland and Collopy (2004, p.9) *"Designers relish the lack of predictable outcome"*. In a design attitude the problem and the outcome of an innovation project is debatable, as the path of an innovation is unknown beforehand. In the initial phase of management from a design attitude, the problem is explored with questions like *"What is learning?"* or *"What is an office",* trying to expose those assumptions that have become invisible and unnoticed. The following quote illustrates the point well:

> *"A designer looks for the real thing we are trying to accomplish, unvarnished by the residue of years of organisational habit."* (Ibid).

A designer is going beyond default solutions, starting from square one when creating opportunities for the future, arguing they can forget the messiness of every-day life in doing so. From this perspective, the opposite of the design attitude is the decision attitude. In this definition, the decision attitude is part of traditional management. To illustrate the difference this juxtaposition is given by Boland and Collopy (2004, p. 4):

> *"The decision attitude assumes it is easy to come up alternatives to consider, but difficult to choose among them. The design attitude towards problems solving, in contrast, assumes it is difficult to design a good alternative, but once you have developed a truly great one, the decision about which alternative to select becomes trivial."*

It is either about deciding upon- or designing the optimal alternative. This means that with a decision attitude a consultant can forecast each alternative and make the result the source of decision. With a design attitude a consultant first has to design the alternative, and by doing so, making it the only alternative. According to Boland & Collopy decision attitude is overwhelmingly dominant in management practice today, e.g. by economic analysis and risk assessment. This form of reasoning requires rather stable environments, in order for such analysis based on the past, to repeat in the future. The design attitude however, is proposing a new way of managing innovation in the *new structural landscape.*

Reviewing Boland & Collopy certain elements of their understanding of their design attitude raise some potential tension when applying this attitude in practice. They argue a design attitude is *unvarnished by the residue of years of organisational habit*, which is in contrast to producing solutions for real life practice of an organisation, characterised by *the residue of years of organisational habit.* The design attitude does not provide an answer to how the innovation is translated in the organisation, ensuring there is a match between the innovation and the organisational habit.

Second, in the design attitude it is assumed *that once you have developed a truly great solution* there is no doubt that this is the best solution. Does this design attitude towards the solutions produced, have significance to the following diffusion in the client organisation?

02.2.2 James March on exploration and exploitation

In his renowned article from 1991, March defines the dichotomy in juxtaposing two different modes of development and use of knowledge in organizations. He addresses the different forms of management where innovation management is through exploration, and traditional management is about executing and exploitation. March (1991) provides these descriptions:

- Exploration is about *search, variation, risk taking, experimentation, play, flexibility*, and *discovery.*
- Exploitation is about *refinement, choice, production, efficiency, selection and implementation*.

The problem is that these modes compete for scarce resources and according to March, the battleground is about considering the risk assessment of future returns. For organisations, this means choosing between exploration, where the future returns are initially unknown, and exploitation, where the currently available information is used to predict future returns. In the short term, the risk assessment in exploitation of an existing solution seems more attractive, instead of exploring for new alternatives, although this is required from a long-term perspective. One does not replace the other as most organisations both plan and execute their current business on the same time they search for new opportunities (Levinthal & March, 1993, p. 105).

In March's definitions there is a tension in choosing among exploration and exploitation for decision makers, when investing in future returns. In exploitation the expected outcome of a new project exploiting an existing solution becomes the argument for this particular project (as a note: expectations of future return does not necessarily entail deliverance on that promise). In contrast, in exploration, the future returns are initially unknown, which makes exploration risky. In this light exploration practitioners have to convince a client of the future returns an exploration project will bring. Stories of previous successes, in explaining how exploration has created value, are important in convincing decisions-makers to take on the risk of exploration. Furthermore, returning to the innovation discourse, stating that you must stop replicating the past also becomes the exact argument for deciding on exploration over exploitation.

It is relevant to address how claims of future returns are managed in practice and in what degree they affect the innovation project?

02.2.3 Roger Martin on intuitive and analytical thinking

Roger Martin (2009) defines the dichotomy between *the invention of business* and *the administration of business*. As many others, he has adopted the concept of exploration and exploitation from March:

> *"These organisations, solely dedicated to exploitation, might last somewhat longer than exploration-only business, but the business that creates value only through exploitation will exhaust itself in due course. It can't keep exploiting the same piece of knowledge forever. If it tries to do so, the cost to the business can be devastating."*
> (Martin, 2009, p.19)

Departing in the dichotomy he argues that without exploration, a business will eventually cease to exist. His contribution to the field of innovation management is design thinking – the concept of thinking like a designer and not the method Design Thinking as practiced by e.g. IDEO, although similar, Design Thinking is a five-stage model. Martin's definition of design thinking is a combination of *intuitive* and *analytical* thinking. Intuitive thinking is the art of knowing without reasoning, or the unanalysed flash of insight, such as the world of originality and invention. Analytical thinking is contrasting intuitive thinking, relying on quantitative analysis to decision making. Martin argues for a dynamic interplay between them in his definition of design thinking. In contrast to Bolland & Collopy and March, his concept of design thinking is presenting a prescriptive model – *the knowledge funnel*. Passing through the funnel means simplifying, or converging, the world's complexity through iterative yet consecutive steps of defining a phenomenon, building heuristics and producing algorithms. According to the model, the innovation consultant can deliver validated knowledge ready to exploit in the client organisation, this is the dichotomy between *the invention of business* (innovation management) and *the administration of business* (traditional management).

This understanding of design thinking and Martin's knowledge funnel is exploring the realm of the users. As with other design methods they are iterative as they are inspired by artists and designers iterative approach, where the exact final result is not known beforehand. A piece of art is the product of an artist interacting with the material with information exchange between the artist and the object from start to finish. This circular, or iterative, process becomes codified through Martin's knowledge funnel. He describes successive convergence through the funnel from general to specific, and through validation by users, the emergent knowledge develops into an algorithm. Algorithms are mathematical formulas providing a step-by-step procedure. From this mathematical expression Martin has codified the iterative in a linear model. As a prescriptive model this linearity correlates with inherent circumstances of innovation projects bound in time, i.e. a linear progress makes the model attractive when planning a project.

It is interesting to study how the iterative and emerging nature of a design approach can be practiced through a timely linear real life situation. Or how is emerging knowledge practiced in the realm of an innovation project bound in time?

02.2.4 Summing up design to the rescue

Through these three definitions, we have outlined some of the tensions upholding such a dichotomy can provide. None of these definitions seem to conceptualize how to implement innovation. The focus of these definitions is contrasting a specific attitude in innovation management with traditional management. In this undertaking, the disinterest in established knowledge seems to neglect the organisational perspective. The design attitude is explicitly trying to avoid the organisational habits and the knowledge funnel is delivering a linear model promising progress in an iterative process. This addresses some contextual concerns for the design methods and as a contribution to the practical implications of innovation management Van de Ven et al. have synthesised 17 years of research on innovation in the book *The Innovation Journey.* The following will present that perspective.

02.3 Van de Ven et al.

Van de Ven et al. (1999) portray the innovation process as a journey with an underlying structure of three key phases*: initiation, development and implementation*. Although such common attributes, each individual project has its own set of contingent circumstances defining and emerging as the project becomes (Ibid., p.67).

Central to Van de Ven et al. is their notion of the innovation journey as an *"exploration into the unknown process by which novelty emerges."* (Ibid., p.3). According to them, innovation was conventionally seen as a single and stable idea throughout its development. For this to happen, all parties would have a consensus view of the idea from the beginning and through out the innovation process. The context in which the innovation would progress was seen as stable in regards of resources and constraints, meaning that the surrounding network which the innovation would interact with, was understood as fairly stable during the development period. Therefore innovation processes could be formalised through a series of definable stages such as inception, development, testing, adoption and diffusion (Ibid., p.8). Nevertheless Van de Ven et al. observed how innovation occurred in real life; ideas would turn into multiple ideas, some ideas were discarded and new were born, and invention was often reinvented. Many people were involved, if only partially, and they would have other tasks during the development period, and multiple environments made the whole innovation process more fuzzy. Assessment of a project's value was constantly reassessed throughout the process, as multiple and related assessments or spin-offs would occur, thus as the outcome was reconstructed, it would lead the innovation in new directions (Ibid., p.9-11).

Similar to the design methods Van de Ven et al. classify the innovation through the phases: Initiation, development and implementation. Initiation and development has reminiscence to the exploration part where an innovation takes shape through design methods. Having reached a stage of implementation, means the solution has been defined in the latter part; it then just becomes a matter of planning and executing with means of traditional management.

Where Van de Ven et al. can provide a different perspective is when studying innovation in real life. Following such phases would require a stable environment, but as their research suggests, the environment is fuzzy. In real life the environments are not stable as there are multiple environments at the same time. The outcome of an innovation is reassessed when meeting the organizational structure (or mess) leading the innovation in new directions. Departing in Van de Ven et al. studying innovation in practice is an understanding of changing environments and a framework like Actor-Network Theory can illustrate this.

02.4 The source of innovation

In discussing the design methods, we have presented a discourse on how to manage innovation in a new landscape with the understanding of knowledge as emergent. In this section we will address the source of innovation.

Novel ways of managing innovation are only interesting if they open the way to new insight (Von Hippel, 1988, p.4). Therefore according to Von Hippel the discourse presented above is only interesting if it produces new insight. In his studies, he has identified different sources of innovation deriving from different industries. One of the sources for innovation in traditional management is the informal know-how of research and development (R&D)(Ibid.).

Another source of innovation is users, i.e. studying users through qualitative research. Numerous studies indicate that users develop important innovations (Von Hippel, 2005, p. 21). Von Hippel argues for lead users as the source of innovation. Lead users are the experienced users of a product or service.

Organisations can shift their source of innovation if they have a hypothesis that another approach would maximise the innovation benefit, although this has implications for the organization (Ibid., p. 7-9). Trying to shift from R&D to user-centric Von Hippel notes that one should not try to make the R&D engineers interested in user exploration, as they are trained and motivated in foreseeing the entire product development themselves (Ibid., p. 9). It would make sense to reorganise and hire qualitative competences and not transform an R&D department. They should have thorough experience with qualitative research and have qualitative sensitivity towards the users and they are not producing knowledge through expertise like in an R&D department. Organisations organise their staff and innovation-related activities based on their understanding of the best source of innovation (Von Hippel 1988, p. 76).

To enhance the understanding of qualitative research Kvale & Brinkman (2009) contrast it to quantitative research in the following two metaphors:

- In quantitative research the researcher is portrayed as a gold-digger in search for lumps of knowledge, already lying out there ready to be discovered. This knowledge can then be assembled and neutrally be presented to others.
- Working from qualitative principles the researcher is portrayed as the traveller who moves around in the landscape and interacts with those the researcher meets and through these encounters, the researcher has something to report upon return.

These two different forms of creating knowledge are used in the two positions we have outlined in the dichotomy. Quantitative research is often practiced in traditional management and in innovation users are studied through qualitative research. Here, the source of innovation is not an object, but a subject you can interact with and thereby produce providing (Ibid.). In various innovation understandings like co-creation, design driven innovation, design thinking, people-centric innovation, etc. qualitative research is the backbone (Sanders, 2006). Another way of explaining this is how the users' *tacit* knowledge and the researchers' more abstract and analytical knowledge are combined in the development process. Tacit knowledge is *implicit* knowledge that people have and are not necessarily able to articulate

(Spinuzzi, 2005, p. 164-165). Working as a curious traveller interacting with the users, creates knowledge working as a gold-digger will not obtain and vice versa.

Depending on the context and the purpose of an innovation, Von Hippel is promoting lead users as the source. He argues for qualitative competences in exploring the users, not compatible with the specialized knowledge of e.g. an engineer. This shapes the composition of competences in the field of innovation management when placing users at the core. How does this affect the innovation project when replacing specialized knowledge with qualitative skills?

02.5 Summing up chapter 2

In this chapter we have argued for a body of literature favouring a new type of management. By contrasting innovation management to traditional management, a dichotomy becomes present. This creates an innovation discourse promising growth by novel offerings instead of reproducing the past.

Illustration X is illustrating the dichotomy according to our presented theory.

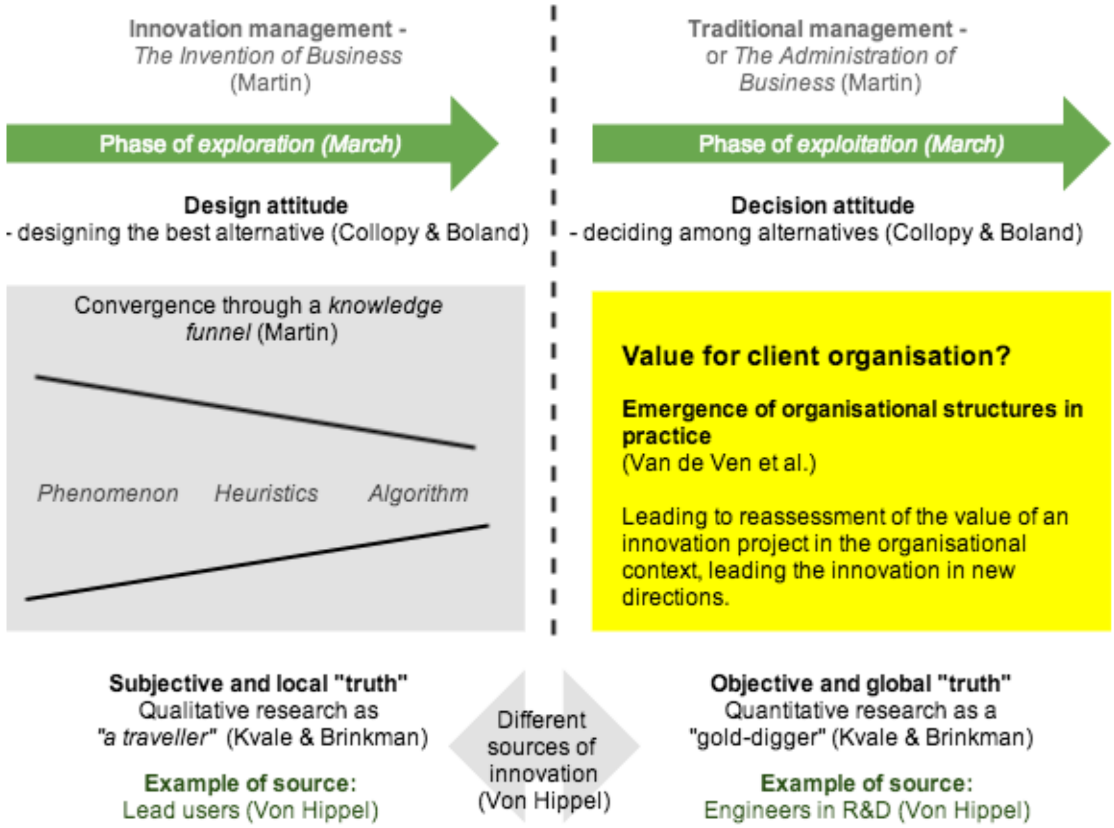

Illustration 2 The dichotomy

Explaining the illustration

The left side of "Illustration 2 The dichotomy" is an assembling of the theory on design methods within innovation management. The funnel, although iterative in its becoming, becomes linear, promising that knowledge converges into an algorithm once the knowledge funnel is followed. The right side of the illustration presents the traditional management of plan and execute, matching the equivalent alternative from the left side. The *knowledge funnel* is Martins *invention of business* proposal and is countered by *the administration of business*. This has no model and therefore the "Value for client organisation" is placed opposite the knowledge funnel. It represents the practical understanding of organisational structures, as this represents Van de Ven et al.'s understanding of organisational structures emerging when novelty emerges, i.e. the organisational environment and the people in it react to a novel proposal. As a note, although presenting these terms aligned (they are not absolute comparable), the illustration functions as a representation to underline the dichotomy we have outlined.

As part of this thesis, we are interested in understanding the implications of the innovation discourse for the HCIC we study. Presenting stories like the redesign of a television in our introduction and other promising stories of the value a HCIC produces can be understood in the light of this innovation discourse present in HCIC. We start to see the contours of a tension between “the idea of insights which innovate because of a eureka moment” and “practical studies of innovation” in the light of this review. This calls for further research in the practical application of such methods, which is what the present thesis provides.

03 THEORY

In this chapter we will present the relevant theory needed for our analysis. To study innovation in real life we will turn to the manifold frameworks presented in Actor-Network Theory. The changing environments of a real life innovation project can through ANT be mapped through actors and their relation in an actor-network. By following agency, ANT will be our frame to understand the becoming of an innovation.

Through the framework of translation we will present the four moments: problematization, interessement, enrolment and mobilization. As a nuance to the translation process the obligatory passage point becomes important throughout an innovation project. An innovation project can be understood as a temporary local network with the aim of making changes in the surrounding global network. In this understanding the strength of an obligatory passage point becomes important in translating the knowledge produced from the local network into the global network.

Finally, we will present the understanding of discourses in ANT, as this will provide us with a frame for analysing the innovation discourse and the related discourse present in our field of study.

In following this structure we will present our theoretical frame and relate it to our field of interest by outlining some basic structures of actor and their relations.

03.1 Actor-network theory

> *"ANT is simply the social theory that has made the decision to follow the natives, no matter which metaphysical imbroglios they lead us into."* (Latour, 2005, p.62)

ANT is the study of Actors' relations in the formation of Actor-Networks. This requires what ANT calls *to start blank* and not beforehand attach certain qualities to certain actors. Therefore ANT does not distinguish between humans or non-humans, but only look for the action an actor possesses or exercises.

In their article *"The key to success in innovation - The art of interessement"* Akrich, Callon and Latour (2002) share the mission of Van de Ven et al., i.e. to understand the becoming of innovation. Akrich et al. challenge the narratives of how innovations were created by critically assessing cases of innovation in the making. The problem with stories of success and failure is that they are created in retrospect, where all decisions made during the process looks like a linear path to the end. According to them, there is no learning from these stories which can be applied in innovation management:

> *"What purpose is there in explaining this resounding fiasco by invoking technical difficulties, market evolution or the project's dubious profitability? All of these are true, banally so, but they are of a truth blindly created by the story. Doctus post factum. Once these rather provisional certainties are painfully obtained, the lesson is learned and the file closed."* (Akrich et al., 2002, p.190)

Akrich et al. argue how myths of the fantastic one-person as the key to innovation exist and become explanatory for many innovations' successes or failures. They critique these myths for not helping practitioners in managing innovation, as no single person can be accused for an entire innovation process. They argue:

> *"the individual qualities of insight, intuition, sense of anticipation, quick reactions, skilfulness, must all be reinvented and reformulated in the language of the organization."* (Ibid.)

An innovation is therefore not an accomplishment of a single actor, but the process and product of translating language, interest and intentions between various actors involved. These translations are complex and hard to grasp, but it is in this complexity the answer of the innovation's paths lay. It is only by studying important agency to the innovation and to not decay to the stories in which demand, technical construction, costs and an organisation that never saw difficulties, that we can explain and learn from innovation processes.

03.1.1 Black boxes

A central concept in ANT is "black boxes". A black box contains what we no longer need to reconsider. The more elements one can place in a black box the broader the construction of the box becomes. However, black boxes are never fully closed or fastened (Callon & Latour, 1981, p.285).

Understanding black boxes can be explained by zooming in and out of an actor-network. One can consider an entity just as an actor or one can consider it as the underlying actor-network constituting that specific actor (Callon, 1987). This means one can black box an actor-network forming an actor and one can unbox an actor to uncover the actor-network it consists of.

When opening a black box to take a look inside you will see the associations and relations of the actors inside. The goal of opening black boxes is to discover what they contain and how their content is structured; and how this is inscribed within the black box (Latour, 1987, p.13).

03.2 Studying relations instead of entities

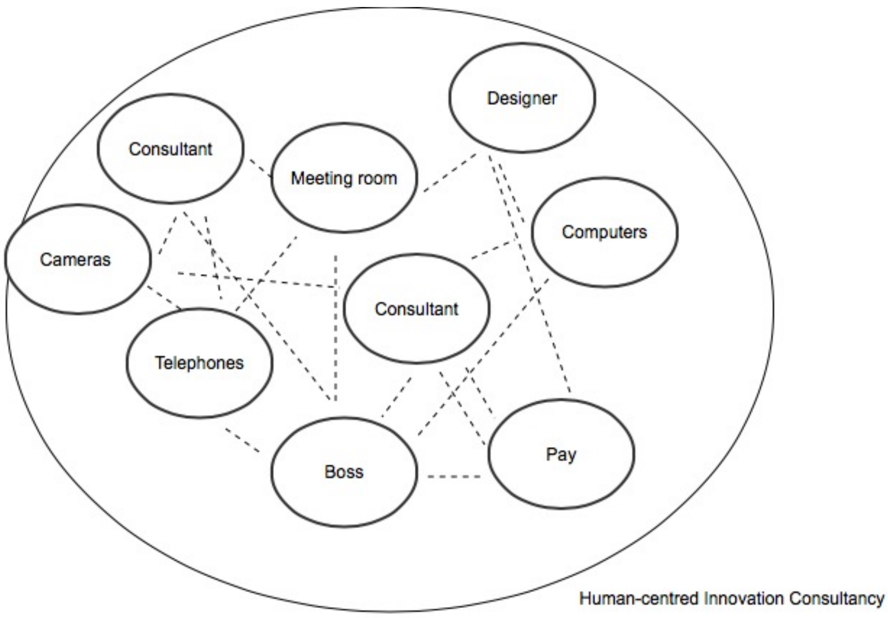

Illustration 3: Example of actors in a network

HCICs can be thought of as a black box. They are closed entities, but when you open them you will see that they exist of consultants, designers, formal hierarchies, computers, cameras, contracts, flirts at the office, research methods, payrolls, etc (see Illustration 3). These actors and their relations constitute the actor-network and make each and everyone of the HCICs unique. The relations between actors are what give shape to everyday agency at the workplace. However, actors with strong associations do not only define each HCIC, they also define the relations to the larger actor-network, in which the organisation operates. When studying innovation projects we explore the relations between the actor-networks that are central for the innovation process by adhering to the principle of following the actors.

In human-centred innovation the central actor-network consists of *HCIC*, *clients* and *users* (Illustration 4).

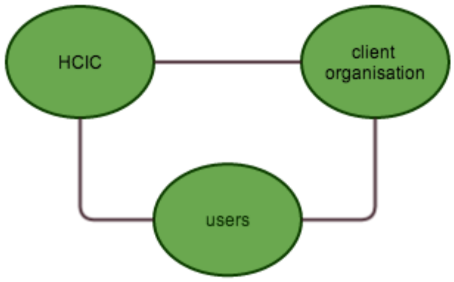

Illustration 4: The central actor-network

Black boxing these actor-networks will produce the simple actor-network in Illustration 4 and provide an overview by mapping how they are related on the macro level. Once established, unboxing the various actors gives a detailed map of the particularities of each relation, i.e. what is special about the HCIC-user relation, the client-user relation and the HCIC-client relation?

In introducing the innovation project in the actor-network we will turn to the ANT concept of a local and global network, and their creation through an obligatory passage point.

03.2.1 Innovation as translation

When working with innovation projects in an organisational context, as HCICs do, innovation is always incorporated into an existing network – the client organisation - a process which is hard to predict and control (Reff & Johansen, 2011, p.107). Innovation in an existing network is created through alliances between different actors and their relations. Ideas or concepts are nothing in them selves, but become innovation when they are translated into a local practice (Ibid., p.108).

ANT scholar Michel Callon (1986) has divided the becoming of a network into four moments: *problematization, interessement, enrolment* and *mobilization*. These are four distinct moments, although they can overlap, which make up the broader events known as translation. The first moment - **problematization -** can be understood as the actions of identifying and determining the actors' involvement in an event, therein positioning them as indispensable. The actor positions himself as an obligatory passage point (OPP) in the network, while joining, forcing and creating alliances to accomplish a certain and defined goal. The problematization defines the stakeholders producing the actor-network and needs to be accepted since it defines the realm of possible solutions. If this framing of the problem is accepted, the actor-network emerges as indispensable and as an obligatory point of passage. (Ibid.)

The moment of problematization can fairly easily be seen in our field of study, since contact between the innovation consultancies and clients are established through a problem or interest within the client organisation. However, that does not necessarily mean that the innovation consultancy accepts the client's version of the problem.

The second moment is **interessement**, which is a series of actions performed by an entity (e.g. a consultant, researchers, politician, etc.) that attempts to impose and stabilize the identities of actors. The actors have been identified through problematization, but are yet to be tested and checked for stability, which would therein strengthen their collective understanding of which positions they hold in the network. If an actor within a network does not submit to certain plans that are initiated, or the roles which she and others are to fulfil, then that network is redefined. The actors need to negotiate a working terrain and relationship that is agreed upon if they are to succeed in moving closer towards their goals. Again, this network is never static and must be worked upon by numerous actors in order to maintain existence in one capacity or another. These actions attempt to solidify the positioning of the different actors involved. This is *interessement*, and if it is successful it achieves enrolment. (Ibid.)

In our field of study, moments of *interessement* relate to the actions taken by the innovation consultants to strengthen the innovations actor-network. This is done both through stabilising users in text, pictures and other acts that strengthen the network, or in trying to align a broader field of actors.

Enrolment, the third moment of translation, is a designation of devices that help to define and coordinate roles of actors. One can think of enrolment as a series of negotiations between actors that accompany moments of *interessement* and allows them to succeed. These negotiations tend to be multilateral and while the consultant and the consulted may agree upon their positions and roles, another member of that network - who is not in accordance - can threaten the success of enrolment. For example the consultant and the consulted may agree on a new product or service but external actors, such as technical complications, costs or legal implications might determine feasibility. All innovation is intertwined in various political, public, legal, economic etc. interests. It is also important to note that enrolment can happen without visible resistance. (Ibid.)

The final moment of translation, **mobilization** of allies, is the representation of different populations or groups within a network either through representatives or spokespeople. Who is representing whom and who speaks for whom are the two fundamental questions pertaining to mobilization of allies. The consultant represents the voice of users, and a client project manager speaks on behalf of his/hers organisation (Ibid.). However as the project group is leaving their small network in order for the becoming of an innovation, they need alliances for implementation to happen. For this to occur, the other steps of translation have to be present. When innovation projects never reach implementation, it is because of conflicting interests in the other steps of translation.

Paramount to the understanding of translation is that it is an on-going process and it is never completely finished. These moments – problematization, interessement, enrolment, and mobilization - comprise a process, not a result, and they are constantly blurred at their edges. That is to say that while four moments can occur, they do not exist separate and independent of each other; contrarily, they are interlinked, dependent and evolving together during this process. In this light, the working process of the consultants and the consulted may appear one way early in their relationship, but will inevitably bend and change through the four moments of translation.

The four moments in a translation process can be used to describe an innovation process. The question however, from a practitioner's perspective, is if this way of viewing the premises for innovation is useful? Akrich et al. argue:

> *"The cases of successful implementation are very revealing: they demonstrate the formidable mobilisation necessary to diffuse an innovation. First of all, it is necessary to have a consenting management which is not discouraged by the desperately negative results of the first experiments, and which must be permanently convinced of the long-term interest of the process."*
>
> (Akrich et al., 2002b, p.208)

Taking a closer look on this *formidable mobilisation* it has to do with 1) actors consenting through acts of interessement, 2) these actors accepting new knowledge as it emerges through the process and 3) that there is a timeliness for innovation to materialize.

03.2.2 Spokespersons

Akrich et al also points to the importance of "spokespersons". These are people who can speak on behalf of an enrolled actor-network and pave the way for an innovation in mobilizing others. Different spokespersons can be relevant at different times depending on the project. The spokespersons speak the cause of the actor-network giving the impression that his/hers discourse, even though held by a single being, is credible. Therefore spokespersons are those who negotiate the innovation project through an organisation and carry it into acceptance and legitimacy. (Akrich et al., 2002b, p.219)

03.3 Local and global networks and obligatory passage points

In Law and Callon's (1992) 'The life and death of an aircraft' we find some useful theory on defining the characteristics of an innovation project.

As a project is established, a distinction between the inside and the outside of the project is described as the local and the global network. This is practiced through problematization and the establishment of an obligatory passage point. The following will explain the relevant terms for understanding a project according to Actor-Network Theory.

03.3.1 The local network

When a project is established it translates into a new actor-network. Some actors inside an actor-network are forming a local network, thus making the remaining actor-network the global network. The local network, so to speak, lends resources from the outside network. The local network of a project becomes a space of negotiation through a certain amount of time. In return the local network generates intermediaries back to the actors of the global network. Being a negotiation space, the local network of a project has achieved a degree of autonomy from the global network. (Ibid.)

03.3.2 The global network

The global network, being the network surrounding the local; their neighbour's so to speak. The global can provide resources like: finance, political support, technology etc. as well as the global network can challenge the local with hostility or other opposing acts towards the local network. (Ibid.)

03.3.3 Problematization and obligatory passage point – defining local and global networks

Defining the actors and their role in a project is the act of problematization. As the nature of a problem is defined the relevant actors are defined/redefined. When defined, these actors become indispensable and an obligatory passage point (OPP) is established. Therefore the OPP becomes determent of the actors of the project and its neighbours, the local and the global network. According to Law and Callon (Ibid.) it is difficult to define the appropriate arrangement of the relationship between the project and its neighbours.

As the title of their article suggests "The life and death of and aircraft", it is an analysis of a technological failure and this quote is explaining the failure in terms of local and global network:

> *"Actors in the global network were able to interfere with the structure and shape of the local network, while those in the local network were able to go behind the back of the project management, and consult directly with actors in the global network. The result was that project management was unable to impose itself as an obligatory point of passage between the two networks"*

The first part of this quote shows that the global network would interfere with the structure and shape of the project. Such interference should otherwise be negotiated in the moment of problematization, by redefining the actors in the local network, i.e. if a project is interfered without revisiting the nature of the problem, the relevant actors might not be identified.

The obligatory passage point is to have control over all transactions between the local and the global network. This is defined in the strength or weakness of the obligatory passage point in terms of the strength of the external attachment and internal mobilization (Ibid.).

03.3.4 Mapping an innovation project

Returning to our simple actor-network between *consultancy*, *users* and *client*, we can map their relation through the innovation project. Illustration 5 maps the entrance of an innovation project by introducing the local and the global network.

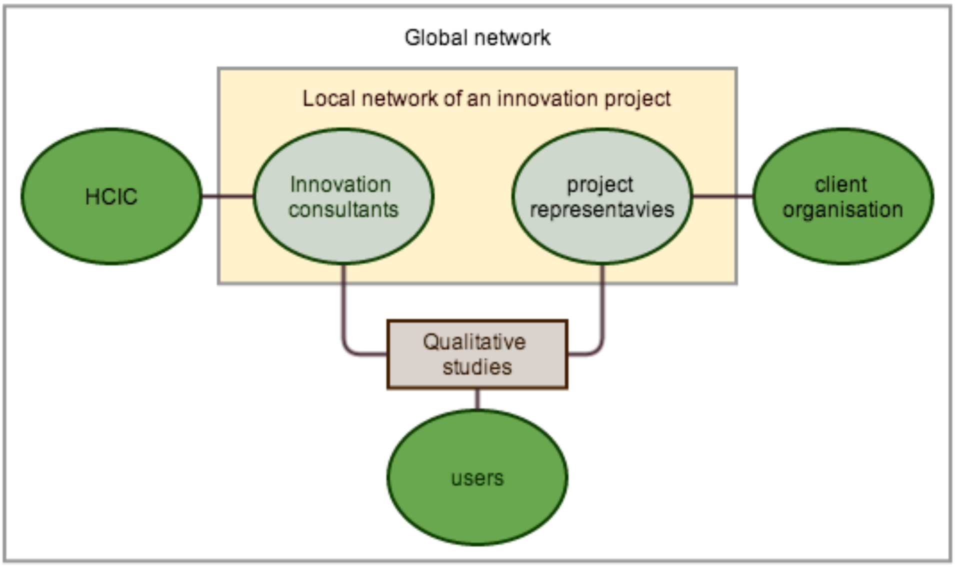

Illustration 5: The innovation project map

Illustration 5 shows how a local network is established from representatives of the client organisation and the innovation consultants from the HCIC. Actors inside become indispensable and the local network stabilizes in an OPP of agreement, i.e. "we have contracted you to help us with this problem". In an innovation project the users become the object of study through qualitative studies conducted by the consultants. The user knowledge is then brought into the innovation project through various negotiations with the client representatives. This entrance of user knowledge, as an actor from the global network, might challenge the initial agreement of the OPP and renewed problematization should occur to stabilize the local network again.

03.3.5 Intermediaries connecting the two networks

The success and shape of a project depends on the creation of two networks and the exchange of intermediaries between those networks. According to Law and Callon (Ibid.) mobilizing the global network from the local network of a project depends on their connection:

> *"If the elements that make up global and local networks are heterogeneous, then the extent upon which they can be depended is also problematic: the degree to which they may be mobilized is variable, reversible, and in the last instance can only be determined empirically. In other words, the extent to which it is possible for a project to control its two networks and the way in which they relate is problematic, and it is the degree and form of mobilization of the two networks and the way in which they are connected that determines both the trajectory and success of a project."* (Ibid.)

If the heterogeneity of the networks is too extensive they may not be relatable and the possibility to form and mobilize them is problematic. Their relation is determining both the trajectory and the success of a project. To formulate it in our own terms: if a project is too diverse from its environment, it becomes more difficult to realize (but not impossible).

03.3.6 Inscriptions

The exchange of intermediaries in connecting the two networks is the overall process of translating the local into the global network. As part of this and to describe why HCICs study users, we turn to inscriptions. Studying users and bringing that knowledge in the local network is what HCICs do as an act of strengthening the local network in the process of translating the global. According to Robson inscriptions are:

> *"a material translation of any setting that is to be acted upon. Inscriptions have to travel between the context of action and the actor remote from that context".*
> (Robson, 1992, p.691-692)

So inscribing is to translate a *setting to be acted upon* in a material form to travel to *the actor remote from that context*. This understanding of inscriptions can be used to understand how HCICs build arguments from user insights as a mean to persuade the client organisation to make a change. When applying this understanding to our field a consultant studies the users to fixate them in a materialized form, which makes the consultant a representative of the users - a spokesperson - in mobilizing the global network.

03.3.7 Success or failure of an innovation project

The ingredients of an innovation project are authority and a certain amount of time, in which to generate intermediaries to mobilize and attach the client organisation. The trajectory of a project is then defined in the strength or weakness of the OPP the local network has been able to establish from these ingredients. Therefore the success of an innovation project can by understood in how it connects with the client organisation (or not), through a strong OPP.

03.3.8 The whirlwind model

To sum this up and to illustrate the messiness of innovation we will introduce the whirlwind model:

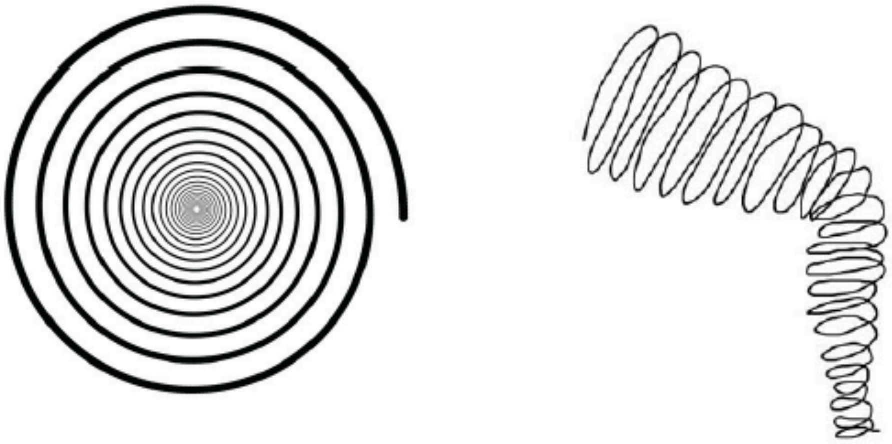

Illustration 6: The whirlwind model adapted from Akrich et al. (2002b)

"Illustration 6: The whirlwind model" is in contrast to the model presented in "Illustration 2 The dichotomy", as we argue is codifying iterations into a linear model.

Innovation, in the understanding of ANT, is continuously transforming according to the trials to which it is submitted. Designing solutions for the users without considering the *"unexpected technical evolutions"* (Ibid.) will prove problematic in the adaptation in a local practice. The only way to ensure adaptation is through a *progressive complexification* of the project and of the devices, which it runs into. The whirlwind model is reminding us to do so. When giving birth to new actors who did not exist initially, the whirlwind can reshuffle the entire network, extending or retract it, stabilize or destabilize it. (Akrich et al., 2002b, p. 213)

03.4 Innovation as producing value

When establishing failure and success we simultaneously establish the possibility to evaluate a project. A process of *e-value-ating* is interpreting the outcome of a line of action where some actions are credited more valuable than others for the outcome. In the HCICs we study such evaluations produces discourses that will be central in our analysis. The following sections will we present the use of discourses in ANT followed by theory of value and worth.

03.4.1 The use of discourses in ANT

Whereas ANT has become popular for studying socio-technical system ANT's rich methodology embraces discourse analysis in its central concept of hybrids, or "quasi-objects", that are simultaneously real, social and discursive (Frohman, 1995). Developed as an analysis of scientific and technological artefacts, ANT's theoretical richness derives from its refusal to reduce explanations to either natural, social, or discursive categories while recognizing the significance of each (Latour, 1993, p.91). ANT insists that:

> *"the stability and form of artefacts should be seen as a function of the interaction of heterogeneous elements as these are shaped and assimilated into a network"*
> (Law, 1989, p.113).

ANT sees these artefacts, i.e. the discourses, as a historical product that is shaped and assimilated into the HCICs from interaction with the field of innovation. The discourses function as accusations of the actors' own analysis of the value they bring to an innovation process in which they are involved. Within these discourses of accusation there are both implicit and explicit choices, since the aim is to distinguish between explanatory actors for the innovation and those who are not (Frohman, 1995). Therefore within their analysis, they draw upon rules for managing action or to put it in another way, the consultants discourses of value become governing strategies in deciding how to manage the relation between clients and users for the innovation to occur (Akrich et. al., 2002b, p.224). The controversies that give shape to an innovation's life are under the impact of these discourses of accusation. These can either be produced within actor-networks that are trustworthy, those who lie deliberately or those who lie without even realising it (Ibid.).

As we seek to critique these discourses of value from a practice perspective, this means questioning the accusations the consultants make use of in justifying their practices. To do this, we want to present relevant theory of *value* to qualify the concept.

Value has always been the troubled phenomena in sociology. It has belonged to a field that was hegemonic since the birth of social sciences and maybe still is – the discipline of economics. In order to avoid discussing with this crowned science, sociology has maneuvered itself around economics with the promise of not entering their terrain. This agreement has been called *Parsons Pact* and its promise has been that "*You, the economists, can study value and we, the sociologist, can study values"* (Stark, 2000, p.1). This has lead to a categorical separation where *"Economists have the claim to explain the economy and the sociologists the social relations in which economies are embedded"* (Ibid.).

03.4.2 Orders of worth

American sociologist David Stark challenges the dichotomy between markets/social relations in a new take on economic sociology in what he calls a *sociology of worth*. He is inspired of Boltanski & Thérenots (1991) sociological theory of value. In their book On Justification: Economies of Worth they set out to understand how individuals in modern societies reach agreement. In studying this they conclude that we are capable of reaching agreement if different parties identify value in agreement. This may sound utilitarian but it is not. As Boltanski & Thévenot formulate it:

> *"Individuals are moral beings capable of distancing themselves from their own particularity and coming to terms over commonly identified goods on which their acquisitive desires have converged and reached agreement."*
>
> (Boltanski & Thévenot, 2006, p.30)

This means that a commonly good can be identified between individuals at the same time as it serves the interests of individuals. They observe, when studying agreement, that there is not just one way of making and identifying value, but that modern economies comprise multiple principles of value - or as they formulated it - *multiple orders of worth* (Ibid.). These orders of worth are: civic, market, inspired, fame, industrial and domestic. These orders do not belong to special social domains but coexist in the same social space. The notion of orders of worth can be used to understand the innovation consultants' positions on creating and justifying some types' actions as valuable over others in innovation projects.

Taking departure in the relation between the process of evaluating and the orders of worth, David Stark introduces a metaphor of *accounts.* Using the idea of accounts we simultaneously connote bookkeeping and narration. Accounts both make evaluative judgement when marking action, people or things as valuable or not. An innovation process is negotiated between different accounts of worth making all participants accountants:

> *"Accountants prepare story lines according to established formulae, and in the accountings of a good storyteller we know what counts. In everyday life, we are all bookkeepers and storytellers. We keep accounts and we give accounts, and most importantly, we can be called to account for our actions."* (Stark, 2000, p.5)

Evaluation therefore becomes an on-going reflective process we constantly practice in giving notion to what counts, who counts and whether it is worth the trouble. We constantly evaluate by using different scales that take some types of worth into account and not others – thereby validating some accounts and discrediting others. Stark introduces the concept of heterachies as a way of studying organisations in which a manifold of values are invited in as explanatory in evaluating worth. Heterachies are characterized by distributed intelligence and diversity present in organisations (Stark, 2000).

Translating this into a practitioner's context, we argue that the consultants we study are navigating by giving and receiving many accounts of worth such as profit, user satisfaction, legitimacy, novelty value, efficiency and many more. Some of these are more credited than others depending on what the client organisation value. These evaluations give shape to discourses of value through their conclusions.

The consultants' uses qualitative studies of users to build arguments supporting some orders of worth and conquer others. As argued in the beginning, the hegemonic version of value from economics is highly rated however it is hard for the consultants' to give a positive figure of their worth since they work in the exploratory realm of innovation. The knowledge they produce can either be instantly exploited through materialized in change initiatives, or it can float around the client organisation first making an impact visible several years after the project has ended. This means that innovation processes do not end when innovation projects end.

In justifying their worth the consultancies we study produce cases/narratives of their work. These are both in written formal form on their webpages, articles and books but also in everyday narratives person to person. In this way, such narratives might be seen as a way of justifying their worth in a discursive evaluation. Therefore they also become producers of the consultancy's identity both internally and externally. Returning to the metaphor of accountants, these cases become value discourses with a linear storyline, e.g. a client organisation faces a lot of problems because they do not qualitatively understand users, the consultancies produce new insights leading to a client epiphany and newfound clarity that help the client design a new value-creating strategy, product or service. Put simply: Client organisation in trouble -> Consultants to the rescue -> Client exploiting new knowledge = Innovation = Client Value

03.4.3 Innovation through narratives of value

As argued earlier, different discourses of value governs strategic decisions in innovation projects. Different discourses of value contest each other and these trials of strength all have a say in the innovation's destiny. When looking at innovation from a narrative perspective, the first precondition we must take into account is that the innovation cannot be defined by the researcher beforehand but is defined by how different actors understand innovation through their narratives (Reff & Johansen, 2011, p.110)

Chris Steyart has, through his carrier, tried to take a point of departure in many theoretical landscapes to describe innovation and entrepreneurship. In his book from 2004 he argues for a linguistic turn, and look at innovation as the product of everyday narratives and conversations all as a part of a slow, steb-by-step aligning.

He argues that the potential of narrative, dramaturgical, metaphorical and discursive analysis to explain where innovation will perhaps occur not only in their singular application, but above all in "*their combined use, in the interrelationships between narration, drama, metaphor, discourse and deconstruction*." (Steyart, 2004, p.8). Looking at how narratives interplay with other narratives we can see them as not sufficient explanations to innovation but as:

> *"Utterances are not indifferent to one another, and are not self-sufficient; they are aware of and mutually reflect one another . . . Each utterance is filled with echoes and reverberations of other utterances to which it is related by the communality of the sphere of speech communication . . . Each utterance refutes, affirms, supplements, and relies upon the others, presupposes them to be known, and somehow takes them into account."*
> (Steyart, 2004, p.13)

As Steyart argues narratives are not sufficient by themselves as explanatory, but it is in their relation to one another that they become producers of strategic decisions. Therefore an innovation process can, to an extent, be seen as a product of a narrative performance process through trials of strength between different forms of narratives (Reff & Johansen, 2011, p.11). Returning to the concept of a spokesperson, we can link the narratives' trials of strength to a certain spokesperson's narrative capacity in enrolling and mobilizing alliances.

03.4.4 Summing up on "innovation as value creation"

In this section we have argued for the use of discourses in ANT studies. Discourses are produced inside the HCIC through their history of engagement in the field of innovation. We have argued how discourses justify the consultants' worth in innovation projects and argued through different *orders of worth* how this justification is constantly negotiated through crediting certain types of value and discrediting others.

03.5 Summing up chapter three

In this chapter we have described innovation processes through ANT's theoretical framework of translation. We have furthermore argued for the use of discourses in ANT analysis. These choices of theory are something we will return to in chapter 3, Method, were we will discuss them on an ontological level.

In this chapter we have presented the theoretical frameworks we will apply in our analysis. Thus we will sum up by creating a vocabulary of the ANT concepts we apply.

Vocabulary

Actor (or actant)	Human as non-human entities
Actor-network	Heterogeneous network of aligned interests
Black Box	A black box contains an actor-network that is considered stable.
Translation	Refers to the process in which actor-networks through interaction translates into new actor-networks.
Problematization	Is a reference to when key actors attempt to define a problem and the roles of other actors to fit the solution realm.

Interessement	Processes that attempt to strengthen the actor-network enabling the innovation
Enrolment	The moment where actors take action in imposing their will on other actors. It is within these actions that actors place themselves in a stable network of aligning actors.
Mobilization	When the stable network gets wider support outside the network through alliances. In mobilizing the network will grow larger through actor-networks not previously involved.
Spokesperson	A single actor who can speak on behalf of an innovation and the actor-network representing it.
Obligatory Passage Point	When actors' roles are defined and they become indispensable in accept of the problematization.
Local and Global Network	Refers to the temporary formation of a local network in a translation process defining the actors involved relation to its global network and visa versa.
Inscriptions	A material translation of any setting that is to be acted upon. Inscriptions have to travel between the context of action and the actor remote from that context
Irreversibility	The degree to which it is subsequently impossible to return to a point where alternative possibilities exist

Tabel 2: Vocabulary of ANT terms

Tabel 2 presents the central terms and their definitions from Actor-Network Theory, which we will apply in the analysis. The reader can return to this throughout the thesis.

04 METHOD

In this chapter we will present our considerations for the method of this thesis in five sections. First, we present our starting point in guiding principles from actor-network theory that gives shape to our methodology. Second, we will present our research design and the data laying grown for our analysis. Third, we present our analysis strategy and how the previous parts give shape to this. Last, we critically reflect upon the limitations to our data in contrast to intentions from our methodology and research design.

04.1 Methodology – making a the field

Margaret Thatcher once said: "*That, which we call society doesn't exist"* and even though she said it for other reasons and with the intention to provoke, we argue that she is right (Example borrowed from Latour (2005)). This utterance does not deny the existence of a society, but only that our common description and referring of it is an abstraction and not the society in itself. Since we cannot ask society what *it is,* our only way of accessing knowledge about it is through different methods of perceiving and interpreting it, acknowledging the world is constantly translating through formations of new actor-networks. This philosophical orientation of the world has consequences for our notion of a *human-centred innovation consultancy industry*. Groups are normally defined by their boundaries and a placement in the world, we as ANT researchers accept that we are co-producers of this group that does not exist a priori in the world. As Latour puts it:

> *"For the sociologists of associations* [An expression Latour uses for sociologists using ANT], *any study of any group by any social scientist is part and parcel of what makes the group exist, last, decay, or disappear."* (Latour, 2005, p.33)

The HCICs we study share common methods as a starting point for consulting innovation. These methods can be seen as guiding star or a group maker that they follow and practice in different ways. As Latour puts it:

> *"There is no group without some kind of recruiting officer. No flock of sheep without a shepherd—and his dog, his walking stick, his piles of vaccination certificates, his mountain of paperwork to get EU subsidies ... Although groups seem to be already fully equipped, ANT sees none existing without a rather large retinue of group makers, group talkers, and group holders."* (Ibid., p.32)

We therefore argue that instead of looking at them as a fixed category, we, the researchers and them, the consultancies, are co-producers and play the same role in the play of group formation (Ibid.). A group or network should in this sense be understood as a concept, not a thing that is out there. It is a *metaphor* to help us describe, and not the *object* or *what* we describe (Ibid,).

Let us take a closer look at principles that can guide us in our method. Latour argues that in ANT we can learn from controversies when studying the world. Identified through sources of uncertainty when creating knowledge Latour (Ibid.) proposes five principles, which we shall consider in our process:

1. *There are no groups, only group formation*. Meaning that in the world there are many contradictory ways for actors to be given an identity.
2. *Action is overtaken*. Denotes that in any line of action a great variety of agents seem to barge in and displace the original goals.
3. *Objects too have agency.* Signifying that there is no reason to prematurely give humans any privileged position to non-humans. In interaction many types of agencies participate.
4. *Matters of fact vs. matters of concern.* Meaning that the links between natural sciences and the rest of society seem to be a source of continuous dispute.
5. *Writing down risky accounts.* This simply refers to all the practicalities under which social science is conducted, interpreted and written.

Taking that many principles into account may seem like a big mouthful in doing research - and it is. How would it be much easier if we could just ignore some of them? It may seem counterproductive and a waste of time to split hair about what is a group and what is not. Adding messiness, to a messy world in which researching is a messy process may not seem fruitful, but in order to critically investigate practice, like in this current thesis, we cannot ignore to take these uncertainties into account.
These 5 principles are guidelines in both our gathering of data and our analysis of it.

We use them to keep questioning:

1. **The existence of a HCIC industry as a group.** We as researchers should let our actors participate in mapping out their social context without predefining it through a theoretical framework.
2. **The relations with innovation projects preliminary assigned actors and emerging actor-networks**. We will look towards the relation between the actor-networks in which innovation projects are executed, and the actor-networks surrounding and affecting the innovation process.
3. **Who are acting and when**. Organisational hierarchies, innovation consultants, laws, etc. may look like they are privileged in explaining action. We need to remember that every entity can be traced, as the source of action is an actor.
4. **No perception of a group or causal relation is right or wrong.** As the actors who formed the base for this study have different backgrounds and positions, we should not treat different definitions as a problem for the study' validity. We will use contradictory positions to look upon "matters of concern" instead.
5. **The circumstances of writing about real-life people and things under the practical structure of doing a master thesis.** To fixate actors-networks in written form carries a serious intellectual and moral responsibility. We constantly balance the relation between producing an interesting and relevant study, staying true to the real-life persons laying ground for this thesis, and at the same time live up to the scientific tradition and academic demands.

These principles should not be seen as a textual structure for neither our method nor analysis, but as controversies giving shape to the ontology of this thesis. We return to these principles ad hoc, throughout this thesis.

04.1.1 Everything is ontology

As ANT dissolves the boundaries between humans and non-humans it also dissolves the borders between epistemology and ontology. No type of actors is on beforehand privileged with more explanatory power than others and therefore all, that we as researchers can perceive, becomes ontology. We have to focus on the dynamics of interaction and relations rather than on the stability of their relationships. When studying HCICs, clients and users we accordingly have to study this interaction from a close qualitative perspective.

A method for this can be looking upon these relations through cases. In a case study the analyst should not try to select representative cases, but rather generalize the findings in developing a theoretical framework (Yin,1993). There is no such thing as representations in an ANT framework, again, as everything is ontology. This building of a theoretical framework is characterized as 'analytic generalization' and not 'statistical generalization' like in natural science. This means that cases are not 'sampling units' and one case is not comparable to the next like two different respondents to a survey, thus the potential generalization is produced through our analysis strategy (presented later in this chapter). Therefore, in this thesis we will first analyse the cases and second, in the discussion, we will develop a theoretical framework based on the analysis.

04.1.2 Analytic generalization

So how can we generalize from an ANT study? What should be clear, is that we cannot generalize in the sense generalization is known from natural sciences. Knowledge, research, concepts or ideas are always bound in context and not transferable without translating into the new context in which it acts.

However, we are able to develop theory that can be inspirational in explaining other cases. But where generalizations presume that knowledge can relatively unmolested travel from context to context ANT would argue, "*to adopt is to adapt"* (Akrich et al., 2002b, p.209). In this way, the theoretical frameworks we develop serves the purpose of being inspirational to adopt and adapt into local practices of innovation management or further research on innovation. This is why we understand the use our knowledge produced in this thesis in the form of such a theoretical framework. According to Yin (1993) theories can also be practical and not just academic, which adheres to the aforementioned second part of our research question where we ask ourselves in the research question how *this analysis can enhance their* [HCICs] *practice*? In our research design we return to the theoretical framework.

04.2 Making up this thesis' field

When there are no groups but only formations of groups, we as researchers want to invite the HCICs to create our field. Some of the organisations we study are private companies; others are internal innovation units on an annual budget and some are financed as part of larger organisations' operation funds. They all work in unique ways and under unique structures. What initially connect them are their human-centred connotations such as *"a deep* *understanding of real people"* (Interview with Thomas, Ideas That Transform Markets), *"involving citizens"* (Interview with Søren, Designing Gov) or *"user driven innovation"* (Interview with Allan, We Know People; Anna, Health Lab).

In recruiting consultants for interviews we contacted them and presented to them whom else we were hoping to recruit. We also described how we wished to study consultancies using qualitative methods as a starting point for consulting innovation. In this way the HCICs themselves could decide whether they belonged in this group we were producing. Some turned us down because they felt they did not belong in a relation to the other HCICs or could not fully recognize themselves in the methods we described. Out of nine organisations two of them decided that they did not belong within the description and did not want to participate in this thesis[3]. The seven HCICs' participating all positioned themselves in relation to each other and the described methods by accepting to participate.

In recruiting this way we are the senders and producers of the email but let the consultants decide whether they see themselves in relation to each other. This way the consultants participate in mapping out their social context without us predefining it through a fixed group. In this way we keep agnostic about the existence of HCIC's as a group as ANT prescribes. Instead we address them looking towards their relations and their shared methods as a *group maker.*

For the same reason we do not initially differentiate between private and public HCIC's. There very well be differences and this is a commonly used dividing line. However, we define a consultant as "*someone who excess influence over an individual, group, or organization, but who has no direct authority to implement changes*" (Block, 2010, p.9). This means that even though the organisations we study have different structures and operate with job descriptions such as innovation consultant, project manager, management consultant and more they all share the same non-authorial relation to their clients no matter if they are public or private. We argue that the answer to create a dividing line is empirical specific and we do not prematurely want to make this. Structures may differ as much between two private HCIC's, as between a private and public.

04.2.1 Data

This study began with this thesis' authors getting permission to conduct fieldwork at Designing Gov and Health Lab in 2013. From the position as interns each of us worked

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[3] This could also be an excuse for not wanting to participate at all. This we do not know.

alongside innovation consultants for 11 months at Designing Gov and 2 months at Health Lab. Our method will be presented later.

After our internships we contacted HCICs to conduct interviews. The following is an overview of the seven anonymized HCICs that agreed to participate in this thesis. We have conducted interviews with informants from each of these HCICs. These were executed at each HCIC's office and lasted between 60 to 75 minutes. The interviews were done in the consultants' native language. All of these were Danish except for Thomas from Ideas that Transform Markets who was native English. All interviews were transcribed shortly after they were conducted. Transcriptions are in the language of the interview. When using quotes in this thesis we have translated them to English.

Case informants

Case 1:	**"Designing Gov"** is a public internal unit working for their owners with public innovation.
Informant:	Søren is an innovation consultant at Designing Gov. He has a background in political science.
Case 2:	**"Health Lab"** is a public internal unit working with hospitals and welfare problems in the region of southern Denmark.
Informant:	Anna is an innovation consultant and designer at Health Lab. She has a background in design and management.
Case 3:	**"Center for health innovation"** is a public internal unit working with hospitals in the Zealand region in Denmark.
Informant:	Christian is the deputy manager and innovation consultant at Center for health innovation. He has a background in psychology.
Case 4:	**"We Know People"** clients are both public and private organisations. They are funded according to contracts and take on projects from the state, municipalities, regions, EU, who often has funds and pools for enabling innovation
Informant	Allan is a partner and innovation consultant at We Know People. He has a background in social science and holds an MBA.
Case 5:	**"Innovate now"** work to stimulate, counsel and manage innovation processes for both private and public organisations.
Informant:	Peter is a partner and innovation consultant at Innovate Now. Peter has a background in design, communication and media science.
Case 6:	**"Ideas That Transform Markets"** is a private consultancy that produce user

	insights to form actionable strategically suggestions for clients both public and private organisation.
Informant:	Thomas is an innovation consultant. He has a background in philosophy, science and technology studies.
Case 7:	**“Strategic Design”** is a private design consultancy working to design innovation from extensive studies of users with both public and private organisation.
Informant:	Hans is a designer and innovation consultant at Strategic Design. Hans has a background in media studies and IT.

Tabel 3: Case informants

Tabel 3 is descriptions of our cases. We will use when quoting or referring to interviews or field descriptions. In our presentation of our data we will use these names and the name of the organisation.

04.3 Research design

This thesis applies an inductive deductive method, where we through extensive data collection develop analytic frameworks and contextualize it with existing theory. ANT is grounded in an intense inductive deductive commitment to develop theory through qualitative empirical research. In this thesis we will make use of case studies as they offer an empirical frame to encompass it. We will collect data from interviews and observations and explain why and how to use case studies followed by a description of the methods we use.

04.3.1 Case study

According to Yin (1993) fieldwork can be used as method for doing case studies. A case study is an empirical inquiry that:

- Investigates a contemporary phenomenon within its real-life context, especially when
- the boundaries between phenomenon and context are not clearly evident.

The phenomenon we are studying in this thesis is innovation. We are studying how innovation is managed and practiced within the real-life context of human-centred innovation consultancies. As argued earlier innovation is surrounded by a great deal of mystery and the boundaries between innovation as a phenomenon and HCICs as boundaries are not clearly evident. Thus our method is an explorative case study (Ibid.), as we wish to explore the contextual application in our field of study through different cases.

04.3.1.1 Theoretical framework

In producing an exemplary piece of research the aim of a case study is to build a theoretical framework or theoretical propositions (Ibid.). This is done through analytical generalization, i.e. the process of showing how our findings have informed the relationships amongst a particular set of actors, events, methods etc. throughout our case study analysis. As described in "Everything is ontology" the generalization in our ontology is in line with this analytic generalization.

When describing theoretical frameworks Yin (Ibid.) reminds us that theory might not be more than a series of hypothesis or propositions. This understanding of a theoretical framework is also found in Cronbach:

> *"Perhaps it is better to think of these as constructs, as working hypotheses regarding variables that can be used to formulate a satisfying theoretical network. If a good set of variables is found, relationships can be summarized in sentences that are comparatively simple."* (Cronbach, 1976, p. 17)

The analytical generalization used to construct the theoretical framework, does not have the character of a conclusion, but rather that of a "working hypothesis". Such hypothesis can then experiment with new case studies and continue to produce findings related to the theoretical framework and refine it.

04.3.1.2 Methods of our case study

A case study can mix various methods and the case study accepts that there will be many more *variables of interest* than data points (Yin, 1993). Using a single source in a case study is not recommended and the strength of a case study is the principle of having multiple sources of data – also known as method triangulation. In this thesis we will primarily include data through: observations within the consultancies and interviews with consultants, and secondary through literature on human-centred innovation, data from websites, annual reports, blog posts, objects, etc.

When obtaining data from those sources we are interested in the field of HCICs, and how we can contribute to this, and we will therefore collect our data primarily in that context.

This means that when addressing the relations between the actors and different actor-networks, such as consultancies, clients and users, our data collection will be from the position of the consultancy. E.g. when we address the client-user relations we will either have data available where we have witnessed such encounters as consultants or we will delimit ourselves to the accounts of this client-user relation, provided and existing within the HCICs we have studied.

To collect our primary data we will turn to methods of *participant-observations* and methods of interviewing from an explorative approach in *convergent interviewing*, as they can provide us with detailed descriptions and principles for collecting data from our cases.

04.3.2 Participant-observation

We will join the field to participate and to observe HCICs. This means that we have to get access to a field by permissions and acceptance. First the researcher has to obtain permission from the owner, and second the researcher has to be accepted by the *gatekeepers* (Hammersley & Atkinson, 2007). Gatekeepers are the ones who exercise control of the researchers passage and access to a field, and in different organizational settings they can have different hierarchical positions. Even with the acceptance of the gatekeepers, their support does not inherently diffuse amongst the employees, as the researcher has to win the employees trust and confidentiality. (Ibid.)

Getting access to the field in this thesis was through internships within two of our case organizations from the period of February 2013 to January 2014. Entering a field means to get permission through the managing directors and subsequently getting accepted by gatekeepers like a subordinate manager, team leaders and so on. Our access to the innovation consultants is in this configuration defined as a collegial relation. According to Hammersley & Atkinson (Ibid.) researchers can have four positions in the field ranging from external to internal. The positions are: *"complete observer"*, *"participant-as-observer", "observer-as-participant"* and *"complete participant"*. Our access as interns in the field makes us internal and has the characteristic of *"observer-as-participant"* or *"complete participant"*. The total immersion in the *"complete participant"* is suggested to be the ideal position for a researcher as this creates acceptance in getting colleagues support and confidentiality (Ibid.). Furthermore ANT would argue that the position of *"complete observer"* is not possible, as a new-coming actor always will translate the existing actor-network. Instead of trying to deny our influence on the field, we instead embrace our role as participants.

In participating, the researcher runs the risk of *going native.* This means to enrol so deeply in the field of study that the researcher uncritically subscribes to the organisation's language and worldview. Paradoxically going native is at the same time proof that the researcher has totally immersed in the organisation and enrols evenly with colleagues. But with this a problem arises if the researcher cannot later detach himself from the organisation's worldview and language when analysing.

04.3.2.1 Field descriptions

The importance of meticulously taking notes cannot be stressed enough as this is the main source of data in participant observation. According to Hammersley & Atkinson (Ibid.) writing field notes is a central research activity within participant observations. It has to be carried out with care and self-conscious awareness. Field notes become a selection of the observations, as "*social scenes are truly inexhaustible"* (Ibid.) and therefore not possible to capture completely. This also means there is "*a trade-off between breadth of focus and detail"* (Ibid.). It therefore becomes important to know "*what to note, how to note it and when to take field notes"* (Ibid.). In our participant observations we will take field notes and write them into rich field descriptions subsequent, according to the following principles.

Our methodology will guide us in answering the "*breadth of focus and detail"* by stating "*what to note"* from our observations. Returning to Latour we will in our note taking pay attention to the five principles in doing research, i.e. we will focus on the on-going changes of relations in the actor-network, as actors enter, translate or leave. Also, in acknowledging that objects have agency too, we will enter the field with an understanding of non-humans being equally as important as humans. In producing our field notes we will therefore describe the relations between both humans and non-humans in our field of study. This brings us to the question of *"how to note"*. We will use notebooks, scraps of paper, text editors on smartphones and laptops. In the field we will also gather material and objects for the purpose of making field descriptions - objects can be brochures, e-mails, contracts, PowerPoint's etc. Finally when asking *"when to take field notes"* the answer should be *"as soon as possible"* (Ibid.).

Although researchers can train to improve their recall, the quality of the notes "*diminishes rapidly with the passage of time"* (Ibid.). Ideally notes are taken during the observation, but especially in participant-observation, this is hardly possible, and it is following important to ensure the note taking process soon after. To support the postponed note taking, we will try to follow this advice:

“A single word, even one merely descriptive of the dress of a person, or a particular word uttered by someone usually is enough to “trip off” a string of images that afford substantial reconstructions of the observed scene”. (Ibid., p.143)

This means that jotting down even a single word, or whatever is possible in the situation can help the following and more thorough description of the field. Hammersley & Atkinson stresses the importance to assign time for periods of writing field notes matching the phases of observations (Ibid.).

Throughout our internships a field diary has been kept describing the everyday life at the workplace. These diaries are both descriptions of our reflections and feelings but also a mapping of events, people, workshops, locations, e-mails, conversations, telephone calls, documents, contracts, etc.

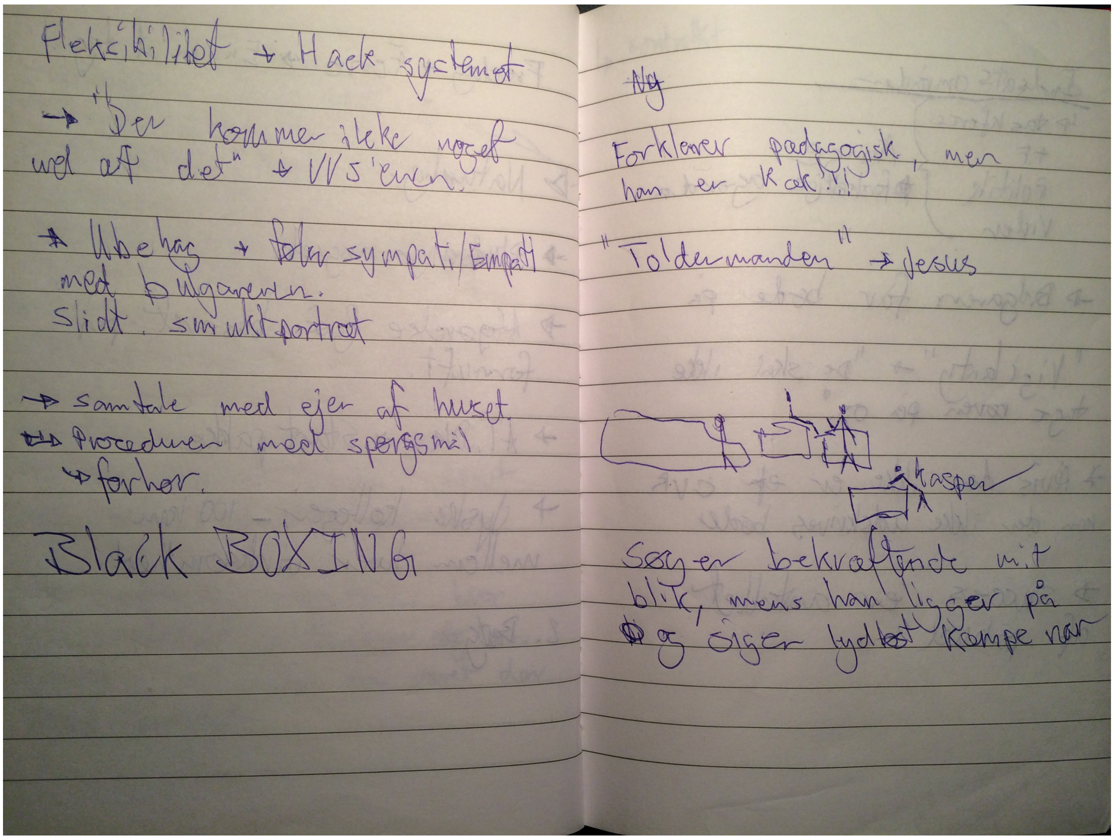

Illustration 7: Example of field notes in a field diary

Illustration 7 shows an example from a field diary. The field diary is a mess of notes, cue words, quotes, drawings, theoretical references and all the associations that come to the

researchers mind. The actual diary is completely uncensored as the tactic for filling these was filling *as much as you can*, *as soon as possible.*
These diaries are later rewritten to coherent field descriptions based on the notes taken. These are the ones presented in the analysis chapter.

04.3.2.2 Reflections of fieldwork

As interns we were given access to the field, thus providing us with the role of participatory observers. Working along side innovation consultants was double bound, as we were enrolling in the field through participation, but at the same time wanted to keep a reflective position in collecting data through participation and observing. This was not always an easy role to balance. It was hard not to uncritically subscribe to the language and worldview of the consultancies we followed, as we experienced them as rather strong homogeneous groups with a general high level of consensus.

We cannot judge whether we have succeeded in detaching ourselves from our respective organisations language and worldview. In trying to overcome this pitfall we have systematically and collectively reflected upon field notes. As researchers, a shifting between roles of narrator and a critical listener has given us an outside-in perspective on our experiences within the field and has hopefully helped us to detach ourselves. Discussions, reflections and comparison of our time in the field formed a critical reflective position towards the field. As ANT argues it will be for the reader to judge whether we have succeeded detaching ourselves in our analysis. What should be accounted for is whether our descriptions are rich and actors are reflexive, articulated and idiosyncratic.

04.3.3 Convergent interviewing

In the following we will present Convergent Interviewing (Dick, 1990), an interviewing method, which has inspired us when designing our interviews. Convergent Interviewing is a series of interview rounds, where each round of interviews is forming the succeeding round and as a result, the focus of the interview guide converges over time. This is a dynamic process, which enables us to follow agency and focus on the actors as they barge in, according to Latour's principles.

Compared to in-depth interviews the advantages of convergent interviewing is:

a. The iterative structure, which makes the researcher refine content as the interviews progresses and
b. it allows the researcher to have an initial broader research focus.

As opposed to other qualitative methods convergent interviewing accepts prior propositions and encourages researchers to engage with literature from the beginning (Driedger et al., 2006; Given, 2008). Prior experiences with the field can help establish report and create dynamics between the interviewer and the informer, i.e. concerns can be shared with the interviewer, and the interviewer might even contribute to the problem for the interviewee (Driedger et al., 2006; Rao & Perry, 2003). Making use of this interview strategy our prior participant-observations become not an obstacle for non-biased listening, but an advantage as we can dialogue with the interviewee on the basis of the already achieved knowledge.

Another advantage of Convergent Interviewing is that we are two authors to this thesis and therefore two interviewers. Ideally there are several interviewers conducting numerous interviews for a discussion between the interviews, to search for convergence and redefining the questions for next round of interviews. Our interviews will be structured so that one of us leads the interview and the other has the role of observer with only a minimum of intervention. This distribution of roles will provide us with different experiences and areas of attention to discuss afterwards.

Interviewers can also explore issues *as* they emerge within the interview, when identifying areas of agreement and disagreement between the current and previous interviews:

> *"Interviewers will tend to filter information as they interview, trying to identify areas of agreement and disagreement between interviewees. In a sense convergent interviewing legitimizes this natural tendency by making it an explicit part of the research strategy."* (Williams & Lewis, 2005, p.221)

The opening question becomes very important in convergent interviewing. The objective of the opening question is to start broad and not to lead the interviewee into certain responses (Rao & Perry, 2003). Besides the general opening question, the interview guide in convergent interviewing is not designed prior to the first round of interviews. Questions are not direct and specific and do not have to be sequential. The interview guide is designed over time on behalf of the arising themes, problems and issues in previous interviews (Given, 2008).

As a third object, we will make use of a visual representation to form an interview from a "blank slate" to a somewhat ordered format. We will use a piece of paper containing a drawn line, indicating time, and ask the interviewee to talk about the process of an innovation project in time, such as before, during and after:

This underlines the explorative nature of convergent interviewing and animates the interviewee with the opportunity to merely tell their story (Rao & Perry, 2003). With our timeline introduced we will open the interview with the question *"From this timeline representing the chronology of a project, not necessarily the linearity*[4]*, please tell us your experience with innovation projects."*. Throughout the interview we will add on events, intentions, actors, relations etc. to the timeline, and ask the interviewee to engage in this if they wish to. The interviewer and the interviewee co-create this map as a tangible representation of how the interviewee structure innovation projects.

Because of its converging nature convergent interviewing stresses the importance of always trying to look for agreement and disagreement within the series of interviews; these are the ones that help the researcher to refine the questions in subsequent interviews. This is in correspondence with the principle of matters of concern from ANT. Themes and issues arise from agreement, and themes with most agreement are considered most important. Disagreement should become the subject for probe question; to either eliminate the theme or qualify the disagreement to the theme it relates to (Ibid.). This is not a positivistic exercise of finding matters of fact, but rather a method of finding central positions and matters of concern.

04.3.3.1 Reflexions of interviews

In our experience, visualizing the interviews together with the interviewee through a timeline was a fruitful method. It helped them to refer to their own practice and reflect upon it. The interviewees seemed well experienced in articulating their methods of studying users and producing insights as we almost got an auto response when this was brought up. As these methods are only practiced during the project, using the timeline enabled us to address a "before" and an "after" the project, were the consultants to a higher degree had to reflect upon their relation to the client and not only users.

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[4] We decided to bring in this formulation, as one interviewee objected, to the linearity of the line, in regards to the iterative and cyclical nature of the project work.

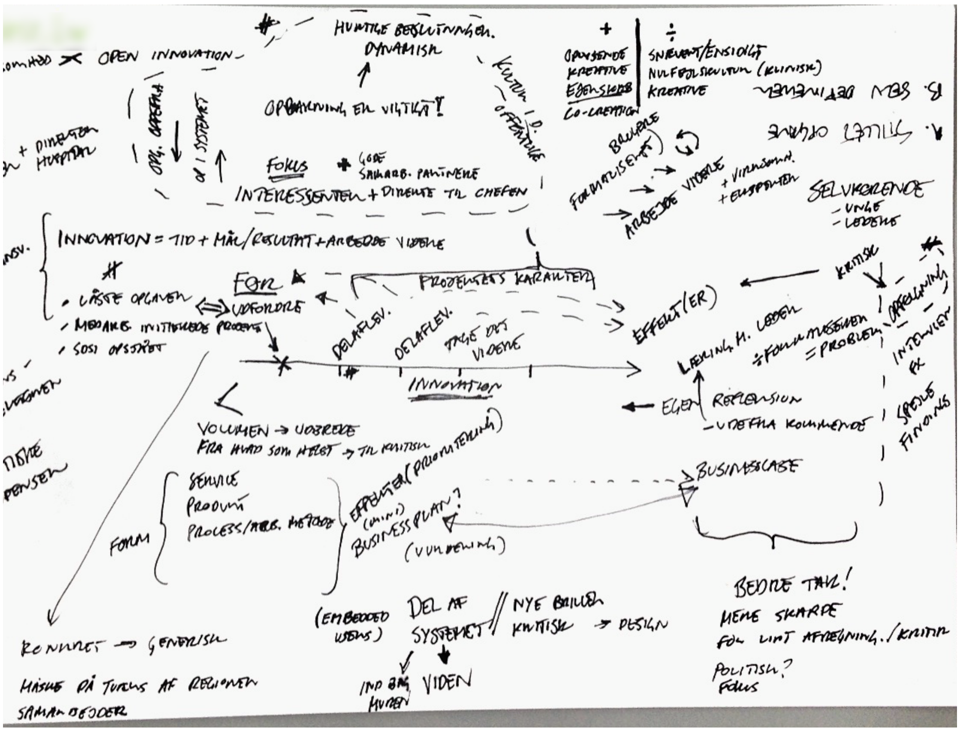

Illustration 8 Example of the mapping of an interview on a timeline

Illustration 8 is an example of the timeline from an interview. In the middle of the sheet the initial timeline is placed. During the interview the interviewer draws touch points, phases, themes, concerns, actors, etc. guided by the interviewee. At the end of each interview the interviewer would go through the drawing with the interviewee clarifying and summing up the interview.

Practicing the method of Convergent Interviewing was challenging for us. The interviews took their own direction as we, in the role of interviewers, could only, to a certain degree, control themes addressed by interviewees. They would speak from the top of their mind referring to projects they had recently finished or were currently working on. Finding convergence throughout each interview seemed difficult as the interviewees had different roles in an organisation. Some were deputy managers, some partners and some innovation consultants. Refining a focus throughout the series of interviews was not an easy task. Confirming similarities of differences from interview to interview became secondary to finding different matters of concern. This is not to say there was no convergence - when comparing our first interview to the last; our focus of attention had evolved, as we exerted more control in the latter interviews.

04.4 Analysis strategy

In our research design we have described how we will build our case study. In this section we describe our process of analysing our empirical data gathered through our case studies. In the first step of the analysis we will analyse matters of concern from our data into themes and place them in relation to the actor-network of users, clients and HCICs. The second step of the analysis will through Actor-Network Theory unbox relations where themes are placed.

We argue to isolate actors for analytical reasons when following the principle that *action is overtaken*. By isolating actors in an actor-network, we are able to explore in detail when actors enter, leave or change. This isolation will unbox the relations to reveal agency between actors in the relation between consultants, users and clients. As *there are many contradictory ways for an actor to be given an identity* it makes sense, for analytic purpose, to separate the relations to limit the contradictions by singling out some relations and not grasping the whole network at once. Although it is not possible to separate actors in real life, it can be beneficial when following the principle of *writing down risky accounts*, i.e. we have to conduct an academic paper, which are intended to provide the reader with assessable knowledge about our field of study.

04.4.1 Step 1

The first step of the analysis will map the relations between the main actor-networks we have identified in this thesis: *consultants, users and clients*. They are related and interdependent in an effort to produce innovation. Through empirical induction the conditions under which actors act will map and unfold the actor-network.

04.4.1.1 Matters of concern

As an analysis strategy we will start with our process of Convergent Interviews. As described in the research design, this is a dynamic and iterative process. The way we practice this is by triangulating the interviews with data from our participant observations. By going through the rounds of interviews as described, we will, additional saturate the findings with fieldnotes from our observations. This analytical process will map themes as they arise and probe them through new rounds of Convergent Interviews. These themes will be mapped as matters of concern. A new theme will be created every time a new matter of concern is manifesting, i.e.

one or more utterances are addressing the same issue, but not to be covered by the existing theme. These themes will guide our analysis of relations between the three actor-networks HCICs, clients and users. ANT studies look for strong and weak associations between actors and a method to identify these is to freely associate between actors dependency (Latour, 2005).

04.4.2 Tracing associations

In practice we start by transcribing all the interviews and divide them into short sections of 1-5 lines of text and mark each section with a number. We tag each section with a theme. When an interviewee is speaking on *"measuring value for the client"* we tag this with the theme *value*, if the interviewee is speaking of *"the clients project managers"* we tag this with *client relation*, etc.

We then condense each transcribed section into an utterance, which we graphically map by their themes and through a free association process detect patterns of similarities, differences and certain characteristics within each interview. Illustration 9 is an example of this mapping process. Next the interview maps are compared with one another to identify patterns between the interviews.

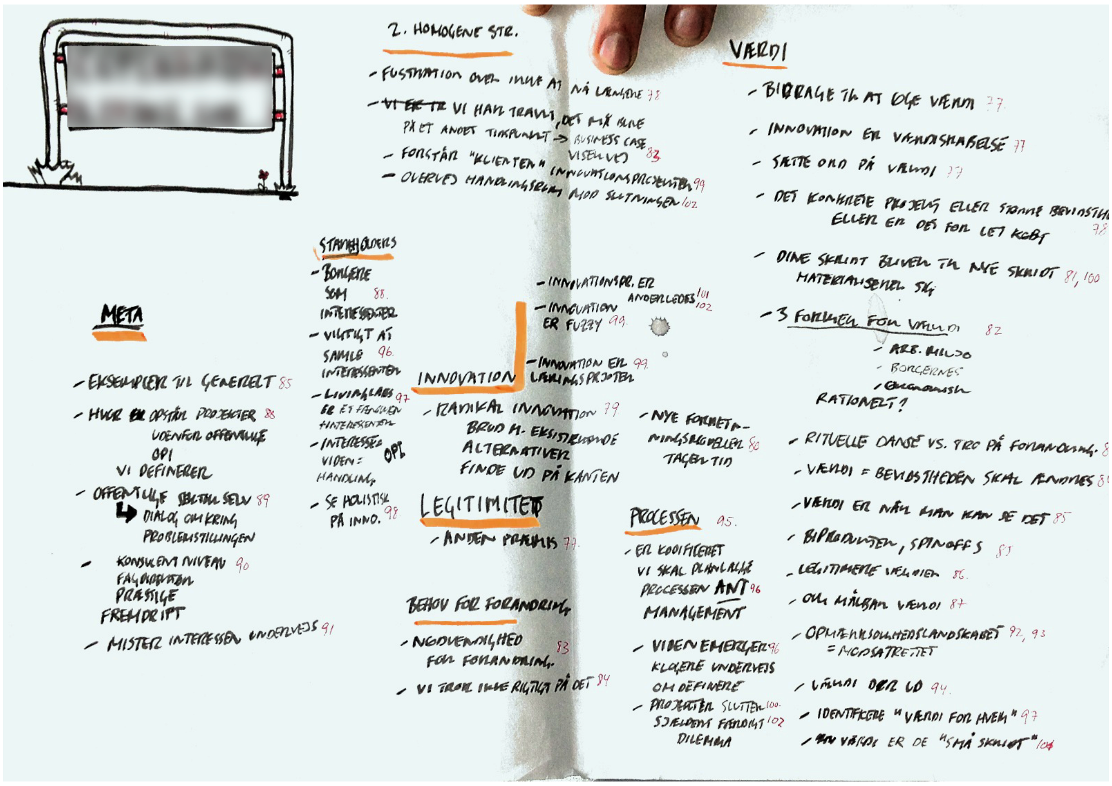

Illustration 9: An example the process of theming and mapping the utterances

After this we compare this analysis with field notes from the innovation projects we have followed through participatory observations. In order to avoid a *selective censored* analysis where we curate cases to support propositions, when defining themes we search for fieldnotes either questioning or supporting that theme. If associations between various actors are strong we continue to open up for actors that can explain the strength of the association.

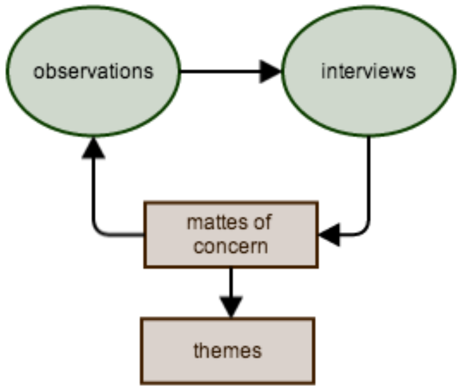

Illustration 10: Illustration of building themes

In this way our analysis becomes an iterative circular process were 1) the interviews creates themes, 2) themes are tested with field notes that 3) again are tested with interviews. These iterations continue until themes are clear and coherent (As shown in Illustration 10).

04.4.3 Step 2

Departing in the themes placed in relation to the actor-network of clients, users and HCIC, the second step consists of part analyses' representing these themes and their relation. These will be analysed through theory presented in chapter 3 Theory. Each part analysis will answer each research sub-question.

04.4.4 The use of theory in the analysis

We are inspired by theory of *value*, *translation*, *narratives, innovation,* etc. in our analysis but we do not apply it as explanatory. As ANT dissolves the borders between epistemology and ontology theory becomes ontology as well. The consequence in our method is that theory and empirical data becomes symmetric actors in our analysis. We occasionally make use of comparative studies made by other researchers in our analysis. It is important to note that we use these studies on an empirical and associative level and not as explanatory.

04.4.4.1 Analytical framework

Standing on rich and detailed descriptions from the analysis we will finally discus how HCICs can enhance their practice in chapter 6. Discussion. We will through the discussion of our analysis parts propose an analytical framework to use in further cases. We use cases and interviews ad hoc to build a text supporting themes we have found across our data. We develop the "Actor Action" model as a theoretical framework for addressing the barriers to innovation we found in our analysis. The hope for our framework is that it becomes not only an academic aspiration but also a framework that can help innovation practitioners.

04.4.5 Writing down risky accounts

So how can we contrast bad research from good research in actor-network theory? In bad research only a handful of actors will be addressed as the cause of all others, as it is the case with a lot of research on innovation where single persons, portrayed as lonely geniuses, are accounted for the becoming of an innovation. Reading these studies serve no other function than a backing for the flows of causal efficacy (Latour, 2005, p.130). Instead ANT restores the belief in the value of a *good* story – meaning one that is detailed and connects the many actors it finds swarming around. In an ANT-study the researcher should strive to represent actors as reflexive, articulated and idiosyncratic as they are in real life and not decay in reducing them to implausibly unambiguous characters. We will aim to do this in our analysis.

Good ANT is therefore a description that is so rich and "thick" that it does not need explanation from another theory (Ibid.). It is implicit to a good description to focus on agency. ANT studies are not just about describing everything but choosing a focus, because *"if an actor makes no difference, it's not an actor. "* (Ibid., p.130). Therefore in our analysis there are persons, events and things that we do not describe as our text is guided by agency.

04.4.6 Limitations to data

Based in the process of collecting data we will reflect on our preliminary analytic propositions and our empirical material.

04.4.6.1 Empirical material

In our interviews we experienced a good rapport to the interviewees. Our conclusion to this was that our prior involvement with HCIC's had given us a deep knowledge that could support the structure of the interviews.

However the two types of data, interviews and participatory observations, are two different means to access the actor-network of the HCIC's. As everything is ontology in ANT the researcher always will affect the field of study and no method is more innocent than others in describing real-life actors. However in a matter of scale we acknowledge that we have a privileged sensibility with the case organisations we observed, a sensibility interviewing cannot match. Therefore interviews and cases are not easily comparable as we as researchers do not have access to contextualise an interviewee's utterances with the interviewee's organisation. To overcome this uncertainty we therefore do not look at the interviews as anything else than what they are - expressions for the consultants' intentions and reflections regarding their practices. These are utterances that represent different accounts towards innovation and their value, and therefore shape how innovation is conducted. Even though interviews do not reveal real-life practices they are still interesting to us in regards of understanding the consultants' intentionality for practice.

No research design will ever be perfect and no amount of data sufficient in ANT. Had we chosen a different type of method other actor-networks would have revealed themselves to us and we would have concluded differently.

04.4.7 Ethical considerations

As participant-observations takes place within everyday work life, many actors in and surrounding the organisations have not been asked to be part of a study. According to Hammersley & Atkinson a *"fully informed consent is often neither possible nor desirable in ethnographic (or, for that matter, other) research."* (Hammersley & Atkinson, 2007, p.42) and the actors might not think of themselves as a subject of study.

When interviewing our roles are clearly defined and the interviewee may censor themselves while talking or explicitly talk "off the record". When entering the field as interns and through the student position the roles are less clear. We have a collegial relation to some of the actors we study, thus we will get access to more sensitive data than through interviewing. Since we have gotten the owners' support it might indicate that they can confine everything.

We have chosen to change the name of all HCIC's participating in this thesis. This is because several innovation projects we have participated in are bound by confidentiality. As we do not wish to put actual persons or organisations on display but focus on actors relation in the innovation process we have chosen to secure anonymity for the persons and projects we have engaged with. We also leave out events that would reveal specific persons. Therefore it is important that the reader of this does not use it as a list of historical facts but as an example of an innovation process. The observant reader might guess the true identity of an HCIC from the descriptions but this is not a problem to us. We want to contextualize them, but covers their identity to not make this thesis related to each HCIC through for example Google searches.

We have made the same decision with our interviewees. Even though they were all willing to put their name to their words we wish not to exhibit them and put them into account for their utterances. The interviews serves the purpose of giving insight of the different narratives and intentions related to their methods of working and not critically investigate them as individuals.

For the same reasons we have chosen not to create an appendix with transcriptions of interviews and complete fieldnotes as these would reveal projects bound by confidentiality. These can be obtained by request.

05 ANALYSIS

This analysis will be presented in two steps. The first step is building themes through sorting and analysing the empirical material.

Mapping the themes in the simple actor-network HCIC, clients and users provides us with an overview of our data and enables us to specify which actors and relations of the actor-network become relevant answering our research questions through further analysis. This will structure and guide our analysis in the second step of the analysis.

The second step consists of three parts analysing the themes in relation to the actor-network answering each research sub-question. Illustration 11 is an illustration of the two steps and the parts they contain.

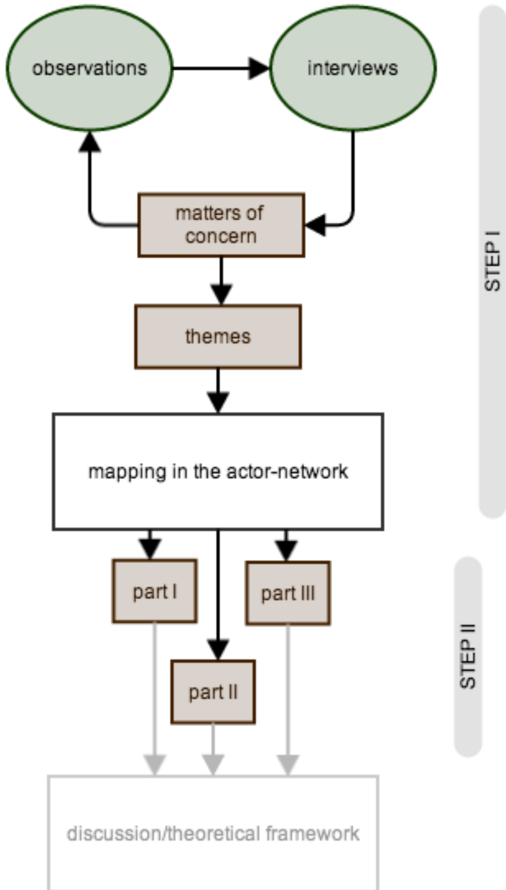

Illustration 11: Illustration of the two steps

Returning to our main research question can help illustrate the structure of the second step:

> ***b.) How can studying innovation in practice as a process of translation provide a critical perspective*** *to the* ***a.) discourses of value present in human-centered innovation consultancies****, and* ***c.) how can this analysis enhance their practice?***

Answering our research question is structured as follows:

- First, in "DISCOURSES OF VALUE" we will analyse the discourses of value present in HCICs adressing "a." in the research question.

- Second, in “CONTESTING THE OPP” and “TWO DIFFERENT ACTOR-NETWORKS” we will through the framework of translation address “b” in the research question.
- Third, in discussing the analysed parts of “a.” and “b.” in a following discussion, we will address “c.” in the research question.

To show how the three main parts of the analysis answer the research sub-questions, we have to present our themes and map them in the actor-network. This is step 1.

STEP 1

Building the structure for step 2 by mapping themes in the actor-network.

05.1 Matters of concern

As the first step towards buidling our analysis, we have analysed the interviews and saturated them with fieldnotes from our observations. This has given us an overview of our empirical material. In this mapping of utterances and fieldnotes we are able to identify some clusters of related data (this process is described in appendix X). Through this analysis we have identified major and minor matters of concern.

The major:

- Redefining the problem
- User insights as arguments
- Discourses of value
- Two contesting homogenious groups
- Stakeholders

The minor:

- Qualitative methods
- Ideation

The major matters of concern we will define as themes and place them in the actor-network. The minor matters of concern we will not place in the actor-network, for the following reasons:

- **Qualitative methods.** This theme relates to the methods the consultants use to gain qualitative sensibilitity with users. Even though this theme is interesting to problematize it does not relate to our research question and we therefore choose to leave it little focus.

- **Ideation.** This theme refers to the methods of developing ideas for innovation practiced in HCIC. Again, even though this is interesting and cannot be completely separated from the other themes, we do not focus on these methods in our research question.

The following matters of concern become themes we later map in actor-networks. These, we argue, are important when answering our research sub-questions, but before we come to that, we will explicate the themes:

05.1.1 Themes

These themes represent a selection of our data analysed according to their relevance to our research question.

Tabel describing the themes

Problematizing the problem Discourses of value	The consultants' value proposition for client organisations and users is central to this theme. There are many different discourses of the consultants value all founded in different understandings of innovation. Within the same interview, we encounter co-existing contradictory discourses on the value of human-centred innovation consulting.
User insights as arguments	Producing insights through observations, interviews and other qualitative methods is the core competence of our cases. How to present those insights to the client is varying in the cases. Some have methods for this and wish to create concepts or proposals based on their insights, while others have more lose formats in the deliverance of insights to clients. We detect a tension between our cases if it is the consultant's job deliver insights or recommendations. Common for the cases is that insights (or recommendations) become arguments for value creating practices for the client.
Redefining the problem	We detect patters of a design attitude in our cases, i.e. the consultancies wish to problematize the clients' problem, arguing that the clients' presented problem is not necessarily the right problem to adress. User research has to be made before defining the "real" problem. Negotiation and agreement have to occur to redefine the problem the HCIC is contracted to try and solve.

Two contesting homogenious groups	This theme relates to the relation between consultants and client organisation. The theme covers utterances about the difficulties of translating between the two organisations and covers a range of narratives about clients.
Stakeholders	As stakeholders were brought up in all cases as dependencies for an innovation, this has become a theme. Stakeholders can exess significant influence on a specific innovation project even though they are in the outskirts of it. We have encounterd various attitudes such as: Users as stakeholders, project owners as stakeholders and others describe various external persons as relevant stakeholders even though they are not formally engaged in an innovation project.

Tabel 4: Table of themes

05.1.2 Mapping themes in an innovation projects actor-network

To illustrate our themes we will map them in an actor-network representing an innovation project[5]. We will use this illustration to structure our analysis by relational descriptions of this actor-network. Studying relations in isolation provides less "noise" and enables us to explore actors in detail – who they are, when they enter, leave or change. Therefore we follow actors and their relation by unboxing relations in innovation projects actor-network.

Mapping the themes in the actor-network is shown in Illustration 12.

[5] As a note the theme "stakeholder" has been split into two, as there can be stakeholders both in the local and global network, which is also represented in the utterances within that theme.

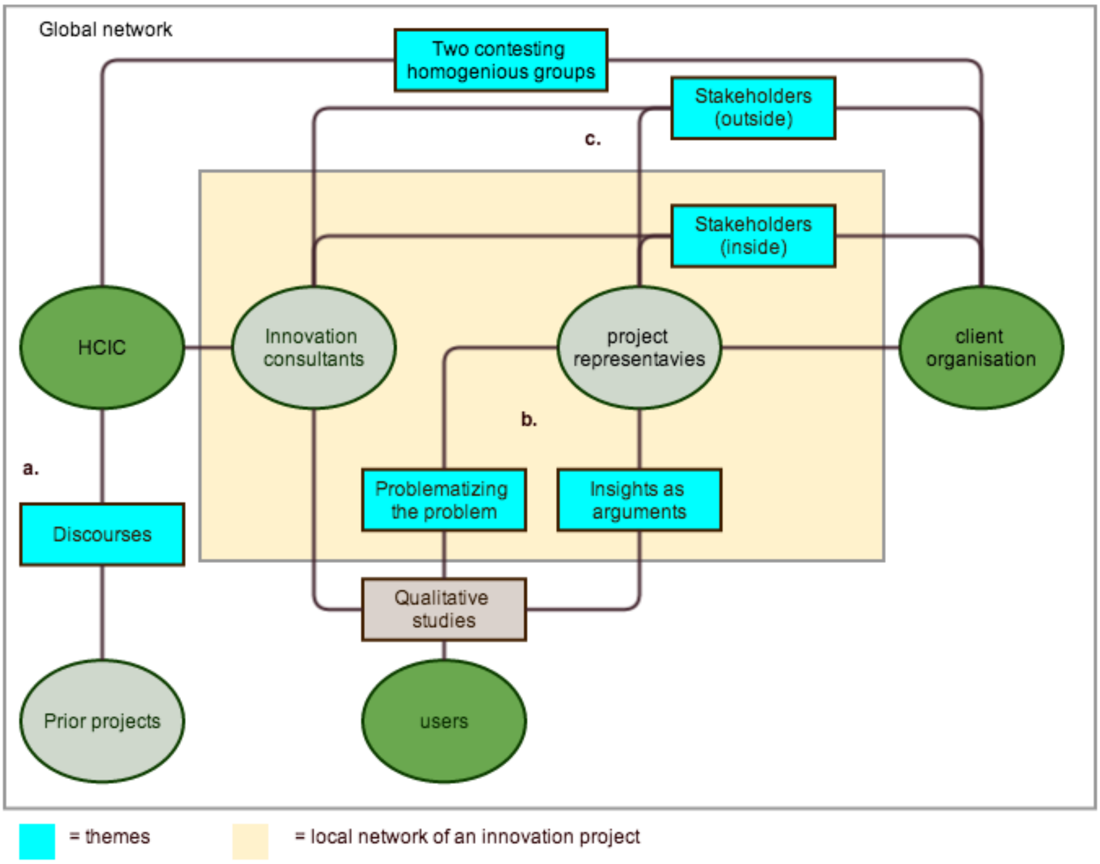

Illustration 12 Themes mapped in the actor network

Illustration 12 is placing the themes in the actor-network we previously mapped through our application of actors and black boxes. For the illustrative purpose most actors are black boxed and will be unboxed in the following analysis parts. The inner beige square is representing the boundaries of a local network, which exists when an innovation project is agreed.

This illustration of an actor-network will structure the remaining of this analysis through three sub-analyses. These are corresponding to our three research sub-questions. In the following reasoning of the themes of the illustrated actor-network, we will both present the structure of the rest of the analysis and explain how this is relevant for answering the three research sub-questions.

a) "DISCOURSES OF VALUE" is mapped as a theme within HCICs as these are discourses of value produced in HCICs from their analysis of prior innovation projects both their own and cases from other HCIC's. The discourses are mapped in the global network as they are not part of the current innovation project per se. Through this theme we will analyse discourses of value present in HCICs. These discourses govern strategic decisions on how the consultants manage innovation projects. The analysis answers sub-question number one:

What are the discourses of value present in HCIC's?

b) In "CONTESTING THE OPP" we will analyse the themes "Problematizing the problem" and "Insights as arguments". Both are mapped in the relation between HCIC and users, as the HCICs relation to users is in qualitative studies. In innovation projects users represent knowledge from a global network, which should translate a local network. Knowledge of users is contesting the established agreement of the initial obligatory passage point, i.e. contesting the nature of a client's version of a problem and the roles of the actors involved in a local network. Analysing the abovementioned themes we will show how HCIC, from their human-centred methods, produce and translate user knowledge into a local network in efforts to strengthen it. This analysis will describe how initial obligatory passage points are continuously contested by emerging user insights throughout innovation projects. This analysis will answer sub-question two:

How is the innovation consulted through qualitative studies of users?

c) "TWO DIFFERENT ACTOR-NETWORKS" Finally, we address the theme "stakeholders" and the differences in "two contesting homogenious groups". These become important themes in understanding client innovation as a process, a translation of ideas or concepts into local practice. With these themes, we will analyse barriers for innovation in the relation between local and global networks and the relation between client and innovation consultant. We will argue that enrolment and a mobilization of actors in the global network determine the trajectory of the innovation. Throught the four moments of translation we will therefore analyse innovation in practice in part III answering our research sub-question:

How can we understand innovation as a translation of an innovation project into a local practice?

STEP 2

In step 1 we have built themes and placed them in the actor-network. From this we have structured three part analysis' corresponding our research sub-questions. In the first part analysis we analyse the value discourses present in HCIC and in the following second and third part analysis, we will analyse innovation in practice.

05.2 Discourses of value

> *"Organizations can get so caught up in their everyday life that they no longer see themselves with fresh eyes. We offer them an outside-in perspective on their organisation through studying their users free from organizational habit."*
> (Interview with Anna, Health Lab)

In this quote from Anna, an innovation consultant at Health Lab, she explains the value they offer when working with hospitals and other welfare institutions. The quote is an example of a discourse of value that justifies the existence of Health Lab. Her organisation can help clients innovate free from organisational habit.

In this section we want to map the discourses of value present in HCICs. These discourses are engrained in the consultants' relation to a field of innovation and in different evaluations of previous innovation projects. In these discourses lay accusations of actions that strengthens the relation between clients and users, and these become governing for strategic decisions in managing innovation projects. We will in this part argue for two overall discourses in HCICs that govern innovation management:

- **Innovation as materialized change** – The value of a project is the value that is materialized in a change in the client-user relation.
- **Innovation as learning** – when a project's value is the process of learning about users.

Fundamentally, HCICs work from the premise that clients have insufficient qualitative sensibility with its users. It is in this gap the innovation consultants justify their worth. They can establish a sensibility, which can design innovation. This means *"restoring the* [Clients] *connection to their users"* (Interview with Thomas, Ideas That Transform Markets), *"not by giving them* [Clients] *Big Data but Thick Data about their users*" (Interview with Peter, Innovate Now) or "*giving the client an outside in user perspective on what they do"* (Interview with Søren, Designing Gov). The relation between client and user becomes the centre in which the consultants' value proposition lays. There are many facets of the notions of value surrounding this relation. In the following, we will explore the value discourses surrounding the interviewed HCICs. Even though these discourses can be contradicting, our goal is not to expose these contradictions but to show how they co-exist and justify different practices at different times. We look at these discourses as artefacts containing inscriptions shaped and assimilated within a network.

05.2.1 Knowing what is valuable to users is valuable to the client

Understanding what is valuable to people is at the core of human-centered consulting. As we have shown, they argue that clients have come out of sync with their users and the consultant's job is to synchronize them again. Sensibility towards the client's users is what gives shape to the design of successful innovation. This means understanding "*what their needs and pains are"* (Interview with Hans, Strategic Design), "*Looking for what would help them in their everyday life"* (Interview with Søren, Designing Gov) or "*understanding their emotional response to a product or service"* (Interview with Peter, Innovate Now). The consultants therefore become spokespersons on behalf of users on what is valuable to them and what is not.

To illustrate this, let us present a field description. The following is from our internship at Designing Gov:

> We are currently working on an innovation project where we interview users of a specific service. In our analysis it has become clear to us that these users do not expect the "product" of the service to have fast delivery time. Instead they value a trustworthy specific date for the delivery of the service. This is contrasting with the client organization strategy. For many years it have evaluated itself on the speed of delivery of the service, accepting that errors and delays would occur, rather than a trustworthy specific date. Maybe there is something to gain from this.
> (Field description, Designing Gov)

In this case there was a mismatch in the relation between the client strategy and what users valued. The consultant's job was accordingly to translate these insights into the client organization. A case like this functions as a "state of the art" example in HCICs since both client and users can add value from changing their relation. Users would get a trustworthy date for the service delivery, and the client would benefit from longer deadlines and flexibility when planning resources. Even though the involved client project managers acknowledged the value of this innovation, this knowledge was not exploited in practice because of many opposing interests within the client organisation. The client project managers found this new knowledge valuable but in this case it did not lead to innovation.

05.2.2 Producing value through innovation projects

> *"Fundamentally innovation to me is a question of producing value. But at the same time it is hard for us to see whether we do so, because how is it we create real tangible value?"* (Interview with Allan, We Know People)

The wish to produce value is present at all time in our encounters with innovation consultants and all of them are eager to discuss notions of value. But because of the qualitative nature of their work they find it complicated to put a concrete figure on the value they bring. Amongst our cases, we have heard many different discourses of an innovation project's value as learning such as "*learning about users"* (Interview with Thomas, Ideas That Transform Markets)*, "changing mind-sets"* (Interview with Hans, Strategic Design)*, "creating the conditions for innovation"* (Interview with Peter, Innovate Now)*, "planting seeds in the client organization"* (Interview with Søren, Designing Gov), *"practicing the future"* (Interview with Allan, We Know People). At the same time that the consultants express these value discourses, they also express another value discourse; how innovation is creating value through actual materialized change in the client-user relation. These value discourses are presented on the consultancies webpages, case descriptions and other text, we can detect a discourse that innovation can produce four kinds of value:

1. More for the same money.
2. The same for less money.
3. Better user experience without increasing costs.
   Or (for the public consultancies only)
4. Creating a democratic value.

The two first has to do with an agenda of effectuation and optimization of resources. These are strong accounts where value is a positive figure that easily justifies an innovation's worth. The latter two are qualitative and political by nature and are therefore presented in discourses built by series of arguments explaining how users have a better experience post the innovation.

Contrasting these value discourses of materialized change to the value discourses of changing mind-sets, creating conditions, planting seeds etc. it is interesting to understand why they exist at the same time in the HCIC we study. The following sections will describe this in practice.

05.2.3 Authorizing environments

The following are reflections from a field diary after an open lecture held at Designing Gov on the topic of service design. An external innovation consultant has been invited to talk about human-centred design methods. He presents an innovation case of users' "journey" through a service, in order to find touch points where the service provider can improve. The following is a field description describing the consultant:

> The consultant is showing us before and after pictures of his redesign of a client's office. When looking at them, it is more than obvious why the new design is better than the former - almost to the extent were it becomes banal. The presenter is humorous and we, the audience, are laughing as he shows us pictures. As he shows them, I am thinking: "*How stupid could the client have been? It is so obvious that this place was producing a bad service before the consultants came. This is absurd*." Looking around at the audience I see many known faces. It is always a lot of the same people who come to these lectures. I guess we are some kind of a community in the way we all acknowledge the consultants' improvements as good, and all believe in the potential of innovating in services from a user-perspective.
> (Field description, Designing Gov)

In the situation above, the consultant builds a story of the potential in human-centred innovation through before and after pictures of a success case. The pictures become artefacts supporting his arguments on how the innovation produces a better user-experience. These pictures' inscriptions are created and curated by the consultant to tell the story of a better user experience and he succeeds in creating a coherent narrative. In this way he becomes a spokesperson for the potential of human-centred innovation methods and we, the audience, all recognize the value of his innovation and enrol into a new network of service innovation "cheerers". This aligns with the intention of the consultant and the purpose of the lecture. The question however, is whether the innovation cheerers, when they return from this lecture are able to mobilize their own organisations into innovating based on human-centred research or if the open lecture becomes a local actor-network with weak associations to the global? In any case this local network strengthen its relations through the lecture and legitimises the value discourses about the necessity to innovate in the client-user relation.

05.2.4 Innovation projects produce value when the client recognize its value

Another discourse towards HCICs value focuses on client's recognition of value. This value discourse therefore focuses, not on the client-user relation, but on client value alone. The private held consultancies we have interviewed justify their value in working on a free market. Utterances such as "*We wouldn't have returning customers if what we did wasn't valuable"*(Interview with Thomas, Ideas That Transform Markets) or "*It is a costly affair to hire us. Clients wouldn't pay that kind of money if they didn't get anything out of it.*" (Interview with Peter, Innovate Now). The exchange of money for an innovation project is a tangible recognition of the consultants' work and gives a precise figure to its worth. "Being worth the money" becomes a marker of the value they produce. Continuing this focus on client value Peter explains how value "*is* [visible] *at the end of a project when we present our results to the client, and you can see in the eyes of the client, that we are on to something interesting."* (Peter, Innovate Now). In this discourse, an innovation project's value is not bound to whether it leads to innovation, but only depended on the client's recognition of the project as valuable. In this thesis we have put ourselves on the consultants' side of the table and have only observed clients from this perspective. However, there are obvious structures inside a client organization favouring a successful evaluation of a project. Their recognition of value therefore becomes asymmetrical in itself. Imagine an executive who has spent a lot of money hiring a consultancy that did not produce any results. The executive would experience the discomfort of cognitive dissonance. This hypothesis of course only applies to a certain extent but clients are, as everyone else, not just rational entities but a complex actor-network of many interests. We therefore argue that evaluating the worth of a project is not as simple as presented above. This does not change the fact that the client acknowledges the consultants' work as valuable. Instead, the question is whether the consultants' work has been valuable for innovation in the client-user relation?

05.2.5 "It's good because it's innovation"

As argued in chapter one and two in this thesis there is a discourse in innovation management about the need for innovation. These are present in the consultants we have studied. Strong rhetorical accounts like "*we can't fix tomorrows problems with yesterdays tools*" (Interview with Allan, We Know People) legitimize innovation as a solution to problems of delivering a good service and staying competitive to rising economies. Enterprises, users, citizens, politicians, etc. all call for innovation and in this way engaging in innovation activities become valuable in itself.

"We live in a world of success stories. I mean, all of these places tell stories of success. But the thing is that it's also true. Something good always comes from an innovation project." (Interview with Søren, Designing Gov)

This quote displays an interesting position towards the value of innovation projects. First it tells us how evaluation takes its form in stories and how HCIC live in a world where innovation stories are always success stories. Second, as innovation projects do not have defined clear outcomes as they set out, they do not run the risk of failure, since the creation of new knowledge is evaluated positive.

This leads us to the idea of learning as moments of epiphanies, which can help us understand this value discourse. In the idea of epiphanies, insights about users produce a striking realization that will forever change the way client understands its users that will consequently forever change their relation. Turning to ANT's concept of irreversibility, the consultants' argue that new knowledge functions as an obligatory passage point after which the client never can go back. As Hans puts it:

"We know that implementing is the hard part, but we try to plant the insights we produce so deep in the organisation as possible, so should the project fail, the insights stick. We have planted so many seeds that things will change eventually." (Interview with Hans, Strategic Design)

Using the metaphor of planting seeds, Hans argues that knowledge will "grow" to innovation over time. Managing the innovation process in the client-user relation in this discourse the value of a project is not the single new initiative a project produces, but the spin-offs produced over time from the client applying a new way of thinking about their users. Another metaphor we have come across is innovation projects as "steppingstones" to a greater quest of changing clients' capacity to innovate:

"In my experience we are in a constant discussion with ourselves as to whether an innovation project isn't more of a steppingstone of a greater awareness of the need for change in the client organization […] If not, I believe that many will feel frustrated that their projects don't deliver more concrete results than they do."(Interview with Allan, We Know People)

As Allan expresses it, the values of innovation projects are steppingstones on a path to change awareness of the need of innovating in client organisations. In this discourse the goal is *acknowledging the need for innovation* and innovation projects are the means.

The discourses of value therefore takes ambiguous characters since the value of innovation projects justify different outcomes.
We argue that, formulated in many ways, the contours of two discourses dominate the management of innovation projects in HCICs:

- **Innovation as materialized change -** A project's value is the value that is materialized through change in the client-user relation.
- **Innovation as learning** – A project's value is the process of learning about users as a step-by-step path to innovation.

These discourses function to justify different innovation projects at different times depending on the outcome of a given project. The innovation consultants prefer the first one as it marks a translation of the client-user relation – the actual production of value through new practice. These function as strong stories with tangible value as showed with the consultant showing before/after pictures of an innovation project.

The latter has translated a smaller actor-network (the project participants) within the client organization through new knowledge. The discourse claims that knowledge will "grow" or "lead" to a later translation in the client-user relation. However, the story in this discourse is weaker as the knowledge has not yet been put to practice and we cannot predict if it will.

What is interesting about these discourses is that they are both depended on the client to fulfil the value. This means that the consultant only produces value if he or she has succeeded in translating the client's relation to its users. As it is hard to imagine, when engaging in research activities for a period of time, that no learning at all should occur. It is therefore difficult to imagine that the value of 'innovation projects as learning' not being fulfilled. However, when it comes to the discourse of projects' value as leading to a materialized change, the consultants are dependent on the client's successful translation.

05.2.6 Summing up "discourses of value"

In this first part analysis we have argued that HCICs justify their value in stimulating innovation within the relation between clients and users. They do this from a presupposed qualitative gap of knowledge in this relation.

We have argued how two discourses justify innovation projects at different times depended on the outcome and we have argued how these different accounts justify the consultant's work at different times and legitimize their offering, thus making projects successful.

These discourses are important as they govern strategic decisions in the management of innovation projects. Therefore, we want to question the accusations of actions producing these discourses. Does knowledge grow as "seeds" inside a client organisation leading to innovation? Does user insights create epiphanies that can be accounted for the becoming of the innovation?

Looking at innovation projects from a practice perspective will argue that new knowledge about users, even though it resonates with client project managers, does not necessarily lead to innovation in the user-client relation. We will in the following argue that knowledge produced in the local network of the innovation project group not by itself diffuses to global network of the client organisation.

05.3 Contesting the OPP

In this second part analysis we will explore the themes "Redefining the problem" and "User insights as arguments" as they are moments contesting the obligatory passage point established when a HCIC is first contracted by a client organisation.

05.3.1 Redefining the problem

The innovation projects we have studied depart from either an area of attention or a particular problem for the client. Whether it is politicians, a front line worker, a CEO or the consultants themselves who first direct attention to an area, it is always from a belief that a potential for improvement is present.

However, the first thing the innovation consultants do when a project is established is to question their client's version of the problem. This is incorporated in their methods. The following four quotes are from our interviews expresses how the consultants searches for a meta perspective to the clients problem:

- *"We start by looking at the problem from above"*
  (Interview with Allan, We Know People)
- *"Some projects are more clearly defined than others, and I like to challenge such projects."*
  (Interview with Anna, Health Lab)
- *"We always ask if what they think is the problem really is the problem"*
  (Interview with Søren, Designing Gov)
- *"We leave the problem and instead study it as a phenomenon in relation to its surroundings"*
  (Interview with Thomas, Ideas That Transform Markets)

This wish to redefine the problem is characteristic of the design methods practiced in HCICs. With words such as challenging, asking whether the problem is the problem, looking from above and defining it within its context/surroundings the consultants underline the importance they give to challenge their clients' problem version. The consultants argue that within a problem version already lays a solution. The following quote from Peter at Innovate Now describes his view of a good consultant:

> *"The good consultants' task is to challenge the problem he is hired to solve. This way you will expose the underlying structures of the initial problem* [...] *it is so deep in our nature that we wish to make decisions, the client might have decided 'we want a new website', but then you have already identified the problem in the answer. We wish to challenge that."*(Interview with Peter, Innovate Now)

Peter wishes to challenge clients' problem version; in order to find, define and solve what he argues is the most important problem. In this quote the consultant argues that there is an underlying structure to a problem, which he can identify by studying the behaviour of users. He argues that the value he provides for a client organization is better when addressing the underlying structures of the initial problem. In his argument, Peter does not define the intrinsic relationship between problems and their underlying structures, which could be interesting to address further.

When redefining a problem, the OPP established when the client contracts the consultancy is readdressed. This means that the nature of the project and the identified actors has to be renegotiated when the problem is redefined. If the actors in the local network agree and the actors' roles are defined, then the OPP is stabilized again. As an example, if Peter advice his client to produce a magazine for members instead of a webpage, a new actor-network needs to be established to complete the innovation.

In contrast to this, Christian from Centre for Health innovation has a different perspective to redefine the problem. His clients are hospital employees and according to him, redefining their problem version can be counter-productive:

> *"Our experience with employees is that they are so used to think in solutions that they are really bad at problematizing, and therefore problems which are 'born' in a concrete context are also those we like the most, because this is where we can get closer to the problem* […] *If we start to problematize too much there is a tendency that small problems can easily grow big, and we wish to favour a minimal effort with the biggest effect. This is not from lack of ambition but to use our resources best* […] *you have to remember the region we are in, there is little understanding of academic undertakings, we have to prove the effect of our professionalism"*
> (Interview with Christian, Centre for Health Innovation)

As Christian argues, problems tend to grow big when you start to problematize and solve them, therefore they demand a larger effort. He describes this rational not in a lack of ambition, but from a resource rationale. He wants to be able to prove the effect of his work to the region – in this case solving locally born problems without redefining the problem.

What Christian tells is that there is a risk by leaving the problem's context and redefining the problem. If problems grow they can no longer be solved in the context they were born. Placing this perspective in contrast to the perspective of redefining the problem generates a dilemma for the consultant, as redefining is an important part of design methods to improve the value they produce. At the same time, this redefining risks not being solvable to the involved actors. The question is how the consultants should balance between these two seemingly conflicting perspectives in practice?

The following is a field description from a project we followed, where the problem was not redefined. It shows that the following transactions in a project are contesting the OPP, with consequences for the strength of the local network.

As part of enforcing a strategic agenda in an organisation, this project was about creating efficient meetings in coherence with this strategic agenda. This case description is from Health Lab who was contracted to implement that focus in the organisation's weekly and monthly meetings. Clara, the innovation consultant from Health Lab, had not been involved in the overall aim of enforcing a strategic agenda. *Users* are in this case employees from division A and B.

Clara explains the purpose of the meeting to me *"The aim of the project is to create more efficient meetings with a strategic, analytical and political agenda"*. Within the organisation there are two divisions, and Jesper, a newly appointed director, had worked in direction of more strategic discussions in the organisation and now he wanted to make the weekly 'calendar meeting' and the monthly 'staff meeting' more strategic and less ' a waste of time'. *"The current meetings are not that well attended and Louise, the leader of one of the divisions had contacted us to help with this problem"* Clara tells me. I ask Clara *"What does Jesper mean with a strategic, analytical and political agenda?"*. Clara answers *"Before I entered the project, there had been a seminar on that and now the meetings have to be more strategic, analytic and political"*. I was wondering what that meant and I asked *"Should Jesper be challenged upon this, I mean, do the employees understand what he means by strategic, analytic and political"* and Clara replies, *"I don't think I will address him on that, he is really busy and they have attended the seminar, so they should be informed on that"*. Clara had made some interviews with the employees and amongst other things; she had learned that *"most of the employees from division A are normally attending these meetings whereas division B is less represented"*. She decides to make a workshop for the employees, where they should design different forms of meetings, which they could test on the upcoming meeting situations.

The day before the workshop, Tim, the leader of division B, cancelled his attendance. Thinking about the learning from the interviews I ask Clara *"Can we do the workshop without him?"* and Clara argues that *"Louise from the other division will be there and although it is irritating that Tim will not join, we have to continue with the plan - the workshop is tomorrow"*.

The next day I attend the workshop. It was held at an expensive conference facility placed in rural surroundings. I was looking forward to see how many from Tim's division (B) would attend. None of them showed up and almost all employees from Louise's division (A)

attended the workshop. The workshop went well and Clara did her best in guiding the employees through the exercises, but I still felt that the missing division played a role in the room. At one point in the workshop, one of the employees addressed the elephant in the room as she said *"It is pretty hard to design a perfect meeting if we don't know what the others want. Them not being here is part of the problem of our meeting culture"*. There was a general consensus and others joined in, saying how it was a problem that Tim's division never came to meetings. Clara agreed in that viewpoint, but said that designing efficient meetings is the aim of this current workshop. After that, the workshop returned to the plan of designs' meetings. They were presented and should afterwards be tested in upcoming meeting situations.
(Field description, Health Lab)

This field description shows several things of innovation projects in practice. We see an interesting tension between the intern and Clara. The intern coming straight from university with a set of theory and methods ready to apply, and Clara who works within the practical realities of the project making it difficult to question Jesper's agenda. Doing so could mean that the she would question the previous seminar, and question the aim of the project she had been assigned to. Clara accepts his purpose with the workshop to deliver the results requested from her. In the local network of the project actors defined are Clara, Louise (A), Tim (B) and the employees within the two divisions (and for a while, one of the authors of this thesis). Unboxing the "employees within the two divisions" for a moment, it can be discussed whether they are part of the project, as they have not formally been asked to join but are only invited to events like the workshop. Jesper was in charge of the overall agenda and had asked Louise to initiate the project of efficient meetings. She contracted Clara from Health Lab. Clara did not questions Jesper's version of the problem, nor did she address e.g. whether the structure of a meeting would be the best way to address strategy, analysis and politics. Clara learns more about the organisation as the project progresses, i.e. division B is not well represented in the current meeting structure and the day before the workshop Tim cancels. Being asked whether to cancel or go through with the workshop, she finds herself invested in her course of action, arranging the workshop, booking a conference facility, inviting employees, etc. and she argues that Louise will be there, knowing that Louise was the one who had contracted Health Lab. In this situation Clara has to choose between altering her plan with following the consequences, or to continue according to the plan of creating efficient meetings with a strategic, analytical and political agenda. In this situation the strength of her previous course of action wins over the confronting the unknown following consequences.

As the project progresses only employees from division A get involved in the project. In the workshop this became an issue, as division A found it complicated to design a new structure on behalf of actors from B who were not represented. Therefore at the workshop, the problems reveals itself to be that the problem was not only about making the meetings more strategic, analytic and political, but that division B did not show up at meetings. The problem between division A and B's priorities in this way influenced the innovation process and made it impossible to legitimize decisions made at the workshop. In our observations, this issue was not problematized as part of the nature of the problem and identification of the actors involved.

In terms of ANT, the project creates a local network where an OPP is established upon agreeing on making meetings more strategic, analytic and political, thus making the actor-networks A and B indispensable. This initial OPP of agreement got contested as the project progressed, which meant that the nature of the problem, better meetings and the actor-networks, A and B, as the actors involved was not as stable as initially identified. The strength, or lack of same, of the OPP in a local network determines the trajectory of an innovation. In the case of efficient meetings; had Clara addressed the nature of the problem and therefore the actors involved, the local network i.e. the attendants would have been different at the workshop. The case becomes relevant when analysing the OPP, addressing the importance of identifying and matching actors with problems. In this project all employees of these divisions were participants in the organisation's meetings. What other entries for the workshop could Clara had made use of? What would have happened if Clara had only asked spokespersons from division A and B to join the workshop? What would happen if the theme of the workshop had been: "how do we make division B prioritize meetings"? Asking these questions in retrospective light is not a very grandiose activity, as Clara has probably asked them herself. This case serves as an example of the complexity of balancing the relation between redefining a problem, and the many idiosyncratic actors, calendars, resources, etc. of everyday organisational life.

05.3.1.1 Balancing a redefinition of the problem

The question is if the solutions are less ambitious than the solutions derived from redefining the problem? Following the logic for redefining the problem, that changing the underlying structures or solve the underlying problems, will solve the initial problem and similar problems anchored in that underlying structure. This is the claim for having that attitude present in the discourse of value. We have, in our cases, not observed innovations we would characterize in that description. This is not an argument against redefining the problem, as "larger" innovations occur less frequent. Central to the two different attitudes represented in our cases are the motivation for producing value for the client.

05.3.1.2 The dilemma of redefining the problem

The dilemma is between accepting the problem as "it is" and trying to redefine it. We have argued that both approaches can be understood as an intention of creating value for the client organisation. The dilemma for consultants seems to be balancing between solving problems without redefining the problem - as a trouble-shooter - and redefining the client's problem versions with the risk that the local network becomes heterogeneous to the global. In either case time becomes a relevant factor, as these, initially unknown outcomes, only will show empirically. Balancing between redefining them or not is empirically dependent and different context allows different decisions.

Acknowledging that an innovation project is bound in time, with a start and an end, we are curious to discuss if a HCIC can act differently? Especially when redefining the problem, can HCICs translate the way local and global networks relate? According to ANT it is the degree and form of mobilization of the two networks and how they are connected that determines the trajectory and success of a project. How can this relation be addressed when redefining a problem?

05.3.2 User insights as arguments

This section will explore how user insights become arguments for a desired future.

05.3.2.1 Collecting user data, analysis and validation

The sociologists, designers, anthropologist, engineers etc. who fill the role of innovation consultants make use of qualitative and design methods. Through their various professions they exercise this in different ways. In this field description of a project on creating new hospital uniforms at Health Lab, a designer and an anthropologist are the project owners executing the research. This constellation makes it an empirically dense project, as the field description illustrates:

In a project, the consultants were researching for new uniforms and patient wear for hospitals.

The project team was doing extensive fieldwork. Fieldwork at different hospitals was unfolding in a four by four meters meeting room. Before I was assigned to the project, I had sat next to the room noticing the designer, the anthropologist and two other team members entering and leaving the room after each trip to the field. Although the wall between the room and the open office space I sat in was made of glass, usually creating an open space transparency feeling, not much transparency was the case, as the glass wall was covered from the inside with A0 sheets of paper. After entering the project, I had my first visit to the room. Inside the room there was a table with scissors and lots of small pieces of paper, leftovers from cutting out images printed on paper. All the walls of the room were crammed with A0 sheets, some overlapping each other. These sheets were filled with images, and each image had a handwritten note attached, representing a quote or a note supporting the image. They were all little stories of the use of uniforms and patient wear. Some positive, but the most part were concerned with the problems of the current clothing, showing different situations where the design was impractical. The A0 sheets facilitated a sorting according to a common topic, and the walls facilitated a sorting according to different areas.

Seeing the thorough and dedicated work of the group, I tried to count the man-hours put into that room. There must be at least 100 hours of fieldwork and analyses represented in those walls. I had not expected that a consultancy would have so many hours for fieldwork.

Towards the end of the project the most important themes were selected and the images/quotes supporting that theme best were selected. The selected data was then visualized and made presentable for a final presentation for the client.
(Field description, Health Lab)

As this case shows, the consultancy spends dedicated time in the field to come up with user insights. Furthermore, they put effort in analysing the gathered material in a tangible manner. Towards the end of a project, a fixated artefact presenting the users has been "condensed" by the consultants. The reasoning for doing this is that user insights when fixated can function as arguments for a desired future. As Søren describes it:

> *"If you involve users four times, you can get four different results, it is not about building valid knowledge in the classic sense. Involving users is about strengthening an argument because of user involvement. It creates a good story, why this* [the proposed change] *is a good solution."* (Interview with Søren, Designing Gov).

Søren's point is that you strengthen an argument and create a good story by involving the users, users become both an argument, and at the same time, the origin of the knowledge produced. In the case of the new uniforms the result has the function to select arguments for the client to make informed decisions of designing new hospital uniforms. The findings are visually presented with the same objective as Søren's, to support a good story of why to change.

05.3.2.2 Validating

To continue building arguments for a desired future, the HCICs in some projects include users to validate their findings. As Anna from Health Lab tells us in an interview where she talks about validating user knowledge *"Sometimes I make a workshop with users, where I present my findings from observations and interviews in order to validate these findings"* (Interview with Anna, Health Lab). In other projects the findings are tested and validated through mock-ups and rapid prototypes. All of these to further qualify decisions of going one way or another.

05.3.2.3 Translating user knowledge into the local network

Therefore, building good arguments become vital for the innovation consultant and users become the sword in his hand in the quest to do this. In an interview with Peter, he reveals their strategy when building arguments *"We focus on recommendations, as most clients are indifferent of how this was produced, as long as we can tell the good story about the essence of being a user."* (Interview with Peter, Innovate Now). This entails storytelling as a powerful inscription in the translation of insights, or outside-in perspectives, in the client organisation. He favours *"tons of images and quotes from user"* over long reports that *"ensure academic quality"*. The same consultant also has an interesting view on the long-term effects of strong arguments:

> *"You have to know how to <u>pitch</u> ideas, if you wish it to be taking further into the organisation. When you pitch, you have to remember the idea has to travel down the halls of power." (Interview with Peter, Innovate Now).*

The interesting thing about Peter's argument is that it is not <u>what</u> user insights are, but <u>how</u> they are delivered that determines whether ideas can help the local network and enrol and mobilize allies inside the client organisation. This statement acknowledges that most projects have one or few touch points inside the client organisation, and therefore the strength of the argument has to both convince the client project managers but also provide those persons with arguments to continue the innovation inside the organisation.

The following is field description from Designing Gov of this point. Previous to the field description there had been a workshop where Designing Govs' project manager Magnus, had tried to address how his client could benefit from a new type of communication in becoming a more service-oriented organisation. The participants however, had reacted by protesting to his proposal. Trying to address the same issue again to a higher hierarchical actor, Magnus has edited a one-hour interview with a user down to a two-minute sound clip presenting a fixed narrative of how this user had experienced the client's service – in the user's own words. In the field description we call the client organisation *Danish Agency of Permissions (DAP)* where Annika, head of office at DAP, is the project owner but has not participated in any previous workshops.

Magnus tells Annika about the previous workshop and how he senses a conflict in being a controlling organization and a service at the same time. He also tells her about the project group's reaction to the service-oriented communication. Annika replies *"Yes, that is an ongoing discussion within this organization. I remember some years ago when someone suggested that we write, "kind regards" at the end of our letters. It was a huge discussion and you will find completely different attitudes, depending on who you talk to in our agency."*. Magnus *"But maybe you could see this project as a chance to open that discussion again? If you have the time, I would like to play a sound clip from one of our interviews? This is an American who, because of small and unforeseen errors in his application, goes through enormous trouble getting through your system. You should not see this as a critique, but just as an example of how a user has experienced you*." [Annika signals okay and he plays the sound clip.]

Quote from the sound clip *"So I was notified September 6th that the amount of money I had shown in the bank was insufficient because that was for 6 months instead of 12 months. And so I called DAP because I was pretty pissed, 'cause I had confirmed it with them several times and gotten the information straight from DAP. However, none of the ones I spoke to felt it was their responsibility to help me in my situation and only referred to existing rules."*

[Annika looks affected by the sound-clip and asks what exactly went wrong in the case. Magnus explains the details.]

Annika replies *"Maybe we should have a strategy session with the heads of the different offices one day where you could play this? Maybe that would be a good idea."* and Magnus goes *"That is something we really would like to facilitate, and something we have a lot of experience with. We prioritize these structural strategy sessions highly and this is something we could easily find the time for, if that becomes an issue."*. Annika *"I have to go now, but lets talk about this again."*

Magnus and I are really happy as we leave DAP.
(Field description, Designing Gov)

As we can see in the field description, Magnus succeeds in finding support for his agenda. The sound clip holds a powerful inscription and takes the voice of the user into the room. Through this tactic Magnus all the sudden gets access to new actors in the global network of the organisation – the different heads of office. Finding allies in these networks will strengthen the innovation's actor-networks in making the agency more service oriented. It was not only the insights but also the shape of the argument, the shape of a sound-clip, which made his agenda legitimate.

This field description shows how contesting the OPP through arguments can translate the OPP. A stable OPP of a local network can be contested by bringing in actors from the global network – fixed and inscribed into an argument. If the initial identified actors in the local network cannot renegotiate the nature of the problem the OPP becomes unstable. For the OPP to stabilize, the identified actors have to change. Some will leave and new ones are enrolled. If succeeding in stabilizing the OPP the project has translated into a new actor-network.

05.3.2.4 Summing up "Contesting the opp"

In this part analysis we have identified and analysed how innovation projects either become redefined or accepted as they are. This creates a dilemma for consultants for knowing when to choose which.

Secondly we have argued how user behaviour both become the source of knowledge and the argument for desired future for the client organisation. The insights but also the form in which these are presented determine the strength of an argument. When an argument is strong it possesses greater potential for enrolling and mobilizing alliances in the global network.

05.4 Two different actor-networks

In this final analysis we will look towards how the themes' "stakeholders" and "two contesting homogeneous groups" affect innovation projects through the framework of translation. In this analysis we will use actor-networks, stakeholders and groups unanimously as they all refer to actors related through a consistent ambition for an innovation. We will analyse barriers for innovation between local and global networks with a focus on the client – innovation consultant relation. We will argue that moments of problematization, interessement, enrolment and a mobilization of allies determines the trajectory of the innovation in moving from a local to global network.

05.4.1 The Professionals

The consultants in each HCIC share terminology, language, methods, workspace, history, stories from their private life, etc., as every other organisation. What makes them different from other organizations is that they are to consult other clients in innovation projects. Inherently in this position makes HCIC representatives of the "new" and clients the "old". A raison d'etre in contesting the old strengthens the homogeneity of the HCIC's. As Peter puts it:

> *"You are easily wearing blinders as a consultant, seeing things from your own perspective and get all caught up in your own methods."*
> (Interview with Peter, Innovate Now).

In this quote the interviewed acknowledge that his HCIC as an actor-network in order to translate concepts, knowledge or ideas, needs an ability to look at the world from a clients' perspective.

The consultants we study are experts on innovation and studying humans qualitatively. This identity puts pressure on the delivery of expertise and the need to radiate competency. An example in this field description explains how the intern experienced the atmosphere at the office at Designing Gov. The following is Søren talking about the identity of the consultant:

"We are experts everywhere we go. We have a rumour amongst our clients as the new,

exiting and innovative, which we enjoy to mirror ourselves in. Even though we only work with public sector agencies, none of us would be willing to work in one. Everyone in our team is well educated and academically strong. This is highly valued and at our team discussions everyone speaks in a highly academic abstract language. Especially the few ones that are really skilled at this are the ones who gets most talking time. I am always very careful not to say anything stupid at these discussions to not lose face."
(Field diary, Designing Gov)

As we can see from this field description, the professional identity is both produced in the relation to clients but also produce the organisational identity internally. Positioning oneself in opposition to the client strengthens the identity internally. The challenge with a professional identity, as we can see in the field description, is the risk aversion, which is also produced in reproducing a professional identity. This risk aversion does not only affect the internal actor-network of the HCIC but also how relations to clients are managed. Allan from We Know People explains in an interview how some of his colleagues explain projects failures in the client organisation:

> *"You have to be careful with stories like 'fuck they are lazy and conservative in the public sector' because you are likely to express this attitude yourself when things doesn't go as planned and you are also likely to loose confidence that you can change anything."*
> (Interview with Allan, We Know People)

As Allan argues, the accusation of a failed innovation project being explained in the client's unwillingness to change is likely to happen when the consultants have reached dead ends. It does not threaten a professional identity in explaining a project's lack of success in factors out of his or hers control – the client organisation. Furthermore, Allan explains how you as an innovation consultant can loose faith in your work when using this explanation. Our question is therefore how this professional identity balances learning from projects but at the same time seek explanations that do not threaten it?

05.4.2 Problematizing

As argued earlier, HCICs sets out to design innovations free of organizational habit. However in innovation projects multiple actors tend to barge in and overtake the original goals of a project with another. Lets take a closer look at how actors enter, exit or change an innovation process.

The following is a field description from a study Designing Gov conducted for a governmental agency. It was supposed to produce knowledge to a larger cross-governmental policy development managed through a committee. The committee was intended to develop a new legal recognition of these enterprises.

> As an intern who had just followed a class on these enterprises we were about to study, this project served as a perfect case for me to make use of my methods and prior knowledge. Two of our project managers, Nicolai and Julia, were to consult on this project owned by Susie, a project manager from the client. Susie presented their preliminary work. They had made a 1-5 dichotomy scale categorizing enterprises the project was intended for. Susie showed us a list of approximately 200 companies that, as she said, *"has some kind of the profile we address"* that she had placed within this 1 to 5 scale. She explained that: *"even though we don't know yet what recommendations the committee will give, it will be something like this. We need to be ahead for the following policy work so there is no reason not to start working within this framework now."*
> Biking back from the meeting I chat with Nicolai and Julia and raise some early concerns about this framework. First of all I was surprised that they had already started to make a framework before our study had begun. Second, in the lectures I just had on these enterprises we were about study, a key teaching had been not to categorize them in a dichotomy scale. Nicolai explains to me that *"for now it is important not to question Susie's agenda and framework, since she is the project owner of this analysis. I also think Susie takes this project very seriously. It is the first time she's been project owner of something and I think she sees this as a chance to prove herself and maybe get a promotion."*
> (Field description, Designing Gov)

This case marks the beginning of a project. Establishing the obligatory passage point between Designing Gov and the client organisation is a political ambition on improving conditions for a certain type of enterprises. Before beginning this project the solution realm is already defined in the problematization. *Better conditions for enterprises = Innovating in the legal recognition of them*. As Designing Gov enters the client's innovation process there is an advantage of applying the prior knowledge the intern carries in questioning the framework the client is working from. The academic literature within this field is unanimous about the misconception of applying a dichotomy scale to categorise these enterprises. But as we can see Designing Gov enters an actor-network with a manifold of stakeholders that Designing Gov's project managers do not wish to challenge. The innovation process is negotiated between *"the ambition of being ahead"*, Susie's hope for a promotion, the initial framework and many others. In this case project managers decide that it will be counter-productive for the innovation process choosing to problematize within these actor-networks. This means that they do not work to free themselves from organisational habit but instead accepts the actor-networks' interests as a premise for their entry.

05.4.3 Continuing the story

With the framework of translation this can be seen as the consultants accepting the clients *problematization* in order to inscribe themselves into the clients innovation process. The project started, enterprises were interviewed and a report with insights about these enterprises was produced to qualify the forthcoming policy work. However, when the report was presented the project stranded because the knowledge Designing Gov had produced was ignored due to the set-up surrounding the policy work. This had grown to big to encompass new knowledge.

As the project had progressed, the initial problematization between Designing Gov and the agency was bypassed as the ambition of making a cross-governmental policy activated two other ministries, practitioners and academic experts. These new actor-networks had with their entry questioned the initial problematization and thereby the trajectory of the innovation process. Meetings held in the committee were long and involved long discussions where agreement between the different stakeholders seemed almost impossible. The knowledge Designing Gov had produced was ignored, as it became only another actor advancing the process of agreement. When looking at the actor-networks surrounding the committee, we can see how establishing an obligatory

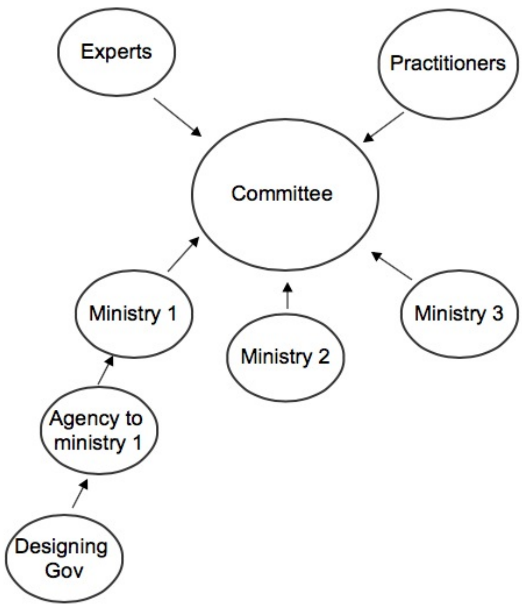

Illustration 13: Map of the actors involved in the case

passage point in which all the involved actors agrees on the nature of the problem is a dubious task. New actors constantly barged in and displaced the original goals of the project between Designing Gov and Susie ("Agency to minister 1" in Illustration 13). The strength of the global network (all the actor-networks), and the weakness of local (Designing gov and Susie), as the illustration shows, made it easy to bypass and ignore the local.

This lead to a lot of frustration over the client and the committee within Designing Gov, as they felt they had produced knowledge valuable to fulfil the original political ambition of improving the conditions for the enterprises – insights and ideas free of organisational habits. Therefore Designing Gov ended up evaluating their project's lack of success in factors out of their control – the "bureaucracy" surrounding the committee. The question is whether Designing Gov and Susie's agency could have foreseen the entry of the actor-networks in their project? A critical perspective to the consultants' accusation of the project could also argue that from the perspective of the global network it is Designing Gov that barge into the committee's innovation process.

05.4.4 Interessement

In our study we have come across some consultants who had a strong ability to affect their relation to stakeholders. Through different actions they have succeeded in strengthening the association between actors and support the formation of actor-networks needed for a certain innovation to become. In the framework of translation this is what is referred to as acts of *interessement*. This was not determined by their ability to produce good qualitative user studies, but by their ability to affect others. When interviewing Peter from Innovate Now, he commented on this:

> *"In my old innovation unit we tried to figure out what made a good consultant. We found no clear pattern in their background or the work they did but we could still see that some of the consultants were favoured by clients more than others." (Interview with Peter, Innovate Now)*

When looking at the innovation process from a narrative perspective, it can inspire us in explaining the becoming of an innovation from a narrative performance perspective. Different narratives conquest and change through a series of negotiations. However, some actors have greater capacity for narration and interpretation than others, and therefore have a greater success in enrolling and mobilizing others in carrying an innovation into legitimacy. Christian describes one of his colleagues who has this ability as:

> *"The good thing about Adam is that he has an ability to inspire persons you would initially have thought wouldn't be supportive. Of course we sometimes run the risk of becoming the department for coloured balloons when he speaks of a projects 'buoyancy', 'momentum' and so forth, but this ability has a clear say in what we can do." (Interview with Christian, Centre For Health Innovation)*

As Christian describes Adam he holds an ability to enrol others into innovation projects through narrative capacity. Adam has a rich language and uses metaphors when he tries to interest others in a project. These acts enrol actors and become paramount to Centre For Health Innovation's capacity.

When comparing the success of consultants, we find no clear patterns in their background, use of methods or any of such. We have encountered consultants that are very kind, empathic and appreciative in their approach while others could be more confronting and polemic. Both styles could be successful in enrolling clients. However, one pattern is the consultants' ability to create interessement through narrative performances. This ability is a mix of both personality, style of dialogue and experience. They are good at taking on greater societal discourses, such as the need for change, and link them into the local innovation narratives of the client organization. A field description from Designing Gov describes the intern's experience of his boss:

> "*In these times of unprecedented turbulence, how can we keep competitive and still deliver good public service?"* That is the sentence our boss starts most speeches with. After drawing the counters of a public sector in crises he elegantly returns to today's topic. He is excellent at inspiring people and has followers in all our client organisations. It seems like he can enter a conversation with anybody and always has something interesting to say. He has a rich catalogue of cases and arguments to always find a productive entry to different stakeholders."
> (Field description, Designing Gov)

The good consultant in this way, becomes a spokesperson that through inspirational speaking strengthens actors to passionately take on an innovation through their organization.

Making others attached to an idea is complicated and there are many factors making it difficult. Returning to the implications of a professional identity, governing strategies for risk aversion can stop the consultant in acts of interessement. An innovation project we followed at Designing Gov had not moved forward in the way our project group initially hoped. Our field description describes:

Towards the end of a project the consultant in charge said one Friday that next week he would work out of the client's office to try working closer to the client's project managers. When Monday came he showed up at our office. Surprised to see him I asked why he had changed his mind. He answered: "I don't really know about the whole thing. I have all my stuff here and I think I was just going to sit at their office and look stupid."
(Field description, Designing Gov)

In this case the project manager had run out of options to push the innovation project forward. He wanted to strengthen the network for the innovation by working side by side with the client organisation. Not knowing all the exact reasons for changing his mind about this strategy, he explains how he does not want to run the risk of looking incompetent. Instead he chooses to stay in his everyday workspace. In this case risk aversion becomes an obstacle for his strategy of exceeding the boundaries between his own and the client's actor network and he therefore does not succeed in affecting relevant stakeholders to push the innovation forward.

Looking towards Deleuze and Guattaris' (1980) notion of passion offers us a perspective that can inspire us in describing certain actors' strength in acts of interessement. According to them passion *is an ability to affect and be affected.* This means that the consultants are not only good at enrolling others through acts of interessement but have this ability because they themselves are easily enrolled in new actor-networks. However, as actors translate in different actor-networks this is not an inherent ability in any actor but one that is enabled through relations. This means that the same actors can posses narrative capacity in some relations and in others not. The question is therefore how we choose the right spokespersons and acts of interessement in order for the innovation to become?

05.4.5 Enrolment

As an innovation process moves forward, there is to some extent an exceeding of the boundaries in the relation between innovation consultants and clients. Peter from Innovate Now describes an interesting case where their relation to a client has altered through an enrolment over time.

> *"With the brewery we work for we have a really good relation because of the many projects we have done together. Now we are actually sitting at the table when they hire other consultants. We participate in briefing PR agencies when they are about to make a new commercial – telling what kind of feelings they should address at users and such."* (Interview with Peter, Innovate Now)

Through a series of innovation projects the boundary between the Innovate Now and the brewery has translated into a new relation where they represent the same actor-network. Peter becomes a spokesperson on behalf his client in mobilizing others. Engaging in innovation activities therefore also means that Peter, together with his client, share ownership for the becoming and shaping of the innovation.

Looking towards the concept of ownership it has been an important matter of concern to our interviewees in regards to stakeholders. We have heard how ownership on different hierarchical levels of the client organisation shapes the trajectory of the innovation. Hans expresses how they include client management throughout a project to ensure implementation. He says: "*their* [management's] *ownership is of crucial importance. If you don't have their support, the innovation process will strand when the project ends*." (Hans, Strategic Design). Anna stresses the opposite end of the hierarchy when she says how: "*you can't change anything unless the frontline workers really wants this to happen. You have to be sure they feel ownership for the process*" (Anna, Health Lab).

Taking a closer look at the concept of ownership it both refers to a hierarchical position used in innovation projects – *project owner* is a title of the one to be held responsible for the overall of a project. But *owning* an idea also refers to *take on the innovation* in a metaphorical manner. Actors who "own" an innovation are the ones who pave the way for the innovation by enrolling and mobilizing other actors. In our study it became clear how an innovation's "owner" therefore are not necessarily the one with formal power to change, but the one with the passion about putting his or hers idea or concept to practice. We will return to this later.

05.4.5.1 *Owning the risk of failure*

To take ownership for the becoming of an innovation therefore also means running the risk that you do not succeed in putting it to practice. This coheres with Mitra & Company's (2009) ANT study of the "Commonwealth Games". They describe how enrolment tends to work in an environment governed by an inviolable timeline where the risk of failure is owned and managed by actors who have a certain image to defend (Ibid.). Christian expresses how, in their relation to the client, (in this case employees at a hospital) they always search for "*Problems that are anchored locally*" (Christian, Center for Health Innovation), and would not accept projects without one or more persons willing to take ownership to carry it through. As he expresses: "*We can't use ideas delivered on our doorstep – they have to be owned by persons. Employees have to prove to us that they really want this and are willing to carry it through*" (Ibid). He sees the role of Center for Health Innovation as supporting the employees in their development and implementation of ideas. "*It is important to ask the employee 'what do you need to execute this? Who from your management should support you?' And then we can supplement with help*" (Ibid).

The consultants role then becomes both to help the owner of the innovation qualify his or hers idea but first and foremost to address stakeholders in the global network of the hospital. Their arguing for only choosing to work with persons who own the idea is that they have something at stake – a person try will to solve a real problem. Therefore they run the risk of failure in their innovation efforts.

The following field description from an innovation project from Designing Gov is an example of the opposite; how enrolment does not occur when the risk of failure is not owned.

> This project is actually quite ambitious if you see it from the outside. The minister has expressed a goal of a 15 % reduction by 2020, so this project is feeding right in to this ambition. We have been called to assist because they want to try new initiatives, which we should help them develop.
>
> We are working on a project with two project managers from their organization, but the organization is notoriously famous for being slow, bureaucratic and surrounded by tons of strong stakeholders making it extremely hard to innovate. Therefore I don't know who has the smallest ambitions or beliefs for the project – them or us?

We know that nothing is going to come from this project but we still go through the whole procedure - workshops, ideation, interviews with users, analysis, recommendations, etc., knowing that no concrete initiative will come from this. But we do it anyway... The funny thing is that even so we just play along and justify the project in that we still "*give them new knowledge of users*" and that this knowledge "*plant seeds for later innovation*." As the project finishes we can see, as initially expected, that no new initiatives have been put to practice. We therefore decide to write a report explaining our insights so that this at least will be available if they decide to use this knowledge in another project, even though we know it is probably going to end up in a drawer somewhere.

Frustrated about the project, an innovation consult from our team one day utters: "*If they just were actually interested in effect for their users they could do so much better.*"
(Field description, Designing Gov)

What should be clear from this example of a project is that neither the client nor the consultants believe in the project, and none of the involved took any kind of ownership for the innovation to be realised. Neither the innovation consultants nor the client organization own the risk of failure, as the innovation projects goals are loosely defined. The consultant in charge expressed working with the client as "*boxing into a pillow*" and the client did not engage in any activities exploiting Designing Gov's insights.

The case may seem discouraging but we do not present it to point fingers or start a blame game. Instead we present the project as an example of how a translation process strands when enrolment in the innovation's actor-network does not occur. Initially the expectations of the innovation project were to design new initiatives based on user insights, which would help fulfil the political ambition i.e. the goal was creating value through a materialized change. Every idea for a new initiative always reaches a dead end due to laws, resources, technical difficulties and a manifold of strong stakeholders surrounding the client organisation. These were all actors in the global network excessing influence over the project group. Therefore the project's value proposition translated to *the knowledge the project produced* with a hope that it would later diffuse to another project. It is too early to tell whether the clients' project managers newly acquired knowledge may lead to change over time, but if the innovation consultants' prognosis is right, the knowledge will be left in a drawer. Even though every difference makes a difference, if the knowledge, as an actor, does not act, then it is not an actor. This case therefore questions the value discourse that organisational epiphanies will lead to innovation over time as we know knowledge can be ignored. The question to this analysis is therefore how to create or identify ownership and enrolment?

05.4.6 Mobilization

If the translation of an idea or concept cannot be fulfilled within the local actor-network a mobilization of alliances in surrounding actor-networks is needed. This can be bosses, frontline workers, resources, technology, laws, etc. An example of mobilization is presented in the following field description. Martin is a client employee participating in an innovation project, which Designing Gov led:

> "Martin is a case worker who works at the service desk. He is one of the few young men in an office primarily dominated by women, and has his own special place here. He is actually not supposed to be part of this project but has been allowed to because he "*really believes that our organisation has momentum right now to do things differently and I want to be a part of that.*" He is really interested in human-centred innovation and wants to join forces with us [Designing Gov] against, what he thinks is a slow a bureaucratic organisation – his own. The other day we discussed a simple technical difficulty in their computer system that could, if solved, better both customer service and time spent on each case radically. When one of the others said: "*But that we can't change. It has to do with a law that we cannot do anything about."* Martin replied: "*I don't care about that. It is still completely stupid that we can't change it. Maybe we cannot change it in this project but then we can do it in another."*
> (Field description, Designing Gov)

In the above we can see how Martin, who has no formal ownership for the project, takes on the innovation project ambitions and carry them with passion. When this specific innovation project ended no concrete initiatives had been launched and the project ended with a meeting presenting a report with recommendations for the client. However, Martin was later allocated some resources to the development of a proposal for a solution on how to solve the technical difficulty and still follow the law, simply because he insisted. As Martin has now hierarchical power to get these resources he had to mobilize allies. This story is still in the making and has not revealed it's ending yet but for Martin to succeed with his projects he needs to enrol and create alliances with persons on a higher hierarchical level than him with the authoritative power to change the law and technicalities surrounding their computer system. However if he succeeds in changing the program, it tells us something about the importance of a dedicated spokesperson for a mobilisation formidable to occur.

05.4.6.1 Innovation tourism

The consultants we study express a wonder of clients' priorities in innovation projects. Allan diagnoses the barriers for healthcare innovation in that doctors do not take innovation activities seriously. He explains: *"I am surprised how little time and attention the important persons on the hospitals are willing to invest in thinking different …*[and then continues, now speaking from the perspective of a medical doctor]…. *I am responsible for the patients and I take it seriously, so you can pack away your questions* [about thinking differently]*, I don't have time for this."* (Allan, We Know People). Christian has the same arguments when he says, *"in my experience hospitals are 'heavy' on operation and therefore rather indifferent with innovation"* (Christian, Center for Health Innovation). This has in the HCICs' given name to a certain type of innovation projects – *innovation tourism.*

> *"Much of public sector innovation is what we sometimes refer to as 'innovation tourism', where innovation is a place you go to for a bit of entertainment, but is never thought of to exert influence on their daily practice"*
> (Interview with Allan, We Know People)

As Allan tells us, innovation becomes an activity in a small local network that does not diffuse, or have the intentions of diffusing back into the client organisation. Innovation projects are simple amusement where clients, for the fun of the game, can go imagine how they could do things differently. This is the consultants' accusation of why certain innovation projects activities strands. Having only studied innovation in practice from within public sector HCICs, we have not observed data from private held organisations. However Strategic Design, Ideas That Transforms Markets and Innovate Now all express the same experience with public sector. But innovation tourism is not a phenomenon exclusive bound to Public Sector. As Hans puts it: "*You can have a good sensibility with the clients intentions no matter if its public or private of engaging with us but it is hard to tell from the beginning whether they are actually going to go through with it. And the bigger and more visionary our projects are the higher the risk that it will never be implemented."* (Interview with Hans, Strategic Design)

As Hans tells us, it is hard to anticipate whether their clients want an innovation project to end in a materialized change. Furthermore he explains how the more visionary an idea is – the higher the chance that the client will not put it to practice. In his experience when his consultancy makes something truly great is also the same projects that strand and never become.

As organisations, and especially public sector agencies, are intertwined in a manifold of actor-networks, change can be experienced difficult because the innovation requires support from these. Our question is therefore how to balance the relation between idea, knowledge of users and knowing which actor-networks needs to support the innovation in moving from a local to a global network?

05.4.7 Summing up "Two different networks"

We have described how stakeholders and the translation between homogeneous organisations translate an innovation process through four moments. First, how agreement amongst involved actors in *problematization* positions innovation consultant, client and others as indispensible in the innovation process. Second, how good consultants are capable of affecting other actors and enrolling them through acts of interessement. Third, how enrolment tends to happen when specific actors "own" the innovation. These become spokespersons for the innovation and thereby, fourth, mobilize allies in order for the innovation to become.

We have shown challenges in the client-innovation consultant relation and argued why this leads to consultants explaining projects not reaching implementation in circumstances out of their control.

In the following discussion we will bring users, client and consultant relations back together in one actor-network to discuss how the consultants can enhance their practice in helping clients innovate.

05.5 Summing up chapter 5

In this chapter we have analysed our cases. We have mapped them in the actor-network of clients, users and HCICs. This has structured the analysis into three parts corresponding the three research sub-questions of this thesis. We have analysed the value discourses present in

HCICs, described how HCICs manage innovation through qualitative studies of users and we analysed innovation in practice as a process of translation.

06 DISCUSSION

In the first chapter of this thesis we asked:

> *How can studying innovation in practice as a process of translation provide a critical perspective to the value accounts present in human-centered innovation consultancies, and how can this analysis enhance their practice?*

We will now engage in a discussion of this question based on our analysis. The discussion aims to find matters of concern that can develop a theoretical framework for enhancing innovation practices in relation between HCICs, clients and users.

The world is messy and unpredictable, and so is innovation. It is created within instable environments and therefore no method will be able to master all the empirical uniqueness of each innovation process. However we have argued that there are certain phases, patterns or moments we can see across different innovation processes. These we have described through Actor-Network Theory's framework of translation. Looking at innovation in an organizational perspective we have argued how its trajectory is determined by the local network of the innovation project's relation to the global network of the organisations. In a translation from the local network an innovation need spokespersons that enrol and mobilize allies in the global network.

06.1.1 Identifying actors with dependency

In an innovation process new actors constantly barge in and replace the original goals of the project with new ones. The question is whether the design methods, that sets consultants free from organisational habit, makes them wear blinders for identifying emerging actors and organisational structures? In the case where Designing Gov was studying enterprises together with Susie's agency we argue that an initial and continuous focus on the actors surrounding the policy work would have produced different strategic decisions for Designing Gov's position in the innovation process. Previous to Designing Gov's study began; the committee's structure had already been designed. Instead of addressing it, Designing Gov wanted to focus their resources on producing knowledge free from the structure of the committee – creating the best knowledge that would better the conditions for the enterprises. However when they entered the global network of the committee their legitimacy was not secured and they were ignored. Whether Designing Gov could have affected their legitimacy in the committee prior to their presentation is an empirical question we cannot answer. However, we argue that in not identifying, nor doing anything to strengthen the relation to actors with dependency of the trajectory of the innovation, innovation projects run the risk of being ignored, as it was the case for Designing Gov.

06.1.2 Affecting the network

Choosing acts of interessement is depended on what the consultant wants to achieve and the allies needed to achieve it. Therefore choosing spokespersons and acts of interessement has an empirical answer dependent on the actors whose support the consultant wants to gain. As in the case with Magnus who succeeds in gaining access to new actor-networks in DAB on a higher hierarchical level through enrolling a new actor, Annika, through an act of interessement. Magnus had not previously found support for his agenda in the local project group, however through the use of the sound clip he finds a new productive entry to push his innovation forward. In this way Magnus becomes an innovation consultant that not only delivers ideas and user insights to the client, but a political actor that mobilizes allies dependent for his innovation. If he had not successfully enrolled Annika he would have to alter his idea or it would have stranded due to lack of support in the local project group.

06.1.3 Owning the becoming of the innovation

In how to create ownership for an innovation, again, the answer is empirical. Different actors take on an innovation for different reasons and carry it passionately into legitimacy. As argued, enrolment tends to happen when actors who have an image to defend, own the risk of failure. As innovation consultants have no formal power to implement changes in the client organisation, they cannot define clients' success or failure parameters. However, we argue that innovation consultants can benefit from enabling and supporting actors, like in the case with Martin who wanted to change the technical difficulty in his organisation's computer system. Martin experienced it as a failure every time he did not succeed in changing this system, and he kept advocating for changing it, searching for new allies and finding resources to try again. Martin, in this way, embodies a corporate entrepreneur. We argue that the innovation consultant in the act of creating ownership can benefit from attracting and strengthen the relation to actors like Martin; as such, actors possess legitimacy, in their role of employees in the client organisation, which a consultant cannot embody.

06.1.4 When redefining a problem

Holding a mirror to an organisation going down a wrong track is one of the greatest values a consultant can offer. However, as novelty emerges the need for new organisational structures emerges to fulfil the innovation. We therefore argue that when contesting the initial OPP, actors identified as indispensible for the version of the problem can become the barrage that makes the project strand. This is not to say that innovation consultants should become simple trouble-shooters to clients' problems, but in order for the innovation to happen, they need support in the redefinition of the client's problem. We acknowledge the value of producing ideas and insights that function as lighthouses for clients in a distant future, but in regards to innovation these will often end up in nothing but a report in a drawer. There is some ambiguity to the statement of Hans from Strategic Design when he expresses that the best projects they have done are the ones that never gets implemented.

06.1.5 Confronting the discourses of accusation

As innovation processes are messy, it is difficult retrospectively to identify their starting point. Knowledge or ideas produced for one project might be applied several years after and it is therefore hard to foresee whether a "seed" will grow and lead to innovation over time. Looking to practice we argue that the consultants we study put great effort in producing high quality insights and ideas through the study of users. They do this from the belief that eureka moments in the client organization will diffuse and ultimately lead to innovation.
We argue against this belief; If the strength between the local network of the innovation project and the global is weak, nothing or very little of the knowledge produced transfer to the global network. The idea of "seeds" or diffusion becomes metaphors for a passive transport of knowledge between the local and global. It is not knowledge in itself that grows as "seeds", but the knowledge in relation to actors that support and search for others' support for it that creates innovation. Innovation is not an innocent activity where great knowledge grows because of the greatness of it, but a political activity where some actors search to influence others in finding supports for the idea.

Even though it might at times be experienced as tough and frustrating to search for support and exhaustingly to experience how projects reaches dead ends time after time, we argue of the danger of decaying to explaining failures in discourses such as “innovation tourism”. Even though they might seem reasonable from the consultants’ perspective, these accusations functions as nothing but a self-protecting mechanism of a threatened professional identity. This is what happens when the consultant at Designing Gov frustrated utters that the client *could do much better if they were actually interested in changing*. Accusations like this are not only counter-productive for the relation between consultant between and client in an innovation process, but also for the consultant to learn through projects. When the explanation of failure has ossificated reflection stops.

The larger an organisation is and the more intertwined it is in others, the harder it is to implement radical ideas, as a greater number of actors need to support the innovation. A local network inside an organisation might acknowledge a need of change but that will not help if it does not produce the strength to change the global.
We therefore argue that a productive entry to consult innovation in complex organisations would be to continuously map stakeholders as a project emerges in order to get a clear vision of the possible solution realm from an organisational perspective.

06.1.6 Managing the relation between the local and global network

Throughout this thesis we have discussed the relation between methods of managing innovation in HCICs and an innovation as a process of translation. We argue to connect these two models of managing innovation as a parallel process. As we have argued, the consultants we study are excellent at producing user insights and ideas for innovation. They have a rich set of methods for both coming up with, refining, qualifying and testing ideas with users. However, these ideas run the risk of becoming organisational nonsense if an organisational perspective is not addressed. By incorporating the whirlwind model into the methods practiced in HCICs, consultants together with client project managers can balance the relation between idea and the global network. Ignoring organisational complexity in designing the best idea free of organisational habit can produce ambitious and radical ideas, but in order for it to become, the local network needs spokespersons with extraordinary political talent and dedication to keep on going when the innovation faces dead ends.

06.2 *Theoretical framework*

In our theoretical framework we provide a model for balancing emerging organizational structures with the emergence of novelty such as user insights, ideas or concepts. Managing these relations we have argued, determines the trajectory of innovation. This model is not a prescribing method but a reflective exercise to accompany the design and qualitative methods practiced in HCICs when innovating in complex organisations.

The name of our proposed theoretical framework is “The Actor Action Model”. It is a model to help key actors in a local network of innovation projects to assess the idea in relation to the actors in the global network, and giving direction towards actions to be taken. This model should function as an on-going reflection throughout the course of an innovation project and be used when significant changes occur. For HCICs, innovation projects come with a limited amount of time and ensuring a support for the innovation to become an on-going addressing of its relations throughout a project is important.

Traditional stakeholder management inspires this model, however it is different as the model is adapted from an understanding of the process of translation.

06.2.1 *Presenting the model*

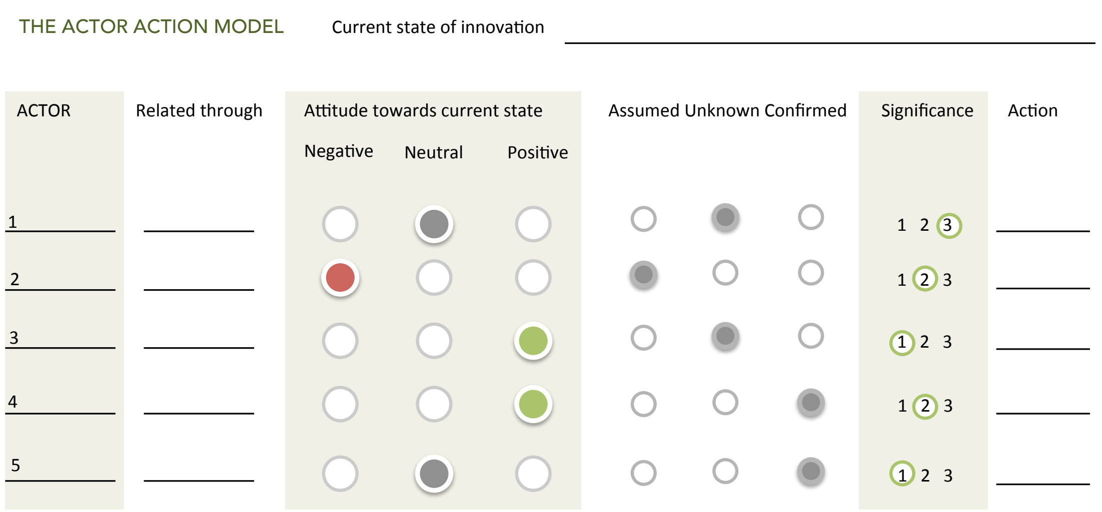

Illustration 14 The Actor Action Model

Explaining “Illustration 14 The Actor Action Model”. This model can be used when significant changes in an innovation project occur. Significant changes can be a new insight, idea, concept and also changes in the actor-network related to the innovation. The current state of the innovation is described in the top of the model. The first column represents the identified actors related to the innovation. The second column informs if they are related through another actor. The third is the actor's attitude towards the current state of the innovation and describing if this is assessed, unknown or confirmed. The significance of the actors in relation to the innovation is rated 1-3 and finally; proposed actions towards that specific actor is described.

Identifying important actors should be through asking oneself and others "who are related to the current state of the innovation?". By addressing actors with knowledge of the client organisation information related to the current state of the innovation might bring new actors to light.

06.2.2 Connecting the model to our findings

The Actor Action model is addressing identification of actors and assessing their dependency and support towards an innovation at a current state.

In the discussion, we argued that the trajectory of an innovation is dependent on the strength of the OPP in the local network and its relation to the global. Managing this relation become important for HCICs. As the strength of an OPP is dependent on idea and the involved actors, you can either change the idea or the involved actors. This means, when using the Actor Action model to test ideas in an organisational perspective, there are two things that can be changed: Actors or the idea. If the actors cannot be changed, then the idea must change and vice versa. In this way the Actor Action model can be used for prototyping ideas balanced with an organisational perspective.

06.2.3 The art of interessement

Using the Actor Action model will help the consultant assess actors as being negative, neutral or positive towards an idea. Rating the significance of the actors' relation to the innovation will guide the consultant in their following action. Acknowledging the importance of an emerging organisational structure, e.g. the entrance of a critical actor, can convince the consultant or other key actors to take a critical discussion with a significant actor opposing the innovation. In doing so. the consultant can either succeed in changing their relation to the idea or bring back knowledge into the innovation project, and subsequent change the idea. Again, this model is a tool for dialog and reflexion. One can easily imagine an actor being both for and against an idea at the same time; therefore choosing actions to influence this actor requires a well-developed sensibility with his/hers/its reasoning for being for or against.

We warn of the danger of simply plotting in actors without identifying the complex reasons for different actors positions. If the idiosyncrasy of actors is not identified, choosing actions will be nothing but a guessing game.

06.2.4 Illustrating the model through examples

In the following we illustrate the model through cases from this thesis. The purpose is an analytic exercise and not to judge or evaluate the consultants' decisions from a retrospective position.

06.2.4.1 Making efficient meetings

Returning to the case where Clara was assigned to facilitate a process of creating more efficient meetings between division A and B, we will try to test what the Actor Action Model could have offered her (see Illustration 15). For the innovation to become Clara is dependent on support from both division A and B, whose positions are, previous to the workshop, unknown to Clara. Had she identified that division B did not attend meetings, she could have problematized the initial idea and instead focused on changing the aim of the project; being about *making division B attend meetings.* She could also have searched for actors within division B, which she could mobilize through acts of interessement. This could e.g. be calling the head of division B and learn the reasons why they do not attend meetings. In identifying these reasons she might find arguments that she, in a narrative performance, can enrol the head of B in seeing the necessity of creating efficient meetings. As division B's leader both is a spokesperson and has hierarchical power in his division, enrolling him might be the productive entry she needs to mobilize the whole division.

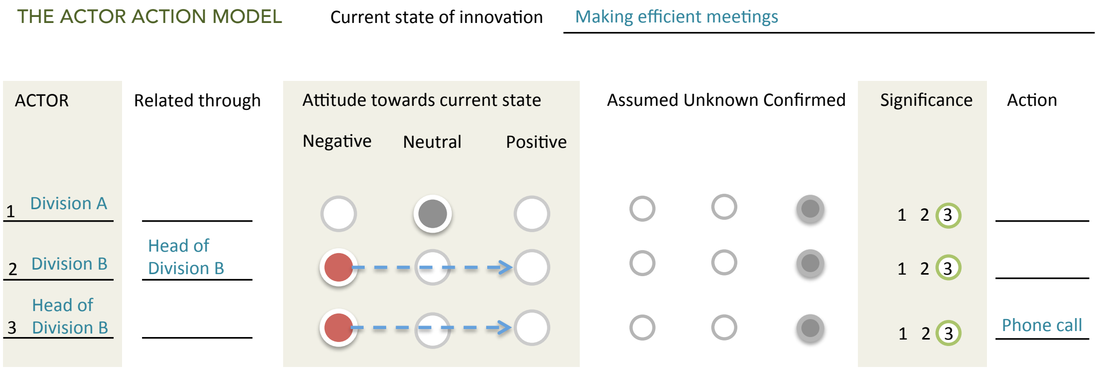

Illustration 15: The Actor Action Model on "Efficient meetings"

06.2.4.2 *Insights that improve enterprises' conditions*

Another case is of Designing Gov and Susie's innovation project. Had they started by identifying the different actors surrounding the committee their strategic decisions might have academics and management of the committee, might have changed their innovation project from "*developing insights to improve the conditions the enterprises*" to "*securing legitimacy in the committee for the insights we produce*". This requires advanced political skills and the acts of interessement needed are empirical specific. However, when first actors with high dependency and unknown positions are identified, the consultants will be wearing blinders if they do not recognize the risk of their project becoming ignored. The following illustrates why actions becomes nothing but guessing, when actors positions are unknown. In the model we are guessing how legitimacy might be gained through the head of committee (see Illustration 16).

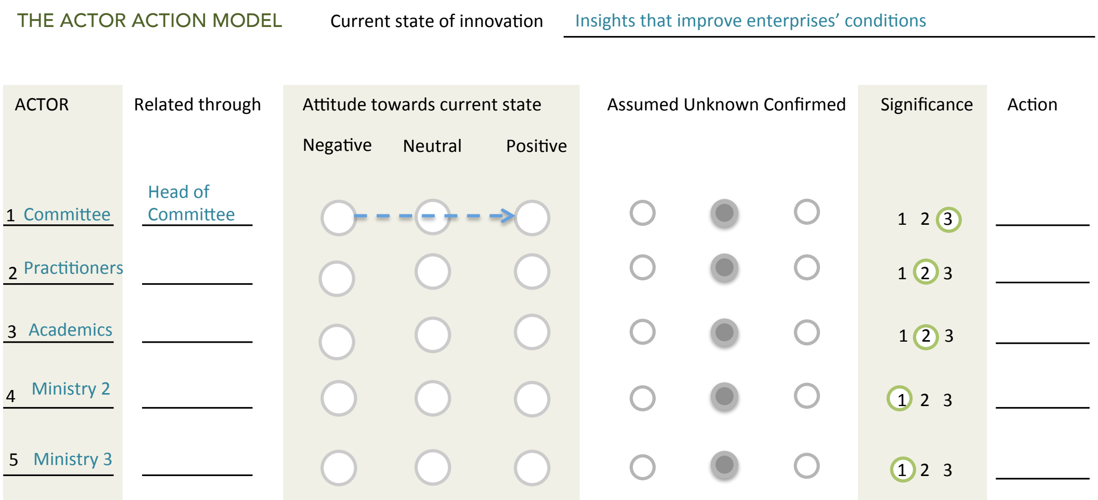

Illustration 16: The Actor Action Model on "Insights that improve enterprises' conditions”

06.2.4.3 *Service oriented communication in DAP*

A third case is Designing Gov’s project with DAP. Magnus searches to get acceptance for *making DAP use more service-oriented communication.* This functions as a success case on addressing what the Actor Action Model stresses. As Magnus finds resistance for his idea in the project group he searches to mobilize actors with higher significance. Through a successful act of interessement, playing Annika the sound clip, he succeeds in mobilizing her from neutral to positive. Annika gives access to the heads of offices and invites Magnus to participate at a strategy sessions. Therefore the current state of the innovation is changed and the project group is no longer dependent for driving the innovation forward. This makes their resistance in the current state of the innovation insignificant. Had Magnus not won Annika’s support he would have had to change his idea, as it had no support in the project group.

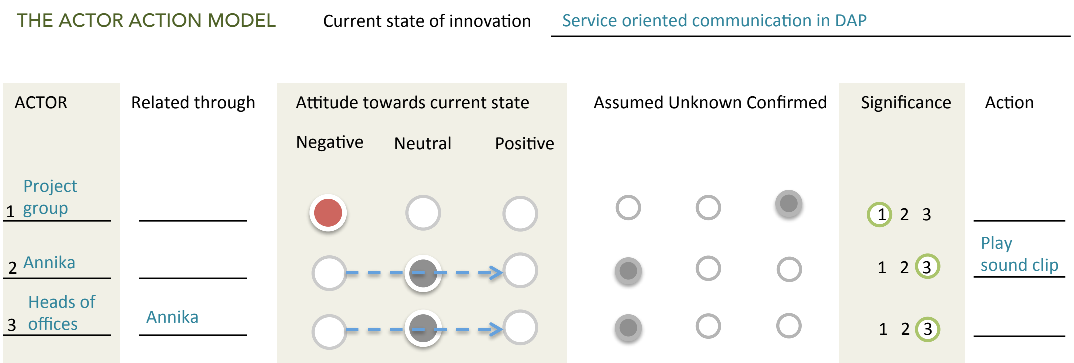

Illustration 17: The Actor Action Model on "Service oriented communication in DAP"

06.2.5 Political talent

The good consultant is therefore not merely one that produces good ideas and insights from users. This is not to undermine the qualities and complexity involved of studying humans. However, the good consultant must also embody political qualities.

What lies in the design and qualitative methods of HCICs are of great importance for producing great ideas. But a political talent means to be able to compromise and negotiate between ideas and actors, and make an increasingly number of actors more and more interested. The success of an innovation is determined by who can find followers among those who were initially opposed and compromise a manifold of interests into an innovation.

The Actor Action model does not create a political talent but helps the consultant recognize when political actions are needed to push the innovation process forward.

06.3 Summing up chapter 6

In this chapter we have discussed and answered the research question of this thesis. In finding the matters of concern, discussing the three part analysis' from the second step of the analysis, we have proposed a theoretical framework. By applying it to our empirical data, we have argued how our model can enhance the practice of HCIC.

07 Conclusion

The call for innovation is part of a greater societal discourse of keeping up with competitiveness and the quality of service in a globalized world. Human-centred innovation consultancies is centrally concerned with this. Through design methods and qualitative studies of users, they consult client organisations in designing innovations.

In this thesis we describe how HCICs' discourses of value govern strategic decisions in managing innovation projects.

We have argued that innovation in practice is the development and adaptation of new ideas by actor-networks who translate through the adoption of the innovation over time. The more complex and intertwined an organization is in the relation to other actor-networks, the less probable a larger innovation is to be implemented, as more actor-networks need to support the innovation for it to become. This means that even though innovation project groups in an organization recognize a need for change, the innovation process is depended on actor-networks distant from the local situated project. An idea or concept does not become an innovation until it is translated into a local practice. In this way the success of an innovation is dependent on how the innovation project relates to the surrounding actor-network, i.e. the degree to which it finds followers both in and outside the client organization to the point where the innovation becomes a reality in the structure of a client organization taken for granted.

We have argued that an idea or concept not only finds followers because of the quality of the idea, but also through how it is presented. The strength of an innovation's spokesperson, arguments and narrative capacity can to a large extent determine its ability to find followers. We have argued that the becoming of an innovation is partially a political process by which spokespersons influence others to become attached to the new idea. The accumulated strength of the actors supporting it is dependent in establishing the innovation. A good innovation consultant therefore has to be not only good at producing high quality insights and ideas, but also need well-developed sensibility with the stakeholders surrounding the innovation and how to address these through acts of interessement.

We have therefore in this thesis argued for the HCICs to confront the discourse that new knowledge by itself, will diffuse to the client organization and lead to innovation over time. This is not to say that new knowledge of users is not valuable in itself, but this is the activity of research. However, to accuse new user knowledge as the dominant actor that by itself acts to innovate is a counter-productive accusation in strategically managing innovation projects. It is the idea in relation to its actors that determines the trajectory of innovation. Looking towards innovation projects, we can se how alignment of multiple actors, allocating resources, solving technical difficulties, etc. all carry dependency in translating the idea into reality. If these issues are not addressed, the innovation's project group run the risk of designing ideas and concepts that become nothing but pies in the sky of nonsense to the client organization. Creating ideas free from organizational habit as the sole undertaking in innovation management might serve as visionary lighthouse in a distant future, but in order for the innovation to become the emerging novelty must balance with the emerging organizational structure.

We therefore argue that HCICs can benefit from the Actor-Action model or the qualities it holds. The model is meant as a reflection and dialogue tool, and should be adapted to the everyday life where it is utilized.

Innovation is managed in landscapes of great uncertainty. Many projects will face dead ends that could not have been identified from the beginning, and our quest in this thesis has not been to neglect this fact. We have argued that HCICs end to explain the failure of a project in factors out of their control. This has lead to discourses e.g. categorizing public sector organizations innovation activities as "innovation tourism". We have argued that these discourses are counter-productive for managing innovation projects with these organizations and functions as a self-protecting mechanism of maintaining a professional identity. Instead, a productive entry to consult innovation in these organizations would be to address stakeholders in and outside the client organization in order to cover the space for innovation.

07.1 Encouraging further research

To continue the study on how innovation is consulted, we argue that Actor-Network Theory is an appropriate point of departure, since it studies the practical reality and does not take point of departure in explanatory models; rather, it detects agency important to the innovation process. It offers a position where discourses of accusation can be confronted and challenged to whoever wants to manage innovation.

We therefore encourage others to drive this research further, both to contribute to the academic knowledge on innovation but first and far most, to contribute to the field of practitioners who engage in the field of innovation.

We argue that this thesis can be seen as a launching point for that.

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