Influential factors of CROWDSOURCING in SMEs



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GRADUATE DIPLOMA (HD) IN INNOVATION MANAGEMENT

Submission date: May 18th 2018 Pages/STU: 135 pages/ 138.918 STU

CROWDSOURCING IN SMES

A case study of which factors, that influence successfull crowdsourcing in a SME context anno 2018.

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Acknowledgement

We would like to thank everybody who have helped throughout the process of making this HD thesis.

A special thanks to our supervisor, Professor Marion Poetz for helping us through the process with advice and encouragement.

Thank you Rikke and Michael for spending countless hours, proofreading through the pages and challenging us on our choices throughout the research. Your help and inputs have been invaluable and much appreciated.

Also, a big thank you to Flemming Binderup Gammelgaard from Danish Crowdsourcing, who helped us find the companies we used in the research.

Finally, a big thank you to our five respondents, that have taken their time to speak with us. We have been incredible well treated by all and are very grateful for the time they spend pre-, during, and post-interview.

Abstract

Open innovation is a term, that have received great attention. Opening your company's mindset, to embrace the benefits of external collaboration is a trend, which companies around the world are benefiting from these years. This is thanks to the technological developments, that have made communication across borders and industry sectors easier. This development has opened new ways to collaborate and new ways to innovate.

In this thesis, we will explorer crowdsourcing, which is a new way to run innovation processes. In crowdsourcing you post a problem to a group of people, who then individually or in groups develop solutions or ideas to solve the problem. This is typically done via online platforms and the contributions can be both paid or unpaid. Crowdsourcing has successfully been implemented by many of the world's largest companies. 84% of the world's most prestigious companies, including Dell, SAP and Google have started to build their own crowdsourcing platforms. These are companies with many resources and a substantial customers base. But what about the smaller companies and their experiences with crowdsourcing? In Denmark alone, more than 30% of the total workforce is employed in SMEs with less than 250 employees. These companies often have limited resources and leveraging on external knowledge can be key to successful innovation to them. It seems that SME's could benefit greatly from using crowdsourcing, but the literature in this field is limited. Therefore, the focus of this paper, is to explore the factors that influence successful crowdsourcing in SMEs.

This thesis is done as a cross-case analysis with an inductive and deductive approach. The qualitative data has been gathered through five semi-structured interviews with an explorative approach. All data has been coded and patterns have been identified based on the findings. Finally, the data has been triangulated with existing literature, to validate our findings. Three of the interviews is done with SMEs, who all have experience with crowdsourcing. The last two interviews were conducted as expert interviews, whereof one of the interviewees is perceived as a leading researcher within this field.

The output of the data analysis in this thesis resulted in 11 factors, which influence successful crowdsourcing in SMEs; Idea generation, Preparations, IP and Trust, Outsiders, Lack of Resources, Daily Work, Leadership, Platforms, Social Bias and Picking the low hanging Fruits. These factors are all presented in this thesis, as well as the data that support them. The findings contribute to existing literature within this field, but also adds novel aspects to the understanding of how SMEs can benefit from crowdsourcing. Moreover, the findings could have a practical implication, by indicating which aspects SMEs have to consider, when they launch a crowdsourcing campaign.

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List of concepts

Innovation

The Oslo Manual defines "innovation" as "the introduction of a new, or significantly improved, product (goods or service), a process, a new marketing method or a new organizational method, in internal practices of the company, the organization of the workplace or external relations " (OECD, 2005, p.56).

Open Innovation

Henry Chesbrough is an adjunct professor at Haas School of business and known for coining the term open innovation. His definition of the term is: "Open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively. [This paradigm] assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as they look to advance their technology" (Chesbrough et al., 2006).

Crowdsourcing

Crowdsourcing is a method for companies or individuals to seek help with problem solving in crowds. The term was invented by Jeff Howe and Mark Robinson, editors at Wired, who describes how companies could "outsource work to the crowd" via the internet (Howe, 2006). The benefits of companies who tempt to use crowdsourcing is to save cost, increase speed, improve quality, add flexibility or to add more diversity (Buettner, 2015).

Crowdsourcing Platforms

In this paper the term platforms occur frequently as it is an important facilitator for running crowdsourcing campaigns. The platforms became possible when the internet was introduced and is virtual platforms where contests can be run. Companies invite interested users to engage with solutions regarding a certain problem, to show their talent by uploading their created content and to compete for a price (Hutter et al, 2011).

Crowd

A crowd is in crowdsourcing terms, the group of people, to whom you post you problem. The crowd usually consist of a diverse mix of individuals with varied skills, experience and perspectives. A well-functioning crowd is loose, meaning not attached to any organizations, and decentralized meaning they can be placed all over the world. A crowdsourcing crowd can operate at a scale that exceeds

even the biggest companies in the world, bringing in many individuals to work on a certain problem (Lakhani, Boudreau, 2013).

Community

Community derives from the Latin word <u>communis</u> meaning 'shared in common', and refers to a social unit, who has topics in common, such as religion, location or values (Oxford dictionary, 2014). With the rise of the Internet, new types of communities have arisen, which are often based on interest or beliefs (Smith, 2001). Successful crowdsourcing initiatives often utilize such interest-based communities.

Exploration and Exploitation

These two terms were coined by James G. March (1991) and refers to an organization's ability to on one hand explore new opportunities and on the other hand exploit existing capabilities. Exploration covers disciplines such as innovation, flexibility and searching for new ideas, whereas exploitation includes refining and optimizing.

Ambidexterity

Ambidexterity describes an organization's ability to simultaneously explore new opportunities, while exploiting existing resources (March, 1991). Earlier research has tended to focus on either exploration or exploitation, but as companies are facing more rapid change, they need to include both and hereby be ambidextrous. Adaptive capabilities and ambidextrous leadership is closely related terms (Tushman and O'Reilly, 1996; Rosing, Frese and Bausch, 2011)

Fuzzy Front End

Fuzzy Front End relates to the time before an organization formally start a new product development. The Fuzzy Front end is the messy "getting started" period and includes all activities from the search of opportunities to the definition of a specific concept (Koen et al., 2001).

Outbound Innovation and Inbound Innovation

Outbound Innovation meaning how a company sells or license out its ideas and products for alternate usage, Inbound meaning sourcing ideas or solutions from its surroundings (Dahlander et al. 2010).

Absorptive capacity

Absorptive capacity is defined as an organization's ability to "recognize the value of new, external knowledge, assimilate it, and apply it to commercial ends" (Bilgili, Kedia, & Bilgili, 2016, pp. 700–701)

Social Bias

When a small group of individuals that manages to create a lot of noise by rallying around a specific solution or suggestion for a new product and thereby pushing their agenda forward even though it is not the dominant opinion of the crowd (Braun, 2017)

SME

SME is an abbreviation of Small and Medium Sized Companies. In this thesis an SME is defined to be less than 250 employees that can already be considered incumbent players in their market, hence not start-up companies that to a large extend is still not pushing products or services but remain to a large extend in the ideation phase (Lambrechts, 2017, http://www.smvportalen.dk/).

1.0 Introduction

"No matter who you are, most of the smartest people work for someone else"

Bill Joy, Co-Founder of Sun Microsystems

The statement above has been named Joys-Law, and the logic behind this is one of the cornerstones in crowdsourcing. The quote is from a time, where Microsoft considered themselves an IQ Monopolist. Bill Joy disagreed with this and said that it was better to create an ecology, that gets the world's smartest people toiling in your garden for your goals. He claimed, that if you rely solely on your own employees, you will never solve all your customers need (Karlgaard, 2007).

Crowdsourcing is based on that same rationale, that you need external inputs and knowledge to succeed. Crowdsourcing is a relatively new tool, which companies can use to open up innovation project to externals. Through this, the company can run campaigns and get help to generate ideas or solve commercial tasks from an external crowd. The crowd can consist of a group with no specific skills or of specific groups with specialized knowledge (Schilling, 2017). In contrast to the established internal R&D structures, a healthy crowd is decentralized and more loosely structured. By presenting the problem to a crowd, people with a range of skills, experience and perspectives will contribute to solving it. If successfully executed, crowdsourcing can operate a scale, that beats the R&D processes at big international companies. This is because crowdsourcing enables individuals with very different skills and perspectives to work together on a given challenge (Boudreau & Lakhani, 2012).

As an example, Netflix ran a crowdsourcing campaign on who could create an algorithm to improve their recommendation system. Through this, Netflix saved resources on the internal development and instead posted the problem to a public crowd with a reward of \$1 million to the person, who could improve the efficiency with 10% (Villarroel, Taylor & Tucci, 2011).

There is a clear correlation between the increased focus on crowdsourcing and the rise of the Internet (Afuah, Tucci, 2012). The new technologies have made it possible to broadcast problems to crowds, who can self-select whether or not to solve the problems. The Internet now contains many sophisticated online platforms, which can facilitate crowdsourcing and have standardized the process of running such campaigns (Boudreau & Lakhani, 2012). This makes it possible for companies of all sizes to utilize crowdsourcing as a method in their innovation process.

The literature on how large companies have implemented open innovation and crowdsourcing is extensive. Most previous research have been focused on the management of open innovation processes in large technology-based organizations, as they were among the first to implement open innovation (Lee et al, 2009). Research on how smaller companies can work with open innovation is however limited. Many studies actually exclude SMEs in their research (West et al., 2006). Typically, this is simply because the big companies are the most well-known examples of open innovation. Moreover, the big companies are used to work with externals and often have more technological data, that they are willing to share.

1.1 Problem statement

This thesis will focus on the research gap discussed above and investigate how SMEs can successfully engage in crowdsourcing. When SMEs consider launching a crowdsourcing campaign, there are many concerns; Is it too risky to share an internal problem with an external crowd? Who owns the IP rights of the proposed solutions? What is the cost? How do we implement and internalize the new knowledge? And so on. These concerns are understandable, but SMEs might lose an opportunity, if they don't embrace crowdsourcing as part of their innovation repertoire (Boudreau, Lakhani, 2012).

Crowdsourcing was established back in 2006 and is steadily growing in popularity (Howe, 2006). Academia within this field is mostly concerned with big corporations, and research within in crowdsourcing in SMEs is limited. This is despite the fact, that SMEs in many countries makes up a considerable part of the total industry. SMEs in Denmark represent more than 50% of the private sector in terms of number of employees and is hereby important for the economy (smvportalen.dk). SMEs often have limited resources and cannot post campaigns like Netflix with a million-dollar reward. Despite this, it seems that there is a great unexplored potential for SMEs to engage in crowdsourcing. Because of this, the focus of this research is to examine SMEs, who have engaged in crowdsourcing. The objective is to get a better understanding of what it takes for SMEs to successfully use crowdsourcing. Therefore, the research questions are as follows:

Which factors influence successful crowdsourcing in a SME context?

When answering the research question, the term 'factors' is understood as circumstances within the company, such as processes and structures, that can influence the output of the crowdsourcing campaign.

The contribution of this thesis is to elaborate on the understanding of what it takes to successfully use crowdsourcing as a tool in SMEs.

1.2 Structure

After the introduction and presentation of the research questions, this research paper will begin with a theoretical framework in chapter two. This framework will give the reader an overview of the research done on open innovation, crowdsourcing and its presence in SMEs. The literature review will map out potential literature gaps and thereby provide the reader with knowledge of the unexplored areas seen from a theoretical perspective.

Chapter three describes the methodological approach, that have been applied. The focus of this section is to outline the primary and secondary data included in this research. The section will explain how data have been gathered, transcribed and analyzed. The section also briefly covers how the researcher have applied integrated reliability to inhibit single informant bias and single researchers bias.

Following the methodological section, is an examination of the findings, which will be presented in chapter four. Firstly, the chapter includes five expected categories of aspects affecting SMEs engaging in crowdsourcing. Secondly, three unexpected categories are outlined, which were discovered by following the deductive approach. Finally, based on the categories a total on 11 patterns has been uncovered. These will also be examined in chapter four.

In chapter five, the findings from the previous chapter will be discussed. This chapter also argue for the contributions of this research and its implications, as well as addressing the limitations of the research. Chapter six is a conclusion of the study, and finally chapter seven will present further research areas, which have occurred during the process of writing this paper. This structure is illustrated in the table below.



Table 1. Structure of thesis

2.0 Literature Review

The Literature that has been used for this report is taking its offset in current academia. The theories and materials used for our analysis is mainly based on a number of recognized scholar's work on Open Innovation. First, we will establish the background within open Innovation followed by the different areas that is influenced by incorporating open innovation. This will be done by addressing how to set up the business model, that promote opening up companies' ability to interact with external sources. That will lead us directly to the use of crowdsourcing in various forms, and how both the companies' employees and external partners can be motivated to participate in such arrangement and how leadership can be used to facilitate the process. Lastly our literature review will focus on the part of the literature that highlights the opportunities and challenges that can be considered specific for a SMEs (figure 1).

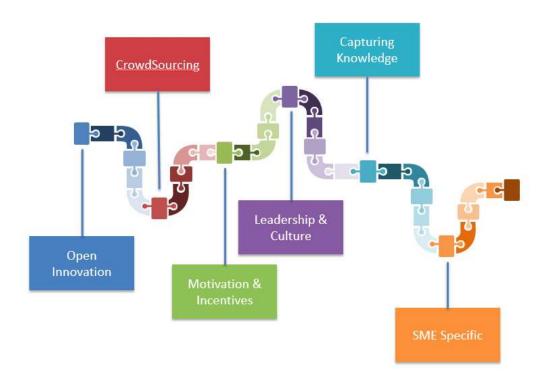


Figure 1. "Pieces of the Puzzle"

2.1 Open innovation

Innovation have historically been conducted in large integrated research and development (R&D) departments in only big firms and was considered a key strategic resource. These companies were self-reliant and could close of their Innovation efforts to their surroundings (Chesbrough, 2003).

As advancements in technologies and shortening of product life cycles have changed the market forces and consumer behaviors; companies have been forced to adapt their Innovation efforts (Livari et al, 2015). Some companies started to move away from the implicit rules of doing closed innovation and have total control. These companies began to source ideas and solutions outside the company by partnering up or acquiring startups (Chesbrough, 2003, Lee et al., 2010).

The move away from closed innovation began in the large enterprises to gain a competitive advantage over their peers (Lee et al., 2010). The literature therefore points us in the direction that the strongest innovation companies are the once with a balanced Innovation effort between core, adjacent and radical initiatives as an integrated whole (Nagji et al., 2012).

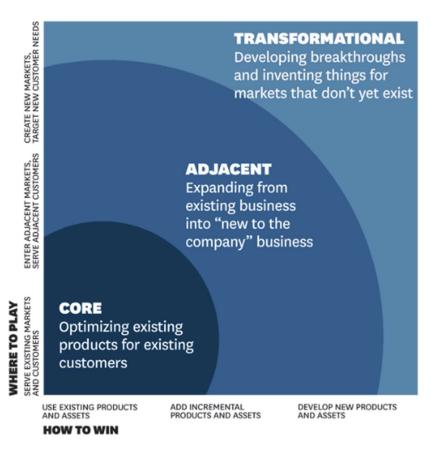


Figure 2: Balancing the Innovation effort

As figure 2 shows, incremental innovation lies within the core or in adjacent fields expanding on what an incumbent firm already knows. The further away from origo the more radical the initiatives become along the x- and y -axis. As Hill et al. (2003, page 258) states "an incremental technological innovation builds squarely upon the established knowledge base", hence innovations close to the core of a company can easier be conceived within an incumbent firm itself. The idea of open Innovation has thus their offset in finding solutions to strengthen internal R&D processes (Lambrechts et al., 2017).

Some scholars argue that internal R&D is a complementary to engaging in viable open Innovation (Dahlander et al., 2010). We therefore shouldn't be talking about innovation in the sense of Open vs Closed, but rather consider innovation efforts as being "placed on a continuum, ranging from closed to open, covering varying degrees of openness" (Dahlander et al., 2010, page 703). The notion of open innovation not being a question of either/or, is backed by other current literature, stating that the expertise of the R&D departments - not least when it comes to technological, procedural and intellectual property (IP) rights - is a central driver for generating novel ideas (Poetz et al., 2012). As Spithoven et al. (2013, Page 539) states "The key concept underlying open Innovation is that firms do not operate in a vacuum, rather, they are always scouting for new ideas and information in order to capture a higher market share or enter new market segments".

Another important factor to why corporations is engaging in Open Innovation, is the change in labor force patterns. This change has been introduced in connection with technological advancements are maturing for "a dramatic rise in the mobility of knowledge workers" (Chesbrough, 2003, page 36). It has made it a lot harder for companies to protect their Intellectual Property (IP). A very well-known example here would be Xerox and Kodak. In this case, they saw ideas originated at their company but deemed not worthy to pursue, realized outside of their company scope (Chesbrough et al., 2002, Chesbrough, 2003).

Simultaneously the shortened product life cycles and a large increase in Venture Capital (VC) funds and Angel Investors (AI), have made it much easier for workers to go outside of the company constraints and set up their own businesses (Chesbrough, 2003, Livari et al., 2015). It is Important to recognize another important aspect of open innovation literature. The aspect, that the literature is young compared to other areas of academia, and therefore contains a large amount of ambiguity in the definition of what it means to open up. Some scholars have argued that its related to the number of external sources whereas others argue that it is related to opening up and revealing hidden ideas with a company itself (Dahlander et al., 2010). Dahlander et al. (2010) therefore argues that a conceptual framework has to be created for the definition of open innovation. Also, the framework needs to address both Inbound innovation and outbound innovation.

2.2 Crowdsourcing

Initially, most crowdsourcing is done via online platforms build to facilitate the communication between the problem owner and the problem solvers. Such platforms can also be referred to as intermediaries. The bigger companies tempt to build their own platforms, whereas the smaller companies benefit from using existing platforms. The existing platforms are often specialized within certain fields of expertise (Vanhaverbeke, 2017). These expertise's often relates to the interest of the crowd who is connected to the platforms. 99designs is an example of platform who specialized in graphic design. This platform engages more than one million designers who solve design problems for businesses all over the world (99designs.dk). The small businesses benefit from the experience the platforms own, as well as their knowledge within topics such as IP rights (Vanhaverbeke, 2017).

There are many ways of engaging with Open Innovation and "the crowd has become a fixed institution available on demand" (Boudreau et al., 2013 page 67). In search of ways to accelerate the time to market, companies have started asking themselves if the speed and ratio of successful innovation can be increased, by leveraging on the crowd to create and curate new ideas? (Kohler et al., 2017). Some studies have even shown that users and crowds can provide very valuable inputs to the development of new products and indicates that these ideas are at least on par with professional ideas (Poetz et al. 2012). It is therefore no surprise that more and more companies are turning to the crowd seeking competences and insights from outsiders.

A crowd is at its core, a loosely defined and decentralized group and is providing different perspectives and experiences into the effort in solving the focal firms challenge (Boudreau et al., 2013). Perspectives and efforts the company would not be able perform on their own. Within crowdsourcing, there are several ways to engage with the crowd. Boudreau et al. defines them in four categories (Boudreau et al., 2013) (Appendix 1):

- Contests
- Collaborative Communities
- Complementors
- Labour Markets

2.2.1 Contests

Contests is maybe the most used form crowdsourcing, where the focal company or an intermediary on behalf of the company issues a competition with a price. Most often the price is a lump sum, but the challenge winner can also get a part of the profit gained in the commercialisation process. Contests work well on a specific problem when it is uncertain what skills is needed to solve an assignment and that the outcome is tangible and measurable (Boudreau et al., 2013).

2.2.2 Collaborative Communities

The main point here is that the collaboration is amongst the community, and that they are working together to jointly reach a goal (Boudreau et al., 2013,). Properly one of the best examples of this is Wikipedia, that within a few years outperformed standard Encyclopedias. Other examples could be a large company like LEGO, who have integrated user-communities in their product development. As the crowd in this case, is a community of customers or users, collaborative communities often have a very well developed in-build rating system from peers and thereby acts as a focus group for product development (Dunford et al., 2013). Crowdsourcing set up as a collaboration community have the added value that they in contrast to contest will allow the community to work on a number of different ideas (Boudreau et al., 2013). Having an internal community though is a potential difficult and time-consuming task, not related to the core business and is therefore not an avenue to take for a SME (Boudreau et al., 2013).

2.2.3 Crowd Complementors

Complementors rather than talking it's offset in product or service development it "built on your core product and transforms the product into a platform that generate complementary innovations" (Boudreau et al., 2013, page 66). The transformation of your product into a platform then allows the company to license out the ability to use the platform and take part in the revenue. Platforms though only works when a lot of complementors get build around the platform and therefore benefits from network externalities as the platform benefits from an increase in complementaries and users (Schilling, 2016). An example here could be Kickstarter.com that made an easy to access and navigable platform that allows for other companies to post their product and seek crowdfunding from customers, Kickstarter in return receive a part of the revenue from the sourcing campaigns.

It is important to emphasis the importance of technology when we speak of platforms, and that accessing the crowd is very much connected to leveraging on a preferred standard, I.e. Kickstarter, Android, OSX and the likes.

2.2.4 Crowd Labour Markets

Crowd labor markets work as a tool for the focal company by matching people with the right competences to a specific task (Boudreau et al., 2013). This from of crowdsourcing therefore come fairly close to a normal labor market, but by avoiding long-term employments and allowing the focal company to only call upon the competences when needed, gives the SMEs the needed agility. These kinds of crowd-platforms are, in contrast to the three others in the sense that it is not a crowd that can be maintained by the company itself. Crowd Labor Markets are used when the task is very narrowly defined where little to no interaction is needed during the process. Examples of uses could be simple data entries where people would outperform, to the focal company, available computer technology.

Which of the four modes an SME should choose depends on the problem, interaction and efforts the focal organization wish to put into the process (Boudreau et al., 2013).

When it comes to inbound innovation and accessing critical knowledge outside of the firm's own boundaries, a centralized search is problematic (Felin et al., 2014). Companies that leverages on the crowd enables their organization to harness the ideas and solutions of a vast amount of people (Kohler et al., 2017). Some academia also highlights that crowds are in general not hampered by industry standards and it is in part the reason why crowds come up with more novel ideas than professionals (Poetz et al., 2012). While crowds often come up with novel and original ideas, they tend to undervalue the importance of feasibility. Companies often appreciate feasibility. (Hofstetter et al., 2017).

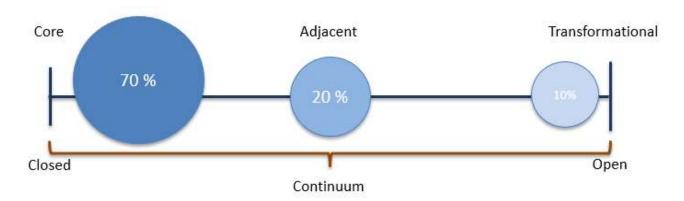


Figure 3: Innovation Efforts along the Continuum

Researchers have discovered that companies that have a varied portfolio of Innovation initiatives (70 core/20 adjacent/10 transformational) along the continuum outperform their peers (Nagji et al., 2012) (Figure 3), it is therefore important for any company to explore multiple roads when it comes to innovation.

Companies must focus on working with both incremental and radical innovation, and it takes knowledge and skills to do so. In today's market, SMEs often suffer from lack of resources, the crowd can be a helping hand with complementary competences. Business Models that leverage the participation of the crowd enables the focal company to harness the combined skills and creativity of the company and the crowd (Kohler et al., 2017).

2.5 Motivation & Incentives

When it comes to motivation and incentives we must address the issue in two overarching parameters; the crowd and the community and the company plus its employees.

In this part of the literature review the intrinsic and extrinsic motivation will be in focus. Crowdsourcing is a new way of using external resources, why it's important to understand the motivations that leads to the best results. The intrinsic motivation is when you perform an activity for your own sake and personal reward (Cherry, 2018). In the crowdsourcing universe these motivational factors are activated when you solve a problem out of pure interest. You simply solve the problem because you find it enjoyable, fun and exciting. When you are motivated by intrinsic factors, it is not important what the outcome is, the participation is its own reward.

On the other side of the table is the crowd that is extrinsically motivated. This crowd is participating to earn a reward or avoid punishment. In the crowdsourcing world this crowd is engaged because they wish to win the competition. They can both be motivated by the social recognition they achieve or by the reward they are achieving. This could be money, scholarships etc. Their behavior is motivated by an ambition to win or to avoid the adverse. The crowd is participating not because they enjoy it or find it satisfying, but because they need something in return or avoid something unpleasant. The main difference between the two is that intrinsic evolves from within the individual and the extrinsic arises from the outside. An example on extrinsic motivation is an observation made on the two community driven platforms Quirky and Threadless (Kohler & Marco, 2017). This shows that recognition is a key motivator. Because the platforms grew, the number of contributions increased as a consequence. Thereby did the contributions more quickly disappear from the front

page, and down to the following pages. This meant that the contributions were exposed for shorter period, resulting in a decreasing amount of acknowledgement from the platform or other users. This lead to a decrease in popularity among the contributors, as they were extrinsic motivated.

Rogstadius et al. (2011) makes an assessment of this field in their paper called: An assessment of intrinsic and extrinsic motivation on task performance in crowdsourcing markets. In this assessment they test a hypothesis that claims that intrinsic motivation in a problem of helping others, may succeed with improving the outcome whereas extrinsic motivators such as money do not. Their test is done through the Amazon Mechanical Turf which is a crowdsourcing platform. Here they posted a profit and a non-profit challenge and measure the completion speed and the accuracy the result of the paper confirms the hypothesis, that intrinsic motivation can improve the quality of the solvers output, and paying people more did not lead to increases in the output accuracy.

When talking about intrinsic and extrinsic motivators of an organization, this is a field of its own and belongs to the management literature and in particular change management.

2.6 Leadership & Culture

Encouraging to creativity and open innovation is a novel field, which managers increasingly have to get used to (Amabile & Khaire, 2008). Creativity has probably been considered hard to manage and unquantifiable or maybe payoff was less immediate. It also takes a different management style to manage creative processes (Hill et al. 2014). The article by Amabile & Khaire (2008), mentions the founder of Intuit, Scoot Cook with many quotes. One of them is that "traditional management prioritizes projects and assigns people to them. But increasingly managers are not the source of the idea". Google is well known for creating their creative workspaces, and Cook mentions an analysis Google did of where the ideas was generated in the Google organization. The management in Google tracked the progress of their ideas versus the ideas made from their staff, and it turned out that the greatest success was made from the staff without the involvement of the management (Amabile & Khaire, 2008).

According to the literature, it is important when you have the role of a leader to try and enhance creativity. It is also important that the leader don't consider themselves as the only place where ideas can arise. The leader's role is to be the appreciative audience (Amabile, Khaire, 2008) and ask the inspiring questions. It is important to allow ideas to arise from the workforce. Bill Coughran was one

of the founding fathers behind the Google File System which he began to develop in 2003. Bill new that the role of a leader of innovation is not to set a vision and motivate others, but to create a community that is willing to generate new ideas (Amabile, Khaire, 2008). It is important that a leader enable collaboration and work against the myth of the lone inventor, invented by Diego Rodriguez, Partner at IDEO. The lone inventor is not to be cherished to much as an individual, but as a superstar which biggest achievement is to make the group a success.

Another driver of successful leadership of innovation, is putting together the right team and enhancing diversity. It is very likely that Innovation is more successful when the people who work with the creative work, comes from different backgrounds (Johansson, 2017). Also, people working with different disciplines and areas of expertise archives synergies when collaborating.

"Only those who dare to fail greatly can ever achieve greatly" Robert F Kennedy, Former U.S. Attorney General

Though above quote is old, it is still being confirmed when working with modern literature on open innovation. It is needed, that managers accept the failure as an option and support their employees if it happens. The most important thing is that the team recognizes what went wrong and then learn from it for future use (Amabile & Khaire, 2008).

Another theme that leaders must be aware of is the art of killing ideas before they take to much wasted time. In the literature this is called a filtering mechanism that has to be developed to sought out the ideas that are doomed (Weintraub, 2007). There are many schools within this field, but one of them claims that it is the people closest to the project that are best to make the call. At the pharmaceutical firm Merck's in the US, they incentivize their scientist to abandon a project as early as possible if they lose faith in it. They claim that the inability to admit failure leads to inefficiencies, why they offer stock options for abandoning a project. Their argument is that good scientist wants to use their time on doing good projects. The hardest decision is to leave a project, and by these incentives they push their scientist to go for the promising projects (Weintraub, 2007).

When managing a creative group, it is important to protect the front end from commercial pressure (Amabile & Khaire, 2008). There are natural forces within an organization that pushes for new products, but it is known that this kind of pressure is also functioning as a limiting factor for the creation process.

As discussed earlier, companies have to manage their existing business and optimize it with incremental improvements. At the same time companies must be ready to do more radical innovation, to create new product lines or respond to changes in technology. Managing this can be referred to as ambidexterity. An ambidextrous organization can manage both to run an efficient short-term business while developing long term innovations (Schilling, 2017).

When rifling through the innovation literature it is hard not to mention design thinking in this thesis. Design thinking means that innovation is powered by a deep understanding, through direct observations of what people needs are (Brown, 2008). Today there are many examples of companies reaching out to their crowd, to obtain knowledge they can use while working with design thinking as a method. Chesbrough also explains that the company Intuit kept a distance to Microsoft years back, by maintaining a close and disciplined interaction with customers to gain in-depth knowledge about their needs (Chesbrough, 2003).

2.7 Capturing Knowledge

To successfully engage with open innovation and crowdsourcing it is as mentioned important to look at the leadership in order to motivate and facilitate interaction with the crowd. Likewise, it is important that these managerial efforts extend to aligning the inbound knowledge flow with the companies general activities (Brunswicker et al., 2015). "Companies that involve users in their business models are challenged with issues related to value capture and the sustainability of their business model" (Kohler et al., 2017, page 26). In particular SMEs are lacking the resources to build up the absorptive capacity as they are not able to internalize the inputs from the crowd (Brunswicker et al., 2015). The Brunswicker article also mention how an internal R&D department acts as an anchoring point to increase the absorptive capacity and as many SMEs do not possess a formal R&D department. Even with an internal R&D department this task can potentially be an arduous task that requires that the before mentioned capabilities are in place (Chesbrough, 2003). Thus it might hinder the company if it do not "recognize the value of new knowledge assimilate it and apply it to commercial ends", as Cohen and Levinthal formulated it in 1990. To learn from prior open innovation processes including Crowdsourcing engagements and the overall absorptive capabilities of the company.

2.8 SME Specific

When specifically focusing on SMEs its firstly important to recognize the limitations that lies with the lack of resources and capabilities that come inherent with being an SME (Lee et al. 2010). Lee also speaks about a tendency that SMEs should be careful in engaging with larger companies as it might

limit their opportunities and increase the risk of being integrated into the larger firm (Lee et al. 2010). So even though research shows that there is a greater concentration of open Innovation activities within large enterprises (Spithoven et al. 2013), SMEs are very actively seeking to leverage on the opportunities within open innovation. This is in particular various crowdsourcing opportunities, in the form of networks and intermediaries (Lee et al. 2010).

This is also supported by Brunswicker et al. (2015), who describes these alliances as critical drivers for innovation and helps SME access resources they else, would not have access to. This happens to retain a higher level of internal core competences, as it allows the SME to focus at their core (Lee et al. 2010). Lastly the use of crowds and cross sectoral networks helps accelerate the flow of information and thereby accelerate the processes involved when Innovating (Zeng et al., 2010), with the, as described earlier, scarce resources available to SMEs, this is a highly important factor.

As mentioned earlier, external knowledge sourcing can be performed in many ways and can require many resources of the firm. These resources can be used to engage with the crowd. This engagement can be especially time consuming, if the company wish to create its own community. SME's normally don't have these resources in house. It is therefore important for SMEs to engage with Intermediaries in the form of networks or crowdsourcing platforms that can facilitate the needs of the focal company (Lee et al., 2010). This is done by giving the company access to already developed crowds and networks.

Using intermediaries have the added effect that it helps companies safeguard their Intellectual Property (IP) and company secrets (Romanczuk et al., 2017).

It is evident that SMEs benefit from the use of Open Innovation, and that it positively influences the launch of successful products and services (Spithoven et al. 2013). To which extend crowdsourcing plays a role in this could not be found in the literature.

SMEs are usually quicker to react and make decisions then large enterprises (Brunswicker et al., 2015). They are in particular faster in their decision making, on whether to kill or continue innovation projects.

3.0 Methodology

Crowdsourcing in an SME context is a relatively new research field. Therefore, in order to investigate which factors, influence successful crowdsourcing in an SME context, an explorative, cross-case analysis was conducted. The study is based on qualitative research design, and the primary method is interviews. The data collection took approximately five months and was based upon the principles of Miles & Huberman's (2014) book on Qualitative data analysis. The research approach was following a deductive and inductive approach to explore the topic. A total of five semi-structured indepth interviews with either case companies or industry experts were conducted and is the main source of primary data. The five interviews were transcribed, and the two researchers independently coded the interviews. The individual codes were discussed and developed into patterns. The patterns were analyzed to reach the findings of this paper. The findings include aspects that are already established within the research field and some that are novel.

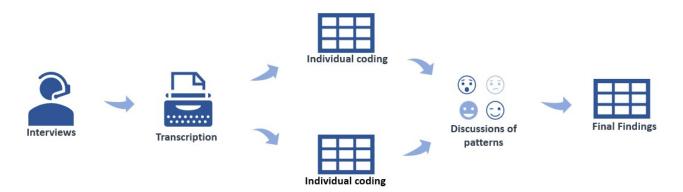


Figure 4: The qualitative research design

3.1 Data Selection

To answer the research question, it was necessary to use both primary and secondary data, to get a more valid and reliable result. As crowdsourcing is still a relatively new discipline for SME's, the number of potential cases is limited. However, crowdsourcing has received increased interest and is to many seen as an important discipline for SMEs in the future (Livari, 2015). In the USA crowdsourcing is a more integrated part of how SME's work (Karen A., Frenkel, 2012). Due to geographical limitations and cultural barriers, it was decided to focus on cases and experts from Denmark. The benefit of researching only Danish cases is that the geographical proximity and similar macro environments makes comparisons between the different cases more feasible.

Due to the novelty of the field, it was chosen to go in-depth with few cases rather than using many different cases. This was done by using a qualitative research design to obtain rich and contextualized data. Secondary data has been found through databases, CBS Library and blog posts on the internet.

3.1.1 Primary data

A total of five interviews were conducted over a period of four months. Three of the interviews are case interviews done with owners and co-owners of SMEs, who has experience with crowdsourcing. The two other interviews are experts interviews, with a researcher and a consultant, who have worked intensively with crowdsourcing. These interviews often contribute with good practical value (Meuser, Nagel, 2009). Hereby the aim is to include both first-hand experience with crowdsourcing, as well as broader academic and practical knowledge on the topic.

Discussions on crowdsourcing is in many cases focused on big corporations like Dell, LEGO and Heineken (Yeomans, 2013; Brunswicker & Vanhaverbeke, 2015). These companies have the resources to create the platforms and communities themselves and is often well known in the public. However, finding examples of SMEs working with crowdsourcing is more difficult, as they are relatively unknown, and the crowdsourcing campaigns are done on a much smaller scale. The researchers therefore started out by asking for references from professors and consultants with domain knowledge. A purposive sampling method was hereby initiated. The answers, however, indicated that the professors had mainly been working with larger organizations, and that consultants were not allowed to share customer information's. The breakthrough came, when contact was established to Flemming Binderup Gammelgaard, co-founder of Danish Crowdsourcing. Danish Crowdsourcing is a consultancy that specialized in helping companies prepare, run and evaluate their crowdsourcing campaigns (Danishcrowdsourcing.org, 2018). Flemming had through his connection to VIA University College done crowdsourcing campaigns with many SMEs and was able to share some company names. Among these were AMOV, H2O & Sørensen Leather, who were chosen to be part of this thesis. Two additional companies were also contacted, but they did not want to participate in our thesis. The purposive sampling was based on the principles of snowball sampling (Miles, Huberman, Saldana, 2014), which enabled the researcher to find suitable case for the paper.

Besides the in-depth interviews with the founders and experts, the cases were also analyzed by looking into company specific documents, such as the company website, Facebook pages, company blogs and articles on the company in different newspapers. Below is a short description of each of the companies and experts.

AMOV appeal is a fashion company founded by Kasper Eis in 2015 in the outskirts of Viborg, Denmark. The brand was established with an ambition to sell sustainable apparel, through their own website as well as through retail shops. The cloth is made from organic, high quality materials that's produced to have a long lifetime and manufactured under sustainable conditions— AMOV even supply repair kits for free if needed (amovapparel.com).

As Kasper Eis mentions 35 minutes into his interview, "Innovation I think we have done well from the start". AMOV did very early in their company life, two successful crowdfunding campaigns to get started. Currently they are working on a crowd investment project (Appendix 2, 16:00 min) where many small shares of the company are sold to a crowd via a Finish platform, Invesdor.com. These crowdfunding projects combined with his crowdsourcing experience we are investigating in this thesis makes AMOV very innovative and a relevant company.

Sørensen Leather was recently taken over by the second generation Sørensens, who is now running the company. The company was established in 1973 and is selling high end leather hides into the industry in more than 36 countries (Sørensenleather.com). Around half of their turnover is export. Their products are manufactures around the world, kept on stock in Denmark and sold in flexible quantities to both smaller upholsters and larger furniture producers. Sørensen Leather holds between 15 to 18000 hides in stock divided into 450 colors and 25 collections. The company has 16 employees and work with agent around the world that sells their products. Sørensen Leather has after Louise and her brother took over the company, engaged in many new networks and used crowdsourcing which we look deeper into later in this thesis (Interview Appendix 5, min 4:30).

H2O is a Danish heritage fashion brands that has supplied their popular sandals to the Danes since 1984. H2O was few years back bought by 3 active investors, who wanted to give the brand a revival. Today H2O sell collections to both men and women within lifestyle, swim & beach, bags and footwear(https://H2O-sportswear.com/about-us/). H2O sells more than 100000 pairs of their popular sandal (Appendix 3, 01:34 min) and have done design partnerships with the famous designer Stine Goya, Henrik Vibskov, Han Kjøbenhavn and Oh! By Kopenhagen Fur among others. The H2O team is relatively small consisting of only 6 people and their philosophy is to outsource as many processes as possible. Therefore, H2O have also engaged in many collaborations with crowds, both through their company Facebook page wit +6000 followers as well as through crowdsourcing platforms.

In addition to the three interviews with SME's, who had crowdsourcing experience, two expert interviews were conducted. The ambition was to find experts, not only with Open Innovation

knowledge, but in particular on crowdsourcing, who could provide insights on SME's working with crowdsourcing. Lars Bo Jeppesen is a professor at Copenhagen Business School, who has done extensive research within crowdsourcing. Fredrik Kjellberg is a senior consultant at Deloitte in Copenhagen. He has worked intensively with crowdsourcing and is currently engaged in Deloitte's own crowdsourcing initiative, Deloitte Pixel™. Fredrik Kjellberg was found through LinkedIn, where he advertised for a seminar on the potentials in the crowd:

Lars Bo Jeppesen is a respected professor from Copenhagen Business School, where he holds a position in Management of Innovation at the Department of Innovation and Organizational Economics (cbs.dk, 2018). Lars is currently a visiting scholar at NASA Tournament Lab plus Harvard University and is an expert on innovation as it relates to co-development with users, crowd sourcing, crowd funding, and technology platforms (cbs.dk, 2018). Lars has released many Peer-reviewed articles, and his work has been featured in medias like Financial Times to Nature and Science (cbs.dk, 2018). His extensive research within the field of this thesis, makes him a very relevant contributor.

Fredrik Kjellberg is the youngest of the 5 respondents and have worked with crowdsourcing since May 2016 (LinkedIn, 2018). Fredrik graduated from University of Michigan in 2014 with a bachelor's degree (Dual Major) in informatics and Economics. Shortly after, he was employed at Deloitte in Detroit Area as a Business Technology Analyst, working with Data Science and Internet of Things (IOT). In 2016 Fredrik helped build, launch and scale Deloitte Pixel™, which is Deloitte's global crowdsourcing capability (deloitte.com, 2018) and a part of Deloitte Consulting Innovation in the US. Fredrik has worked with Fortune 500 companies, governments and Deloitte's internal teams across the world to use crowdsourcing to solve problems (LinkedIn, 2018).

3.1.2 Secondary data

Secondary data was collected to get an understanding of the field and to uncover the research gap. Moreover, the secondary data was also used to compare the findings of this paper with the existing data within the field.

The secondary data makes it possible for the authors to make cross references and triangulate the data, which improve the validity and reliability of the thesis (Andersen, 2014). The secondary data consist of two types: Academic and non-academic data. The academic data is mainly obtained through different online databases such as Business Source Complete and EBSCO. The non-academic data was typically found on the Internet and in different journals. A common example of

this is blogpost from different industry experts. These were often focused on open innovation more generally and of course rather subjective, which has to be considered whenever this data is used.

3.2 Data Collection

As this thesis is researching in a novel field, the amount of existing research is limited. Therefore, a qualitative research approach has been chosen for this paper. Five semi-structured interviews with companies as well as industry experts were conducted and is the primary source of data. The interviews were done by using an interview guide and based on the principles of narrative interviews (Andersen, 2014).

Prior to conducting the interviews, a wide literature review was done. Scientific articles, books and theory were studied, and the main points gathered in a shared literature review. Through this the researchers could establish what has already been found in the field and use that to create a framework for the research. A screening process was done following a selection of only the most relevant theoretical categories for further use. Hereby the literature review act as both theoretical and methodological guidance in the data collection.

After having conducted the literature review, the categories were used to create an interview guide (Appendix 2). The interviews had two primary purposes; to understand the companies and their crowdsourcing campaign, as well as investigating the factors, that influenced their crowdsourcing initiative. To uncover the first part about understanding the companies, introductory questions were asked. These gave a good understanding of the SMEs and their context, as well being good ways to start the interviews in a non-threatening manner. From there more specific questions were asked about factors influencing their crowdsourcing campaigns. This was divided into five main categories, which were all uncovered through the literature review. The categories were; campaign, structural, procedural, IP and culture. The interview guide was to be used in all five interviews, but however slightly adjusted for the expert interviews. This was done as the researcher were more interested in the experts' industry-wide rather than company-specific knowledge. Below is an illustration of how the interview guide was created.

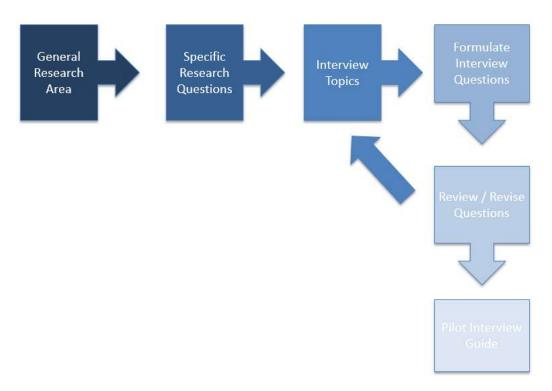


Figure 5: Applied process of shaping the interview guide (Inspiration from Bryman, E. Bell, A, Business research methods, 2011)

This interview guide was made, so the interviews could be executed as semi-structured interviews. This means that the interview guide served more as a checklist (See figure 5) of overall themes rather than a list of fixed questions (Bryman & Bell, 2011, p 481) This was done to adjust the interview depending on the answers given by the respondents. If the conversation got too far away from the interview guide, improvised questions was formulated to get the interview back to the categories in the interview guides.

As the topic is still fairly novel, it is important to give space to the respondent to lead the conversation in the directions they wished, although this might be to unexpected categories (See figure 6). This would enable the authors to investigate new areas (Andersen, 2014). Moreover, there are a limited number of SMEs, who have worked with crowdsourcing, which is why it was important to get as indepth and detailed answers as possible

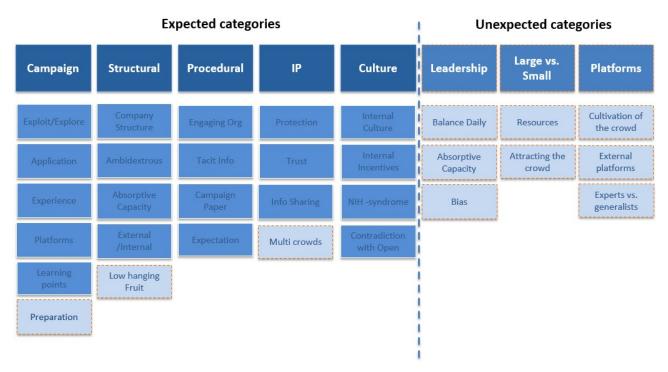


Figure 6: Overview of interview guide

The informants chosen for this research was as earlier mentioned sampled through snowball sampling. Three case-interviews and two expert-interviews was done. An overview of the interview is seen below.

Name	Company	Position/Title	Interview date	Length
Kasper Eis	Amov	CEO & Founder	08.03.2018	39:00:00
Christian Trads	H2o	Co-Owner	08.03.2018	29:00:00
Louise Vesterskov Sørensen	Sorensen Leather	CEO & Partner	09.03.2018	42:00:00
Lars Bo Jeppesen	CBS	Professor	04.04.2018	41:03:00
Fredrik Kjellberg	Deloitte	Senior consultant Nordic DeloittePixel Lead	16.03.2018	32:50:00

Table 2: List of informants

All five interviews were conducted with a narrative approach, meaning that emphasis was on narratives told by the respondents and the interviews asked questions to enhance this (Andersen, 2014, page 153). As mentioned earlier, two different types of interviews were conducted, which each had a slightly different focus and wording. In the case interviews, the company owners were asked specifically about their experience within the firm. Questions could be framed like "What is you experience with xxx, in your company?". When doing the expert interviews with the researcher and

consultant within crowdsourcing, the ambitions was to uncover their experience with crowdsourcing. To do so, the wording of the questions could be "In general, how do you see SME's act when it comes to xx...".

All respondents were generally very helpful, which the researchers benefited greatly from. As an example, all five respondents kindly mentioned, that we were welcome to contact them again after the interview, in case further questions had appeared. This indicates that the researchers succeed in creating a trustworthy relationship with the interviewees, which positively affects the quality of the interviews (Bryman & Bell, 2011).

At all five interviews, both researchers were present. Bechhofer, Elliot, and McCrone (1984) emphasis that there are certain advantages of being two interviewees. While one interviewer can lead the interview by asking questions based on the interview guide, the other interviewer can ask follow-up questions and elaborate on what the respondents say. Moreover, this gives the interviewers the most time to observe, make notes and make sure that all topics are covered. Being two interviewers also creates a more informal atmosphere in the interview, in contrast to an exchange between two people (Bechhofer, Elliot, and McCrone, 1984).

All interviews were audio-recorded with acceptance from the respondents. Although this might have an intimidating effect of the interviewee, the recordings enabled later transcriptions and an opportunity for an in-depth examination of the interviews. The transcription was done word-by-word and includes time-separation every five minutes. This both makes it easier to re-consult the recordings and the find quotes used in the thesis. The transcription resulted in a total of 51 pages, which is the primary source of data for this research. All transcripts are found in the appendix (3 to 7).

The transcription was done to help the two authors analyze the data and hereby arrive at their findings. When the interviews are available on paper, it is easier to examine and discuss the interviews as well as develop codes for the analysis. Another benefit of recording and transcribing the interviews, is that it opens up the data to public scrutiny by other researcher, who can evaluate the analysis that is carried out by the authors of this thesis. As Bryman and Bell (2011, page 487) writes; "It therefore helps counter accusations that an analysis might have been influenced by a researcher's values or biases"

After both authors had approved the transcriptions the interviews were send to the respondent, for their approval. This was done to give the respondent a chance to have statements amended to increase the validity and reliability.



Figure 7: The conversion of the interviews

The amount of secondary data within the research question is limited, as this is a fairly novel field. As an example of this, the three companies, who had all been engaged in crowdsourcing, did not have any internal reports on their crowdsourcing projects or knew of any. Fredrik Kjellberg, the Deloitte consultant, had some reports relating to the research question but was not able to share them, as they belonged to Deloitte's customers. Lars Bo Jeppesen, professor at CBS, actually has published academic articles within the topic. Lars Bo Jeppesen is preserved as one of the leading experts within the field and his research has contributed greatly to the field.

Due to the limited amount of academic work within the field, the Internet has been used to find articles, reports and blogs about the topic. When using these kinds of insights in an academic research, it is important to keep an eye on the reliability of the data. As part of the judgement of the data, the following four questions (Stewart, 2014) should be asked, such as;

- What is the data providers purpose? Based on why the data is provided, the writer might have a biased reason of posting the information.
- Who is the data collector? The reliability of the data or blogpost can be impacted by who
 collected it. The blogger might be associated to companies that could have an interest in
 selling certain services with the field.
- When is the data from? It could be anticipated that the technological development has played an important role in the rise of crowdsourcing. Therefore, the secondary data cannot be too old, as it would then be outdated.
- Is the data consistent with data from other sources? In order to validate the data reliability, it is positive if the facts are matching with the findings in this thesis, or at least with one other data source.

3.3 Data Analysis and Study Design

This chapter describes the methods used to analyze the data. These methods illustrate the steps that have been taken to arrive at the findings, and hereby helps indicate the quality of the analysis.

The study is made as a cross-case analysis in order to study multiple cases. By including different cases the generality of the study is enhanced (Miles, Huberman & Saldana, 2014). The different cases were mainly examined through interviews, which enabled the researcher to gather information about the companies' crowdsourcing campaigns. More specifically the researcher aimed to investigate which structural, cultural, IP and procedural arrangements that influenced the different crowdsourcing campaigns they had done.

The expert interviews were done on the same categories, to give some more general perspectives on the same topic, and hereby either support of oppose the findings from the case interviews.

Prior to the data analysis, the method for gathering the data had to be established. The findings gathered should then be analyzed by codebooks, inter-coder agreements and pattern recognitions (Miles, Huberman & Saldana 2014). As there were two authors it is important, that there is consistency in the data analysis. To ensure this, they decided to follow a five-step analysis which is illustrated in the figure below.



Figure 8: The data analysis process

The inspiration to above mentioned process was gained from Krippendorf & Bock's book (2009) "The content analysis reader". The method was developed in 1993 during their work on the Centers for Disease Control, on a HIV project were 600 semi-structured interviews was conducted. One of the key points is, that the Code Book Structure is to be defined and thereby act as a frame for the coders. This is known as an inter-coder agreement (Krippendorf & Bock, 2009, page 217)

The first step in data analysis process is to develop a list of codes. This is done to get a comprehensive list of used to categorize the interviews. The list of codes also provides the two authors with a common understanding to base their coding on. The first five codes have already been uncovered from the interview guide (Appendix 2), but as the interviews were conducted with

an exploratory approach, it is very likely that new codes could be discovered during the coding process.

In order to get the highest possible reliability in the analysis of the data, the two authors individually and independently coded all five interviews. This is the second step of the data analysis. The individual coding was done apart, to avoid any influencing of each other resulting in biased interpretations. The interviews was colour coded in the various categorize.

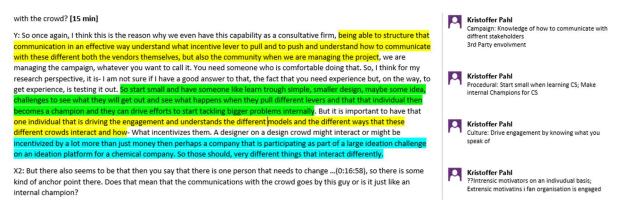


Figure 9: Examples of coding

The third step was discussing the findings from the individual coding. This process was very thorough, and the authors went through the interviews line-by-line and discussed the meaning and interpretation of what was said. These discussions were needed in order to ensure the highest possible level of reliability in the analysis. In some cases, the interpretation of the transcriptions, was so diverse, that the authors had to re-listen to parts of the interviews again. There were some differences in some points when reading the transcribed interviews and listening to the interviews in its context. These differences were discussed by the authors, and mutual agreements was made were it was most relevant and important for the thesis.

Along with these discussions a shared document was created to gather all the agreed inputs in one place (Appendix 8). This is step four in the data analysis process. The shared document was constructed as a matrix. As shown in figure 10, the matrix consisted of interviewee details on the vertical axis and categories on the horizontal axis. The boxes are colored in order to ease up the understanding of the matrix. The grey boxes are expected categories, whereas the blue boxes are unexpected categories, which were discovered during the data analysis process.

Company/ Category	Campaign	Structural	Procedural	IP	Culture	Leadership	Large vs. Small	Platforms
H20	- Start with a problem - Design thinking? I clea generation - Open end compaigns I cleas for later use - Change of direction - Successfull marketing campaign - Incentives by money - Tin the making' meeting with crowd	- Benefits of beeing inside the machine room - Benefits of working with industry experts - Use to work w. outsiders (Cutsourcing) - Agile company DNA - Storage of crowd genrated ideas - One anchor point	- Used SoMe to get their customers(crowd) oppinion on campaing result - Bes specific when framing the campaign - How to incooperate - Lack of implementation structure - They include PR, to keep people motivated	- No time spend on IP concerns	- Move from incremental to radical — Embrasing external inputs*** - "We gav your back" culture takes a long time to build, and can be destroyed in weeks	-Hard to focus on term strategy -Four days spend per campaign - Permission to fail	- Lack of manpower - Agility by beeing small - Flat organisation allows ideas to travel	- VIA used with succes - Reusing known platforms - Mindset of your people generated novel ideas
АМОУ	- Acces to great people - Bad startingpoint, broad campaign - Ongoing dallags - Bad alloosition of time - Missed '5 minut' pitches to sought in ideas - Ambition to create own - Foot communication w, plafform - Easy to mislead the crowd by comments	- Owner make the briefs - Small organisation - Use crowd as a flexible work force - Time is a limiting factor - Hire more people, chickerlegg - Framing can become a constraint for creativity	- Lack of preparation - Lack of annalysis in the beginning - Missing coordination with platform, about output expects. - Low abosptive capacity - Pick your crowd cerefully(B&O)	- Difficult to protect when engaging crowds - Pre-situdy is key, to set the guidelines	- Hands on - Innovation imbedded from the beginning - Daily incremental innovations - Lack of tech		- Time is a constraint - Small firms to benefits the most	- 99designs had easy interaction with crowd - Platform selection takes CS knowledge - the right platform for the right job
SORENSEN Leather	- Broad problem - Idea generation phase	- Appealing with flexible organisation	- Co-Creation - Anchor point for	- Working with trust - Openess in a limited sized	- The organisation can learn openness	- Owner is leader in all positions	- Flexibility is key	- Workshops - Technical knowledge

Figure 10: Section of Interview Matrix (See Appendix 8 for full matrix)

The matrix was done without any generalizations and only using quote or points taken directly from the interviews. The purpose of the matrix is to collect and arrange the data for convenient overview, which allows for a more detailed analysis. Moreover, the matrix set the stage for later cross-case analysis and pattern recognition.

The fifth stage is analyzing the matrix to look for patterns. Patterns is defined as quotes or points that was mentioned more than twice (Krippendorf & Bock, 2009). This was done jointly by the two authors, as there are a lot of quotes that potentially could be used. The purpose was to look for overlapping experiences in the five different interviews. The patterns may make the findings more generalizable. The patterns were color coded and given numbers in the matrix. The patterns themselves gave us an inductively generated tool that were incorporated into our overall data analysis. The data analysis in general followed a deductive approach, which means that data is generated from the theory (Bryman & Bell, 2013; p. 392).

Company/ Category	Campaign	Structural	Procedural	IP	Culture	Leadership	Large vs. Small	Platforms
H20	- Start with a problem - Design thinking? I-blea generation (1) - Open and compaigns (12) I-bleas for later use (1) - Change of direction - Successful marketing compaign (14) - Incentives by money - In the making" meeting	- Benefits of beeing inside the machine room - Benefits of working with industry experts (5) - Use to work w. outsiders (Outsourcing) (4) - Agile company DNA - Storage of crowd genrated ideas - One anchor point (1)	- Used SoMe to get their oustomers(crowd) oppinion on campaing result - Bes specific when framing the campaign - How to incooperate - Lack of implementation structure - They include PR, to keep people motivated (8)	- No time spend on IP concerns	- Move from incremental to radical (7) - Embrasing external inputs'' - "" hive gost pour hack" culture takes a long time to build, and can be destroyed in weeks (8)	- Permission to fail (8)	- Lack of manpower (6) - Agility by beeing small - Flat organisation allows ideas to travel	- VIA used with succes - Reusing known platforms - Mindset of your people generated novel ideas
AMOV	-Acces to great people - Bad startingpoint, broad campaign (2) - Bad allocation of time (4) - Missed 'S immuri priches to sought in ideas - Ambition to create own community/Army 67 - Poot communication v. platform (12) - Easy to mislead the crowd by comments (12)	- Owner make the briefs - Small organisation - Use crowd as a flexible work force (4) - Time is a limiting factor (8) - The more people, othickenlegg - Framing can become a constraint for creativity	Lack of preparation Lack of annalysis in the beginning - Missing coordination with platform, about output expectat. Low aborative capacity (6 - Fick) your crowd carefully (BSCI) (10) - Contact to Crowd Bias(12)	guidelines (2)	- Hands on - Innovation imbedded from the beginning - Daly incremental innovations (?) - Lack of tech	- Ambidenterity is very difficult (8)	- Time is a constraint (6) - Small firms to benefits the most	- 93designs had easy interaction with crowd (14) - Platrom selection takes CS involvedge—the right platform for the right job (10)
SORENSEN Leather	- Broad problem - Idea generation phase (1) - External competences - Using competition form	- Appealing with flexible organisation (4) - Need for external technical know how (5)	- Co-Creation - Anchor point for communication - First evaluating post-	- Working with trust (3) - Openess in a limited sized crowd	- The organisation can learn openness (7) - Light minded - joke about changes and implement in	- Owner is leader in all positions - Change management 7" (8) - Internal communication a	- Flexibility is key (4)	- Workshops - Technical knowledge about leather is needed (5)

Figure 11: Section of Pattern recognition Matrix (See Appendix 9 for full matrix)

After all the primary data was collected, coded and patterns had been found, a similar process began for the secondary data. Maintaining the same categories as used in the coding of the 5 interviews, the secondary data was now coded and added into a similar looking matrix. In this matrix the author, year of publishing and source is in the vertical axis and the categories know from appendix 10 in the horizontal axis.

Companyl Category	Campaign	Structural	Procedural	IP	Culture	Leadership	Large vs. Small	Platforms
Thomsen, D., 2017, Wonderful Media	Build Products for your customer, 2)Rough prototypes often spark richer conversation than fully realized designs	Iterative Prototyping	1)'Human Centric 2) invove customers early		Design thinking 2) No good idea comes from just on eperson. It's about the quity of the idea an success of the team			
Hoehn, R., 2016, Innovation Management	Using Customer base as crowd and use the crowd as your focus group						Small companies do not have the luxury of trying diffrent products and services out on thier customers	
Jaruzelski, B., Cesare M., 2011, Forbes	Successful innovators focus on that matters most rather than spreading their effort and resources on capabilities that are less critical	specfically targeted consumers	Coordinate across the eniter orgalization for an effective launch					
DeBord, M., 2016, Business Insider			Lissen to customer feedback and execute on it					

Figure 12: Section of secondary non-academical data Matrix (See Appendix 10 for full matrix)

Following this coding the data was used to triangulate the patterns from the interviews to improve the reliability and validity of the findings.

3.4 Data quality

There have been great discussions within academia whether the more positivistic criteria for data quality can be applied to qualitative research like this thesis (Yin, 2009, Guba & Lincoln, 1982). There is, however, a common agreement that the general criteria for evaluating data, namely reliability and validity, can be used to evaluate the quality of qualitative research. Hence these concepts will be used to test the quality of the findings of this paper.

Validity is concerned with whether the collection method and data analysis are suitable to answer the research question (Andersen, 2014, page 84). To understand the aspects that affects crowdsourcing in SMEs, the researchers chose to use in-depth interviews with both case companies and experts. Hereby, they extracted both case-specific and general data on the topic. By including multiple data sources, the researchers ensure that different perspectives are included in the analysis. Qualitative interviews have previously been recognized as a useful method to uncover complex concepts, such as crowdsourcing, in a novel context, like SMEs (Von Hippel, 1986). Furthermore, the validity has been enhanced by letting the informants review transcribed interviews. This was done to let them validate the data interpretation done by the researchers.

To ensure a close relationship between the informant's answers and the concepts developed, quotes are included in the findings. Hereby, the researchers aim to stay close to the data, as well as creating transparency in their analysis of the data. This has previously been emphasis as a helpful method to enhance validity (Brymann & Bell, 2015, page 707)

Reliability is concerned with the accuracy of the repeatability of the study (Brymann & Bell, 2013, page 400). In other words, reliability is concerned with if other researcher, who did a similar study on crowdsourcing in SMEs, would arrive at the same findings. To ensure a high level of reliability. Secondary data has been included in the analysis to triangulate the primary data. Moreover, the secondary data included in the study, has been through a structured evaluation, to ensure the quality of the data.

Furthermore, when the researcher initiated their analysis of the data, they started out by doing individual and independent coding. This was done to minimize social bias between the researchers, and hereby increase the level of reliability.

This research arrives at some novel findings within crowdsourcing, which paints a picture of how crowdsourcing is today used by SMEs. Moreover, there are some clear indications about the future development in this field. The study includes relatively few cases, which are all in Denmark. The small, homogeneous sampling means that a direct generalization to other areas might be difficult. However, by having a cross-case research design and including multiple data sources, it is believed that the findings are justified by the data.

4.0 Findings

As described in the methodology, the data collected in this thesis comes from three SME case interviews and two expert interviews. In the following chapter these findings will be presented. As illustrated in the model below, the data-analysis resulted in both expected and unexpected perspectives on crowdsourcing in SMEs. First, the expected categories will be presented in the way the interviewees answered the questions. Secondly, the new aspects will be presented, meaning categories that are novel to the researcher and the research field specified in this paper. These categories were brought up with initiative from the interviewees. Finally, the patterns that has been detected, will be presented for further use in the discussions.

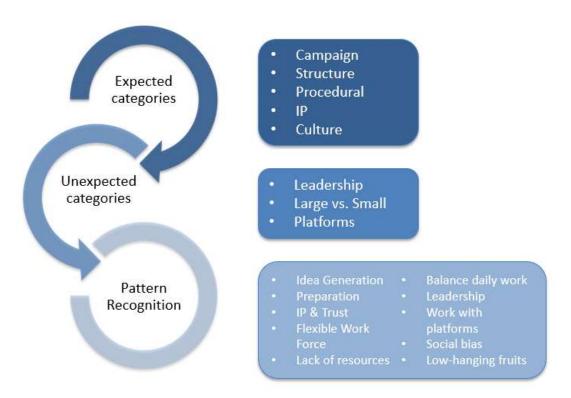


Figure 13: Model of data presentation (Appendix 8 and 9)

The aim with this chapter is to present the analysis conducted on the collected data. The findings are derived from all five interviews, and present some novel insights into which factors that affect crowdsourcing in SME's.

4.1 Expected Categories

This first part of the findings will present categories discovered in the data analysis, which are already established in the research fields. These findings are derived directly from the interviewees' answers to the questions from the interview guide (Appendix 2). As described in the section 3.4, all the interviews were coded and summed up in an interview matrix found in appendix 8. This means that while reading the following findings, the reader can follow the categories in appendix 8.

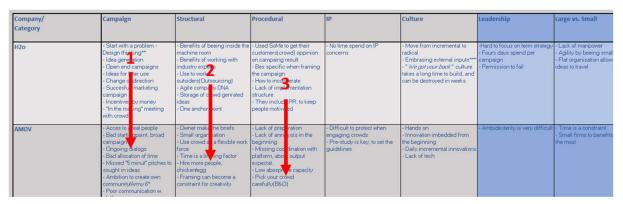


Figure 14: Section of Interview Matrix, showing the workflow of the the findings (See Appendix 8 for full matrix)

If the reader wishes to make a quick examination of the findings, there is a list in a bullet form in the end of each section.

4.1.1 Campaign

When engaging in crowdsourcing, the first external step is to launch a crowdsourcing campaign. This means describing the company, the problem and the potentials. This step is essential to ensure a successful crowdsourcing campaign and is therefore included in the finding. After drafting the campaign paper, it is posted on a crowdsourcing platform which for most of these cases where the VIA University college platform.

AMOV apparel (AMOV) is the youngest and the smallest of the companies included in this research. However, the founder has great experience within open innovation, and has already engaged in both crowdfunding and other crowdsourcing campaigns, such as creating a logo via 99designs.com. However, engaging with university students through a crowdsourcing platform, such as the one VIA University provides, was new to AMOV. When contacted by contacted by VIA University, the founder of AMOV, Kasper Eis, quickly agreed to participate as a case company on the VIA platform.

AMOV's campaign was structured as a case competition with an open question on how AMOV could improve. During the campaign there was little or no correspondence between AMOV and the students and VIA. At the end of the campaign, AMOV was surprised by the amount of inputs. They received around 20 suggestions of up to 30 pages. To the founder, Kasper Eis, it was important to give the students thorough feedback on their inputs. However, due to limited resources at AMOV and the time needed to read all the proposals, Kasper Eis had to acknowledge, that it was not feasible. He therefore was bound to let the course director Flemming Binderup Gammelgaard find the winner of the competition.

AMOV has, prior to this used 99designs to create the company logo when the company was still in the start-up phase. Kasper Eis's experience with using 99designs was that it was simple. AMOV simply made a request on the homepage for inputs to his design, and during the campaign he, as the owner of the problem, was in direct communication with the designers via the platform. The dialogue was good but had also some unintended factors on the process. Every time Kasper Eis gave some feedback to a specific contributor, the entire crowd used the feedback hence the designs became more uniform throughout the process.

The second case company, H2O, has mainly used the VIA connect platform to idea generation. Their experience from engaging in crowdsourcing is very positive, and they enjoy the inputs they've got from launching a campaign on the VIA platform. Many of the ideas generated were quite novel. As an example, an input that they are currently investigating is 3D printing for the soles of their flippers. Connecting with the crowd have hereby given H2O some insights into other industries, which might lead to a spillover effect for the company, as they have become aware of the opportunities. Many of the ideas from the campaign are kept in a "box" for later use, which they then internally reconnect with at a later stage. Christian Trads Hansen, Managing Partner at H2O, explains that the platform works well for different intent and purposes. He emphasizes, that the main task is to figure out what kind of results the company wish to gain from the crowdsourcing campaign; "If you want to be inspired don't make it to bounded, let people think". Christian Trads Hansen believes, that it is valuable to have people involved with no previous knowledge of the company's product or industry, as they will come up with more novel ideas, that haven't already been discussed at the firm. This viewpoint meets great support in the literature by Bonnefant (2018), which argue that open innovation flourish when participant with different backgrounds is put into a group setting. This is the case with the crowd at VIA Connect, as students with different skills, knowledge and interests are put in the same groups. In relation to this, Mr. Hansen mentions that you need to be aware of your crowd composition, and be aware if it is professionals, students or something else. Professionals will

for example have a lot more insight into what can be realized and what can't. As a small company, Christian Trads Hansen also mentions that now that he has achieved good results from their campaign on VIA Connect, he will use the platform for future interactions with the crowd. Christian was the only employee engaging directly in the crowdsourcing campaign, so only few resources was used during the campaign.

The third case company, Sørensen Leather, also engaged in crowdsourcing through VIA Connect. Louise Sørensen, who is one of the owners, tells that a company's product is important, when considering engaging in crowdsourcing. She also emphasizes the importance of interacting with someone that knows your products. This is especially true, when working with products, that are not consumer products, such as leather hides. For crowdsourcing campaigns like that, Louise Sørensens thinks the crowd must be selected based on specific expertise. It was also emphasized by Sørensen Leather, that for a small company like themselves, it is extremely important to brand the company, to get some traction from the crowds. The crowd can consist of both consumers and professionals, and to get their attention it is important to be known. Sørensen Leather has used the crowdsourcing primary for two purposes; 1) to get new input, and 2) to stay agile and only pull on expert knowledge when it is needed. Hereby crowdsourcing becomes a way to manage their resources. To Sørensen Leather, using crowdsourcing also has meant that they have built up a network of competences, which they can seek inputs and guidance from in case of sudden changes or challenges. Therefore, by engaging with the crowd on a regular basis, it allows the company to work together with experts and leverage from their knowledge. Experts that Sørensen Leather would normally not be able to work with due to their size and geographical location. Moreover, the ongoing dialogues with the crowd, gives the crowd enough tacit knowledge about the form, that crowdsourcing campaigns are faster and requires less resources. Sørensen Leather is hereby able to engage with the crowd in other areas than idea generation, for instance marketing and commercialization.

Besides the three case companies, this research also includes insights from different crowdsourcing experts. One of them is Professor Lars Bo Jeppesen, who has done extensive research in the field. In his opinion, the main reason why companies engage in crowdsourcing is to access external knowledge, that would normally not be available to the company. This he argues, is the same regardless of the size of the firm and whether it is an international player or not. Lars emphasizes that companies who launch a crowdsourcing campaign, has to focus on four major steps:

- 1. Preparation
- 2. Attract the crowd
- 3. Establish incentives
- 4. Selecting the winner

Based on his research, Lars Bo Jeppesen explains that the largest difference between large companies and SMEs is the lack of resources, time and people. Hereby it is utterly important that SMEs prepare well for a crowdsourcing campaign in order to get the needed results and to manage the resources spend. His experience is, that a lot of the SMEs who have failed when engaging in crowdsourcing, have failed due to a lack of preparation and lack of resources allocated for the crowdsourcing campaign.

The second expert included in this thesis is Fredrik Kjellberg, who has worked intensively with crowdsourcing among SMEs through his job as a consultant at Deloitte. He explains, that many SMEs believe, that the easiest way to engage with the crowd is in the ideation phase. However, to this he disagrees. Ideation is often fluffy and herby requires few internal resources, but the inputs from such campaign is often very superficial and strategic, which makes them hard to execute on. If engaging in idea generation campaigns, the SMEs benefits from standardizing their questions as well as using scores to evaluate the inputs.

Fredrik's repeats that it is easier to involve the crowd in the designing or commercialization of a product, as you can involve the crowd on the executional part. This point is confirmed by the theory as discussed in 2.8 (Lee et al., 2010).

Fredrik Kjellberg also emphasizes the importance of using intermediaries. Intermediaries meant as platforms or community-based companies like Innocentive.

To sum up the most important takeaways about crowdsourcing campaigns are:

- SME's gain the greatest success by crowdsourcing very specific problems. Crowdsourcing idea generation can be hard to handle as found in the case interviews.
- It is crucial to prepare well and be very specific in the problem statement that needs to be solved. AMOV and Sørensen Leather both experienced that the solutions they received in return was difficult to implement due to their diverse nature.
- Using platforms as intermediaries is crucial to the success of crowdsourcing. campaigns for SMEs.

 Reusing the same platform and the same crowd for multiple crowdsourcing campaigns increases the value of the crowd for the focal firm.

4.1.2 Structural

When investigating how the structures in the SMEs affects crowdsourcing campaigns, three different topics has been selected in this thesis. Firstly, how is the organizations structured, who does what and what challenges do they have. Secondly a look at the company's ambidextrous performance and thirdly an investigation on how well their absorptive capacity is.

The co-owner at H2O, Christian Trads, explained, that his organization is very agile, and it is an asset for them because the fashion industry is constantly changing. Additionally, H2O sells many of their products online, which is why they also have to be able to adjust to new technological developments. H2O aims at having the smallest organization as possible, and therefore they outsource as much as possible. H2O have a small amount of fixed staff, which including management consist of 6 people. Besides that, they use 20-25 external freelancers, such as photographers, designers and warehouse facilities. The thoughts behind keeping the organization small, is that it is easy to scale if sales increase, but also easy to downscale if sales decrease at certain times. Another advantage of using external partners is that H2O gets external inspiration, which is important when you work in the fashion industry. The use of externals might be a bit more expensive, but H2O believes it is worth the extra cost, as it gives them the needed agility.

Christian Trads mentioned, that it becomes harder to maintain ambidextrous when the company is growing, as most resources are used on scaling the daily business and few on developing new strategies. This is an area of which they will increase their focus.

From the interview it appears, that H2O is probably not getting the maximum output from the crowdsourcing campaigns they have been running. H20 has mainly used crowdsourcing for idea generation rather than technical problems. The inputs obtained from the idea generation campaigns, have been hard for H20 to implement, which Christian explains in the following quote:

"If the aim is to get an answer for a specific technical question, we would be able to implement it immediately". Christian Trads, H2O

Christian Trads believes it would have been easier for them to implement specific solutions, rather than implementing loosely suggested ideas from the crowd.

AMOV is the smallest of the case companies. AMOV consists of Kasper, who is the owner, and responsible for logistics, warehouse, sales, and Vinnie who works with designs and suppliers. Besides the two they have a student worker by the hour to help when the workload is too much. AMOV is facing the chicken and egg dilemma, as they are at a stage where they do not make enough money to hire a new employee, meanwhile their few staff limits their growth opportunities. They have outsourced their accounting and are planning to outsource the warehouse and logistic as well.

The two employees have many different roles due to their resource restraints, and Kasper Eis has worked out the strategy. AMOV has an analytical approach to how they plan to grow, as they use historical data to make their new collections. Kasper works during the day with micro-managing the company and the long-term strategy is then done in his couch in the evenings, when all the parcels have been shipped.

In AMOV it is only Kasper Eis who has worked with crowdsourcing. As mentioned earlier, he used crowdsourcing to designs their logo. To him, the outcome of this campaign was easy to implement, as the new logo could be implemented directly. Besides this campaign, Kasper also posted a campaign on the VIA platform. This campaign was an idea generating campaign resulting in too many outputs, which were difficult to structure and implement.

At Sørensen Leather, Louise Sørensen and her brother recently acquired the company from their father. Since then they have updated the assortment and branding, why Sørensen Leather today appear more modern. They consider themselves part of the fashion industry. Louise Sørensen's brother takes care of sales and are travelling more than 100 days a year, whereas she herself takes care the daily operations. Besides the two siblings, there are 16 employees at Sørensen Leather, who is divided into administration, warehouse and in-house sales. Besides this the company have one employee, who travels the world to control the quality of the supplied leather. Sørensen Leather has made unique looks by combining architects and they emphasize that they cannot compromises with their quality.

Like the two other companies, Louise Sørensen is working a lot with external partners when it comes to designing, architects and branding. Especially the architects from Copenhagen is mentioned, as Sørensen Leather have developed new collections in collaboration with them.

When it comes to working both with exploitation and explorations, Louise and her brother is spending most of their time on daily business and thereby exploitation. The company have made an advisory board, as they know it is important to take the time to plan for the future and discover new opportunities.

When interviewing Lars Bo Jeppesen, a researcher within crowdsourcing, it is clear that he has deep knowledge within the field. At first, he mentions how SMEs often underestimate the amount of work involved in running the campaigns, and that the companies tempt to reserve to little capacity for them. This often results in unsatisfying outputs.

Lars Bo Jeppesen explains how more and more companies are moving away from internal R&D to using external resources. The benefit of this, he states, is that you attract people from outside your own industry and hereby your team composition becomes more diverse. Another benefit is that you attract people with different capabilities. However, he argues that for a company to be able to benefit from external resources, top management support is very important. The management has to create an environment which leaves room for creativity and were people are allowed to fail.

Fredrik Kjellberg is daily working with the challenges of crowdsourcing in his job at Deloitte. When discussing SME's, he is particularly focused on the ability to earmark resources to run the campaigns. He mentions, that it begins with an initial structuring of the campaign, which is often underestimated by the companies. At the end of the campaign, Fredrik Kjellberg argues that many SMEs face a problem as their absorptive capacity is limited. Due to these reasons, it is not always the best option for SMEs to engage in crowdsourcing. In some cases, he argues that it would have a greater effect to find experts within the field using pyramid search and make them solve the issue without involvement from a crowd.

To sum up, the most important findings within structural is:

- The employees in the three case companies simultaneously have many different roles and responsibilities.
- Across the cases there is a lack of resources, which is a limiting factor, that sometimes is the reason for less satisfying outputs from crowdsourcing initiatives.
- There is a positive attitude towards using externals, as they contribute with expert knowledge and inputs from other companies and industries.
- It is a big benefit for SMEs, that the cost of externals is variable.

4.1.3 Procedural

When investigating the procedural arrangements of the SMEs, it is interesting to look into the following three aspects. First, how much time the companies spend on their crowdsourcing campaigns. Secondly, who had the responsibility of the crowdsourcing campaign. This includes who

that communicated with the crowd and selected the winners of the campaign. Thirdly, it is interesting point to investigate whether the three owners engaged the organizations' campaigns.

At H2O it was mainly Christian Trads the co-owner, who invested time in the crowdsourcing projects. Christian Trads wrote the campaigns in collaboration with the representative from the VIA platform, and defined how it should be communicated. He was the only one who spend manpower on the campaigns, funding small gifts for the winner in the form of gift cards to their webshop. During the campaigns Christian Trads went to VIA university to guide the students. The evaluation process was made in collaboration with the platform, and the various projects were given scores to decide, who the winner should be. In total Christian Trads spent two days on each of the campaigns he has done through the VIA platform.

Most of the output that H2O received was related to PR and had great interest to H2O. Christian Trads selected the winning solutions and presented it to his PR group. The different suggestions were implemented immediately (See YouTube link in Bibliography).

AMOV has experience with crowdsourcing from two different platforms; 99designs and VIA University. For the 99design campaign, Kasper Eis spend half a day writing the campaign paper and posting it on the platform. He followed up on this, by commenting on the developments and finally selecting the winner.

For the VIA challenge Kasper Eis was surprised by how much work, that is involved in running a campaign on that platform. Kasper Eis is very busy, and he underestimated the time it took to create the campaign paper, give feedback while the campaign was running as well as reading through the many pages of answers.

"I forgot to think about my own time, which is kind of normal for an entrepreneur that you think you can do anything", Kasper Eis, AMOV

At Sørensen Leather it is Louise Sørensen, who is the anchor point for all the external collaborations. She has been running the crowdsourcing projects. Louise Sørensen can use her colleague in the finance department, Inger, occasionally to assist, but it is rarely.

It has become a habit for Louise Sørensen to share the outputs internally to show the employees which direction the company is moving, but she does not engage them in the process. On the crowdsourcing campaign through VIA platform Louise Sørensen spend between 10 and 20 hours on the project. She had a login to the platform, so she could login and guide people in the creative process.

As seen above, the three case companies include similar procedural aspects, when launching a crowdsourcing campaign. The two experts included in this research emphasizes some slightly different perspectives. Lars Bo Jeppesen, the professor from CBS, is emphasizing the four phases you have to go through when doing crowdsourcing:

- Do good preparation
- Attract the crowd
- Establish incentives
- Select the winners

This way of framing the process, is according to Lars Bo Jeppesen simplified, as there are also interdependencies between the different steps. You cannot choose a winner, if you have not done the preparation properly, as you might end up solving the wrong problem. He points out, that smaller companies often underestimate the first and the last part.

Lars Bo Jeppesen experience that SMEs often lack a procedure for finding the right problem to solve. In larger organization this is easier, as they often have a more systematic approaches to problem finding, and often have pipelines of problems that needs to bed solved. The smaller companies must look at the value proposition behind the problem. Lars Bo Jeppesen argues that SME's should not only try to innovate, but instead focus on isolating the problem, that they are trying to solve. Once you have a solid understanding of the problem, Lars Bo Jeppesen experience, that finding the crowd and creating the incentive is quickly done.

The final stage proposed by Lars Bo Jeppesen, named the selection process, is not to be underestimated either. He recommends involving a few people from the organization to choose the winner. The thoughts behind engaging more people, is among other that the decision making becomes better founded in the organization.

There is a correlation between Deloitte having a business area specialized in crowdsourcing, and the procedural arrangements needed in the companies. Fredrik Kjellberg argues that companies tends to underestimate the complexity of managing a crowdsourcing project and do not educate their colleagues properly. This applies to companies of all sizes. This is specifically where Fredrik Kjellberg as a consultant spend most of his time.

His advice is to create an internal crowdsourcing champion and make that person comfortable communicating with the crowd. Start small and run design or idea campaigns to a small crowd, to get the feel of the dynamics. When you do this, you start to understand the crowds and how they are incentivized. Once this champion is comfortable, that person can start educating others in the organization to help on the champions campaigns, or even run their own based on the experience of the champion.

To recap, the most important aspects, when it comes to procedural aspects, is:

- The SMEs have not allocated enough time to go in-depth with crowds.
- In the case companies it is only the top-management, that is involved in the crowdsourcing campaign. None of them include the rest of the organisation.
- To have a successful crowdsourcing campaign, it is important to fully understand, which problems should be solved and to look at the value proposition.
- In companies of all sizes, it is beneficial to have an internal crowdsourcing champion.
- When entering crowdsourcing, you need to test on a small scale, and from this learn the dynamics of a crowd, and how they are incentivized.

4.1.4 IP

The Intellectual Property Rights (IP) is in often crucial to have in place before engaging in crowdsourcing. This area is not the main topic of this thesis, but it naturally appeared from the data collection. The first aspects about IP rights is the considerations on sharing data with an external crowd. This is followed by the considerations regarding the IP rights of the outcome of their campaigns.

At H2O they did have some considerations on IP rights, when setting up their challenges, but did not spend much time on it. The main purpose of their campaigns was to generate ideas and play around with the already existing components of their business. Therefore, they did not see IP rights as vital for the crowd sourcing campaign.

AMOV did not include considerations on IP rights with their campaign on the VIA platform. but they did have some concerns when using the 99design platform. The AMOV logo can be seen below. Kasper Eis had was concerned, that designers on the 99design platform would do changes, and then claim they owned the rights. Kasper Eis looked into the terms of the platform, which stated that

he had the IP rights of the design. However, he still feels, that it is a grey zone, and he have concerns that someone will pop up one day with a logo similar to his and claims the rights.



Figure 15: AMOV's logo

Louise Sørensen from Sørensen Leather did not consider IP rights when entering crowdsourcing. During the VIA challenges she opened her business as much as needed without any concerns. Louise Sørensen is convinced that openness is important for further growth, especially for SMEs. She believes, that many companies are too protective of their business because they are afraid they will vanish. When Louise Sørensen utilizes her network, she discusses internal problem with experts from different industries to gain some new insights. She feels, that she gains a lot from this approach. If she reveals any sensitive details about the company, she relies on trust from the people she works with rather than IP rights.

Lars Bo Jeppesen is much in line with Louise Sørensens about how SMEs often rely on secrecy rather than IP rights. To him the problem scenarios are more or less the same no matter the size of the company, but in reality, the big companies are more structured when it comes to protecting their IP.

"I guess a lot of the small ones are playing it on secrecy", Lars Bo Jeppesen, Professor CBS

He argues that SMEs have to be caution, when they choose what they want to use crowdsourcing for. If the problems are within the core business, the company should to be very cautious with what information they reveal. His suggestion is therefore to start out by making a campaign outside the core business area, and from this learn about crowdsourcing. If companies then choose to crowdsource in areas within the core business areas, know how to work with the crowd and are hereby better prepared to protect sensitive, while still obtaining successful outcomes from the crowdsourcing campaign.

In line with AMOV, Fredrik Kjellberg emphasizes the importance of establishing who contractually owns the rights of the outputs. This area, he argues, however is one of the most complex matters in

crowdsourcing. His two main points are to ensure that the crowd understands the legal structure of the campaign regardless of geographical location. The second point is that the legal structure is the same whether you are crowdsourcing internally in your organization or outside your organization.

To sum up, the crucial aspects within IP rights are;

- In some cases, SMEs might base their collaborations on trust.
- Legal structures should be the same no matter company size. However, many smaller companies lack this area.
- It is important to get the participating crowd to understand the legal structures behind the campaign, also across borders.

4.1.5. Culture

There are many reasons why it's interesting to look at a company's innovation culture. Culture is not only relevant for the management level, but across the hole organization. Therefore, this research includes aspects about the companies' culture and how they incentivized innovation.

H2O sees themselves as fairly innovative. In this matter Christian Trads sees it as a clear advantage that they are only few employees, as it enables them to take decisions and implement them fast, hereby staying agile. Christian Trads also emphasizes that compared to the larger organization, that he worked in earlier, it is fast and easy to present ideas to the managers.

H2O does not specifically work with incentive schemes but they strongly encourage their internal and external partners to take risks and try out new stuff. It is very important to H2O that their colleagues feel secure, and Christian Trads explains that if you do not try, you are not the right guy.

"Permission to fail", "We will cover your back if anything goes wrong", Christian Trads, H2O

H2O believes, that it motivates their internal and external partners to test radical ideas, and suddenly realizing that it can be a beneficial strategy. Creating such a culture takes time, and Christian Trads believes, that it can be killed in two days by the management, if you do not pay attention to it.

Kasper Eis, founder of AMOV, sees culture in his company as one of the things, that they have succeeded with from the beginning. This, he argues, are also the reason that they have engaged in crowdsourcing through both VIA and 99designs as well as some Kickstarter projects. In their daily

business they do not feel very innovative, but Kasper Eis believes, that the business model as a whole is innovative, and they therefore only need to focus on incremental innovation in their daily business.

Sørensen Leather rely on a conservative product, and innovations are few and incremental in the company. To become more innovative, Louise Sørensen has made new partnerships with architects, where they together design new collections. She is trying to involve architects in their business and thereby get some inspiration and expertise. When Louise Sørensen explains about these partnerships, she mentions, that it is a total new way of working in the industry. She believes, that the external partnerships help their organization and develop their culture to become more open.

Lars Bo Jeppesen also sees culture as utterly important, when engaging in innovation. As open innovation has become increasingly mainstream, there has been a change in the innovation culture in the companies, Lars explains. He has not worked in the companies himself, but his network informs him that there has been quite a resistance to this change. The resistance especially comes from the more skilled people, as the company start using crowdsourcing within their field of expertise. Then the skilled people starts feeling threatened - and the not invented here syndrome appears. A positive way to frame it is to make the employees understand that successful implementation of the innovation relies on them. Lars believes, that some companies now have had their incentive schemes have adjusted them to facilitate open innovation, and now these kinds of R&D people have understood the advantages of using open innovation.

Fredrik Kjellberg support this point. He also experiences quite some resistance towards the unknown - in this case open innovation. He also explains that these new ways of working take time to implement and make the necessary cultural changes. As mentioned earlier in section 4.1.3 about procedural, it is important to create crowdsourcing champions within the company and educate them, so they become familiar with the method.

To conclude, the most essential perspectives on culture is;

- All three case companies believe it is important to have a culture where failure is an option
- In SMEs the external partners provide important a push for a more innovation culture in the companies.
- The experts have experienced that the "not invented here" culture challenge, but it has improved since the companies have adjusted their incentive schemes to facilitate open innovation.

4.2 Unexpected Categories

When the data was analyzed, three new categories occurred, that has not already been established in the research field. Due to the narrative approach and the semi-structured nature of the interview, the interviewees uncovered areas, that the researchers did not foresee. After the researchers compared their code of the interviews, they agreed on the following three categories.

4.2.1 Leadership

Leadership was one of the categories, which was uncovered. This appear to have a great impact on the crowdsourcing campaigns and was emphasized by many of the interviewees. Leadership is not a novel category within the innovation academia, but it was, however, more strongly emphasized than previous research indicates.

Christian Trads from H20, mentioned leadership when he explained about how he is trying to create a culture, where it is okay to fail. He encouraged internal and external partners to test things and accept if some of the projects failed.

To Kasper Eis leadership was important in relation to become ambidextrous. To him, ambidextrous leadership is needed in order to secure their future growth. Kasper Eis has a lot of management experience form larger organizations, and in his current position he is only leading a small group of people.

Louise Sørensen and her brother took over the company some years ago, and since then they have worked on make the company more up-to-date. She wishes to use leadership to make the organization more innovative, and she spent much of her time developing new products. However, not all employees like the changes. To meet this challenge, Louise Sørensen spends at least 10 minutes every day in the warehouse to speak to the employees and make sure, that they feel like they are getting heard. She also drinks coffee every day the team, to make sure they feel involved and updated. Hereby, leadership at Sørensen Leather is both about having a clear vision, but also stay close to the employees at the firm.

Crowdsourcing often means changes. And creating changes takes attention from the management. The researchers, Lars B. Jeppesen sees strong leadership as one of the main reasons for success of failure in crowdsourcing. Strong leadership ensures that the employees feels secure and

supported in their decisions. Lars B. Jeppesen also emphasizes, that the leader must provide the necessary resources, to ensure that the solutions the company gets from a crowdsourcing campaign, can actually be implemented.

He also supports the assertion, that giving the team a permission to fail is very important.

Another important point within leadership is the importance of management keeping a continuous focus on open innovation and crowdsourcing. This point was highlighted by Fredrik Kjellberg. He affirms, that it is the leaders' responsibility to support and involved the right people, so they consciously have a focus on the crowdsourcing processes.

The most important takeaways about leadership are:

- Successful crowdsourcing takes a strong leader that points out a direction
- The SME's are in all three cases managed by a strong leader
- Support from management is important for successful crowdsourcing
- Keep focus on the projects from managements side

4.2.2 Large vs. Small

From the data collection and analysis, it became obvious, that there a substantial difference between when large or small companies engage in crowdsourcing. Especially within the amount of available resources, there is a great difference. For instance, SMEs are not able to manage their own crowdsourcing platform and create a community around only their brand, as it requires too much focus and resources as an SME. They therefore must use designated crowdsourcing platforms, such as the VIA platform. On the other hand, large organizations like LEGO as able to much better create, nourish and maintain their own crowdsourcing platform (Blohm, 2017).

Secondly, other constraints detected from the interviews, is the that SMEs face, when they try attract a community to engage with the campaign. As professor Lars Jeppesen told in his interview, it is much easier to get traction with the crowd, if you are a company like Volkswagen, where the community knows you and might use the campaign to promote their skills. However, Sørensen leather have had success in re-engaging with their crowd multiple times. They have successfully seeked out previous contributors, who afterwards has acted as freelancers and over time have acquired enough tacit information about the company to know what the company's needs are. The crowd have hereby become an agile workforce for Sørensen leather, who can contribute with expert knowledge when needed. Whether or not this contrasts the possibilities of large enterprises is

beyond the scope of this paper, but maybe most importantly the findings of this paper, supports the current understanding, that crowdsourcing allows SMEs to access knowledge, skills and inputs, that they would else have been reserved for large enterprises. Kasper Eis support this viewpoint as he considers the comparative benefits of crowdsourcing to be greater for SMEs than larger organizations, as it not only allows for new inputs and ideas, but also enables the focal company to allocate internal resources to those areas where their core competencies lies.

The most important takeaways about large vs. small are:

- Crowdsourcing allows for SMEs to gain access to knowledge and skills, that normally require
 a greater organization and a R&D lab
- Reusing the same crowd might lead to better results within crowdsourcing
- It can be argued, that SMEs have a comparative bigger advantage from crowdsourcing than large corporations, as they can focus their limited resources on the key business, while acquiring expert inputs.

4.2.3 Platforms

As mentioned previously, the crowdsourcing platforms is important for the success of a crowdsourcing campaign. This is especially true for SMEs, who rely on external platforms in their crowdsourcing campaigns.

The platform allows the companies to connect with a crowd of people, that they would else not have access to. This crowd must be cultivated and maintained, which is a task, that would be too resourceful for SMEs. The role of the platforms is to facilitate easy communication and engagement with the crowd, as well as being an expert within how to work with crowdsourcing campaigns.

Some platforms are highly specialized in specific industries or ways of problem solving like the 99designs. Therefore, as both Fredrik Kjellberg and Louise Sørensen states, it is important to find the right platform for the particular problem at hand. Fredrik Kjellberg also mentions, that in some cases it is better to engage with external experts, as they often are going to generate value for the organization faster. This goes together with how Sørensen leather have developed further and stronger relationships with particular members of the crowds, who have engaged with for more specialized tasks. In that sense SMEs get access to highly specialized individuals from other industries then your own.

The most important points about the platform are:

- It is important to find the right platform for the specific problem. One example found in the research, explains the successful campaign AMOV ran on 99designs.
- Using crowdsourcing platforms can be a beneficial way to get knowledge from other industries. H20 explained how satisfied they were with the inputs their externals came with from other corners of the fashion industry.

4.3 Pattern Recognition

After a presentation of the expected and unexpected categories, patterns across interview persons and categories will now be presented. These patterns have been uncovered, by using the pattern finding process described in the section 3.4. The matrix below visualizes how the pattern recognition was done by coloring statements from the interviewees. This resulted in 14 patterns which in this thesis also is considered factors. Out of the 14 patterns only 11 was found relevant to answer the research question and will be elaborated in this section.

Company/ Category	Campaign	Structural	Procedural	IP	Culture	Leadership	Large vs. Small	Platforms
H2o	- Start with a problem— Design thinking - I-dea generation (1) - Open and campaigns (12) - I-deas for later use (1) - Change of direction - Successful marketing campaign (14) - Incentives by money - In the making meeting	-Benefits of beeing inside the machine room -Benefits of working with industry experts (5) - Use to vote (5) - Agile company DNA - Storage of crowd genrated ideas -One anohor point (1)	- Used Soffe to get their customers (crowd) oppinion on oampaing result - Bes specific when framing the campaign - How to incooperate - Lack of implementation structure - They include PR, to keep people motivated (8)	- No time spend on IP concerns	- Move from incremental to radical (7) - Embrasing external inputs** - "kill got your hack* outlure takes a long time to build, and can be destroyed in weeks (8)	- Permission to fail (8)	- Lack of manpower (6) - Agility by beeing small - Flat organisation allows ideas to travel	- VIA used with succes - Reusing known platforms - Mindset of your people generated novel ideas
AMOV	-Acces to great people - Bad startingpoint, broad campaign (2) - Bad allocation of time (4) - Missed '5 merul' pitches to sought in ideas - Ambition to create own community/Army (5) - Poor communication platform (12) - Easy to mislead the crowd by comments (12)		Lack of preparation Lack of annalysis in the beginning Missing coordination with platform, about output expectat. Low aboutprive capacity (6 - Pick, your crowd carefully (BSD) (10) - Contact to Crowd Bias(12)	Difficult to protect when engaging crowds (3) Pre-study is key, to set the guidelines (2)	- Hands on - Innovation imbedded from the beginning - Daily incremental innovations (7) - Lack of tech	- Ambidenterity is very difficult (8)	- Time is a constraint (6) - Small firms to benefits the most	- 93designs had easy interaction with crowd (14) - Platform selection rakes CS knowledge - the right platform for the right job (10)
SORENSEN Leather	- Broad problem - Idea generation phase (1) - External competences - Using competition form	- Appealing with flexible organisation (4) - Need for external technical know how (5)	- Co-Creation - Anchor point for communication - First evaluating post-	- Working with trust (3) - Openess in a limited sized crowd	- The organisation can learn openness (7) - Light minded - joke about changes and implement in	- Owner is leader in all positions - Change management 7* (8) - Internal communication a	- Flexibility is key (4)	- Workshops - Technical knowledge about leather is needed (5)

Figure 16: Section of Pattern recognition Matrix (See Appendix 9 for full matrix)

4.3.1 Pattern 1 - Idea Generation

This pattern refers to the purpose of running a crowdsourcing campaign. In the literature there is a distinguish between campaigns to generate novel ideas and campaigns to solve specific problems. Both H2O and Sørensen leather have used their crowdsourcing initiatives to gather ideas, though Fredrik Kjellberg claims that, that is the hardest crowdsourcing campaign to run. His argues, that idea generation can result in ideas in many directions, and they can be very hard to evaluate and implement, as they often are very diverse. H2O experienced their campaigns as successful, whereas Sørensen leather did not have great success with their campaign.

4.3.2 Pattern 2 - Preparations

In the AMOV case, Kasper Eis experienced, that his preparations for the campaign was not sufficient. By defined the campaign too broad and inaccurate, the outcome, that they got, was in his opinion too general to implement. Kasper Eis emphasizes, that he did not do sufficiently analyze the problem and how they needed it to be solved. Lars B. Jeppesen confirms that thorough preparation is needed to run a crowdsourcing campaign, and that time should be spent in this step. This he argues is however often neglected by companies engaging in crowdsourcing. Finally, Fredrik Kjellberg accentuate the need of a pre-campaign process of structuring and focusing the questions, to ensure that the crowd replies accurately to your problem.

4.3.3 Pattern 3 - IP & Trust

IP was one of the hardest aspects for the companies discuss. All three case companies rely on trust, when it comes to their crowds not misusing the findings from the crowdsourcing campaign. The SMEs place the responsibility on the crowdsourcing platform. Kasper Eis from AMOV believes, that it is almost impossible for companies of their size to legally protect their IP rights, as they do not have the resources to hire a lawyer. Another aspect that was mentioned by Lars B. Jeppesen, is that many smaller companies rely on secrecy rather than IP rights. There is, however, a big contrast in relying on secrecy and engaging in crowdsourcing, where you ask external crowds to solve problem or idea generate for you. The solution for many SMEs engaging in crowdsourcing has been to divide the problems into smaller pieces, which makes it hard for the crowd to figure out what the solutions should be used for. This might negatively affect the applicability of the outcome.

4.3.4 Pattern 4 - Flexible Working Force

When running SMEs, the workload often varies a lot. This is often difficult for the owners to handle, as they have a limited workforce, which they cannot scale up. Due to this, the case companies find it appealing to work with crowds, as they are flexible and can be activated only when it is necessary. This flexibility is often very cost efficient and keeping the capacity cost low is important especially to SMEs. Furthermore, the use externals also enable the SMEs to tap into experts from other industry. Fredrik Kjellberg confirms that a flexible workforce is beneficial for SMEs. He supports this statement by mentioning, that one of Deloittes Pixels existentials is that they are only employed on project basis. Other research within the field confirms, that companies are attracted by this flexible workforce (Howe, 2006).

4.3.5 Pattern 5 - Working with Professionals

H2O is, as described earlier, keeping their organization to a minimum by having a network of 25 freelancers they work with on a regular basis, besides their crowdsourcing activities. Developing new ideas by working together with experts from many different industries is an important input to both H2O and Sørensen leather. Previous research within innovation and crowdsourcing confirms, that working with other industries improves the results, as well as the efficiency of the firm (Hoehn, Yeomans, 2013). This applies both when working with individuals or with a crowd. An example of this, is Unilever who work with external crowds to improve their sustainability goals (Yeomans, 2013). Fredrik Kjellberg stresses, that SMEs should engage with intermediaries. This they should do to secure, that the right competencies are in place to successfully engage in crowdsourcing. These intermediaries could be consultants, but also platforms, who are experts within crowdsourcing and the mechanisms needed to successfully engage with external crowds.

4.3.6 Pattern 6 - Lack of Resources

There is a consensus among the companies and experts included in this research, that time constraints is a big challenge when running crowdsourcing in an SME. There often not enough resources available in the SMEs, and the workload of running a crowdsourcing campaign is often underestimated. Several of the interviewees highlight the absorptive capacity as being a great challenge. This is because the resources, that are reserved for the campaign is often used, when the crowdsourcing campaign reaches the implementation phase. Due to this, many companies find it appealing to join forces with crowdsourcing experts, to help them run their crowdsourcing campaign, and make sure that all the steps are efficiently executed (Hoehn, 2013).

4.3.7 Pattern 7 - Balancing Daily Work

There is an agreement among the three company owners in this paper, that balancing their everyday life is hard. The company owners get a lot of ideas but must be very caution with which ideas to proceed with, and how to spend their time the best. The focus in an SME is to run their businesses and relying on incremental innovation rather than radical. It is hard to put efforts into the long-term perspective for radical innovations, as its often too far away from employee's daily mindset. In a blogpost (Jaruzelski, 2011), it is also confirmed that other companies have the same problems, and it is recommended to be good at focusing your time and work structured.

4.3.8 Pattern 8. - Leadership

As mentioned earlier leadership is of great importance when SMEs engage in crowdsourcing. In the companies included in this research, the most changes and initiatives come from the management. The managers in the companies are the only ones working with business development in the companies. This is due to the size and level of maturity of the companies. Something points in the direction that the managers in general find it hard to work with Ambidexterity. Balancing the incremental and radical Innovation efforts for the company is not so much an active though process as it is simply moving the companies forward in a manageable pace. Secondary sources emphasize that it is important for the management to engage people across the organization, and make sure that everybody is taking ownership of new ideas occurring (Jaruzelski, 2011; Thomasen, 2017) thereby making the multi-dimensions of Ambidexterity a part of the company's DNA.

4.3.9 Pattern 10 - Working with Platforms

As indicated earlier in this research, choosing the right platform for a crowdsourcing campaign is essential for both the process and the outcome of the campaign. This is however not easy. To choose the right platform and crowd takes knowledge the specific platform and a good understanding of the crowd. This know-how can be accessed by cooperating with organizations, who have done crowdsourcing previously, and who can match the right challenge with the right platform. These organizations are often independent consultants or platform consultants. However, working with such experts can be quite expensive, especially for SMEs. Literature has indicated, that posing this knowledge can enable faster innovation and improve the output of the effort (Armstrong, 2010; Deloitte, 2018).

4.3.10 Pattern 12 - Social Bias

As crowdsourcing means working with a crowd, social bias is important to consider. As the company launching a campaign, you have to be aware of the influence you might have on the crowd. All of the included case companies, have tried to communicate with the crowd, while the campaign was running. They all experienced how their comments influenced the development of the responses and ultimately the outcome of the campaigns. An example of this, is Kasper Eis from AMOV, who received many similar solutions, once he started interacting and giving feedback on the provided solutions.

4.3.11 Pattern 14 - Picking the Low Hanging Fruits

Finally, the was a definite pattern, which indicated that SMEs can use crowdsourcing to pick the low hanging fruits. This is very important, as an SME have limited resources to invest in the crowdsourcing campaign. Fredrik Kjellberg mentions this, when he recommends SMEs or companies in general to start small when engaging in crowdsourcing, and from there gather experience. An example he mentions is to choose a problem, which is simple to solve, and do it on an intuitive platform where the need for domain knowledge is limited. Academia has also touched upon this aspect. Claudia (2018) argues that by starting small and simple, when engaging in open innovation and crowdsourcing, you will end up with a speedier process and shorter innovation cycles. If you have success with one crowd, then try to reuse it for future campaigns.

After this examination of the established patterns, it is clear that preparations and structuring of a crowdsourcing campaign is very important for the output. The time and resources is a limiting factor in an SME, why managers have to plan how to execute and complete the process. Also, it is found, that SMEs should leverage from existing platforms to benefit from their knowledge and ensure that input from outsiders is optimized.

Following this introduction to the patterns, the coming section will discuss identified patterns and relate it to existing literature.

5.0 Discussion

In this section the authors will present a short summary of the findings followed by an examination of the theoretical contributions. This will be done by discussing the patterns found and comparing them to the existing literature within the field. Novel areas where the literature is limited, will also be highlighted. The authors will then present their views on how SMEs can benefit from these findings.

5.1 Summary

This thesis investigates which factors influence successful crowdsourcing. It is built as a cross-case research study and contains five different interviews. Three of the interviews are with SMEs, who have engaged in crowdsourcing. The last two interviews was done with crowdsourcing experts, who both confirm and contradicts the findings from the three case interviews.

The primary data was coded and three matrices (Appendix 8, 9, 10) was built to create an overview of the findings. In the matrix a total of 14 patterns were found. 11 of these has a relation to the research question and therefore is included in this paper. The patterns are factors, that shed light on certain topics which SMEs should pay special attention to when navigating in the crowdsourcing world. The factors all contributes to the research gap, that has been detected earlier.

The findings indicate that time and resources is a limiting factor to SMEs, which is why projects should be carefully chosen. This also important when considering what and how a company chose to run a campaign. The empirical data found in this research, suggests that SME should start small and simple when engaging in crowdsourcing, and learn from this. Moreover, it is recommended that SMEs seek advice from already existing knowledge owners and crowdsourcing platforms.

5.2 Theoretical contributions

The following will provide an overview of the theoretical contributions of this research. Based on the empirical study performed, 11 patterns have been detected, that influences the success of a crowdsourcing campaigns. The existing literature within open innovation and crowdsourcing have focused on areas, but little research has been conducted on SMEs engaging in crowdsourcing. Therefore, this discussion refers to theory from various academic papers, where it is found relevant.

When engaging in crowdsourcing it is important to be specific in the framing of the campaign. Some uses the method for **Idea generation** and some uses it for specific problem solving. These findings confirm the theory, that crowdsourcing is easier to use in the executional steps of a design process (Lee et al., 2010). Campaigns with the ambition to generate new ideas often become too fluffy for the organizations to handle. It is often easy to come up with ideas, which is why the crowd often contributes with many ideas, that might point in many different directions. Hence, they can be hard to structure and thereby hard to execute on - especially for SMEs with limited resources. All three case companies had tried to do idea generation through crowdsourcing, but with limited success. This paper hereby, support the conception, that it is a general misinterpretation, that ideation is the easiest to crowdsource on, especially not for SMEs.

In this thesis it became clear that the varying quality of the outputs from the crowdsourcing campaigns, was partially due to poor **Preparations**. It seems, that all the case companies have underestimated the effort need prepare a crowdsourcing campaign. When preparing for a crowdsourcing campaign, it seems that there are fundamental questions, that should be asked; What is the company's core competencies? What is the specific issues, that would like to have solved and why? How should we frame our campaign paper, what platform should we use, and which incentives should we use to motivate the crowd? Companies have to ask themselves these questions before starting up the process. None of our interviewees had done this, and it seemed like many of them were not aware of what they were engaging in before after they launched their campaign.

Being an SME, the juridical resources are often limited. Therefore, **IP** and trust is often a vulnerability, that they do not pay attention to. Smaller companies rarely have juridical competencies in-house. In these findings none of the companies have spent resources on this issue. The companies were reliant on the platform to take care of the IP concerns, which seemed like the only option available. The literature mainly covers formal IP rights in larger companies and very little is found on SMEs. Current academia supports our findings in the sense that SMEs most often rely on trust either by a developed relation or with an intermediary that can hold and re-distribute knowledge that is needed to succeed (Lee et al. 2010).

There are various benefits of working with crowdsourcing and one of them being the access to **Outsiders**. Outsiders in this context means people, who work with many companies, and hereby collect insights and experience across industries. Using crowdsourcing to gain access to external knowledge, is also emphasized in the existing literature within the field (Brunswicker, 2015). It has been argued, that SMEs increase their efficiency and produce better quality products, when they use

outsiders as experts within their field (Yeomans, 2013). The SME's from this thesis was dependent on harvesting these novel insights, and this is an important input to their business development.

In all five interviews **Lack of Resources** was mentioned as one of the main challenges of running successful crowdsourcing campaigns. There is a natural limitation in an SME on how many resources you can spend on non-core business (Lee et al. 2010). The findings explain that it is mainly the owner that runs the campaigns, and that the owners also have the responsibility of the daily business. Crowdsourcing takes time, and the interviewees all seemed surprised of the number of hours they had to put into making it an success. Lack of resources hereby is an important factor, which was found both in this paper and in previous research within the field.

Running an SME involves a variety of tasks and **Balancing your Daily Work** was a challenge for all of the company owners in this research. The findings detected, that it was hard to balance between daily improvements and radical innovations. This challenge is confirmed in the literature, and ambidexterity is an often-used term to describe this dilemma (Schilling, 2017). The company owners were engaged in the daily businesses and found it difficult to focus on the more innovative tasks. According to other research in the field, it is important for SMEs to work focused and reserve resources when testing crowdsourcing (Hoehn, 2016). It can be argued that SMEs need to have a certain size to enter crowdsourcing, as the people involved need to retract periodically from the daily business.

A returning topic in this thesis is the lack of resources and capacity. This requires good **Leadership**, which however might be impeded by the relatively few personnel, who are all fully occupied. The literature emphasizes, that the leader has to create a creative environment, to let innovative ideas spring up. Google has done it with their 20% rule, but that is hard to implement in companies with a handful of people. The literature also discusses that "the lone inventor" is a dying race (Rodriguez, IDEO) as open innovation cultures is more about making the team shine. Therefore, it could be argued, that the company need a certain size to create the right environment for crowdsourcing. Of the included cases, H20 has probably had the most success with their crowdsourcing initiative. Christian Trads, the co-owner at H20 is very aware of creating a culture, which motivates the employees to take chances and risk to fail, which is also discussed in the literature (Amabile & Khaire, 2008). Moreover, the small size of the companies, makes them more agile, which often foster a more creative environment.

Previous research has advices SMEs to **Work with Platforms**, when they engage in crowdsourcing (Lee et al, 2010). This was also what the findings concluded, as none of the companies included in the paper have the resources to build their own platforms. There was a consensus about the importance of choosing the right platform for the right job and getting help from the people behind the platforms. The platforms already have established crowds and experiences, and they can also function as a safeguard toward the many questions a crowd can raise (Romanczuk et al. 2017). Being able to tap into the platforms know how ultimately also gives faster innovation results (Armstrong, 2010).

Another factor that might affect successful crowdsourcing in an SME, is being aware of the influence the problem-owner has on a crowd. The findings in this SME, shows that **Social Bias** can occur if the problem owner's comments while the campaign is running. That might influence the crowd to adapt their solutions to the feedback, that they receive. This is another argument to engage with an established platform, where expert is controlling a crowd.

When evaluating the findings, the pattern of **Picking the Low Hanging Fruits** is one of the most important ones. Crowdsourcing is not easy, and SMEs can waste many resources making their own experiences. As resources are limited, it puts a limitation of how big a campaign you can run. The advice emerging from this research is to start by launching a small campaign, where the SME ask a limited crowd a very specific question. From this, they should gather knowledge and learn the dynamics of communicating with a crowd. The literature confirms this, and suggest that when entering crowdsourcing, companies can in the beginning benefit from using small platforms with intuitive user interface and get help from experts to get started. Doing this can lead to speedy campaigns and shorter innovation cycle times.

The literature touches most of these patterns in various connections. Mainly they are linked to open innovation or crowdsourcing in general and often with a focus on larger corporations. This thesis main contribution to the literature is, that it gives a clear overview of the 11 most important factors, found in this research, that affect successful crowdsourcing in an SME context.

5.3 Practical implications

These findings could act as a checklist for SMEs, who are interested in engaging crowdsourcing. The companies who will try this in the future, should spend some time on understanding the factors and sense the dynamics that lies ahead when trying it out.

Using these 11 factors and working with them pre-campaign, could potentially save the SME both money and energy, which was found limited in these companies.

When speaking to SME's, crowdsourcing platforms, consultants, professors and other university-based platforms it's clear that crowdsourcing is in its very early stages in Denmark. The number of companies that are aware of the existence is limited and there is a need to communicate the benefits of this method. This communication could go out through the innovation hubs and through organizations as Væksthusene (startvaekst.virk.dk/), as they connect with many SME's. Such communication could contain findings from this thesis, as it's easy to understand and relevant for a first timer.

The pragmatic way to present the factors could be:

- Be cautious to use Crowdsourcing to Idea generation as the feedback can be hard to handle.
 The more specific you are the better.
- Don't underestimate how much time is spend in the **preparation** phase. A good and well-structured start is crucial for a successful result.
- Lean on to established platforms IP structures to secure you the right to the output.
- The use of **outsiders** improves your output and increase the speed of your innovation
- Make sure that you have the **resources** reserved to handle crowdsourcing.
- Balance your daily work, and secure you have the time as a leader to complete it.
- Try to engage your organization and be a supportive **Leader**. Take chances and kill the lonesome inventor.
- Use **Platforms** who have done crowdsourcing many times before and learn from their experience.
- Be cautious on influencing the crowd.
- Pick the Low Hanging fruits and start small and with easy problems.

The stakeholders learned about crowdsourcing in a detailed way. There are many dynamics and effects which is not obvious in the beginning, and by speaking to users and experts the two authors gained deep knowledge within this field.

5.4 Limitations

During the development of this thesis, a few limiting factors has come to the authors attention. These factors will be presented in this section.

Firstly, there is a limitation to the generalizability of the thesis due to the relatively small sample size. A small population size might lead to single informant bias, which can influence the validity of the research. Moreover, there were only conducted interviews with one person from each company, which can lead to further single informant bias.

In the preliminary phases of the study, the authors searched over a long period of time for potential case companies who could participate in the research. The authors had several meetings with other universities, Crowdsourcing networks, University professors and Deloitte's global crowdsourcing team, but nobody was able to lead us to additional case companies. This might indicate that though the samples size might be relatively small, it might represent a major part of the available population.

The size of the case SMEs measured by number of employees, was in the smaller end of the SME segment which might lead to a misrepresentation of the SMEs.

The case companies all turned out to be Danish, why the findings might not be representable for the situation in other countries.

Finally, the composition of the case companies ended up by being three companies somehow related to the fashion industry. This should be taken into consideration when generalizing across industries.

All three companies collected the majority of their crowdsourcing experience through the same platform (VIA Connect), which might give them a bias view on how crowdsourcing works. The Internal validity in relations to the authors conclusions could have benefited from more sources to better establish the relationship between variables.

These limitations might indicate that there is some missing perspective in the findings.

6.0 Conclusion

The last decades technological developments have created new and exciting ways to collaborate and innovate. Crowdsourcing is one of them, and after researching this topic, it is clear to the authors that the potential of this method is considerable. Crowdsourcing is an open innovation method, where companies engage with an external crowd to get inputs on how to solve different internal issues. Crowdsourcing is not to be considered a replacement of internal R&D departments, but as a supplementary method to leverage on external knowledge and know-how.

The overarching purpose of this thesis has been to investigate which factors, that influence the success of crowdsourcing initiatives launched by SMEs. The existing research on crowdsourcing in SMEs is limited. Hereby the contribution of this study is both aimed at practitioners within crowdsourcing as well as to academia within this field.

A total of five in-depth interviews has been conducted. Three of them are with SMEs, who have experience with crowdsourcing, and the remaining two is with experts within the field. These interviews have been transcribed and coded, from which a total of 14 patterns have emerged. From the 14 patterns, 11 patterns, or factors, is included in this paper, as they are of great relevance to the research question. The factors are applicable both prior, during and after running a crowdsourcing campaign.

The 11 factors are:

Idea Generation: This term refers to a type of crowdsourcing campaign. Using crowdsourcing to generate ideas has proven to be more difficult than for specific problem solving. The SMEs in this research paper all struggled to implement the outcomes from these initiatives and thereby confirms current academia, that greater success is found in later stages of the innovation process.

Preparations: Both the experts and case-companies agreed, that the preparation stages are crucial to the success of a crowdsourcing campaign. Preparation includes understanding your own company and its most predominant issues, finding the right crowdsourcing platform and plan how to engage with the crowd. Surprisingly only a very limited amount of our literature has highlighted the preparation stage, though a few places it has spoken of matching the platform with the requirement of the SME.

IP & Trust: SMEs often do not have their own legal departments and often rely on trust rather than IP rights. This however can become an issue, when SMEs engage in crowdsourcing. Therefore, it is beneficial for SMEs to leverage on established platforms, as they often have predefined legal terms.

Flexible Working Force: The SMEs often have limited resources. Therefore, it is beneficial for them to take advantage of the crowd, when needed, and thereby keep their capacity cost low. Crowdsourcing hereby can be perceived as a flexible working force for the SMEs.

Working with professionals: The research clearly indicates the benefit of using external resources, as they contribute with insight from other companies and industries. This is especially important for SMEs, as they normally would not be able to collaborate with experts from different fields.

Lack of resources: In line with current academia one of the greatest challenges for the SME in general is the lack of time and resources. This is also evident, when SMEs engage in crowdsourcing. If too few resources are invested in a crowdsourcing campaign, it leads to inadequate execution of the campaign, and thereby a less successful results.

Balancing Daily Work: It is often the senior management in the SMEs, who engage in crowdsourcing. As the case companies we have engaged, all can be defined as being small, senior management are often involved in many aspects of the daily business, it can be difficult for them to reserve enough time to perform the crowdsourcing campaign. This research paper is therefore inconclusive when it comes to finding out if these studies can be generalized to medium sized companies but clearly indicates the challenges of management when situated close to the daily running of the company.

Leadership: Crowdsourcing means changes, and changes demand good leadership. The case companies, all found it hard to perform daily incremental improvement, while securing enough resources to engage in the more radical initiatives.

Working with Platforms: It is found in this research, as well as confirmed in the literature, that SMEs can benefit greatly from working with existing crowdsourcing platforms. Both our expert interviewees and the research tells us how platforms develop their crowd to facilitate specific needs of their customers. Most platforms therefore build up their core capabilities around running campaigns on behalf of customers and thereby fulfills the exact needs of SMEs when doing open innovation. In that sense our study also indicates that a University platform that resets its crowd each year might not give SMEs the focused attention that they need to succeed with crowdsourcing.

Social Bias: During the campaign it is usual that the problem owner comments mid-way on clarifying matters. However, these comments have to be thoroughly considered, as they influence the whole crowd and hereby the development of proposals.

Picking the Low Hanging Fruits: Is a factor that indicates that SME should take advantage of previous experience from the field. It is found, that companies should start with a simple and well-defined problems, to build up the internal capabilities to match innovation conceived outside of the organization. The point is clear when we speak to both crowdsourcing experts and the three

companies but little on the topic have been located within the literature. So even though a simple perspective it seems to have been overlooked for the most part.

The 11 factors demonstrate that SMEs must do thorough preparation before creating a campaign. A well-structured process and execution is needed to maximize the output. The research also suggests, that SMEs should take advantage of existing intermediaries, who with their knowledge of the crowd, can accelerate a successful crowdsourcing process. Furthermore, the research confirms that resources restraint is a limiting factor, and that management must invest considerable resources to gain success.

If the SMEs manage to prepare well for the crowdsourcing campaign, utilize existing platforms that suits their purpose and invest adequate resources in the campaigns,

SMEs can greatly benefit from the extensive amount of external insights and skills. This can help them to speed up their innovation process and ultimately enable them to improve their competitiveness.

7.0 Further Research

This research has mainly been built up around a deductive approach applying the known theory on three companies and two experts and their experiences with crowdsourcing. Given that engaging with crowds for innovation is a relatively novel field, the dynamics have yet to be fully explored. Future research could therefore benefit from taking a more inductive approach and thereby letting the data form a new base for new theories - specifically developed to explain the dynamics of working with crowds. This would give a more holistic and saturated knowledge base of which to build further upon for the future.

We have established in our research the important link between SMEs and Crowds and how important it is that SMEs via the crowd gains access to competencies in their efforts to gain competitive advantages and compete on a level playing field with other companies including larger enterprises. Research that would look further into the boundaries of how flexible an organization can become, might provide us with further insight of how many competences that can be handed over to the crowd, without endangering the SME itself.

The research paper takes it's offset from the company's perspective, in line with most of the current academia in the field. It could therefore be interesting to alter the perspective and instead look into the different types of crowds in an attempt to optimize their usage specifically for SMEs.

Speaking about optimization, our understanding of how to fully take advantage of the clear benefits of crowdsourcing, is still at an early stage. The lack of resources and the restraints that clearly comes from being an SME is easily recognizable. It is therefore important of allowing the organization to focus its efforts on core capabilities and fields of knowledge.

The Academia could therefore benefit from looking at the optimization of resources within SMEs and how to internalize crowdsourcing efforts, within the SME.

The study points out that Internal R&D departments are seldom amongst SMEs and therefore hints that the absorptive capacity, is missing a natural anchor point. Research that would look further into how to connect these processes would give a better understanding on how to create a lasting Business Models that allow the SME to utilize the opportunities that lies within connecting internal and external Innovation opportunities.

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9.0 Appendix

9.1 Appendix 1 - When and How to Crowdsource

	PURPOSE	CHALLENGES	BEST USE
Contests	Generating high-value solutions to complex or novel problems through large-scale and diverse independent experimentation	The problem must be general- ized and stripped of company- specific details	Highly challenging techni- cal, analytical, and scientific problems; design problems; creative or aesthetic projects
Collaborative Communities	Aggregating a large number of diverse contributions into a value-creating whole	The crowd lacks the shared culture and cohesiveness of a company, making it harder to control; intellectual property can't be protected	Customer support communi- ties; wikis; open-collaboration projects for information and software products with complementary assets inside the firm; FAQs
Complementors	Encouraging innovative solu- tions to users' many differ- ent problems with your core product	It can be technologically daunting to provide access to the functions and informa- tion in the core product while protecting your assets	Open operational, product, or marketing data initiatives; content mashups; apps
Labor Markets	Efficiently and flexibly matching talent to discrete tasks	Identifying which problems to farm out and who in the orga- nization will manage the labor pool may be difficult	Well-established categories of work that can be clearly de- scribed and evaluated; human computation; repeated tasks

"When and how to crowdsource" (Boudreau et al., 2013) Harvard Business Review April 2013

9.2 Appendix 2 - Interview Guide

Respondent: Kasper Eis, Amow

Christian Trads, H2O

Louise Vesterskov Sørensen, Sørensen Leather

Lars B. Jeppesen, CBS

Fredrik Kjellberg, Deloitte

Interviewe: Jens Møller og Kristoffer Pahl

Referent: Recorded Interview

Timeframe: 30-45 minutes

Place: Via Skype

Theme: SME's experiences with engaging in Crowdsourcing

Research Question: "Which factors influence successful crowdsourcing in an SME context?"

Introduction

- 1. What is your job position within your company?
- 2. How long have you been in the company?
- 3. How big is your company in terms of number of employees?
- 4. Is it okay that we use your name and company as a case?

Your crowdsourcing campaigns

- What was the original thought behind your company decided to engage in crowdsourcing? (Exploration / Exploitation)
- 2. What was the challenge? (Solution/Application, product/process/testing/channels/marketing)
- 3. You choose to do it on the Via platform, why?
 - a. Did you have knowledge of other companies utilizing Via?
 - b. Did you consider doing it on other platforms?
- 4. Did you ever consider doing it internally? (Lack of resources or Competences)

Moving onto your experiences

- 5. Could you take us through the different steps of the campaign?
- 6. Was it a successful campaign?
- a. What went well?
- b. What would you like to have done different?
- c. Other key learning points?

- 7. Have you done crowdsourcing campaigns since?
 - If not, have you any intentions of doing this in the future?

Structural

- 1. How is your Company structured?
- 2. Ambidexterity is being able to handle radical and incremental innovations at the same time. Would you describe your organization as ambidextrous?
- 3. Absorptive capacity is how good your organization is to internalize the outcome of the campaign (use the BP, deep water Horizon example from the gulf). How would you describe the absorptive capacity of your organization?

Procedural arrangements

- 1. When you formulated the "Campaign Paper" what thoughts did you do on the amount of resources you had to put in? (Manpower, Capital, Work hours)
- 2. Where in the organization did you place the responsibility for communicating with the crowd? (Multiple points of communication, Anchor point)
- 3. How did you formulate "Campaign Paper" on the VIA platform? (Narrow / Broadly defined)
 - 1. was the outcome of the crowdsourcing process as you expected?
 - 1. How did you manage expectations with the crowd Effort from the Problem owner and the Crowd?
 - 2. Did you evaluate on the inputs from campaign contributors during the campaign or did you wait until the submission date?
 - 3. How did you make the final selection, on what solution to continue with?
 - 4. How did you engage your organization into the implementation of the process?
 - 5. How important is the organizations tacit information in generating a viable solution?
 - 6. How do you make sure this information is shared with the solvers?

IΡ

- 1. What was your considerations like, in relation to data and information sharing with the crowd in your campaign?
- 2. Did you consider what to do with the IP rights, of the potential output of your campaign?

Culture

- 1. How would you describe the culture of innovation in your company?
- 2. How is the company's incentive scheme?
 - 1. Do you work with any incentives, that reward innovation?
- 3. Did the campaign create any cultural issues, that contradicted with your usual ways of doing innovation in your company?
 - 1. How did you communicate internally about your aspirations for incorporate Crowdsourcing into your company?
 - 2. There is sometime an internal resistance we describe as the "not invented here" resistance. Did you meet this?
 - 1. Why do you think you didn't/did meet this challenge? (Company size, Culture, (lack of) focus, resources)

9.3 Appendix 3 - Interview Kasper Eis, AMOV

Audio File: AMOV Kasper Eis

Interviewer X1: Kristoffer Pahl Interviewer X2: Jens P. Møller

Interviewee Y: Kasper Eis

Length: 39:00

X2: Altså, jeg kan bare tilføje ham samtalen.

X1: Nå, men det vidste jeg ikke, at du kunne, når det var mig, der havde ringet op før. Vi husker at sætte-

X2: Ja. Hvad var det, han skrev?

X1: Skal jeg tage den igen, så?

X2: Ja, gør du bare det, så- Skal bare lige-

X1: ...(0:00:35)

X2: Ja, ja, det må man sige. Han var meget- Hvor fanden har jeg lige smidt ham hen? To sekunder, jeg skal bare lige have hans navn. Så, nu ringer jeg op.

X1: Godt.

Y: Hejsa.

X2: Hej Kasper.

Y: Hallo, nå, okay, kan I også se mig, eller hvad?

X1: Nej, den går ikke endnu, Kasper. Jeg kan heller ikke høre Jens.

X2: Kan du høre mig?

X1: Jens, du har ingen lyd på.

X2: Kan I høre mig?

X1: Nu kan vi.

Y: Nu kan vi, ja. Kan I høre mig?

X1: Vi kan høre dig, Kasper.

Y: Godt, så.

X2: Det er lidt et deja-vu, her sidder du igen over for-

Y: Haha, ja, det ser bekendt ud. Haha.

X1: Haha, uh, jeg har glemt at tage den rigtige trøje på i dag, må jeg indrømme.

Y: Ja, jeg har ham den ...(0:01:59), det er skidt.

X1: Han må jo være- Han er jo self-branding, kan du se.

Y: Ja.

X2: Ja, cheasy and nice.

Y: Cool.

X2: Nå, men fedt, og tak, fordi du lige ville bruge de næste tre timer sammen med os.

Y: Ja, haha, ja, det er fint. Jeg har faktisk et, jeg har et møde om en halv time, så jeg håber, vi kan nå ret meget lige der, kan vi det?

X1: Ja, ja, vi snakker halvanden speed, så.

Y: Jamen, så, så, vi kan jo sagtens fortsætte en anden dag, men-

X1: Det er helt fint, jeg tror vi godt kan holde os inden for det, men det kommer, det kræver, det kommer an på hvad spørgsmålene, eller hvad svarene bliver.

Y: De er jo meget korte, så, ej, haha.

X1: Ja, de bliver meget korte. Hvad hedder det, nå, Kasper, hvad hedder det, vi gør det på den måde, at jeg gør det hovedsageligt, fordi vi har haft lidt udfordringer med Jens' mikrofon sådan semi, så jeg tager de fleste spørgsmål, så kan det være han byder ind med noget ordre, har vi talt. Derudover hvis det er okay med dig, at tale på engelsk. ...

Y: ...

X1: Super, og så er det okay, at vi bruger dit navn og firma i den her opgave?

Y: Ja, ja.

X2: Sådan.

X1: Perfect. Good. So, Kasper, thank you very much, for participating here. We have divided the interview here into four stages, just a brief instruction, then about you and your crowdsourcing campaigns, how you have used it and your experiences, then about, a bit about your company structure and the procedure arrangements, that you set in play for this and as well as becoming the company culture, we are aware you are a smaller company but still interesting. Just to start with the introduction wise, your own position with the company?

Y: Almost every position. I am the CEO founder, finance, marketing, sales, warehouse dude, and then, yes, Winnie is just standing next to me, and she is the designer slash buyer slash quality control slash a lot of other things.

X1: Okay. And how long have you been with AMOV, when did you found AMOV?

Y: I think in the end of '14 is when I quit my job from Lego Wear, and then I used the first year with consulting, so I think from the beginning of, end of 2015, start of 2016 is kind of when we spend full time on this.

X1: Okay, and you mentioned you are two people but you also have some interns, is that correct? How many people are you?

Y: That is actually who I am meeting at a quarter past four, no, it is- Right now we are only the two of us but sometimes we are four or five depending on how many interns we have, but right now we are waiting.

X1: Okay. Good. [5 min]

In relation to this with the crowdsourcing campaigns, what was your original source behind engaging in crowdsourcing?

Y: I just have to know which are we talking about? The one we did with Tago or?

X1: Any for that matter, and we will be asking some of these with VIA Connect but your fortune general in using?

Y: I think, because we have been doing different things. We have been doing- At one point I tried to do kind of a small logo for, you know, like Lacoste has a crocodile, I wanted to have one for us, we did that on 99design, and for that I just wanted to kind of have access to a lot of great persons all around the world to see if we can find kind of, a lot of, one good proposal in the end, but of course also kind of a good brainstorm. That was the idea there, and then the thing we did with VIA Connect was- Well to be honest, it was more initiated by VIA Connect who came to us and asked, would you like to participate in this? And I think that also explains why it kind of ended where it ended. We will get back to that later, but it did not come exactly from a problem, it came more from, like, trying to work with students as well.

X1: Okay. And in this sense what was the challenge there for the VIA Connect?

Y: Well it, I think to be honest it started in the wrong way because it started with, you know, them contacting us and say, you know, we have these students in retail, marketing, branding, design, and we would like to do this kind of crowdsourcing challenge. And we said okay, we can do this. And then basically the challenge turned out to be, you know, in order to progress what should AMOV do in terms of branding, marketing, ...(0:06:48). Very, very broad task and, you know, a lot of funky ideas.

X1: Okay. Did you consider using any other platforms?

Y: No, because, you know, this was, it kind of came from VIA Connect and, you know, I am startup, I am quite busy so I do not think a lot about, you know these things. I am also the innovation director here, and it just kind of popped into us and then we didn't like this. But now I, yes- But we have used it, like I said, the 99designs where we kind of decided to do it like that, because we wanted to have a lot of ideas and see kind of what happened.

X1: Okay.

X2: So I think we should stop with our questioning, and I think we should split it, because here we actually have a case for, we have some empery for both a good and bad example, so just be aware of that in your questioning.

X1: Yes, we will consider that. If you can, can you take us through the different steps in the campaigns? You have two campaigns here, as Jens kindly points out. What was the different, you know, the VIA Connect I can see there is a different set up than the other campaign.

Y: Yes, if you take the 99designs it was basically, you know, we have this aim of logo, I think you know it. But the thing is, you know, kind of for a small badge or something, I did not, I think something was missing. So, you like, Polo has a horse or Lacoste has this small crocodile, I wanted to have kind of a small symbol for ourselves. So I made the brief and I put it on 99designs and then, you know, there was this kind of creative process, where I could tell people if I liked it or not. And I had to give it, like, one to five stars and I was actually quite good at going there quite often and telling people what I liked and what I did not like. And in the end if we go to that, I did not really get exactly what I wanted, but I think, you know, I do not really know if you get that there. But I got a lot of ideas and suggestions about which direction to go in, so that was the 99designs, which I think worked out quite well. And then for the VIA Connect, it was basically, VIA Connect started up and then what happened is, I got a lot of kind of very long proposals and some of them were like 35 pages long. And I, I remember one evening, because it was kind of a very open task, you know, what would you do if you aim of basically(0:09:19). And some of them came up with kind of very long Word documents. And I remember one night I had, I was kind of planning to go home and go through it but I was just kind of like, I don't know what to do, because it is just too much information, and I can't go through all of this. So I think I tried to do like the first three ones, write some comments on it and then I think I called Flemming from VIA Connect and said, I don't know, his is kind of too much. And then I think I actually, in the end, they also picked the winner, because I was kind of like, kind of out of it.

X2: How many proposals did you have?

Y: I think it was only like 55, it was not a crazy number. But it is just if every proposal- [10 min] It is kind of back to, when I went to university, I remember that I had an exam once where the guy who was giving me a grade, he did not even read it. So I just felt so provocative that, you know, I spent, like eighty hours a week for four month writing, or something and he did not even spent two hours reading it. And that was kind of how I felt when I got all those proposals, that you know, there is a girl here, she spent forty hours doing this document and I should spend ten hours reading it, but I planned to do like, one or two hours for fifty documents. So even though it was not that many, it was just kind of, because the challenge was so broad, it took me quite a while to go through it. It is like, you know, when you are in 99designs, it is quite easy to look at a figure and say oh, yes, I like it or I do not like it or, it is too something. But it if it is a long document, it is very hard to do that in just two minutes.

X1: So I knew where of course, what did not went so well with the VIA Connect, but is there any specifics where you could say, I would long to have done that differently then maybe it had been another result?

Y: I think, first of all, there should probably have been, and it is not VIA Connects fault, it is also

myself, it should have been some kind of analysis in the beginning to say, what is your core problem and you know, what do you want to have solved? And then probably from that make a very big core problem and then maybe just go to design students and say, these are the ones we want to work with, so it is a lot more specific. And then I think there should be some kind of steps in it, so for example, they all do- I go to Herning one day, and they all do a kind of a five-minute presentation to me. So over three hours I go through all of them and I sort, I pick the ten I like the most. And then they work on and then one month later I have fifteen ideas to present to me or something like that. So that is kind of a sorting mechanism. I think that was kind of missing in that process or maybe it was in that process, I am not even sure. It just felt overwhelming when I got all that info at that time.

X1: Did the 99 project, was that prior or after the VIA Connect?

Y: Prior.

X1: Prior. So after the VIA Connect have you done anything else since?

Y: No. Not in terms of crowdsourcing, no.

X1: And the reason, what is the reason behind that?

Y: Time, I think. It is not that I have- I like the whole crowd idea, and you know, we are doing crowdfunding, and we are also doing crowd investment soon, like I told you guys about. So we like the whole idea, but I think if you have to brief somebody in a crowdsourcing, you have to do it in a very good way. And it takes a lot of time to prepare and you have to find the right platform and it is really not that easy. And we have not had any kind of creative things we wanted to have solved right now, so that could be a 99design thing for example, to work on. So yes, I did not really find the need right now.

X1: In this sense you mention finding time and resources for it, how would you say your company is structured? You have the two of you, and you have multipurpose roads. Do you else work with the external resources?

Y: Yes, it is basically, Winnie will design the collection and then we work with external suppliers of course. And then what happens, I go and sell the collection. I can maybe, I will just move to another room, so you can see the nice office here. I also have guests coming soon so yes, you can see a bit of a meet board in the background.

X1: Alright.

Y: No, so basically, if you take the process, she will design the collection. We get samples, I go on sell together with agents. We have agents in England, Holland, Germany, Canada, yes, that is it. We also have one in Italy, but he does not work. So basically that is what we do, so we go, and it is kind of pre-selling. After that we kind of sum up and say, how much did we sell? And then we go to the supplier and that is Winnie who is taking care of that, and she is talking to the suppliers, find

the right way to do it. And then we deliver, and that is basically also me in the warehouse packing everything. And then, you know, following up on, you know, payments, is me together with external partners. We do have partners in kind of financing and we have partners in production and, I think, from next collection we will have partners also in stock and warehouse.

[15 min]

Because it used to be quite charming to pack those, kind of ten boxes but now it is like eighty boxes and it is just crazy.

X2: Okay. A day?

Y: No, no, no, no, no, it is like, when we have like four times a year, we have these mayor shipments, you know, when the spring collection comes home. And it is just a few weeks ago and like I got like, like eighty pallets and then I had to, you know, get everything out. And then for Magasin, you know, they want one small, one medium, one large, for example, we kind of have to pick pack. So I remember, I finished at 1.30 at night one night and I had just been here all day, just packing, but of course- But that is another story, that you know, that we are still kind of, like in the-I was just summing up on the last collection we sold in, we are doubling sales again, so we are doing well, but we are also in the area where we are not earning money yet. So we are kind of like, we cannot really afford to have a lot more people, but we are growing a lot, so that is also why we need proper investment. We need a bit more money to kind of take us to the next level, and then I think soon we will start making money and then things will be easier. That is a long answer, but-X2: So you are considering another crowdfunding?

Y: No, we are actually considering crowd investment. You know, with invest store in Finland, so actually tomorrow in Copenhagen I am meeting with KeyStones. Do you know them?

X2: What is it? I know the name.

Y: It is kind of a business angel network in Denmark, so basically the idea is to maybe sell for example ten percent of the shares, you know at evaluation, maybe nine millions or something like that. And then some of it we will sell to kind of mini investors that, for example, pay 90,000 kroners for one percent of the shares. And then a lot of it we would like to sell to micro-investors who buy 0.01 percent of the company for 900 kroners. They are kind of like, anybody who likes the company or likes the vision values can be kind of a co-owner. In the old business council (0:17:15), I am an owner and then what I really want to do is create a movement, so people go down to the local store and say, hey I am a co-owner of AMOV and you should really buy this. So we really want to-

X2: Discount between five percent.

Y: Exactly, they can do that. Or they can try to get AMOV into the store, though it is-

X1: So it is interesting, the crowd to become owners, and you know, because as I also hear you

say it is shares that is so small that they will not have influence on the company and the company direction.

Y: Exactly, so the main idea is, it is actually inspired by, we have one investor today who has fifteen percent and he calls me every day and he is buying all the apparel we have and he is talking to people he knows in Aarhus and he loves it and every time he goes to a dinner party, he is talking about the company, and I know he owns fifteen percent, so it is another thing. But we kind of would like to have this kind of small army of people who are part of us, and you know, if you invest 1,000 kroner in us, maybe one day you are lucky and it is worth 10,000 kroner or 100,000 kroners because the valuation is quite, you can say it is high, you can say it is low, but you know it is, compared to what companies sometimes are valued as, if they are sold, you can be lucky. You know, if you have this army moving with 500 people, is the dream we have, you know, if everyone of them go to a store and tell them to pick up this brand and if like, twenty percent succeed, then we more than double the number of doors. And it is not that easy, but it is kind of the hope to create an army, to use the crowd to build the brand.

X1: Do you use it purely as people have to buy a share or do you also maybe even give shares to selected people, influencers, bloggers, whichever?

Y: I think we- I'm just actually negotiating with William Kvist, football player and I think we're giving him shares. Part, it's an agreement where he's also doing stuff for us but- And we're also talking to Sandrine, a singer, a girl. And also, another football player who are also on the national team. So, we're talking to some of these people where they get something, but we have kind of an agreement of what they have to do. And the reason why we also do this, is because they can also help us with the crowd investment. A guy like William Kvist has strong ties in alternativet (0:19:45) for example. So, he has kind of a role in trying to get some of those member on board when we do the crowd investment campaign, so- We're trying to be smart about it.

X1: If we talk about the structure of your company and all this and- [20 min]

You are probably aware about these terms of ambidexterity's and stuff like that. It's a bit radical and incremental and we're aware that you're at still an early stage in your company but do you-how do you engage posing, like you have a daily routine and you have to get food on the table and then you also have to be a bit more long term, especially within fashion. How does your company balance these two?

Y: It's very difficult, to be honest. Especially, it's also the balance I talked about before and if you're not really earning money you can't really hire more staff. But you have the growth coming so, you have to kind of all the people that- You know, you're going to fairs and you have all these, luckily, orders coming in and things look great. But it also takes a lot of time when you have still the daily struggle and you can't afford to hire anybody. So, we're kind of in a period right now where balance

is tough. It's very tough to find balance right now. And also, the thing- I think we're quite good at thinking long term. I think it's- I think we try- It's often something I do at night. I do all the practical work at day and then at night I try to sit in my couch and think okay, now did we do well in this collection and what do we need to do for the next one? And I have a very good designer. And then we, you know, we try to always- I think we're a very analytical company. And always thinking-We're not very clever always, but we're always very analytical in what went wrong and what went well. And then we try to copy some of the good stuff and delete some of the bad stuff. I don't know if that answers it. But it's a very tough balance.

X1: How would you say in relation that this was ambidextrous. We should now try to talk about, go back a bit to these campaigns, the 99 and the VIA Connect. Some of these also require some absorptive capacity in a company, right? That you are able to internalize. How did you do this in these two campaigns?

Y: I think the 99designs it's quite easy because it's designs and it's logos. And, you know, we picked some winners and we used it for some things and it's quite easy. It's a logo, you put it on something else. With the ideas from VIA Connect, I don't think I even read all of it yet. You know, it's- It more kind of became ideas that we can use sometimes maybe. So, you're totally right it's- I think I also talked a lot to Flemming from VIA Connect afterwards, because there were so many problematic steps in that campaign, you know, actually from the very beginning of it. From him asking me, to me saying yes. You know it's just- We should just have kind of- He should probably have known more about, you know, what this is. What are the implications and I should have known the same thing, you know and asked a lot more questions about it. Because we didn't really have resources to work with the students or to internalize it, as you're saying.

X1: Good. When you- Well, I guess this goes a bit in the same direction now about to ask. When you formulated the campaign paper, what thoughts did you have in relations to resources that you had to put into it and manpower and all that. ...(0:23:24).

Y: It's basically Flemming who made the paper, so I didn't- I just received a copy to be honest. And- But I never- I just, I don't know- Because I didn't really go into all the details. I was just kind of thinking, you know, if there's like fifty students it will take me- I can kind of skim something in three minutes and I can look at it and it will take me two hours. But I didn't really know that it would be so much details in the work that I got.

X2: How did you create the campaign on 99designs? How much effort did you put into that?

Y: I think I probably spent half a day or something putting it up. And-

X1: What was that about?

Y: And then- I like- That was the one about the small logo thing and- I tried to spend every day or every night kind of like commenting on everything that I saw coming in. And I think I did okay in

that campaign, because it's much more easy because it's kind of creative and you just have to kind of comment on you know- Okay, you came with this proposal for an Ingemann logo and I don't really like this font or something, you can say something like that because it's very creative. I'm not always sure if I brought people in the right direction at 99designs because I didn't actually find exactly what I was looking for. And I think at some point, it's kind of a long story, but I liked some of the proposals where they were playing with the letters in AMOV and they're kind of making a small face. And I really liked that so, I started writing you know, I really like this and then everybody moved to that direction. [25 min]

And then I didn't really like any of it so- But that's kind of another thing I'm not really sure I did it a hundred percent correct but that's something you have to kind of learn and I think the people who were involved in the process- I picked a winner in the end and everybody was happy but I also have to- When you lead something like that you have to watch out that you don't kind of guide people in a direction and then suddenly you're like-

X2: How much-

X1: There seems lot of-

X2: Sorry.

X1: A lot of learning points there seems to be in relations to communication with the platforms that you have selected. So, there's a lot of efforts in there?

Y: Yes. I don't know with 99designs if I could do it any differently because it's kind of- It's a feeling. You know, you see something and you feel, they've got it, they almost have it here, this could be the perfect symbol for us. And then they just kind of turned out bad. With 99designs it could also be the- And I don't know this, but I don't think, you know, that the best designers in the world will be on 99designs. It turned out to be a lot of ...(0:26:13) and maybe they just didn't have kind of the right people there to- Maybe the idea was right, but the people were wrong. I'm not really sure.

X1: How important in that sense would you think that your organization's tacit information is?

Y: I just have to say welcome to one person. I'll just get back in just two minutes.

X2: Thanks.

Y: Sorry, can you ask the question again?

X1: Just asking how important in this sense you might feel that the organization's tacit information is? You mentioned that Flemming is basically writing the first paper and you're also writing me about they might not come with inputs that you perceived as right.

Y: But when you said tacit into- I don't understand the word.

X1: That the information that you want to- You have some information coming from outside the company but you can't outsource everything because some of the information that you as people in the company provides has some importance I guess.

Y: Yes. I'll try to answer, then you can correct me. I think Flemming knows me quite well in the company so I think he did a quite good job in presenting the case, actually. But I think what he didn't understand and what I didn't explain to him is how small the company is and how busy I am. And so, I think a lot of the problems were around that. Because if we jump back to the job I had with LEGO Wear where I was the CEO, this would have been fine. Because I could easily take out a day because I was just kind of the manager, you know. And it was a much easier job in many ways, you know. Because I could easily go a day to Teco(0:28:02) and I could sit and look at papers and I was just kind of representing the company. But in this company, I have to do kind of the web and the stock and the finance and so, I think Flemming forgot to think about my role and I forgot to think about my time. Which is kind of normal, I think, for entrepreneurs that you think you can do anything.

X1: Could you in that sense- You mentioned LEGO Wear and this, could you highlight yourself like what would be the benefits in smaller companies, Like AMOV or slightly larger, that you could see for crowdsourcing? Compared to ...(0:28:39)-

Y: I think the benefit here could be even larger because we just kind of need the help, you know, we could benefit greatly. But, you know, if the structure is right and the pressure on your organization is right comparatively speaking you can get a lot more benefit here. Because first of all LEGO Wear could buy it. For example, with students they could go anywhere and buy anything. And for us whenever I get an intern I'm very happy because I can push some tasks somewhere. And especially with creative tasks or with development tasks it's- Some of those ideas that- Like I said before I try sometimes to sit at night and think about long term strategy but it's hard to kind of think a lot out of the box when you're so much under pressure for just kind of completing your normal roles. So, the long answer is I think if you can find the right way of doing it, it could be great. X1: Did you have any consideration in relations to IP rights in relations to the logo part and all, well, I'm guessing not so much for VIA Connect?

Y: Yes, I- Not VIA Connect but with 99designs I did have some concerns. [30 min] And I actually still do. Because it's- Also because a lot of them were just kind of playing around with some of my letters from the logo. Like if you take my- My A is just kind of a V that's turned around and my M is just two V's put next to each other. So, it's like anyone can do a lot of weird things with those letters. And I was kind of afraid that someone would say okay, now I own this. I put A, M, O, V like this and this is my design and I looked into the rules on beforehand and of course it says if they do something very specific they have the rights for it. But of course, if they just kind of play around with something very easily I have the rights for it. But it's kind of a grey zone. So, I was afraid back then and I- Play around with letters and I don't know if someday I'll get a letter from somebody saying, hey, I did something a bit similar. I'd be like, yes, but- I tried it once

with- And I think I told you, Jens, about this, as a third case, but I don't think we should go into it, but once I was with Bang & Olufsen and the Danish office, they did kind of a creative- If you google it you can actually find some press stuff about it, because they did this kind of creative competition where they asked young creative persons to do some kind of Bang & Olufsen advertisement. And it was a cool idea, so, they sent it out to people but they did one mistake, they sent it out to creative agencies. So, they sent it to the big agencies and they kind of- It was supposed to just lie around in the cafeteria and then say to people, well, go home in your spare time and work on this. And then suddenly, I think they're called BDDR or something, the big agency industry organization, contacted us and say, hey, what the fuck are you doing? You're asking people in this area to work for free? And Bang & Olufsen you have a lot of money, you can't just do that. And then I came on board because I was the global marketing director and then I had to kind of- I got involved in this conversation. But it's just to say, I know that in some of those- Some people actually sent in ideas for that, private persons. And then like a year later we would do something that looked a little bit similar and then, I remember one of them, well, he just sent an invoice and he said, well, you used something that is mine so you have to pay me 60.000 Krones now for the work I did. And I got involved again and I had a look at it and I said, well, it's not the same thing. I can see where you're coming from but- But it's actually very complicated because he probably wrote some text and we wrote a text that was quite similar. And did we steal it? And I know we didn't but who knows. And especially in the creative card it's very- You have to kind of be aware.

X2: That's one of the advantages, I guess, of the platforms where you get in contact with global-And people from-

Y: Yes. I also feel a bit safer on 99designs because they're not always kind of looking out for what you're doing. And of course, we're not cheating and not using any of it but you know if some people put my letters like this I could someday do the same thing because there's only so many combinations of how to do it.

X2: What was the cost involved in the 99designs campaign? How much money did you spend on it?

Y: I think 99 dollars. I think that's the concept. It might be a bit more but that's because you can choose to give a bit more so, it might be two or three hundred dollars but it was very inexpensive. But it might also have been too inexpensive. You know, if they don't attract the right persons there-Because if one person has to work for ten hours and in the end, they can win three hundred dollars then you don't attract the best art directors in the world, then you attract somebody from Indonesia because for that guy it's a very high salary. So, it could also be a problem.

X2: True.

X1: Well, we have very few questions left. I want to talk a little bit about your culture, but- And then

see if we can make it fit. How would you describe that the culture of innovation is in your company? I mean you seem to grasp a lot of this but how do you incorporate it in a company that is at the level you are but with start-up issues.

Y: That is a good question. I think there's a lot of things we don't do well yet but actually innovation I think we've done well from the start because we have a quite innovative concept in the way we work. That's why I think from the beginning it's something where we also work with students and stuff in terms of trying to create a very innovative concept. [35 min]

So, I don't know, I don't think I kind of answer it but I think from a kind of business concept point of view we have an innovative concept. If you look on a weekly basis of how we think about innovation it's not very often. I don't know what the terms are, but it's not breakthrough innovations we're doing. It's when I pull myself up, you know, from the daily work it's more, like I said before, it's like, we had a collection like this, how can we create a good collection for next time. We have web sales like this, you know, should we put more focus into web- Or right now, for example, Germany is booming, so I'm like, okay, we should put more resources into Germany. We should take resources out of Denmark. So, it's more strategic management than it's innovation management right now.

X1: And would you- Well, we know, Jens and I, from earlier that you have had this platform that you want to set up or is setting up. What about that part? Is the focus still on that? Because I'm guessing that's a little more radical, so-

Y: Yes, it's still on there and we will develop it this year basically because we also promised to. So, we have to do it this year and we will do it this year. But it's also tough to find time and money for it while you're running your normal business. But it's actually also part of the crowd investment thing to say, you know- Basically the idea behind the crowd investment thing will be to say to people, you know, you can look at our turnover and basically it goes like this. For every season we get more and more dealers, we get higher and higher turnover but the problem is we don't have a lot of money, we don't have a lot time. So- And I don't remember the points, but we need help to succeed with these points. And one of them is building the platform, another thing is to get even stronger in Germany. And then we have some other points. But basically, it's also one of the reasons why this summer we will do that and say, we need money to scale up and to become stronger.

X1: And I guess that's also the new- Are you didn't branding yourself suddenly as a fashion company or we are talking tech company now?

Y: I think we would like to be in the middle. I think when I did the presentation to you guys, it's also one of the things- I think the third guy from your group he asked what would you do differently if you were to start over? And one of the things I said was that, you know, if you can put some kind of

tech into your business that would probably be a good idea. And I think we also would like to do that when we do the crowd investment to talk more about the tech area. And actually, there's a lot of tech in this business case, we just haven't made the start of it yet.

X1: ...the communications.... (0:37:47). Good. Jens, do you have any further questions or should we let Kasper off the hook?

X2: I think I'm quite satisfied. I'm very satisfied. But-

Y: That's cool.

X2: But, no, I think I'm just looking through the questions. It's- We appreciate it a lot, Kasper, that you took the time.

Y: That's cool. Otherwise you can always call me. But my guest also arrived ten minutes ago so-X2: Exactly. Much appreciated.

Y: No, it's cool, Nice talking to you again.

X2: ...(0:38:20).

X1: Thank you so much. We're following your process.

Y: And remember to invest.

X2: Yes, send us a link.

X1: Send us a link.

Y: Bye.

X2: Bye.

X1: Bye.

9.4 Appendix 4 - Interview Christian Trads, H2O

Audio File: H2O Christian Trads

Interviewer X1: Kristoffer Pahl
Interviewer X2: Jens P. Møller
Interviewee Y: Christian Trads

Length: 27:53

Y: Also, see that this is just, don't get me wrong, commercial BS again, so it's just transformed into a virtual world of people showing and telling what is nice and what's not, what comes after. And during that process, because there were students from abroad and there were students from around Europe who didn't know our brand too well, came up with questions from the process, saying "why are you not thinking of this?" "We see the brand as that, or what is this all about?" Instead of telling me what to do, they gave me questions, and I said yes, she might have a point. Maybe we start here, instead of thinking about. Start about the product, instead of - Thinking about who should show it when it's finished, if you understand what I mean. And it came down to actual things, like making actual boxes with notebooks and pencils, and all different kinds, and you see that was not adaptable at point, but the idea was adaptable. So okay, we might start there as well, and that might lead to something else. So, I hope that gives you an idea about how these things develop in this terms of crowns Other things I can mention, we have a case with our- We have a famous, so to speak, footwear sandal, which we made for many years.

X1: Oh yes, the classic.

Y: Yes, and it actually- We had a case with VIA, where we asked them to- How could this Sandal, because we are selling more than 100,000 pairs a year, and that means we have probably 100,000 pairs goes into the system, 100,000 pairs goes out of the system every year. And that means 200,000 soles, which is just sent to the Dumpyard, and we asked VIA, what can we do with this 'out-soles', in terms of can we make benches, or can we make anything else out of these, instead of just throwing them out. And they investigated that was a different team at VIA- And they investigated, and it actually turned out that say at present, it's impossible to do anything, but we recommend you start to investigate 3D production, of the same slipper, and that eventually turned out that we are now working with some people to see if this is possible in a scale that turns the quantity of numbers we want. It's not at the moment, but at least we started the process, which we did not intend to in the beginning, but these people opened our eyes and gave us alternative solutions to the actual problem, instead of just-

X1: Yes, pretty much the essence of, I mean that's the essence of what you can achieve here. Okay, so from- So, you have done two campaigns?

Y: No, we've done more, but- Actually, we've done four or five, I don't actually recall the other ones in more specific, because these are the two latest ones. We did this multimedia storytelling, at VIA as well. We had a case where we gave them, so to speak, with a guest professor. In that case, we gave them free hands to tell who it is addressed to, basically. And that turned out that we actually used- They made some movies, and these movies we actually ended up using on our social media, Facebook, and Instagram, ourselves. In terms of pretty honest advertisement, we told our followers on these medias that this was the case done with VIA and have a look, let us know what you think. And it turned out pretty interesting.

X1: Okay, positively?

Y: Yes, for sure. But, people were in turmoil and around well, in some cases, a bit afraid that-Well I tell you that these was different movies from normal, commercials-orientated movies, so, people were afraid what would be the action or the reaction of this. And it turned out it was positive. People were adapting ... (0:04:35) that we had just shown, what young people can do, let us know what you mean. And, actually one case, one of the movies was done by an old teacher from a school in Denmark, and some of these students started to share this movie around and it turned out pretty big.

X1: Any learning points that you, when you look back, that you could have done differently? [5 min] Any mistakes? Any..

Y: Yeah, If I want to have the output as we get to be inspired, make the case, but don't make it too frail or too bounded, if you understand what I mean, not too direct, make people think and develop, and if you want a direct answer to a certain question, the case has to be set up very directly and very specific, otherwise you get a young kid's mindset questions of 'B' when you ask for 'A'.

X1: Would that have been differently if it had not been the VIA connect, you believe?

Y: Nope, no because that's the same- People who are not inside the machine, because they some time- The communication is sometimes hard when you have to explain them what is the actual problem or what is the actual subject of this case. So, therefore it'd have to be very specific, not only if it's VIA, or if it's anybody, but of course if I work with a professional partner, who are working in the fashion industry or in my industry in advance, he knows things that I don't have to explain upon and things we don't have to discuss, so he said we can't do that because of course, obviously, this does not work. But, in terms of these young people, they don't know these things. So, therefore you have to be more specific, if it's with VIA than if you work with a, let's say, a professional setup of textile developers from around the world, because they know exactly what can be done and what can't be done. ...(0:06:53).

X1: So, it sounds like you could be tempted to do these types of campaigns in the future as well? Y: Definitely, and at this point, the easiest going way for me is through VIA.

X1: Is there any cost involved?

Y: Yes, presents and gifts, you know, if we had this- Sometimes we've had some weekend tasks where they had 2 times 24 hours or 48 hours to solve a problem, and there the best case gets a coupon (0:07:33) on the web shop for 2,000 or 3,000 DKR for selecting these

X1: Okay, so there's no set ... fund, start-up fee, and in your time. So, we have a few questions on structural, procedural, culture. These questions are more about your- So, how is your business, like how is your company structure, (0:08:06)? Who takes charge when you develop You say, you're six people?

Y: I need you to get closer to the microphone.

X1: So, a question about how your company is structured. Who takes care of them?

X2: Jens, I can take over a bit. You are lagging a bit on the question, on the volume here or something. What Jens is asking is that if we take one step to the side, so to speak, and say okay this is how you have connected right now with VIA, but how then is your own structure company different? If you just take a side step.

Y: Yes, it's, how do you say, it's a good question. It's as agile as possible. Because we think agility is the most important thing, in terms of running a company now and in the future, because things are moving so god damn fast, and especially in our terms of business with the fashion and the retail, which is changing a lot at the moment. So, the structure is that we have a solid base here on administration with fixed labor. And then management, very skilled people. hired staff, full time here at headquarter. And then we had a group around 20-25 people selected for the quality, who are working freelance for us, which means that design is out of house, styling is out of house, photographers are out of house, constructors are out of house, warehousing is out of house. [10 min]

Everything, which means if the terminal (0:10.02) should drop, we are able to cut down quickly and at the same time, we are able to scale it up. But, most importantly, we create a world as we tend to live in, is that we work the people who work with other people, and thereby get inspired from anybody else than us if you can understand. And in our terms of business, that quite important that the other people sitting here all the time, and suddenly they all are making red t-shirts, because they know that worked last time. So, it costs a bit more by the hour, but we think also the quality is much higher than it would be in house, so that's- I hope that explains the structure.

X2: Yes, well that is, it does- There's a term within economics that's called ambidexterity, which is basically borrowed from physiology about being able to use left and right hand equally well, and that in economical terms means that you are able to both work with your incremental innovations and your radical innovations. And, I'm hearing you speak a bit about this, you know, continuously making the red t-shirts, but also having a focus on the longer term. How can you balance these two?

Y: That's as the company grows. I would say it's the same thing. I would say that the left hand is making the red t-shirt, and the right hand are making new markets. I would say it's changing from left to right, right now. Because it's growing, and we have to hook up with more people, because we don't have the competence, or we don't have the skills to do these things in a larger scale. So, it's much more strategical level than it was 5 years ago.

X2: Okay-

Y: ...(0:12:15)-

X2: Kind of, but also that, I'm guessing, you are still having to work on the red t-shirt, you're H2O sandal, or, I mean, you have some basics.

Y: But when you say, when you start up a company or have to take over, it's like 80% of the time it's spent on making the red t-shirt, and 20% on actually having the resources to think ahead. And as things grow, and become good at the red t-shirt, we have to spend more or more less time on the-Or less and less time on the red t-shirt, and more and more time about thinking on a new color.

X2: Yes, I get it.

Y: So, that tells the weights a bit about.

X2: In this sense, you know, if we connect the app with the answers you gave in relation to the crowdsourcing campaigns via VIA Connect, the absorptive capacity of your company, basically, how well would you internalize these outcomes of the campaigns? How would you describe the absorptive capacity in your organization?

Y: So, what you ask now is that the cases-

X2: Yes, the cases you get some. Oh sorry.

Y: You get some information and some result, and how do we actually make actions on these? X2: Yes.

Y: Not good.

X2: Good. So, not good means that there's room for improvement. How would you- Could you maybe elaborate?

Y: Yes, it depends of the aim or a part ...(0:13:59), because if the aim is the answer to a specific technical question, we would be able to implement it immediately. But, we've never used it as a specific answer. We haven't done so far, let me say so. On the other hand, it has been an actual-For the video case, we actually implemented 100%, but for all the other things, it's been more inspirational, and a wake-up of new thoughts about why we're actually doing this and what are the younger people thinking when we ask them to do this, because- Yes, that's how to say so. I would say poor and bad of actual actions based on the result, but it has not been negative, despite that.

X2: When you- If we go to the next topics, we call it the procedural arrangement, I mean there must, before campaign, some thoughts go into it. **[15 min]**

How much resources have you spent in it? Manpower, capital, work hours, stuff like that?

Y: It's hard. It's been mainly manpower, and as I'm taking care of these crowdsourcing activities myself, it's been me thinking, spending time on that, on the actual case and how it could be put up most understandable. And then, of course, the presentation and planning of presentation at the campus. And then, eventually valuation and comments during the process. The last one I have with Flemming (0:15:54), it was a process in between some 'Stop and Go' Question was around where students had some questions, or they showed me the first-

X2: Draft.

Y: Yes, first draft or idea about what- How do they see we take that "Can I comment on that?" and then they came up, and I had to make scores and stuff like that. So, that would be the time, and I can't estimate how much. Three, four days or something like that.

X2: Okay. You actually answered a lot of our questions there, so we are done with here. Did you engage, or how did you engage your organization into the implementation of this process afterwards? I mean, I understand that a lot of it has been on idea-generation, and stuff like that, where you have a more exploratory campaign. But, how can you then implement it?

Y: That's actually a good example, because some of this was based- The last project we had, with Flemming turned-out, but there was a lot of PR-related things, which we now actually adapted. Some part of our program, we adapted good ideas and another part of another program, we say well that might work together with the other one. So, bits and pieces from every program was received here and then shared inside the PR group in the company. Let's say I have- Could this be a good idea? Yes. Then we combine it with this group's good idea, and it might turn out that this- I put it to the H2O board...(0:17:30). Could be a good idea, so some of this has been directly implemented to that. X: Okay-

Y: But not a full program if you understand. Not a full project.

X2: Yes, understood. Well, I don't want to put words in your mouth, so- In relations to intellectual property rights, and stuff like that, have you had any considerations in relations to solving of these things?

Y: No-

X2: No. Okay, yes, fair enough. If we go a bit to a different thinking, where we go to your own company, about the culture, how would you describe the culture of innovation in your company? Y: It's good. But based on that we are only six people here, and two across, three across- Above the 40s, we need it external... But the people we have here are really innovative. But, the problem is that it's actually also a question about numbers. So, the more people you have around you in terms of VIA university, whatever, the more ideas your get up for evaluation. And if you can't- Sometimes I've been working in big companies where we've had a lot of people, and I would say that the

innovation was at low a little higher than there. We could have been 10,000 people ..., because the people didn't know the forum ..., the place to come up with these innovations or come up with their ideas anyway. So-

X2: That sounds like potentially it's positive to be a smaller company with this agility you're speaking of, that that-

Y: Yes, or organic. If you have a big company, how do people actually get to speak? or the time to come up with their ideas in a way that can actually is being taken serious by the management, in the end of the day. And how fast do you kill that. When they came up with five ideas and nobody would listen to. So, I mean in terms of that, it's actually more interesting to have these young guns coming up with these ideas, you say okay, 90% are BS, but 10% actually works. [20 min]

And nobody will be offended they come up with ten good ideas and you don't use anything. And you can't use that- Do that in a bigger organization.

X2: How do you- Do your company then work with some kind of incentive schemes like, not towards the students, but in your company to facilitate the culture of having this, you know, wanting to work with innovations that come from outside? Sometimes you can be like, have a preference for ideas that you generated yourself.

Y: Permissions to fail.

X2: Yes.

Y: That's about it. And if you don't try, you're not the right guy. So, basically, a question on, and that might be possible, to do in a big organization--

X2: Nice spoken -

Y: But, it takes- It's a kind of culture to say, keep working, go try. We will cover your back if anything goes wrong. And that, we believe, motivates the internal or external partners to go and try things that happened to sometimes turned out to be pretty good ideas. You just- I think it takes more than years to build up that culture, and you can kill it within two weeks.

X2: Did this- Any of these campaigns create any cultural issues, in the sense that it contradicted some of the things that you were usually, ways of doing things with innovation?

Y: Yes, the video case did, because we had to wrap it into a different story, because if we had taken these videos and put them directly on Facebook, the people would say what the hell are H2O doing? And in terms of us thinking okay we would like to show these videos, but we have to recall the audience, what is going on and why we are showing these videos? That kind of gave us the leap to wrap it in the story about this VIA collaboration. Otherwise, it would be confusing for all our followers saying what's this now? Does that make sense?

X2: Yes.

X1: Are the videos still online, available somewhere?

Y: Yes, they should be on our Facebook, somewhere down the road. Otherwise, I might be able to find them or ask some of the girls to send it to you.

X2: That would be good. We'll take a look.

Y: Take a look. If ... (0:23:02) there, otherwise let me know and I will see what I can do to help you. We don't have that many videos out there.

X2: I think we are about at the end. Jens do you have any laboratory questions?

X1: No. Didn't we- There's some other existing evidence of-

Y: We actually have a lot of medias out there, but it's down the line when you hit videos on our Facebook site. You can find and there's a guy in a bathtub and a skateboarder and a girl on a bed and some rock music. Yes, that gives an idea about if you can live with that we put out these videos on our mobile platform, people would say what the fuck is going on here? This is not H2O. But, as we wrapped it in, and that gave this ... (0:24:07) thought, what would this do to harm our company, or do good? We had to wrap it in, but when we did that, it actually turned out pretty positive.

X1: Who's your- Who do you define as your customer Segment?

Y: Urban people. 20, 26, 27, Copenhagen and Aarhus, Stockholm, Hamburg, Berlin. Paris, London, not yet, but capitals, our major cities, urban lifestyle, we have always tended to aim for the 20 to 25, 26-year-old people. We don't always hit that group, but that's the focus and, especially right now.

[25 min]

The history is, when we took over the brand, our customer base was probably 35 plus. And then that was one of the first aim, wanting to get that down, and then maybe in the last few years, we got it a little bit too down, so we have too many teenagers right now. And 14, 15, 16-year-old boys and girls who think it's pretty cool. And that's fine, because then we have a lot of years ahead. On the other hand, we would like to try to focus on a little bit older audience, that is, who- 20, 26 Copenhagen, if they ask directly.

X1: Fantastik.

X2: Ja, hvad hedder det, simpelthen der er ikke så mange flere spørgsmål herfra. Du skal bare have rigtig mange tak for din hjælp Christian.

Y: Ja men selv tak. Jeg er spændt på- Må jeg have lov at læse hvad i kommer frem til eller hvad? X2: Det må du i hvert fald.

Y: Det kunne jo være jeg kunne lave noget.

X2: Det ville vi da håbe (0:26:14), at man altid kan få et input, om det så er at lære noget, det kan være lige at bekræfte noget måske ellers. Men-

Y: Ja, lige nøjagtigt. Hvor mange virksomheder interviewer i?

X2: En fem, seks, syv stykker er udgangspunktet, alle sammen små, mellemstore, virksomheder. Og mere handler det specifikt om netop for os at finde et succeskriterie, hvor man som SMV skal

have fokus på i forbindelse med crowdsourcing. Du nævner selv nogle rigtig gode eksempler. Så skal vi jo netop se, ja nu er du den første vi interviewer, og så ser vi om der er nogle krydsfelter mellem de her ting. De har ... med, og så selvfølgelig overføre dem teoretisk litteratur som de jo også-

Y: Ja, selvfølgelig.

Y: Men det meget spændende. I har min e-mail, så når i er færdig engang, vil jeg da meget gerne, hvis i vil dele det, jeres endelige resultat med mig.

X2: Det ...(0:27:14).

Y: ... læse det Og hvis i har yderligere spørgsmål, så give mig en e-mail, så skal vi finde fem minutter mere hvis der mangler en opklaring.

X2: Det er så fint, tak for det Christian.

Y: Selv tak.

X2: God aften.

Y: Tak. Godt.

X2: Fortsat god

Y: Ja held og lykke med det.

X2: Tak skal du have.

Y: Tak skal du have.

X2: Det var godt. Hej med dig.

X1: Hej.

X2: Hej.

9.5 Appendix 5 - Interview Louise Vesterskov Sørensen, Sørensen Leather

Audio File: Sørensen Leather, Louise Vesterskov Sørensen

Interviewer X1: Kristoffer Pahl Interviewer X2: Jens P. Møller

Interviewee Y: Louise Vesterskov Sørensen

Length: 42:00 min

Y: Den vil bare ingenting, nej.

X1: Mon ikke det er fordi han har ikke accepteret din venneanmodning, eller-

X2: Ellers skal du se om du har en eller anden-

X1: Du kan også prøve at ringe igen med video.

Y: Nå, det kan jeg ikke, kan jeg se.

X1: Nej det kan du ikke, fordi du er på din iPad, så du kan ikke have.

X3: Nu har jeg accepteret din venneanmodning.

X1: Jamen det er ikke det, det er fordi der er tre på iPad, kan du ikke få lov til at se alt.

Y: Jamen det Maja hun siger, at når man er tre, så kan man ikke få lov til at se på iPad.

X2: Ja, fordi det er iPad, okay, vi sidder her med computer, men så kigger vi på hinanden, Jens og jeg.

X3: Ja, fedt.

Y: Okay, det beklager jeg, drenge, det må i nøjes med.

X3: Jaja, det er fint.

X2: Det går.

X3: Nå.

X2: Det er godt med undskyldninger, hvor så med morgenhår og det hele her. Ej, dog ikke. Hvad hedder det, nu skal du høre her, Louise, vi har inddelt interviewet op i nogle, fire, sådanne hovedpunkter, bare lige for at lade dig vide, bare lige en introduktion af, hurtigt af dig, din position i virksomheden og så kommer der noget om jeres crowdsourcing kampagne, og til sidst hvad er jeres sidste erfaringer. Og så hopper vi ligesom lidt hurtigt tilbage omkring noget, bare jeres generelle virksomhedsstruktur, hvordan i så til sidst inkorporerer, hvad hedder det, sådan nogle kampagner i virksomheden og ja, den kultur i ligesom har omkring det at have ekstern viden. Er det okay med dig at vi foretager interviewet på engelsk, opgaven skrives nemlig på engelsk. Det ville være en stor fordel, er det noget der kan-

Y: Ja det kan vi godt, altså jeg synes, det er selvfølgelig lidt, jamen det er fint nok.

X2: Det er godt. Vi snakker bare på engelsk hele tiden, så, og stadig med godt gebrokken dansk accent, så du er sgu i hvert fald ikke alene, hvis det er det du tænker. Okay, we just have a few

here, starting questions with the interview. Could you please let us know what your position in your company is?

Y: I am the CEO of the company. Our company was founded over 40 years ago, about, I think 45, our father started it in his garage backroom. And my brother and I, we took over, finally and economically, here about, I think it was four years ago, three four years ago. And we had a lot of thoughts about how to find a new way, because one thing is that a company has been doing well for forty years, another thing is, how is it going to look the next forty years? And you can't, you know, you can't keep having the same success on the same grounds, you need to find, for us, it is like new grounds, new ways, to be successful. And again, we are not our father, we need to do it in another way.

X2: Okay.

Y: So-

X2: How long have you been in the company, then?

Y: About ten years.

X2: Okay. And the company size in terms of number of employees?

Y: We are about sixteen, plus agents, so a small company.

X2: Yeah. And when you say plus agents, what, can you elaborate it?

Y: We are about three agents.

X2: Okay.

X3: What is the core business, I mean I am, we of course looked you up and we see some very nice cases, we see a reference to Kinfolk, very design driven. Are you also mass-producing leather solutions for couches as shown, or what is your core business?

Y: Our core business is hides, we sell leather for the furniture industry and we produce leather. So here in Tilst, right now, we have a big stock, we have about 15 to 18,000 hides in stock in 25 different collections. We have about 450 different colors in stock. So, we deliver to a small upholstery, when you are going to have a chair upholstered, we can deliver one hide, half a hide. And we deliver 50 hides, 200 hides at a time for the factories. We sell for over, we sell to 36 different countries, I think, in the world right now.

X3: Fantastic, nice. [5 min]

X2: Thank you very much. So, a few questions in relation to the crowdsourcing campaigns. What was the original thought behind your company deciding to engage in crowdsourcing?

Y: I think there is two ways to point out right now, because one thing is the VIA challenge that we did together with VIA. I was in the middle, I did some workshops with him as well and they asked me if we could do this challenge, because they also need to find the companies that are willing to participate, to engage the students. And the main, I think what the initiative at that time was was,

how can you, you know, what can you use leather for, you know, different objects. Because mainly when you think about leather, you always think about leather on a chair, on a couch, or very conservative thinking. So, the idea was to push that way of thinking and elaborate it into different items, different perspectives. So that was the main objective. And it was not because I needed to have it as a product, because my product right now is the leather, the leather itself, it is not an item that I developed in leather. But it was better for the students to have a more, like, hands on item they could deal with. So, I would say that that was the crowdsourcing in its pure form if you could say so. It was interesting and, but I also think, when you think about crowdsourcing, you also need to think about what kind of product is it that you have in hand. And sometimes it can be good with all kinds of different perspectives and different ideas, but still if you need to have something that really should be interesting. I think, for my point I knew I need to have people that also know my product and know something of the business, otherwise there is, you know, 85 percent of the upcoming ideas does not have any interest.

X2: Okay. So, when you made the challenge, was it, like, to find new solution on your applications, or what part of this, you mention ideas, but was there any specific target area?

Y: To be honest, it was mainly to help out VIA. To participate to students also, because I think it is important for companies to engage with students and get some ideas and also, we do lectures out in VIA and we help them, all different kind of things. So, it was not because I thought, okay, I would benefit from it. But then again, on the other hand, it is like, maybe I will not benefit right now, but maybe in a couple of years, or we have taken another direction, you can still maybe take up some of the ideas and take it to the next level, could be an option.

X2: Yeah. You started out this, answering this question with saying there were two ways, does that mean that you have had some other campaigns than the VIA challenge?

Y: Yes, but it was not a campaign like that. But I think you can see crowdsourcing in different ways. One thing is the very pure way, where you have, like, the challenges, like for me a very pure crowdsourcing way. You know, you put out something in the crowd and the ones that want to participate they participate. Another thing is, for me also, that we are a small company and we have, we tried to brand ourselves quite heavily during the past three years. And in order to do that, you need to have new people that can participate with all kinds of things and where you can gain experience and the help and everything else. And in order to do that, you also need to have, whether you call them freelancers or you call them a crowd, because normally you make take contact to different people to see what, where can they help you out to make this happen. So actually, I work with the, lots of different freelancers and for me that is a crowd as well. It is just, you know, a chosen crowd, if you know what I mean. [10 min]

X3: Yeah, but do you post the same problem to several consultants or external, or do you handpick them?

Y: I handpick them and then I can propose the same challenge to, maybe two or three, because I know they are the ones that can deal with that specific issue or challenge or problem. And that it, that is for me much better, so I like to work with it in that way. Because I think and I think actually a lot of small companies could gain from that thinking, because the problem with our, you know, small companies, it is, you know, I want the best of the best, I want the experience, I want the best photographer, I want the best branding people. And of course, I can't hire them in my company, they would probably die or boredom in the matter of a month and they are too costly. So, it is better that you can pay them when, you know, to help you out when you need it. it gives you much more freedom-

X2: So, you, so like, flex organization.

Y: Excuse me?

X2: You are flexible with your organizational structure.

Y: Exactly, I am much more flexible and I gain more input. And that has been very helpful to us and that has definitely made a big difference. So, I have people, I have some of my best, let us call partners, or crowd sitting in Copenhagen, for instance. And I know them so well now, so you can call them up, or you can write, say I have this issue, how do you see it. And then I can get on. X2: Okay. Could you take us through those, the different steps in such an engagement? Y: I don't have a set way how to do it, so it is something, you know, that happens step by step, because, as I started to point out in the beginning when we started out. It was like you need to build up in a way, your new organization, your new advisory, if you call advisory board, so new people that can take you in the direction where you want to go and still challenge you with the expertise that they possess. So, you know, it is a matter of changing the, some of the board members, having different interviews. Then I opened up to an organization called DNA, it is called Danish Network Association. They are within the furniture and jewelry and fashion industry and they help out all kinds of different, especially smaller companies, you know, they have different challenges, maybe economically, or how to grow, or organization wide. And they have a huge network. So, we had a lot of talks and a lot of confidence and they said, okay, you know, you need to see things differently and, in a way, they helped open our eyes to, you know, what we could do. And then they introduced us, also, to different people. Where, for instance now we work closely with the architects, also in Copenhagen, King that helps us build our brand and develop, for instance, our webpage, social media and everything. To me, that is a very valuable crowd that we have set up among us.

X2: Do you, well when you worked with a crown like this and the VIA challenge, let us say, you know, the VIA challenge is of course one thing, but could you consider, you know, that sort of crowdfunding campaigns for the future? Or do you, yeah, think it is not for you?

Y: I would say it depends on the crowd.

X2: Yeah, what is that-

Y: If you couldn't-

X2: You know, determent?

Y: It depends on the crowd and it depends on the problem. Because, I would, I don't think I would do it with the students, you know, on their first year, to be honest, again. Because I think it is, it is a time killer and I don't think I gain much out of it, to be honest, that is one thing. Another thing is, maybe if I had some, let us just say a simple thing, I want to analyze a market. [15 min]

I mean you can do that on CBS on the University in Aarhus, or somebody and you could go for a crowd that is doing their bachelor or their final MBA. So, you could say, okay, how is, how should Germany look for us in the architect and the design business, you know, who is the actors and everything. Maybe that could be an idea if I was thinking about students, but then it needs to be, to very, to somebody I know that has more to say, that know more, that is more experienced in that matter.

X2: And crowdsourcing, I mean crowdsourcing campaigns doesn't necessarily need to be with students, right? I mean, that could be any kind of crowd, you mentioned-

Y: It could be any crowd, right, yeah.

X2: So, it seems to me that you have some preference with somebody that already has knowledge of the industry or some, or even your industry?

Y: Actually, there is not very many that have experience in my industry. Producing leather, no. Not in Denmark, but then it is abroad. But I mean, being a CEO of a small company also means that there is so much, sometimes, you don't know and so much you need to find out. So, it is important for me to have people around me that can help me with all kinds of issues and have experience or know, you know, where to turn if a sudden new challenge occurs.

X2: Okay, I fully understand.

X3: There are big websites, there are big platforms, internationally, but it doesn't need to be... (0:16:57) where you can go really in depth on product development and process development. Where you can reach out to those experts within leather, I don't know what you, fermentation, or what it is that is done, but the techniques, you can go very deep through some of these technical networks. So, there is, what are they called-

X2: Incentive?

X3: InnoCentive, that is a technical platform where you reach out to guys in Argentina, Australia, all over the world. And there, on, to be at that platform, you might be able to find someone with the same knowledge and same prospects as you. So that is one of the options, opportunities there are within, with thinking crowdsourcing, global. Yeah, that is the comment.

Y: Jens it is very difficult to hear you, I think I only got half of it to be honest.

X3: All right.

X2: Jens just came with a comment that we are aware of some platforms where you can get, like, expert knowledge about, right about any industry, not Danish, but global wise. There is one, he mentioned, that is called InnoCentive. So, a small, like a comic of, is an input to find these people. Y: But I think one thing it has learned, I learned from it, is also to be very open to all kinds of people. Not only that it is within your industry, because I deal with a lot of tanners that and a lot of producers, because you don't have any, we don't have any tanneries in Denmark left, hasn't been there for many years. So, all our producers and all our partners are abroad. So, it is, of course, we travel a lot and it is important for us to talk about all these technical issues that we face and we can never be clever enough, so we deal with our partners, of course. And we are also member of different technical institutes, you know, because with leather there is always different challenges that we need to face.

X2: Okay. Speaking of this, if we jump sideways a bit, could you tell us a bit about your company's structure?

Y: Do you mean product-wise or organization-wise?

X2: Organization wise for this matter.

Y: You mean what we do or how many we are and what they-

X2: Yeah, how you were saying you are sixteen people, you know, are they, are you in a big room, are you in silos, how do you communicate, stuff like that.

Y: Okay. We are, of if you ask me, we are a very flat organization. [20 min]

I am pretty much taking care of, of course a lot of different things. I am, I have a couple of my own customers, but mainly my brother, he is sales director and he travel about hundred days a year, so he is dealing with customers. I have some of my own customers, just to keep my pulse going and then I take care of the purchase, the stock and marketing branding, organization, everything here. Then I have a lady that is our administrative boss, she takes care of the organization, all the economy, because I am away a lot as well. And then I have a, one of my also very important people, is a guy that has been here for over thirty years and he is an expert on all our leathers. And he travels quite a lot, because we control our product both in house, but also where we produce. So, a lot of times it is easier, what is difficult with leather is that it is a very subjective matter, what you see, what you touch, what you feel. It can be difficult to communicate. So therefore, it is

important for us to see the leather at the place where it is produced. So, if it is, anything is wrong, we can correct it right away. Then I have two people in customer service and I have two sales guys and I have Maria, who is helping me with everything. And then we have six people in the warehouse and they are, we have two pots, we have an export and an import department. So, the import department takes care of everything that is coming in, everything is checked for all the different matters and then it is put up on wooden horses. So, we select the heights, because when you have to do with a natural product, it is difficult to know exactly how many patterns can go here. And, so that is what we try to make sure of the selection. Then when everything is checked, it goes to the export department where all our collection is put in and then it is picked according to order. So actually, we deliver out, if we have an order before noon every day, we send it out the same day, normally.

X2: I am not sure you, if you know this term, but there is something called, you know, ambidexterity and, you know, it is about using your left hand and your right hand equally well. And within economics, it is more about, are you able to handle both radical and conventional innovations at the same time. So, could you describe how your organization is looking at, you know, the day to day and the long term, with more radical changes?

Y: Well, being a small company, it is definitely different than being in the bigger company. Before I started out here, I had been with Silvan working as a product manager there for five years, so I know how it is to be in a big organization. When you are in a small organization, you need to be very much more flexible there. A lot of different assignments dropping in your, on your table that you need to take care of. I think the people that like being in our organization, actually we have people here for a very long period of time. And they like that we have a little family kind of attitude. So, everybody is talking to everybody and everybody is participating, actually we are having a big challenge coming up, because we are moving in a month and that takes up a lot of energy and a lot of thought for everybody. So, everybody is pitching in and having their assignments according to our new challenge. But when said that, you know, people are always different. And some people they don't respond so well to changes, or there are things that are going to be different tomorrow than others. I don't know if that was what your answer or what you were looking for, but. [25 min] X2: Well that is a good answer, so perfect. Speaking of this, you are saying people are not so, people act different in relation to changes and all this. And one change is, of course, the inputs that you get from the outside and in that sense the absorptive capacity, which every organization to internalize, you know, the different outcomes that you get of inputs. How would you describe the way that you, well, your absorptive capacity in your organization?

Y: Well, I think it is very important to talk. To have those talks to inform and talk and I see, the more I inform and that is not always my strong side, but you know, sometimes when you say, okay, you

see there is a lot of people, they easily get more insecure than you think they do. But it always good, I think, to inform. We always drink a coffee at nine a.m. in the morning and then we talk about all our moving plans and colors and where to put this and that. And, I mean, that, to me I can see that the, it gives more secureness. And if I feel that somebody they need to be more secured or we need to talk more, then it is important to have the time to take them in. Or go out in the warehouse, what I do every day and then just, you know, spend then minutes and say, what do you think about this and that and I was thinking this and that. And you know, some people they need to be ... (0:26:42). And then I think everything that it runs pretty smooth.

X2: Where in the organization do you place the responsibility of communicating with the crowds, so to speak?

Y: When you say crowds, what do you mean, do you mean my-

X2: I mean, like, the, like, when the VIA challenge, but also, you know, obviously the other campaigns you have had more fraction with, you know, do you have multiple points of communication, or do you have one specific anchor point, or how do you do?

Y: I am not quite sure what you mean, because if we talk about communication, what we communicate now, then I also have a PR-manager, for instance. She is an American lady sitting in Nice, taking care of all my social media and my, all my texts and everything. So, she is my communication how it is right now on the outside. If we talk about developing my company and my brand and more heavy issues, then I take care of the communication myself. To those freelancers or that kind of crowd.

X2: Okay, that was the, it was the latter.

Y: And if it is internally then it can be me, it can be Inge who is taking care of all people and the economy. So, it depends.

X2: Okay. Well it was these two latter parts, you for your information. How do you, like, when you said you mentioned- I will try again. You mentioned that there was some of these challenges that you sent now to multiple people, how do you then manage the expectations of them coming with the right results being, the one being chosen and all this?

X3: I think that, maybe first to the VIA.

X2: Yeah, but that will be part in this case, well that is-

Y: You mean that, you don't mean VIA, you mean the others that I talk about?

X2: Let us, okay, as I understood it, the VIA challenge you have had little communication within a sense and a little output from it, right?

Y: Exactly, yeah.

X2: So, I am thinking if we narrow this down to being the VIA platform, your answer will be, yeah, I don't know. I don't know, well, we can ask you, of course, I really know, how did you manage the expectations with the crowd back then and also what did you do with the, in the other case?

Y: I am not sure I understand what you mean with, I manage the expectation from the crowd, do you-

X2: But you mean, you know, sometimes when you send out a challenge, or if you, a problem that you like to have solved and you send it out to multiple people. You know, they would like to have some kind of feedback, or they would like to have, you know, a narrower definition, or something like that, some kind of communications. [30 min]

Y: But we were able to communicate on the VIA platform, so we got a log-in and then if people had questions or anything, they could write me and I- Or in the process, I also looked through the projects and commented the, made comments on them and said this is possible, this is not possible, or go with that idea. So, I did, we did interact on that level.

X3: How much time did you spend on it?

Y: To be honest now, I think it is over two years, but you spend more time than you think you do, I think maybe ten to twenty hours, at that time.

X2: But, well, I am, I don't know that, while the VIA challenge did their ... (0:30:55), was there any outcome that you, that was useful for you as an organization?

Y: Limited.

X2: Limited, okay. So-

Y: But then again you can say, I can't say it is because it was their fault. Because, as I told you previously, I deal with hides, whole hides, leather, I, that is what I produce. And they were asked to challenge the way of thinking in the way you use leather, so for different services, or items. And they did that, then you can always say how thorough it was, there were different ambitions. But then again, as our company is now, I am not going in that direction where I produce items or products, I produce the leather product itself.

X2: Did you, well, how did you, well, not for the VIA, because that you have not, of course, incorporated into your organization. But for the other things, how do you engage the organization into, like, the implementation of these processes or products, or what people come up with? Y: I don't, to be honest I don't engage. If we talk about specifically VIA and those things they came up with, I don't engage my organization that. Of course, I can show you some of the funny ideas and we can talk about it and then that is it. Because I take, I make the decision if I want to go further or not, or it needs to be elaborated on the different ideas.

X2: If, we jump a bit. You have some considerations with the other kind of crowdsourcing, where, in relation to IP rights, or do you have any considerations there, basically? I relation to, yeah, sharing of information and all that.

Y: I think when you engage in the limited crowd that I have, you also have the trust that you need to open up and you need to share some of your ideas and your experience, because you gain so much more. And that has been my experience. So instead of being closed and think that you can solve all problems yourself and have all answers. I like the way of thinking where you say, okay, I have wise people sitting around me that know so much more about different that, you know, it is wise to have a discussion with them, maybe they can give me a new point of view on this challenge, or problem, or what it is that I face. Or they can point at a direction where they say, okay Louise, maybe you should talk to these guys or this guy. And I think to me, that is very valuable. Because too many people, or too many companies today, are sitting, you know, in their own kingdom and having, you know, taking their arms around it and protecting it because we don't want any of our secrets to vanish. But I do think that we need to think in different ways. I think we need to think about that one plus one maybe will give three instead of two. And we are in a global economy today, where everybody is fighting against everybody, so if you are alone, it is difficult. I think you can gain a lot of good results by being, making new co-operation's.

X2: Speaking of this, if we jump. [35 min]

We have three last questions here in relations to the culture of your company and okay, of course, you are embracing the globalization and innovation, but how would you describe the culture of innovation in your company in general?

Y: That is difficult. I would say, leather itself is in a way a conservative product, so it is not that we, that I would say you deliver, you develop something that is breathtaking every three months. But we are continuously trying to make better products every day on what we have. And we also, of course, want to develop new interesting ideas. The way we have done it in, we have done it in a new manner, according, compared to how other people do it. We have made co-operation's with the architect ... (0:36:05) that we develop a new article together with Norm architects. So, they have decided a product, we develop it together, they made a product, a color range. Our, we have a new product coming up that we developed together with some architects called Space Copenhagen. Also, a totally new article, different way of thinking, different, new colors. So, we are trying to partner up with new people that have access to different markets and trying to involve them in our company, so we also can get some of the expertise. And I think that is a totally new way of thinking in our industry. We are working, right now, on a new product, that we are starting up after summer holiday, with a British designer as well. And doing that is not, has not been seen before. So, in that manner, we are trying to, you know, doing something that is totally new, totally

different to our products. Because leather, leather collections are very conservative and you can say, for instance, if you look maybe in your own home, or a friend's home you see they have a black leather couch, or they have a cognac color, or maybe a white or cream color. But that is basically it, we are very conservative when it comes to leather. But when it comes to fabric, people are much more open. And we want to try to push that kind of thinking, both in what you use leather for, but also in, color wise and how you can put the different colors together. So therefore, we have started up the different jobs together with Norm architects, together with Space Copenhagen. We did a color box, you can also find it on our homepage, where we made a cooperation with Note Design Studio in Stockholm, they are brilliant in setting colors together. So, among our 455 colors, they chose twenty colors they put in a very nice unique box and put together with NCS, so we made a cooperation with NCS, how they could match our colors. So, in that way, we always try to push the boundaries, so in what kind of, in the direction, so we don't limit ourselves too much. And that is definitely during the past three years, a new thinking from our side.

X2: Okay. Did, when speaking of, you know, innovation and the culture of it, there is of course you, but there is also the rest of your company and innovation doesn't necessarily need to come from outside. Do you, but what could, how would you say that your company incentivizes working with outside sources? I mean, for your colleagues and the company as a whole.

Y: I think they got used to it and they like it and they joke about it, because also we have a whole new interior design, for instance, during the past two years. And every, you know, all the desks have leather on it and the conference table and everything. And people enjoy, also, that they can see a change and they can, they can touch a change. **[40 min]**

And I think, or it is my perception that they are very positive about it right now. And I think it is good, because some of the close co-operation's, for instance that I have with Norm architects, they are being part of the family. It is not only, you know, an outside partner that is coming in and trying to rule or decide, everything is done in harmony and a cooperation.

X2: Did any of the campaigns that you created with outside sources, create any cultural issues, like they contradicted what your usually ways of doing innovation in your company?

Y: In- Yeah, you can say in one manner, of course, it has. Because when you have outside people coming in and start talking about leather, they don't know anything about leather. And always they, you know, you also need to educate them about what is possible and what is not possible, otherwise they always want the impossible thing. But wanting the impossible thing can also push you in a direction where you think, okay, you know, maybe there is a way, or what is possible, I need to talk to my partners about it. So, I think you always need to push yourself, because otherwise you get these limitations in your mind about what is possible with your products. I don't know, I, then I don't know, did I get on a side track?

X2: No, it is good. Do you have any kind of communication, internally, about your aspirations for incorporating, yeah, crowds?

Y: No, not really.

X2: In that sense, both with that and before the, you know, there is sometimes there can be an internally resistance, sometimes it is described as the not invented here resistance. Do you meet this?

Y: Not at all. Not at all.

X2: What do you think that is, or why?

Y: I don't know, maybe it is because we don't feel that we haven't invented it, because if we have, if people are coming with some ideas, I mean, we invent at least half of the product, because it cannot be invented without us. We have the right partners, we know where to go, we know what is possible and we know how to talk to the technicians, what kind of people to get hold of to get this through. So, I think we are, we don't have the feeling that is it a product, finished product that is coming up and then we are selling it because it was somebody else's idea.

X2: We are speaking a lot about innovation in relation to product innovation. Do you have used innovations and crowds, for that matter, in others than product innovation?

Y: In a way, yes, but it has been on the level where you talk about where to go with your company, branding wise, markets, what to reach and more in that matter. But I don't know if I should say it is a crowd, or you can say it is an advisory board that I have, or. Because having a company like this, it is always, like, where to go. And in the next three years, I mean we have done a great job for the past three years and we have, we set some targets and actually we have, we are there right now. So, we need to set, always set new targets of what to reach next. And there, I like being challenged to new goals, to new targets, new possibilities. So, there I use different people as well, to help me build the right way. Because what was really difficult, when taking over this company, is how can we survive for the next forty years. This is a family company and you cannot stay on the same track that you have been for the last forty years, because what was successful for forty years, is not successful for the next forty years. And that took a while to reach the right track and it is not mathematics. [45 min]

So, you, it is always difficult, you know, you can go one direction, that could be right, you can go in a different direction, that could be right as well. So, it is a gut feeling and also about the people that you have around you.

X2: Is that understanding something that comes from you, as the top management, or is it embedded in the entire organization?

Y: It is, I think of course in the beginning it came from me, because my father was a different, had a different way of thinking that was maybe more protective and old-fashioned in the way he thought

about management. Where I feel the more people that can have an input, the better my decision can be.

X2: I, well, the official questions they are done, so at least thank you for that part. Jens, do you have anything you would like to have elaborated?

X3: No, I am, I think we got around it.

X2: Good.

X3: I just look ... (0:46:14), it is

X2: I, Louise can you hear Jens, because I can't.

Y: No not at all, not at all, to be honest.

X2: No. So, if Jens, if we have any further questions, if we could be allowed to send you an email and then-

Y: Yeah, you, yeah.

X2: Then we will do it that way. But for now, at least from us, thank you very much for your time, you are, it is more than generous.

Y: You are welcome, hope it can help out.

X2: We hope so too. We will happily send you, also, a copy if you like to see what it ends out with, then you-

Y: Yeah, I would love to.

X2: Good.

Y: Thank you, have a good day and good luck with your project.

X3: Thank you very much.

X2: Thank you. And we will have that.

Y: All right, bye.

9.6 Appendix 6 - Interview Lars B Jeppesen, Professor CBS

Audio File: CBS, Lars B. Jeppesen

Interviewer X1: Kristoffer Pahl
Interviewer X2: Jens P. Møller

Interviewee Y: Lars B Jeppesen

Length: 41:03 min

X1: So, now we are recording. Lars, thank you very much for taking the time to speak to Christopher and I here. I just explained you about the topic. And could you tell me a little about who you are and what you do and how you have been in touch with crowdsourcing through your-

Y: Yes, sure.

X1: Life.

Y: So, currently I'm a professor in, you can say, innovation management at Copenhagen Business School where I teach and do research around topics quite closely related to crowdsourcing but also a number of other things that are happening mainly in digital parts of innovation. So, I've been studying early on user communities online and how they influence firms willing to innovate. I've been studying, you know, platforms, digital platforms. How they work. I started in more, for innovation but also more kind of strategies you can use on these platforms to gain more adoption and so on. And then, one of the topics that came in between those two interests was crowdsourcing. And for me my interest in this area came from very early on actually in the history of this research and practice from the observation that companies were starting to take inside problems and put them on the web, on a platform called InnoCentive. And together with my then co-author Karim Lakhani form Harvard Business School we wrote a paper about this. So, we got all the data from the platform, from InnoCentive, we analyzed it and we found out that there were some things that were really- Some processes and some behaviors that were quite different when you start crowdsourcing as compared to the ways companies were usually innovating back then, like the internal way where they did it in the R&D department. So, we basically discovered some, let's say, how it works on some issues when you're crowdsourcing. Basically, we were analyzing who were the ones that are winning these contests on the web. And we found out that basically people that are quite far away from the field, the scientific field of the problem, were actually the ones that were solving it. Systematically across the data it was people from outside the field of expertise that were solving these problems. And we thought that was quite interesting and that was very new and refreshing so we wrote a paper about that. And then that put me on this research track. Already we did the research in 2005, 6, 7 and published some of this in 2007 and 2010 and that's basically been part of my career on innovation research.

X1: What size had the companies you were digging into through the InnoCentive platform?

Y: Well mostly it's companies who are big companies. And there were some of the early users of the InnoCentive platform was companies, like big companies, big multinational companies with large R&D labs. So, mostly American companies at that point. So, InnoCentive is specialized in life sciences, so it was a lot of these companies involved there. They're strong in the sciences and so they attract a lot of scientists, a lot of engineers and also a lot of hobbyists though, who want to solve the problems. And back then at least they attracted the large multinational companies that were trying to sort of boost- Like Procter & Gamble, for instance, that were trying to boost their innovation process and be more open. So, I guess it was quite- Not costly, you can say, but in absolute terms it was probably a little bit too expensive and too big of a thing to do for small companies, I would say.

[5 min]

X2: And how do you see that now?

Y: Since then the whole field evolved. There are many platforms specialized in all kinds of areas within this crowdsourcing. I mean, advertising material is a big thing, T-shirts (0:05:26), you know, Threadless and these. So, there weren't a lot of small companies back then but now I think it's-I mean, you can find a platform no matter what you are trying to crowdsource, I think. And also, you can probably find some that are free. You can probably find some that are-It depends on the service level that you require from the platform and the guidance that you need. In InnoCentive for instance you could consult ...(0:06:01) InnoCentive employees to sort of frame your problem. Get them to help you so that the crowd would understand your problem better and so on. And that is obviously something that drives up the price.

X1: Have you been involved- So, this was on a research basis. Have you been involved directly in crowdsourcing processes for SME's since?

Y: Yes, actually- Well I've been- Throughout these last ten years I worked on a project where there were small companies trying out these things. And I also recently been involved with more practical stuff with, not super small firms but kind of not the biggest ones either, in the medium size. I haven't-Well, I worked with a company that was less than fifty employees once and we looked at the opportunities in this space for them. So, I always thought that, sorry to ruin your interview guys, but I always thought that these methods should be a nice compliment to let's say the lack of areas of specialization in small firms. If you're small you can't cover all these different specialties. And open innovation and especially crowdsourcing should be a potential method to fill out these gaps, I would say. So, all the way since the beginning of my research we were also thinking about how this could actually be used for smaller firms to sort of compensate for their lack of areas of expertise.

X1: Are there some main headlines across all your experience on SME's where you can say, this is what happens when it goes well and this is what happens when it turns out bad?

Y: Well, I think actually that you probably find a lot of small companies have tried this but probably they underestimated the level of preparedness that you need to have before you start doing it. And there are some simple steps that you can take to sort of insure that you're- Or insure, at least increase the chances of this going well. So, typically, but this goes for small and large companies, is if you don't define the problem in the right way then you're not going to get any good stuff back that fits into your problem. And so, that's step- Problem number one, you can say. And these things are going to be made on the top level of the very big companies and even in small companies too, I think. These are more general insights, I think. Well, I would imagine that some small companies they don't have sufficient, let's say, resources and just money to go and enter with some kind of the more expensive platforms where you get the help that you need. So, they might try to try it out in, let's say, on a more trial and error on their own kind of way. [10 min]

Because there are a lot of platforms you can just got to and do this but-

X2: We have been looking into both the structure and the procedural things about this but also the culture, like three main areas, what you seem to be referring to here has a lot about the structure of it. That you have to go into this knowingly about what you're doing. Could you describe maybe some of the difficulties that you've encountered in this sense?

Y: Some of the problems that small firms might have, or?

X2: Yes, that would be- Is it small firms (0:10:40) in specific or also in general?

Y: Well, for small firms I don't know so well what to pick out. I'd put maybe for small companies- I mean, if you're a large company and you reveal that you're like Volkswagen or somebody, you know, you will attract people to have interest in your problem, right? Because you're a big player and maybe the winner can get in contact with them and so on. But if you're unknown and small, maybe you cannot attract a crowd so easily. That's kind of like the second step, after you define the problem you want to attract a crowd to your problem, right? To solve it. So, you want to attract some interest to your problem. And I guess if you're a small company this might be more of an issue. I think also if you're a small company, the next step would be sort of like how do you set the prize, you know, if you want to give them money for problem-solving. And maybe small companies they cannot afford 15.000 dollars for the first prize. And then also what follows, the next step after that so, when you-Let's say you define the problem, you find a place to go and put it out to the crowd, you establish some incentives, that could be a cash prize or something, and you have to select the right ideas at the end. If you're a small company, it might also be hard to have capacity to select in the last step. To basically sort out what is, you know, out of the- Let's say you're lucky or you're good and you get one hundred ideas. You have to sort through them and assess all of them. That might also be a problem for small firms. So, I think across these four steps, defining the problem requires some kind of knowledge about how to structure a problem that can be put out to a crowd. Second step, finding

the crowd might also be an issue for a small company. Third, having a prize that's hard enough to attract some solutions might also be an issue. And finally, the selecting in the fourth step might also be an issue because you don't have the capacity to basically look at all these ideas. On the other hand, the pro for a small company would be that you don't have to solve the problem yourself, right? So, that's where you're saving. And you probably get much more high-potential ideas if you put it to the crowd because they have a different view on your problem. So, that's the pro. The con is that maybe you have some issues across these four steps that I mentioned.

X1: We can recognize those issues within those four steps from our previous interviews.

Y: Really? Okay.

X1: Yes, absolutely.

X2: Speaking of that structure part, have you seen some company structures that has worked better than others in realizing the potential of the crowdsourcing?

Y: I think it's like- I mean, this is not- So, now I'm just fantasizing because I don't have the complete overview across companies to basically make the right answer but I can sort of- It's improvised. And I think that it's important to have, let's say it's a technical problem that you're trying- So, it's important to have technical people in this area but on the other hand these people can also be so technical that they don't know how to abstract the problem for the crowd. So, having an R&D department would obviously be good because they're dealing with innovation and they know how to talk about it and so on. But they might also be the ones that resist this kind of problem solving because it's kind of threatening their position, maybe they speak some internal language and they can't really deal with the crowd. [15 min]

So, I think a company- You need to have some kind of- At least people that are interested in innovation. If you have an R&D lab, obviously you have a lot of problems but also people that know about these problems within different fields. That's good, but it might also be where the resistance is coming from. So, I think actually in terms of setting up the company for this you might want a strong top leader that basically says this is what we're going to do and then these other departments they have to follow. So, the mandate, I think we talked about that in some of the sessions, Jens. But having the mandate from the top leader is probably very important. So, having a strong leader that basically says this is what we're going to do is probably maybe the most important. And also secure the resources so that when a solution comes back it's actually implemented and not just put out aside. So, leadership is very important and also I think knowledge in the area that you're trying to solve. Some knowledge at least. Some tacit-

X2: Is it also about the tacit information of the company or are we talking about explicit knowledge?

Y: I think actually it's quite a lot about how you can explosive knowledge. Because if you can't, it's hard to ask other people to show up with a solution. So, you have to be able to define and formulate it for you to put it out there. Because it's hard to, I guess, put some tacit stuff out.

X2: How do you- You speak about- We're nearly (0:17:00) talking about culture here, in the sense we are here talking about some push backs and all this. How much have you encountered this syndrome of not-invented-here resistance? This kind of set-up compared to a more regular business model?

Y: So, it's- I think the culture is changing now because it's becoming more mainstream now to do open innovation but ten years ago it was different. And there was quite a lot of resistance. One maybe because- So, I haven't worked inside these firms but I talk with people about it. And there was a lot of resistance especially among the most, let's say, skilled people at- The people that were the most skilled at something. And then suddenly the company starts crowdsourcing in that area. Then people feel threatened. So, they used to be kind of like the central person in this company around a certain issue or topic and then suddenly the company starts crowdsourcing ideas that are challenging this competence. That might be one way. So, basically fearing for your status. Maybe even for your job. And that is a typical reaction. Then also since when you start doing it you will find a lot of the high potential solutions that come back. They actually come from these other fields that we were talking about. And you need people inside that are actually willing and able to recognize these solutions and kind of like make this link between some solution that comes from a very surprising place to the problem that the company has. That's a capability thing. The other one is more like an incentive before resistance because of your personal incentives. So, you have these two things at least working at the same time. And then with-I think a lot of companies is, build around some core specialization. And if you want to really innovate that company you want to innovate on these areas that you are specialized in probably. That kind of threatens the most let's say central people in the company. That was how it was, at least. And now I think since incentive schemes and so on inside companies have been adjusted to sort of facilitate open innovation, I think people actually now have, this sort of R&D people have understood that they can get forward by using these open innovation methods. [20 min]

And also, I think it's being rewarded even if you don't solve the problem but if you find a solution out there, then you can be rewarded too. Earlier on it was kind of like the problem-solver that was the hero, now it's kind of like the one that finds the solution whether he's the problem-solver or not. But I think there might be rewards out there now and more understanding from the company's side that you actually go across the borders. And also, that this is a process that has to be facilitated and it's kind of more normal now. So, I don't think you find this initial resistance so much anymore.

X2: A lot of the literature-

Y: I hope.

X2: A lot of the literature speaks of incentivizing by a monetary way is a bad thing for IKEA generation children. So, that seems to be dampener for creative thinking. So, what kind of incentives have you seen that worked?

Y: Well, I think the monetary worked quite fine. Well, I think they do because it's not so- In social psychology they would say that if you start paying people they won't ever do it for free again. And if you pay your kids to clean their room they will never do it for free again. So, this is how it works. But if you're looking at these problem-solving things that are going on and kind of the likelihood that you're going to win this prize is so low because there are a thousand of competitors. So you're kind of not very sane in your brain if you start engaging in this and thinking that you're going to win. So, people are probably doing it for, like a whole set of reasons, a whole set of motivations and then one guy or a girl in the end will win the prize. But the prize should- If you have the right distribution figured out in your head, then you would take the prize as some exposed reward, right? But not something you can count on or work towards. It's not like a salary. Because if you go to work for your paycheck obviously that's going to crowd out your inner motivation for doing this. But I think in crowdsourcing winning the prize in the end is not going crowd out in your, let's say, problem-solving motivation. So, I still (0:22:58) think the money together with all these other motivations, so having fun, learning about the problem, the status and recognition that you get from potentially winning or being in the top three or top ten, whatever, plus the money, then you basically cover all the different motivators that are out there. The ones that we call extrinsic, the money and the intrinsic, the ones that you get because you have an inner drive. So, I think the money is good together with these other things.

X1: In an SME context, have you been in touch with any IP rights issue, I mean considerations of-Of course the big companies have legal departments who takes care of this, but what about the SME's, do they have any concerns on a general level on IP rights? Is there any-

Y: I think again it's the same almost for the small and the large, but I think at least they should be concerned if they're starting to crowdsource around the core business. So, if it's about their main assets, that they're kind of revealing to a crowd and to competitors potentially then I think they should- Let's say if you are a small, small company and you have two hands, or one, I mean then you already obviously have protected your stuff. But I think many small companies they- I'm not sure about this, but they might have less of formal IP than the big ones. [25 min]

So, the big pharma companies they typically know what they're doing in some sort of IP and they have everything covered, at least it seems. Whereas I guess a lot of the small ones they are more playing it on secrecy. They're more protecting via secrecy, which means that they might have problems if they start to crowdsource in the core secret area, right? Cause they have to reveal. So, my advice there would be that they go and try it out on something that's not the core business to

learn. And if they go with the core business it should be maybe some areas that are pretty well protected formally. Or they should be able to abstract their questions that they put to the crowd completely so nobody can figure out what they are and what they're working on.

X1: And what it will be used for in the end. Concerning procedural arrangements, you divide these four steps of defining, find the crowd, set the prize and then select. Can you somehow put a percentage on the workload? So, out of a hundred how much is in the- Before you post the campaign and how much is afterwards?

Y: So, it's not so linear as it sounds because there are kind of interdependencies between these different ones, so if you don't define well you cannot choose the winner because you don't know if they solved it. But I would say- I mean, even before these steps that we talked about here you would also need to have like a strategy for what problem are you trying to want to solve. Because does it have any- Let's say, what's the value proposition behind your whole problem? And if you solve it what could you gain and so on. After these considerations you would go on and then you would-Probably inside the company there is quite some time you spend on finding out which problem you actually want to solve. For other companies it's just like okay, this is the problem we have to solve to get on. Like even large pharmaceutical companies they would have a pipeline with certain problems in it and if they could solve it, it would brilliant. But maybe in a small company they want to just- If they just want to innovate, right? So, then the question would be what problem do you want to solve? When you figure that out you would start going on these steps that we talked about and you probably spend quite a long time in shaping the problem, the part- Because there might be a big problem complex, like toothpaste for instance. If you want to make a new toothpaste, you don't want to crowdsource all the things that have to do with regular toothpaste making. I mean, because you know that. But you want to separate out the thing that actually makes it innovative, right? The thing that makes your teeth white in ten seconds. So, you want to isolate and chop it down. That is in the defining phase. So, you want to spend a lot of time there. The next steps, finding a crowd could be a platform that's probably going to be a little bit easier and less time-consuming. Finding out if you need a prize is probably- Or how you're going to structure it, whether there's a prize or other motivation, is probably also a little bit faster if you know what you're doing otherwise you have to go back and read your social psychology. And selecting is obviously coming after you did it. But that also takes quite some time and typically you have to involve more than a few people from the company to sort of like weigh these problems on different aspects and sort of agree on which one is the winner. So, that requires some meetings too.

X1: And then integrate it and-

Y: That's something that I don't consider so much but obviously when you have the solution maybe it's brilliant solution but it requires new machinery or whatever. [30 min]

X1: I'm just looking through here. I haven't got the next- Two seconds.

X2: I have one question here then, Jens, while you're looking. You're speaking about defining the problem that you want to have solved, Lars. Any particular places in the process that you see would be benefiting an SME the most to engage with crowdsourcing? I mean, there's both IKEA generation, there's problem solving, there's marketing etcetera. There's a lot of areas in the value chain that you put ... (0:30:43).

Y: So, low-hanging fruits in terms of where to start for a small company? That's a good question, I mean, you could- Because you can also crowdsource advertising material or designs or you name it. So, I would basically- My recommendation would be, I would assume that they lack competences in some areas. Because small companies they can't cover everything. And maybe if they have bottlenecks in their specialization, maybe that might be a place to start. Also, insuring obviously that it's strategically the right thing to do, but- So, if they lack marketing or they lack design, you know if they make coffee cups, they could make a challenge out there on the web for coffee cups and then, you know- So, it depends a little bit. If they're really good at making the cups but they don't know how to design them, you know, all these things. Instead of going to the usual designer around the corner or that they happen to know they could put it out there. It's a little bit hard to answer but actually it depends a lot on what they do. But I think there are opportunities all along the different, let's say, departments in a small company. I mean, I'm not so familiar with small companies, how they actually work on a day-to-day and how they're structured but I guess they are not- I mean, if you're only fifty people something must be lacking.

X2: We were just talking about a very important part being resources here, right? You don't have the resources, the internal capabilities of some sort, being people or skills etcetera. But how do you thenIf you then have a bottleneck, you have a problem there. It could also seem that you then simply move the problem from not having the skills but now you suddenly have to spend a lot of time on figuring out what is the best solution. That's also resources demanding, right?

Y: Yes, so it's probably- I mean there's a learning curve here, so if you start doing it maybe you get in shape and then it goes better for the next couple of problems. But yes, there'll be some- You need to make it like a dedicated investment in time and some people inside this company that have to learn this method. And then they can start kind of like going along the learning curve and you know-It's going to be cheaper in terms of time for the next problems I would expect. So, it's like- It's really like learning a method. And then you can apply it in many different ways. And I think that some of the problems that we were talking about before that you see in small companies is basically that you do it once and then you can't convince the organization to go on. But it's kind of like going one day to play football and then figure like it's super stuff but it's not going to happen this way. You got to kind of try it out a few times.

X1: Christopher, do you have anymore?

X2: Not in particular.

X1: I have, now we talked about in the beginning, we didn't quite finish that one. We talked about why some cases are not successful. Do you have any cases top of your mind where the output was better than expected for an SME and why was it? Why was this special?

Y: Well, I have one right now that I have been involved in but it's not so public. [35 min] So-

X2: What could you tell us ... (0:35:05). What makes it valuable there then?

X1: In general terms?

Y: Yes, actually- But it's going to be a very boring explanation because they were serious about it and they invested what they needed to, to go with a platform that basically helped them through this first step, right? So, they got the consulting needed, they got the help in boosting up the crowd in getting interest in this problem although the company wasn't that famous and so on. They could still get hundred ideas back of which some were really interesting. Contrary I actually thought it was a very difficult problem to find new solutions for because it was kind of an exhausted innovation area, kind of like of desert, no more things to do in this business. But they got a hundred ideas, or solutions back on such a platform. But it was basically because somebody was helping them generate- Sort of like boosting the interest, defining the problem in the first place, picking the problem, defining the problem but also generating interest in the crowd. And also having a concept for how to select the best ones. So, I was close at the selection process and I could see how much that also had to be moderated to generate the right outcomes.

X1: I guess you can also take an unknown SME in an unsexy industry and post a campaign on a well-known big platform and then achieve some benefits of- I mean-

Y: I think-

X1: It can increase the level of solutions you-

Y: If you're a small company but you have a very interesting problem that people think are either fun or challenging and sort of intuitively interesting to work with, you stand a much better chance. And I think that is maybe one of the first- Because you get a lot of free interest then from the crowd. Otherwise you have to pay them for it and then you run into these problems that you mentioned, Christopher, that maybe people don't care because they feel like they're paid for it. But if it's interesting you get a lot of, let's say, free interest in and problem-solving activity in people's heads.

X1: The article you made with Lakhani what's the name of that?

Y: One is called Marginality in Broadcast Search I think. It's from 2010. It's Jeppesen and Lakhani. And there's also another one, it's a working paper from Harvard that you can just download. I can't

remember what it's called but that is also Lakhani and me and two others. And then there is a small Harvard business review article on the same study, which is Lakhani and Jeppesen.

X2: ...(0:38:49).

Y: So, this is one of the earlier papers and then Marion also has a number of papers.

X1: Excellent.

X2: You speak of it being an article on broadcast searching. That's a very specific part of crowdsourcing, right? Simply finding the crowd?

Y: No, it was actually because that's just what we called it. Broadcast search because it was kind of like a play(0:39:22) on this thing that typically happened inside companies that's called sort of myopic search, where you go more closer and closer, right? And you get more and more specialized and like tunnel vision. It's called local search in the literature by- There's some literature by James March where he writes about local search and that's been a big topic. So, we basically took that literature and then we said okay, now there's something we can call it broadcast search. Kind of the opposite, right? Where you spread the problem out instead of you go myopic and only solve- [40 min]
So, local search is basically the tendencies to companies to keep specializing and getting narrower and narrower in their ... (0:40:11), right? And there are problems of breaking out of this. Whereas we thought that we had found some part of the solution to some of that problem. So, we called the paper broadcast search, but it's about the whole process and it's about the study of InnoCentive. I can send you a pile of stuff.

X1: That would be fantastic help.

Y: And I also have a paper on the process of the four steps. But Jens, do you also have some slides?

X1: Yes, we also have some from classes with Marion.

X2: Yes, we can search for one.

X1: For broadcast search. I'll just stop the interview now because I think we are done here.

9.7 Appendix 7 - Interview Fredrik Kjellberg, Consultant Deloitte

Audio File: Deloitte, Fredrik Kjellberg

Interviewer X1: Kristoffer Pahl
Interviewer X2: Jens P. Møller

Interviewee Y: Fredrik Kjellberg

Lenght: 32:50 min

X1: Over the last four years actually ... (0:00:03) on CBS, so it is like it is a part-time study that you do in the evenings besides your daily work-

Y: Yes.

X1: And we took a new line that was created, that is called innovation management.

Y: Cool.

X1: And the reason we took it, was because there were some pretty cool guest speakers and the professor is quite nice, she is called Marion Poetz (0:00:31) and is from Austria and she does a lot of innovation workshops for- Her CV is pretty nice, it could be the board of Adidas or something like that. So just to get engaged with her, was one of the reasons we took the course. Anyhow, now we are then in the final stage and are about to write our thesis. And we have chosen to look at crowdsourcing because we like it, it is a cool way to work and it is limited how developed it is yet. The big guys does it, ...(0:01:17) does it and the big guys, but what about the small guys? So our research question is which factors influence successful crowdsourcing in a SME context? So until now, interviewed three SMI's that has worked with crowdsourcing and we are sort of digging into this. So we have an interview guide that we have used for these companies and we are going to use the same interview guide with you and it is going to be more on a general level.

Y: Sounds good.

X: So hopefully we can do some references between what you say as an expert and what the other guys have said. So has Christopher joined yet?

X2: Yes. You have spoken nonstop, I didn't want to interrupt. Thank you very much for helping us out here.

Y: No worries.

X1: Cool. Did you hear Christopher that, what Fredrik said in the beginning, that let's see, we have twenty minutes left now and if we don't make it, we can reschedule a follow-up meeting?

X2: That would be fantastic. ... (0:02:45) sounds probably like it is going to be me making that follow-up, right?

X1: Yes, let's see.

X2: You want to go ahead with some questions or should I-

X1: Please go ahead and I will just find my-

X2: Okay. We have divided interview guides ...(0:03:11) just mentioning to couple of different steps, one being on a crowdsourcing campaigns, one being under structure of companies, one being procedure arrangements and the last one being about IP and culture. If you take a look at the specific crowdsourcing campaigns that you have been engaged with, how are they organized? Y: So you are going to hate this answer, but it depends. So giving an idea of the type of crowdsource campaigns that I have been involved in. I have been involved in everything from high level ideation, so we are taking a very fluffy topic and trying to kind of led the public to different portals, tackle a head on, thoughts have of cause been relatively easy, because the outputs are almost unknown, the inputs are very high level, so there is not a lot of process that needs to go into it, there is not a lot of organization that needs to go into it, other than the fact that we need to formalize, that the question which we want to ask the people to solve and try to formalize the scoring criteria for the ideas that come in. That is the one end of the spectrum, but then we have also done a fair amount of work where we actually are creating assets, so we are using crowdsourcing to build things and design things and code things and- And that requires a lot more organization and especially from a SMI perspective or I guess small business perspective. This is where they ... work mostly with those type of clients because those are the individuals that, let's say don't have these skill sets that is inside of their organization already. [5 min] So, the idea is that something that anyone can benefit from it from both, like you said, LEGO ... it is a smaller service, that you bring in outside thinking, but you actually execute work and use crowdsourcing as the execution body, is something that we worked a lot with even smaller firms as well, but that does require a fair amount of overhead work. But I guess a lot less overhead then hiring someone full-time onboarding them to project and then doing it that way. And we do it through three different ways, like three different incentive models. The first one being competitions, so similar way that you do in ideation you can do the same thing when you need to execute. The second one is collaboration, so we actually let the crowd tackle the question or the problem which we want to solve in, like a collaborate mode and actually produce the cohesive outputs together and then we do it through a distribution, so when we split up a task into smaller ones, than have individuals each complete a smaller piece and then we bring all that together. And the last one definitely adds a little bit more work to, but a lot of that is done by platforms. So, we or the client than actually have to do a lot of overhead for the distribution or the I guess piecing together, all the pieces that blend, because the platform do that automatically. So-

X2: You as a- How would you describe your own role in such a situation? Are you acting as a consultant to these companies then or-

Y: Both, so I would say we both done it internally, but we also done it so from projects, right. We become the clients and we crowdsource our own work. But also been points where we have used, we have been kind of advising clients on it. So I would say the entire spectrum.

X2: Is there some specific challenges where businesses can benefit particularly well with using crowdsourcing compared to regular way of structuring their work in companies?

Y: Yes, I would say, once again unfortunately, that depends on what the problem is. It is all about structuring the question that you are trying to answer and- Are you going to be able to gain anything from asking people outside of the organization, which is all that issue, right? That is the first question you should ask whether crowdsourcing is a good fit or not. So, it doesn't really matter what type of- Like what we are trying to do, is more ... of what type of problem that we are trying to solve. But the thing is, because of the existence of some of the different partners out there, you can basically do anything. Doesn't mean that anything is a good fit, because there are certain design problems that are not a good fit, but there are some problems are very good fit within the same domain. There are some ideas, even like high level ideas that you can solve a lot faster and quicker inside the organization than you can do outside. So, because you have that domain knowledge for example. So I would say unfortunately depends there as well.

X2: Not necessarily an unfortunate, just a wide range of ways of using it, I presume?

Y: Yes, I would say, it goes all the way from high level ideas to co-creating with the customers, co-creating with their employees, all the way to creating assets and developing tools, even. I have seen some organizations that have successfully manage to use crowdsourcing to augment the entire technology organization, which is very impressive.

X2: Is there any obvious places where you will see, is an ease succeed particularly well? Not necessarily to large scope co-operations, but just where they in themselves succeed well when they use the crowdsource?

Y: Yes, I think it is when you start with the smaller easier questions that is already tangible and that is easy to break down, so when you take those smaller problems, they are trying to tackle on a day-to-day basis and say hey, is there some other organization that can do this better than we can do it inside? And those are the ones that you can succeed with it first, you are not going to succeed with like let's solve world hunger like day one right, so take an example of just having someone clean up, like some data, right? Or industry ... (0:09:40) to ... or come up with innovative designs for a new dashboard and have some designers come up with that. Like those are the easy ones to tackle, it is not the big, like the ideation, which most people think, when they think crowdsourcing, it is actually much harder than doing the more executional type of work.

[10 min]

X2: Then I think also the literature actually backs you up on that the literature mentions that it is not

in the idea generation but in the latter part of the, what you call the value change here, it is not the ideal generation but the execution ...-

Y: Yes, that is what most people think, "they can get most out of it, but it is actually the bang for the bug is running a million-dollar challenge", might not generate challenge that much insights. But like a thousand ... design from a freelancer, that you don't have internally within the organization is going to generate a lot better and faster value for the organization.

X2: In this sense was there anything you found particular difficult when you work with crowdsourcing with SME's?

Y: It is their willingness to kind of risk something, where they think they are risking a lot more, but the way that a lot of these platforms are structured, they are actually relatively risk free, like yes sure, you pay for a challenge and you don't really know when you are going to get back, but a lot of them bake into their contract, bake in the idea of you don't have to pay for what you don't like, which means that it is actually a lot more risk free than even hiring someone just to part-time do your work. So being able to kind of showcase that to small organizations that are inherently(0:11:28) sometimes risk prone to bringing in talent is key. As soon as they understand that it is not the way of bringing people in your balance sheet, they are actually the fastest to adopt this type of work too. Because they realize that they don't have to hire ten extra people, they can actually do it ...(0:11:50).

X2: ... on the structural side, is there any way you would consider ... good way or ... structure themselves when working with crowdsources?

Y: I think it is- I don't know if there is a one answer for that- It totally depends on what type of business it is. If we take the more executional stuff, having someone that is well versed in this domain and comfortable and interacting way of a lot of different companies, because the way that you do this successful, is not to build your own crowd, is not trying to get answers to old entrepreneurs- It is about using existing start-ups and platforms out there that have already built a community built a platform that enables the community. And then use them to be to interact with an eco system of these hundreds and hundreds of start-ups out there, is key to success. And that is how we need to focus on this build a success from this. That is how we teach our clients about it too.

X2: So that means that you should basically expand on your network, this is not your immediate network that you are necessarily using? Perhaps you go out broad?

Y: Exactly. So the way that we define it at least, is crowdsourcing is not just the random group of people outside of the organization, it is actually executed through these existing platforms that are out there. So through literally ... (0:13:19) be seen some of the more popular ideation platforms, but also some of the more popular like distributing task platforms using those existing ones instead

of trying to build your own pipeline, is extremely important, especially in the beginning. And saying that you can build your own, like Starbucks did it, ... (0:13:37) did it, LEGO has a huge "generated content platform" where they use crowdsourcing in 15 different ways. Not saying that you should not do it then, but that is not where you should start.

X2: ...(0:13:56) campaigns and you actually simulate some kind of campaign here to use crowds. How do going in and look about the resources that you as a company have to put into it? Y: It depends on the size and complexity of the problem that we are trying to solve, it is a multi channel effort, where we are using multiple crowds to solve this problem in different steps, in different phases. Is this a one bang thing, will we just need one answer and then we are going to be able to take it internally and process it. Is that output going to be nice and clean and do we need to process it and do something before we can actually use it like- So unfortunately it also depends? X2: ... but in a sense of it depends where you are already telling us that okay, SME's they, it is not so much the idea generation it is more about some concrete problem solving that they should tackle. So if we go from that point, that we have a concrete problem, this needs to be tackled, how do you go about both the internal resources, but also like communication with the crowd? [15 min] Y: So once again, I think this is the reason why we even have this capability as a consultative firm, being able to structure that communication in an effective way understand what incentive lever to pull and to push and understand how to communicate with these different both the vendors themselves, but also the community when we are managing the project, we are managing the campaign, whatever you want to call it. You need someone who is comfortable doing that. So, I think for my research perspective, it is- I am not sure if I have a good answer to that, the fact that you need experience but, on the way, to get experience, is testing it out. So, start small and have someone like learn trough simple, smaller design, maybe some idea, challenges to see what they will get out and see what happens when they pull different levers and that that individual then becomes a champion and they can drive efforts to start tackling bigger problems internally. But it is important to have that one individual that is driving the engagement and understands the different models and the different ways that these different crowds interact and how- What incentivizes them. A designer on a design crowd might interact or might be incentivized by a lot more than just money then perhaps a company that is participating as part of a large ideation challenge on an ideation platform for a chemical company. So those should, very different things that interact differently.

X2: But there also seems to be that then you say that there is one person that needs to change ...(0:16:58), so there is some kind of anchor point there. Does that mean that the communications with the crowd goes by this guy or is it just like an internal champion?

Y: No, it is just an internal champion in the beginning. It is important to, we are not saying that all

crowd are supposed to one group, but it is important to make sure you have someone that understands the process with these different platforms. That might be a single person in the beginning, that might be multiple people after a while, but so that people internally within the organization feel comfortable, interacting with crowdsourcing in different ways, they need to have kind of an anchor point doesn't mean that they always have to go through that person. But I definitely think it is key in the beginning to have that anchor point.

X2: ...(0:17:46) also specifically for SME's?

Y: Yes, I would say that is true across all the organizations. You see that being done within marketing itself, we are seeing that individuals sit within their CTO organization, so technology-And it kind of depends on where the first ... (018:08) pops up, that is

X2: Could you describe to us maybe the culture that is needed in an innovation company that wants to engage in crowdsourcing again SMEs are of course our main focus here?

Y: Yes, it is being open-minded now to try new things and being rigorous in like the way that you do experiments, so making sure that you start small, that you don't like take a too big bite, because it is very easy to fail, especially with crowdsourcing. I mean, you probable heard of the Boaty McBoatface type of examples where an organization is ... and thought that they could tackle crowdsourcing head on, but didn't think about all these different fails that can happen. And you end up with the result that it is either just bad and like not worse than money you spent for it or it actually have a negative impact on the brand and the cooperation itself.

X2: And do you see any way that a lot of these companies, when you go crowdsourcing, then you can find the ability outside and you can have this in many companies, this problem about the "not invented here"-resistance. How do you sensitive using crowds within a company?

Y: I don't think there is an answer for that. It is one thing that we have been working a lot with. I guess we do have an answer, but I can't really share that with you, but there is this ways of structuring your internal incentive, I guess pay out within the organization in smart ways, that allows you to do more- [20 min]

That allows you to I guess incentivize, looking outside of the organization instead of inside, for solving problems. It is also tight to the big problem of how do you crowdsource internally? How do you use an organization of maybe hundred people and start using them smarter with the same type of incentive models that you would incentivize an external crowd? And it is all about being sure that your HR is on board, it is all making sure that you have an incentive model that allows you to solve problems with external agents. So it becomes kind of a gain ...(0:20:35) problem. X2: A lot of companies would already be at a certain stage with their culture and how they can insensitive people. If they make switch to crowdsourcing, that ... (0:20:55)?

Y: That is the problem of looking at it as doing crowdsourcing means you have to do

crowdsourcing across your entire organization, that is the way you shouldn't look at it. I think what I was saying earlier, was starting with experimentation and to showing that you can get incremental value by using external talents, like that is how you should start. And it is that whoever own that piece within the organization, if that is what's in the technology team, crowdsource a design, if that is what the new marketing team who went out and use the mobile work force to collect some data for a campaign. The idea there is that it needs to start small, it is important that it is works. That is how you both make a successful in a larger organization, but especially in a small one, where you can't invest two hundred million dollars to build like a lego, like content platform for you whatever, fifty million lego builders out there.

X2: If ...(0:21:57) obviously handled a lot of these processes already. When you started there, moving into crowdsourcing, working with companies, SME's; was there some things that you had not considered back in the beginning that you have learned along the way?

Y: Not sure if I understand the question?

X2: like you went into crowdsourcing at some point, it is kind of like this is how it is etcetera. How have you thoughts about crowdsourcing and how to use it in SME's changed over the course of your, carrier with crowdsourcing?

Y: I think the biggest one is ... actually studied in some of my course that you guys did back in college, that is how I kind of looped into the team, I was playing around with that from my start at ... (0:22:53). And I think my initial perception there is that the only thing we can do with crowdsourcing was ideation and that is like the best way of using it, because you want to tap into the entire network or wherever 3.4 billion people that connect to the internet. You want all of them to tackle your one question, that is now very different. I think my approach there, my understanding how it is and the way that it actually works, is that it is all about finding the right group of people outside of the organization for your niche problem. That being said, I guess what I am trying to say, is you can get the same type of result from that five very highly skilled people in the area that you are trying to solve the problem within, as you can get from two hundred randomly distributed people within like relatively close group. So it is all about that scale, like you not always going to get the same, better result from accessing a greater crowd. If that makes sense.

X2: Yes, that makes perfect sense. How do you find these five highly skilled?

Y: You do that through kind of a rigorous process of working with these different vendors. And when I say vendor, I mean like the actual crowdsourcing communities. If that is going to ...(0:24:18) who has access to all these amazing people, but they have access to, like what? 2.5 million, what developers ..., so how do you find the right people within that group to contribute to your challenge, your project? And it is actually find the right people within that, because there has been any social- Especially in a digital world, in any social graphs, there is going to be clicks and

distributions of people within that, especially when you start looking at larger social graphs. So being able to find those individuals who are driving connection and those people will then find a better niche group of people, because it is easier to communicate with those, it is easier to drive results. And that is truly the whole reason why you are trying to do crowdsourcing in the first place, like the reason why you want to do large scale ideation. [25 min]

It is not to get an idea from every single, although it is like 1.2 million people, it is about finding the right people within those 1.2 million to help contribute. And you do that through rigorous building of your own network and that what we have done within ...(0:25:21) for example. And that is what we have our clients do as well. It is to figure out how to do the work with these different crowds, to find niche crowd within them that can help solve the problems.

X2: I have two remaining questions that I think we can let you of the hook. The absorptive capacity, you obviously know what that is about ... in the organization?

Y: Yes.

X2: What is the success formula to crowdsource, not just coming up with a solution, but how to internalize it? How do you succeed?

Y: I can probably, that is where I spend a lot of my time on right now, I can probably spend two weeks running to workshops with you, because I am not- Literally, I wouldn't be able to explain it in two minutes unfortunately, because that is probably the hardest problem solved. It is also the most exciting part of the problem I think. Because it is easy to ask a bunch of people for solution, but how you are going to bring that into to your organization and actually realize it, that is part of like a bigger innovation agenda that I think most of the organizations today don't have. So this one answer is that there is not a short answer.

X2: Is there anything there that is particular difficult when you are talking about an SME?
Y: I think what they might- They are actually struggling with this last right bigger organization, because there are a smaller organization. I am not saying that they are used to - They are used to looking at outside ideas, because I think that is totally depended on the organization, but I think in-Once again, I don't think there is a short answer for this. I think for the smaller companies, with them to be able to have a- If they have a board, if they have an agile organization that are open to innovation and they are open to new ideas, they are not going to have a problem being in crowdsourcing. They are not going to have a problem of- If they have like an agile development structure, if they have a team that is focused on taking ideas internally already and realizing them, than that is not going to be an issue. It doesn't matter if that idea comes from outside or inside.
X2: Last one here is what do you have to consider particularly as an SME when you are talking about IP rights and information sharing in general?

Y: Yes, I would say that is also where I spend a lot of my time with clients and that would also take

a while to explain. ...(0:28:05) it is all about making sure that you have exactly the same type of structures in place as if you were engaged and the other third party contractor or freelancer- And making sure that the crowds you are working with have the legal structures in place to make sure that IP that the crowd is generating, is something that you will actually own in the end. Doing the due diligence....

X2: Is there any place there to where it is more difficult like... you spoke about making competition ... kind of a joint venture efforts, closed cooperations etcetera. Is it harder in any of them than others?

Y: I would say it is not about the way that the incentives are structured or the way that they do work. It is more around where the work is being done and where ...(0:29:03). Because you are mostly engaging with an individual or individuals that might not inherit the same legal restrictions within the same country or same borders that you are. That is what it depends on, that is what is asking flexity. Like if you are developing something and get ideas or assets from people from all around world, making sure that the people that you are engaging with understand that they are ...(0:29:31) to the same loss that you like put forwards in that challenge, that is the big struggle.

X2: I think for now ...(0:29:44)-

Y: Yes, I have to head out anyway.

X1: Yes, I think in respect of your time- Maybe if we may contact you for follow up interview over the next couple of weeks-

Y: Yes.

X1: That could be an option, would be very nice. [30 min]

X2: Also if you have any kind of presentation or material that you are able to share, that will of course always be interesting for us.

Y: Yes, I can see if I have something. There is a lot of this that I can't share, but the stuff that I just told you guys now, is- I wouldn't say it is common knowledge, but if you spend a lot time in this area, it is not like it is brain surgery, it is when you start getting in those two or three different domains that I said that requires more time, that is when it becomes complexing, I can't share that much over there.

X2: Also just for the record, everything here that we have been talking about, is of course being treated private and confidential.

Y: That is good. So how many have you guys talked to so far, just out of curiosity?

X2: So right now, we have spoken with the first three companies, we are speaking now with you ...(0:31:06) one industry expert and probably two more. And then we will probably ... some companies just a ... after which to- Then we have like your answers and the other industry experts answers fresh in our minds and then that changes something to our-

X1: Fredrik, it is not super easy to find SME's that have been doing crowdsourcing in our geographical area, being neighboring countries. Have you anybody in mind who you think would be open for a short interview?

Y: Sure, any client staff. But I know there is- If you honestly and you have probably done this, but if you Google like crowdsourcing, I forget what it is called, but there is an organization actually in Denmark that focuses on crowdsourcing. I know there is a bunch of extra consultants there and I wouldn't say that there are non-profit, definitely not, I think they are more like a ... (0:32:25) of like independent consultants for all focus on teaching about innovation and crowdsourcing. They are able to point you in more directions. There is just too much like confidentiality that I can't share on. X1: We are quite well linked with them and they are the ones who have point-

9.8 Appendix 8 - Interview Matrix

Companyl Category	Campaign	Structural	Procedural	Ы	Culture	Leadership	Large vs. Small	Platforms
Н 2 0	Start with a problem Design kinding. Design kinding. Ges generation Open end campaigne Ideas for later use Ideas for later use Change of direction Succesful marketing campaign - Incustives by money - In the making" meeting with	- Benefits of beeing inside the machine room - Benefits of working with indextry experts - Use to work w Outside Company DNA - Storage of crowd gentated ideas - One anchor point	- Used SoMe to get their customers (rowd) opphinon on campaing really a specific when framing the campaign that the campaign the campaign that the campaign tha	- No time spend on IP concerns	- Move from incremental to activate a varieties - Embraring external inputs*** - " In Expression external inputs** - " In Expression	Hand to focus on term strategy Four days spend per campaign - Permission to fail	- Lack of manpower - Agility by beeing small - Flat organization allows ideas to travel	- VIA used with succes Revising known - Revising known - Mindest of your people generated novel ideaz
АМОУ	- Acces to great people - Bad startingpoint, broad compoign - Ongoing dislogs - Bad allocation of time - Bad allocation of time - Misced "S minut" pitches to cought in ideas - Ambition to create own communition to create own communities - Poor communication w, platform - Easy to misc	- Owner make the briefs - Small organization - Use crowd as a flexible work force - Time is a limiting factor - Hire more people, chickenkeg - Framing can become a constraint for creativity	- Lack of preparation - Lack of preparation - Lack of analysis in the beginning - Missing coordination with - Palations, about output - capecial - Low abospritive especity - Fick your crowd carefully(E&D)	- Difficult to protect when sengaging crowds - Pre-study is key, to get the guidelines	Hands on - Innovation inbedded from the beganning - Daily incremental innovations - Lack of tech	- Ambidecterity is very difficult	- Time is a constraint - Small firms to benefits the most	- 33designs had easy interaction with crowd blatform selection takes CS knowledge - the right platform for the right job
SORENSEN Leather	Broad problem - Broad problem - Idea generation phase - Using competitions - Using competitions from - Review executal crowd - Suprishingly time-concuming a right graphed - Precise communication is key - Daily improvements, hercemental innovation - Co-Creation w, arch	chnical oot iteets	- Co-Creation - Anchor point for communication - First evaluating post- compalgin if it is that direction they won to follow - Believes in new cooperations - Spend more time than you think	- Working with trust - Openeese in a limited sized crowd	The organization can learn opponence of popenence of the	Owner is leader in all populitions. Change management ?* Internal communication a tool inclusion in changes Inclusion in changes Change come from the top Need for inputcladvicory board or inputcladvicory	- Flexibility is key	Workshops - Technical inowledge book leaker is needed - Choese crowd of freelancers - Interacted with crowd
Lars Bo Jeppesen	Solvers from outside industry - Early start very costly - 4 steps - Good preparation needed - Attack the crowd - Establish incentives - Select the winner - Lack of - L	- Move away from internal R&D - Solvers from outside industries - Framework and boundaries - Access to expabilities - TOP Management support - Capacity to plan long term	- Usage of platforms - Complimentary expertise in small frims - Low hanging Fruits	- Small frims plays on secrecy - Estier to engage crowd if you are formally protected by IP rights	- 5 × 3	- Top Management mandate important - Villing to recognise external solvinion - Permission to fail - Steep learning curve*	- From big fitnes to smaller fitnes to smaller fitnes - Basefits of being known - Basefits of being known - Hard Essy to find crowd - Capital requirements	- Intermediaties - To match requiremental resource - Institute of the service - Interpretation
Fredrik	Faster result with small freeshore. Both internal and external compassion. It all about atructuring your questions the hardest Technical solutions exist to absorb than idea generations. Split the problem into various steps. Potential third party involvement/Consultants - splitting and particularity involvement/Consultants - splitting and particularity.	- Panning Crowdsourcing comparignt stakes internal resources - Using Crowdsourcing as execution tool*** - Initially Structuring the problem - The right people could also solve your challenge(Pyramid search)*** - Absorptive capacity is one of main problems main problems	- Consultant are cheeper than hing full time staff - Reathle organ - Competitions - Competitions - Distribution - Distribution - Distribution - Multiple outputs, small to big - Start small - Start small -	Important to straighten out who contractually own the rights of the straight of organization increasing of organization internally of organization	- Domain knowledge brings - Stater solution - Learning curve - Afraid of the unknown - Afraid of the unknown - Wake internal CS champions - Create confidence in CS - Create confidence in CS	Stakeholder management - Take responsibility of the CS nagagement - Focused affort is key	(No topica discussed)	- Don't build your own platform as a start hulliple engagements with crowds; Coordoouscing, Co-Creation to change Core appects - Leverage on existing communities - Correcting communities - Correcting communities - Correcting communities - Correcting communities - Leverage on existing - Leverage on

9.9 Appendix 9 - Section of Pattern recognition Matrix

Companyl Category	Campaign	Structural	Procedural	d	Culture	Leadership	Large vs. Small	Platforms
Н20	Start with a problem - Design thinking" - Idea generation (1) - Open one campaigns (12) - Ideas for later use (1) - Change of direction - Succeediul marketing campaign (14) - Chenstries by way - "In the making" meeting with	- Benefite of beeing inside the machine room machine room - Benefite of working with inductor experts (5) - Use to work w Use to work w Storage of crowd genrated - Storage of crowd genrated - One andor point (1) is	- Used SoMe to get their customers/crowd) oppinion on compaining result Bes specific when framing the compaign to the compaign - How to incooperate - Lack of implementation arthurchms - They include PR, to keep - They include PR, to keep people motivated (S)	- No time spend on IP concerns	- Move from incremental to radical (7) - Embraring external inpute*** - I'le govern back*** culture takes a long time to build, and can be deartoped in weeks (8)	Hard to focus on term strategy (7) Fours days spend per campaign - Permission to fail (8)	- Lock of manpower (6) - Agility by beeing small - Flst organisation allows ideas to travel	- VIA used with succes - Reusing known platforms - Mindset of your people generated novel ideas
АМОУ	P 9 2 2	Se vork	he n with t c scity (6)	- Difficult to protect when suggisting crowde (3) - Pre-study is key, to get the guidelines (2)	- Hands on - Innovation imbedded from the beginning - Daily incremental innovations (7) - Lack of tech	- Ambidoxterity is very difficult (8)	Time is a constraint (6) Small firms to benefite the most	- 33 designs had easy interaction with crowd interaction with crowd interaction rakes CS knowledge - the right platform for the right job (10)
SORENSEN Leather	- Broad problem - Idea generation phase (1) - External compenence - Uning compenence - Uning compenence - Reuse successful crowd (14) - Surprisingly time-consuming (3) - Precise communication is key (12)	-Appealing with flexible organization (4) -Alked for external technical flown how (5) -The organization is not engaged -The organization in the regard or the configuration of the configuration with the conf	t- direction perations in you		learn bout in i push, cive (7)	- ©	- Floxibility is key (4)	- Workshops - Technical knowledge about leather is needed (5) - Chosen crowd of freelancers - Interacted with crowd
Lars Bo Jeppesen	- Solvers from outside industry - Early start very costly - 4 steps - Good preparation needed (2) - Attact the crowd - Earblish incentives - Select the winner - Lack of	- Move away from internal R&D - Move away from outside - Stamework and boundaries - Framework and boundaries - Access to capabilities - TOP Management support - Capacity to plan long term	Upage of platforms -Complimentary expertise in small firms -Low hanging Fruits (14)	-Small firms plays on secrecy (3) - Easier to engage crowd if you are formally protected by IP rights	- 5 × c 3	-Top Management mandate important (8)	From big firms to smaller firms to firms to firms to firms to the capture of being known - Benefits of being known - Lack of capacity (6) - Lack for capacity (6) + HaddEage to find crowd - Capital requirements	Intermediaries To match requirementatrecources Platform concuttants help, but has a high cost (10)
Fredrik	- Factor recult with small freedance - Both internal and external comparigne - Its all about structuring your questions? - Its all about structuring your questions? - Its all about structuring sour comparignes of the hardes (1) - Technical solutions assist to about than idea generations (14) - Technical solutions assist to about than idea generations (14) - Split the problem into various etcps - Potential third party involvements.	Famining Crowd-courcing campaigns takes internal recoursed. - Using Crowd-courcing as execution tool*** - Initially Structuring the problem. - The right people could also colve your challenge(Pyramid search)*** - Absorptive capacity is one of main problems (6)	Consultant are cheaper than hims full time staff. Rexible hims of the staff of the	Important to straighten out rights rights - Legal regimes across boarders boarders - Legal issues are the same, - Legal issues are the same, whether you CS external or internally of organization	Domain knowledge brings Steare solution (10) 	Stakeholder management - Take responsibility of the CS nogagement - Focused effort is key (2)	(No topics discussed)	- Don't build your own platform as a start - Multiple engagements with crowds; Crowdcourcing, Co- Creation to change Core aspects - Leverage on existing communities (10) - Extrincic, Money, 3rd party - Intrincic, Fame in

9.10 Appendix 10 - Section of secondary non-academical data Matrix

Companyl Category	Campaign	Structural	Procedural	ll.	Culture	Leadership	Large vs. Small	Platforms
Thomsen, D., 2017, Wonderful Media	I) Build Products for your customer, 2) Rough prototypes often spark richer conversation than fully realized designs	Rerative Prototyping	1) Human Centric 2) invove customers early		Design thinking 2) No good 1 ides comes from just on the sperson. It's about the quility of it the ides an success of the team.	I)To stay Innovative, you need to stay inspired. 2) When new ideas arises, it's the team's idea, not an individual's		
Hoehn, B., 2016, Innovation Management	1) 'Using Customer base as crowd and use the crowd as your focus group						Small companies do not have the luxury of trying diffrent products and services out on thier customers	
Jaruzelski, B., Cesare M., 2011, Forbes	Successful innovators focus on that matters most rather than spreading their effort and resources on capabilities that are less critical	f) Refocus on its base and appecifically targeted consumers	Coordinate across the enter orgalization for an effective launch					
DeBord, M., 2016, Business Insider			Lissen to customer feedback and execute on it					
Hove, J., 2006, Wired		The labor ian't always free, but it costs a lot less than paying traditional employees. It's not outcourcing it is crowdsourcing.						
Yeomans, M., 2013, The Guardian	Of the contropiecs of the project is a \$10m (65.0m) project is a \$10m (65.0m) Ack own community for help	But just as the value of user- generated content becomes more powerful when curated and packaged by professional ediflors, convedignmental ideas and action increase in effectiveness when shaped around an identifiable business goal.	For crowdsourcing to be an effective part of social business, the crowd needs to feel that he views (so assidnously counted by the corporation) turn into setion.		I) Companies like Starbucks and Della world or great by the horse to demonstrate how the vision of the crowd can have vision of the crowd can have a positive steel in connecting customer relations to business planning and research and devolopment.			Uniferer also runs its Open Innovation are authoristion platform, (operated by Yet2, a collaboration platform has also works with Ankeuser-Busch) where it invites outside potential partners to help mack its also works with anythers to help mack its list of sustainability.
Sørensen Læder, Homepage					Leather is a playground for creative minds with the urge to experiment			
Deloitte, Homepage	I) disconnect between what crowds can do and what businesses need 2). There are many restone people many restone people participate in the crowd, while money is often important, there are many other non-ready and other non-ready productions, and other non-ready predictives that drive participation as well.	- Joon into a problem or opportunity "Bresk the problem down, "Set up and Manage the project" -Integrate outputs		hich crowd plotforms are right for your need and how to combine output from multiple crowdz to managing confidential data and other ricke,				1) As a result of this marketybec evolution, the number of coordinates available to large organisations has explosed, moving from exploded, moving from fleesy generation to executing actual morth exceptions.
H20, Homepage	This focus stated with our collsboardow with the Darish designer Stitle Gogy, who made the very successful reducing not us madels and has been followed by many other collsbo with recognised designers							
Armstrong, 2018, feex.com								Platforms enable faster innovation
Claudia, 2018, Crowdsourcingblog.de			Short innovation cycles					- Short time-2-market - market driven by hihg level of connectednes
Hoehn, No date, innovationmanagement .se	CS as tool to improve efficiency	-Appealing with flexible workforce - CS to maximize resources, contact to consumers, enabler design thinking						