

# **Learning in Networks**

Exploring sustainable strategies for the retail network in Vodskov and Aalborg Municipality



Hanne Borris Mathiesen & Simon Lyhne Andersen Environmental Management & Sustainability Science - Master Thesis - 2018

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#### Title:

Learning in Networks: Exploring sustainable strategies for the retail network in Vodskov and Aalborg Municipality

**Theme:** Master Thesis

**Project Period:** Spring Semester 2018

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Copies: 2

Page Numbers: 74

**Date of Completion:** June 8, 2018

#### Synopsis:

This research deals with the implementation of the sustainable development initiative *Netværk for Grøn Detail*, in the business network of Vodskov, through an exploration of current practices and learning in networks.

**Problem Statement:** Aalborg Municipality has established the Netværk for Grøn Detail to increase the sustainable development of businesses in the municipality, with Vodskov Erhvervsforening considered a front-runner. However, the current status and strategy of the initiative is unclear to the businesses of Vodskov Erhvervsforening. An exploration of current perceptions and strategic options is needed, for the initiative to flourish.

**Theory:** Etienne Wenger's concept of Communities of Practice was utilized as the theoretical framework.

**Methods:** The main methods used were literature studies, semi-structured interviews, and workshop activities.

**Results:** Vodskov Erhvervsforening is a strong network, with a high degree of connectivity and willingness to change, which is advantageous in sustainable development initiatives. Business networks, such as VE, can increase knowledge-sharing, innovation and sustainable development through Wenger's principles, as a framework for understanding learning in networks.

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## Preface

This master thesis has been written by two students on the master programme Environmental Management and Sustainability Science, at Aalborg University. The report has been written in the spring of 2018.

The purpose of this research has been to examine the implementation of the sustainable development initiative, Netværk For Grøn Detail, in the business network of Vodskov, and to explore how networks as arenas of learning and knowledge-sharing can be utilized in the development of strategic elements for innovation and sustainable development.

The research has been conducted through a research design rooted in cultural anthropology and phenomenology, with the use of qualitative methods for gathering empirical data. The theoretical framework of the research has been Wenger's concept of Communities of Practice, which has been utilized as a tool for learning in networks.

We would like to thank Aalborg Municipality and Netværk for Grøn Detail for the collaboration, and especially Martin Quientero Hansen for helping us with planning aspects and the initial phases of our research.

In addition, we would like to thank the businesses of Vodskov that have participated in the interviews and workshop activities. We could not have done this research without them and the hospitality they have shown us.

Finally, we would like to thank our supervisor, Arne Remmen, for his excellent supervision. He has given us inspirational and helpful guidance, as well as constructive criticism throughout the entire project.

Aalborg University, June 8, 2018

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## **Glossary and Abbreviations**

This page of the report contains a glossary for words used in the report, as well as an outline of the abbreviations of words.

#### Glossary

#### **Green Transitions**:

The Danish term for initiatives around the world - within both the public and private sector - with the purpose of preventing, reducing or postponing the repercussions of climate change.

#### Informants:

This term is to be understood in an anthropological and sociological sense. An informant is a cultural native, whom possesses knowledge that can contribute to a qualitative study.

#### Knowledge Management:

This term refers to the multi-disciplined approach of achieving organizational objectives by making the best use of knowledge. It is focused on processes such as acquiring, creating and sharing knowledge (Girard and Girard, 2015).

#### Life-world:

This concept is inspired by the philosopher and sociologist, Jürgen Habermas, who believes that the subjective world that we live in comprises of people's relations, their individual identities and culture, which is all based on verbal communication.

#### Techno-Anthropology:

The scientific field that combines competences in carrying out anthropological studies of technoscience cultures with technological insight.

#### Vodskov Erhvervsforening:

The Danish name for the business organization of Vodskov. The organization has 104 members.

#### Abbreviations

CGO: Center for Grøn Omstilling
CoP: Community of Practice. When applied in plural, the abbreviation used is CoPs.
NGD: Netværk for Grøn Detail
IS: Industrial Symbiosis
VE: Vodskov Erhvervsforening

## Introduction

This project began as an assignment to develop a mobile application for Netværk for Grøn Detail, in collaboration with Aalborg Municipality. The municipality was looking for a way to inform its citizens of the sustainable development initiative that is Netværk for Grøn Detail, and hoped to create a platform for connectivity between citizens and retail businesses. The municipality suggested that we used the town of Vodskov as our starting point, since they are the community spearheading the initiative and are farthest along in regards to sustainable development. The municipality defined the purpose and their expectations for the application, in this way:

"We hope that consumers will get more insights into the green products and services available in the municipality, and that the retailers will benefit from the insights the consumers gain."

- Martin Quintero Hansen, Consultant at Netværk for Grøn Detail

The municipality had several ideas for the functions included in the application, and from those ideas we conceptualized a research design for the app development, based on principles of cocreation and user-driven innovation. After the first month of research and design, we came to the stage of investigating the user needs, and we set up interviews with retail businesses in Vodskov Erhvervsforening. This is where our research changed. Through the interviews, we quickly discovered that the sustainable development initiative was not as deeply ingrained in the network as we expected. Most of the informants could not define any functions for the application, since the need for it was unclear. Others had several ideas, but none of which was based on existing needs. For example, one informant suggested that it could be used to facilitate a car-sharing concept, which was still on the drawing board.

As techno-anthropologists, we consider technologies to be tools for problem-solving, and thus you must always keep the problem in mind when developing new technologies. So what is the problem that the mobile application should solve? According to the municipality, it was a lack of information on sustainable development initiatives. But you cannot communicate what is not yet there. This dilemma made us rethink our research completely, since the implementation of a mobile application would seem to skip a step (or two).

We decided to explore the missing steps, by examining the current status and future strategies of the sustainable development initiative in the business network of Vodskov Erhvervsforening. Our research thus became a hands-on experience with environmental management and the complex nature of sustainable development.

"We must go wherever the wind of the argument carries us."

- Socrates by Plato, 380 BC.

## **Problem Analysis**

The United Nations (UN) states that *"the integration of environmental sustainability with economic growth and welfare by decoupling environmental degradation from economic growth"* is one of the greatest challenges the world is currently facing (The United Nations Environment Programme, 2018). If the global population reaches 9.6 billion in 2050, it will require the equivalent of approximately three planets to provide the natural resources necessary to sustain our current ways of living (Ibid.). As a response to the global situation, the UN has formulated 17 Sustainable Development Goals and 169 associated targets, where sustainable consumption and production is one of the goals (Ibid).

Today, 54% of the world's population lives in urban areas. In the next few decades, urbanization will increase and significant infrastructure developments will be made (The World Bank, 2017). Currently, cities are huge aggregators of materials and nutrients, with 75% of natural resource consumption, 50% of global waste production, and 60-80% of greenhouse gas emissions (Ibid.). As more people live in cities, the demand for natural resources grow in urban areas. To change the current global course, we must find ways to stay within the biophysical boundaries of the planet (The United Nations Environment Programme, 2018). Even though cities are large aggregators of materials and nutrients, they can act as central drivers for global sustainable development, due to their high concentration of resources, capital, data, and talent over a small geographic territory (The World Bank, 2017). In cities, the retail sector plays an important role in the preservation of resources. Retailers are positioned in the center of the product chain and function as links between consumers and suppliers, conveying products and services from production to consumption. This position enables retailers to make demands to suppliers and decide the assortment of products and services available for consumers, which is an advantageous position in regards to sustainable development (Miljøstyrelsen, 2018).

Globally, there are several sustainable development initiatives being created and implemented on different societal levels, in order to take advantage of the retail sector's influence on sustainable development. However, creating transitions and change of practices is difficult in a sector with many stakeholders and complexities, and where the foundation is build on the current and unsustainable consumption patterns of mankind. This is the problem area of our research; retailers' opportunities with sustainable development and their perceptions of it.

"Sustainability is not a destination but rather a journey - it is not a well-defined, ultimate goal, but rather a process with an increasing understanding of the problems, their cause and necessary solutions"

(Remmen and Thrane, 2007)

Our research has been carried out in collaboration with the municipality's Center for Grøn Omstilling, responsible for the sustainable development initiative Netværk for Grøn Detail. The municipality has launched the initiative with the intent of increasing sustainable development whilst boosting the turnover of the retail sector in the municipality of Aalborg. In the following sections, we will analyze the problem area, and highlight examples of sustainable development initiatives in Denmark.

Firstly, we will define the concept of green transitions in Denmark, and explore examples of government-supported initiatives that in various ways aim to facilitate sustainable development. In addition to this, we will explore Aalborg Municipality's sustainability strategy and business community, with a focus on Netværk for Grøn Detail and the community of Vodskov.

Furthermore, we will widen the scope of our problem analysis, and explore three examples of sustainable development initiatives with the aim of facilitating change in current practices. The examples will be used to identify central themes in such initiatives, and to use those themes as guidelines for our further research.

Finally, we will summarize the findings of the problem analysis, and establish the foundation for the problem statement and research questions of our research, which are presented in the following chapter.

#### 3.1 Green Transition in Denmark

In this section, we present government-supported initiatives that contain elements reflecting the goal of the national strategy for sustainable development. *Green Transition* is the Danish term for actions related to the elimination, limitation or postponing of climate change consequences, coined in 2013 (in Danish: *Grøn omstilling*) (Information, 2013).

The Danish government refers to the Paris Agreement within the United Nations Framework Convention on Climate Change (UNFCCC) (UNFCCC, 2018):

"Therefore, we must pursue an ambitious green transition in a sustainable and efficient way, where consideration for Danish jobs and competitiveness goes hand in hand with environmental and climate considerations. The Danish example is only worth following for other countries whose conversion is cost-effective and supports growth, competitiveness and employment."

(Regeringen, 2018)

According to the government, the transition must support economic growth and create jobs. On a municipal level, policies on climate change mitigation have been formulated, and in 2013, 72% of Danish municipalities had established climate change action plans (Hoff and Strobel, 2013). These action plans have laid grounds for several initiatives to further sustainable development, such as the Grøn Butik initiative.

#### **Grøn Butik**

Grøn Butik was a national initiative aimed towards optimizing the daily operations of retail stores. The initiative focused on improving the use of electricity, heat, water, chemicals, waste and transportation, and stores would receive a certification if they fulfilled specific demands in these areas ENTJ. Approximately ten municipalities were involved at the peak of the initiative's existence. However, through the years, numerous municipalities abandoned the initiative, leaving only Kolding and Aalborg as the two remaining municipalities. As a result of this, the main actor of the initiative, EnergiTjenesten, withdrew from their participation, which lead to Kolding withdrawing as well. With only Aalborg remaining, Grøn Butik failed to maintain sufficient support, and its original configuration ceased to exist.

One of the main reasons for the abandonment, might be found in the execution of the initiative. The initial focus encompassed several environmental aspects, but EnergiTjenesten primarily focused on reducing energy consumption in the stores, which thus narrowed the approach to sustainable development, according to Aalborg Municipality, who said the following on the matter:

"The focus was on stores making energy improvements, which was a very 90s approach. As the years went by and the concept did not develop, many of the municipalities chose to leave the project."

- Martin Quintero Hansen, Consultant at Netværk for Grøn Detail

In spite of this, Aalborg Municipality still saw potential in the initiative and decided to continue and expand upon it, since it had been popular among retailers. The municipality wanted to redesign the concept, adding more environmental parameters, and emphasizing collaborations and networking. The outcome of this development led to the initiative Netværk for Grøn Detail, which is elaborated upon in section 3.1.2.

#### 3.1.1 Industrial Symbioses

Similar to initiating sustainable practices in the retail sector, the concept of industrial symbiosis (IS) within the industrial sector support environmental sustainability and economic growth (Sacchi and Remmen, 2017). IS is defined as a series of bilateral collaborations between industries as a response to environmental and regulatory changes in an effort to avoid waste disposal costs, which mostly involve the reuse of water, waste, and the sharing of infrastructures (Ibid.). A prime example is Kalundborg Symbiosis in Denmark, where a partnership between eight private and public companies, including Kalundborg municipality, have utilized residues as resources among the companies since 1972 (Kalundborg Symbiose, 2018). The Kalundborg Symbiosis is illustrated in figure 3.1.1.

IS has traditionally been centered around environmental and economic performance. However, in recent years the social and organizational driving forces of IS have gained attention from experts. Neglecting social cohesion and having an inadequate organization may prevent IS initiatives from reaching a mature and self-sustainable stage (Sacchi and Remmen, 2017).

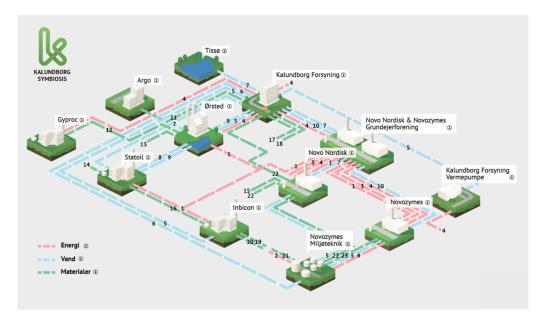


Image 3.1: Kalundborg Symbiosis (Kalundborg Symbiose, 2018)

Social interactions can lead to trust, communication, and mental proximity, and knowledgesharing and common understanding builds trust as well (Sacchi and Remmen, 2017). Close and social relationships are favorable when sharing vital information about activities and performances of an organization, and trust and mental proximity ease information exchanges between actors (Ibid.). As illustrated in figure 3.2, the social sphere is embedded with an organizational and physical sphere. In Kalundborg, physical proximity between companies has led to social interactions and "mental proximity" (Ibid.). However, the management functions of a growing number of companies tend to be located away from the production sites, which may inhibit social interactions between the managers. This is considered a potential obstacle to intimacy, trust, and the exchange of ideas (Ibid.).

"Social interactions are key mechanisms when developing common interests, trust, and commitment between the members of a network."

#### (Sacchi and Remmen, 2017)

To summarize, a strong social sphere is a key aspect for a symbiosis' existence and development, which underlies the importance of acknowledging the social dimension in collaborative business networks. The point of collaborating in networks as a means of improving sustainable practices, was echoed in Aalborg Municipality's improved Grøn Butik initiative. The municipality is focused on gathering businesses around sustainable development, to increase the impact of the initiatives.

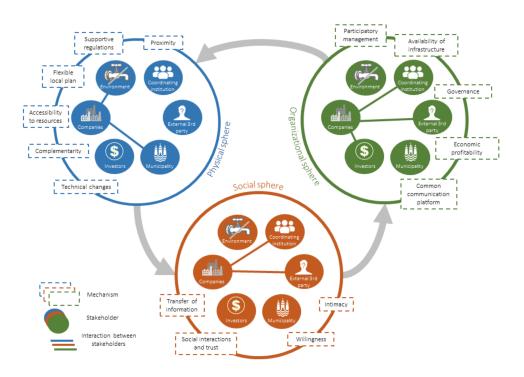


Figure 3.2: The social, organizational and physical dimensions of industrial symbioses (Sacchi and Remmen, 2017).

#### 3.1.2 Aalborg Municipality

In this section, we focus on sustainable development in Aalborg Municipality and on the efforts made in its retail sector. Aalborg Municipality is in the process of developing sustainable initiatives to drive the green transition forward. It is the third largest municipality in Denmark, with a population of 211.937 inhabitants in 2017. The current municipality was formed in 2006 and belongs to the North Jutland Region of Denmark.

#### Aalborg Municipality's Efforts in Sustainable Development

There is a long history of sustainable practices and initiatives attached to the municipality, with the Aalborg Charter and the Aalborg Commitments being the most notable.

"Aalborg is world-renowned for our sustainability work. We even have two documents on the topic that bear our name, namely the Aalborg Charter and the Aalborg Commitments."

- Anders Du Mont-Thygesen, Project Lead at Center for Grøn Omstilling.

The Aalborg Charter and the Aalborg Commitments are initiatives developed and supported by the global governance network ICLEI – Local Governments for Sustainability, and are meant to provide a framework for promoting and accelerating local actions on sustainable development (The Sustainable Cities Platform, 2018). So far, over 700 cities and towns in more than 40 countries have signed the commitments (Ibid). Both initiatives are inspired by the UN Environmental Action Programme, 'Towards Sustainability'. The Charter was established in 1994 at the first European Conference on Sustainable Cities & Towns, in Aalborg. It was considered the European response to the UN Rio de Janeiro Earth Summit held in 1992 (Center for Grøn Omstilling,

2018a). The fourth European Conference on Sustainable Cities & Towns was also held in Aalborg, in 2004, with the Aalborg Commitments as the main outcome. The Commitments are meant to be used at the local level to articulate how to embed sustainability across municipality sectors (Ibid.).

"Aalborg Municipality must be a sustainable and SMART municipality, based on environmental, social and economic sustainability. We must consider the circular economy, where resources are optimally utilized by thinking about circularity and waste minimizing."

- Lasse P. N. Olsen. Councilman at the Department of Environment and Energy.

In 2016, Aalborg Municipality presented its strategy for sustainable development for the period 2016-2020. It specifies the visions and strategies for the promotion of environmentally sustainable change, intended to benefit citizens, the business community, and the environment. The strategy sets a framework for the municipality's other planning and regulatory procedures in the environmental management area, as well as guidelines for Aalborg Energy Group and Aalborg Water Group's strategies for sustainable development (Center for Grøn Omstilling, 2018b).



Image 3.3: Aalborg Municipality's logo (in Danish).

#### Sustainable Development in Retail

In relation to sustainable development in the business sector, the municipality's sustainability strategy urges the importance of a supportive and motivating common green effort, to establish Aalborg Municipality as a national leader in sustainable development and circular economy (Aalborg Kommune, 2017).

In 2017, the retail sector in the municipality had 910 stores, with 79 of them requiring significant space, for instance Bilka, IKEA, Bauhaus and Biltema. The combined number of retail stores decreased by 7% from 2008 to 2017, where especially a decline in grocery stores has added to the decrease. Aside from Aalborg's City Syd seeing an increase in retail stores, the decrease has been significant both in the city center and in the rest of the municipality. Even though e-commerce is expected to take a large market share from retailers in the coming years, the municipality is still optimistic about the continued existence of business communities in Aalborg and the hinterlands (Aalborg Kommune, 2018a).

#### Netværk for Grøn Detail

The Center for Grøn Omstilling (CGO) facilitates all municipal projects aimed towards sustainability, including Netværk for Grøn Detail, based on the former Grøn Butik initiative, mentioned in section 3.1. The purpose of the initiative is to actively strengthen the retailers' environmental profile in relation to energy, water, heat, products, waste, communication, supply, cleaning, etc. Members are offered in-store screenings (see A.1), where consultants asses the opportunities for making sustainable improvements. In addition to this, the stores can participate in network meetings, with opportunities for collaborations, knowledge-sharing, and gaining inspiration for sustainable development across industries (Aalborg Kommune, 2018b). A major difference from the original concept is the focus on collaborations within the network. Similar to the networks in industrial symbioses, businesses are encouraged to utilize each other as resources through collaborations.



Image 3.4: Netværk for Grøn Detail's logo.

In an interview with Martin Quintero Hansen from the network, we further established that the aim of the network is to develop sustainable business strategies and practices. Hansen said the following:

"We would like to help and support them (the retail stores) in becoming greener. We are a significant part of the network as project managers and sounding boards, whom can lead and guide them in the right direction."

- Martin Quintero Hansen, Consultant at Netværk for Grøn Detail

During initial meetings with the municipality, that were meant to settle our research scope, the community of Vodskov was promoted as the front-runner in sustainable development in retail in the Aalborg area, being a role model for other businesses in the network. According to the municipality, the community is already committed to many aspects of developing sustainable business practices, and is ahead of other business communities.

#### 3.2 Vodskov

Aalborg Municipality is focused on growth in the area of Vodskov, and states the following in a recently published proposal for urban development:

"Citizenship is a prerequisite for creating a living city. It is therefore important that the citizens of Vodskov feel a shared responsibility for lifting the city."

(By- og Landskabsforvaltningen, 2017)

Vodskov has been presented by the municipality as the starting point for the new NGD initiative, since it possesses an existing business network with a strong embeddedness in the community. Vodskov is located approximately 11 kilometres northeast of the city of Aalborg and is the fifth largest urban area in the municipality. It has a population size of 4.292 inhabitants, and 128 local businesses. As mentioned in the beginning of this chapter, the main characteristic of cities are high concentrations of resources, data and talent across a small geographical area (Ellen MacArthur Foundation, 2017). This proximity enables networking and sharing, which is beneficial in sustainable business development.



Photo 3.5: Aerial photograph of Vodskov.

As of June 2018, 20 shops in Vodskov have been screened by the municipality, and at a public event in Vodskov the city was officially named the front-runner of sustainable development in Aalborg Municipality.

"Vodskov shall be part of showing the rest of the municipality a green road ahead, because you (the community) are already in the process of realizing the municipality's campaign and making us all greener."

- Lasse P. N. Olsen. Councilman at the Department of Environment and Energy.

According to the municipality, Vodskov is on track in regards to sustainable development. However, through our initial fieldwork and interviews with businesses in Vodskov, we found a mismatch between the municipality's profiling of the community and our findings. In the initial interviews, one informant expressed uncertainty about the strategy of the NGD initiative in Vodskov:

"Isn't the plan for the project that we start by making us (the businesses) greener, and then later the citizens will become green as well?"

Another informant lacked insights into the concept of NGD, when asked what she knew about the network, she replied:

"Not a whole lot. There were some gentlemen (consultants from NGD) here in regards to electricity, and how we could decrease it, but we are actually doing pretty well."

When asked if there were any green collaborations between businesses in Vodskov, another informant replied:

"Not with the other businesses... well, we are a part of the business organization, so in that sense we collaborate."

The lack of engagement and knowledge of the initiative among the informants was surprising to us, since we expected a well-established network in the progress of developing green initiatives through collaborations. From our experience the informants found the strategy of the initiative to be unclear. Even though the informants were aware of the overall aim of the initiative, they seemed to lack an understanding of how to carry out changes.

From our perspective the process of making change in the initiative has not been properly defined. The lack of a well-defined strategy may inhibit change and hold back sustainable development.

The initiative in Vodskov needs a strategy, if it is to evolve further. In the following section, we will explore other similar initiatives in Denmark, that could be inspirational to the community in Vodskov, and help in their strategy-making.

#### 3.3 Sustainable Development Initiatives in Denmark

In this section, we explore three current sustainable development initiatives within green transitioning: the communal project *Food Loop - Cirkularium*, the mobile application *Too Good To Go*, and the sustainability strategy of *H&M*. The examples are meant to provide insight into the current state of green initiatives in Denmark, while also highlighting possible challenges and opportunities of the initiatives. Additionally, we will use the examples to define central themes that could be relevant to focus upon in case of Vodskov Erhvervsforening's new initiative.

#### 3.3.1 Food Loop

The Food Loop initiative was established in Aarhus, in 2015. The project started out an attempt to optimize resource utilization among local restaurants and cafes, and to inspire citizens and businesses to participate in sustainable resource management and to develop a local industrial symbiosis.

In the innovative project, local businesses collaborate on growing food in urban gardens, by reusing different kinds of waste from the businesses. Local gardening is meant to create an affiliation with the city and to increase the environmental value and social equality among citizens and businesses.



Image 3.6: The Food Loop project illustrated (Erhvervsstyrelsen, 2018).

Bio-waste from restaurants and cafes in Latinerkvarteret is considered a central and significant resource that will supply the businesses with greens, herbs, mushrooms etc. Latinerkvarteret lies in the centre of Aarhus with cafes, design stores, and galleries and is known for having an organic touch to its products and services (Aarhus City Forening, 2017). In our interview with Jonatan Marcussen, the project manager, he explained that it was easy to get the businesses involved in the project, since they saw potential for branding and waste management. Initially, 15 restaurants and cafes provided bio-waste, primarily consisting of coffee grounds. However, in order to maintain the quality of the coffee grounds the demands for its handling were tightened. Due to the changes, 13 of the 15 businesses were unable to handle the grounds accordingly, which essentially excluded them from the project, leaving only two businesses actively providing waste today.

Though the project suffered a minor setback, due to the handling of the bio-waste, it still thrives from its resilient local community and network. In spite of having existed for several years, the project is still in the early stages of development and is expected to expand in the coming years. For a project such as Food Loop to continue, it is important to include actors in the network who are passionate about the environment, Marcussen explained. He has worked with many different projects regarding sustainable development and circular economy, and he has experienced that the participants' abilities to inspire and change the attitudes of others is vital to a project's success.

#### Summary

- Aiming to attain sustainable resource management and circular economy through local business collaborations.
- Firmly established network in a local community that is already concerned with the environmental impacts of production and consumption.
- Innovative way of utilizing waste as a resource in the local community.

#### 3.3.2 Too Good To Go

The Danish business concept *Too Good To Go* is made to raise awareness of food waste by facilitating bargains of expiring food from businesses to their customers. The European Commission (2016) describes food waste as *"not only an ethical and economic issue but it also depletes the environment of limited natural resources"*. To achieve a significant reduction in food waste, it is necessary that both public and private actors collaborate, along with a change in consumption behavior (Halloran et al., 2014). When stores collaborating with To Good To Go have a surplus of food, customers are able to buy the soon-to-be expired foods at a reduced price, thus stores make a small profit. Businesses include restaurants, supermarkets, hotels, gas stations, etc. (Too Good To Go, 2018).



Photo 3.7: Promotional photo of Too Good To Go's shopping bag (Too Good To Go, 2018).

The business idea was conceived by a Danish entrepreneur puzzled by large amounts of surplus food being wasted at a buffet restaurant. Along with two other companions, he started a webshop that could offer the leftovers to customers at a reduced prize, so that the restaurants and entrepreneurs still earned a profit. Initially, the potential restaurant customers were contacted by phone and/or approached by the entrepreneurs in the restaurant. On a A4 paper the participating restaurants initially were able to specify leftover amounts and at what time the leftovers were available to customers, where after the offers were made available on the webshop. As the business gained attention from customers through social media, the concept was turned into an app and launched onto the Danish market (CXO Magasinet, 2017).

The business has, from the beginning, relied on the existence of a strong network. The business has a large digital network of cafes, restaurants, and other businesses in Denmark and abroad. However, the businesses have no direct contact to each other through the initiative, which potentially leaves out knowledge-sharing, in regards to sustainable practices.

As the app has increased in popularity, some businesses expressed dissatisfaction about the service being unprofitable due to customers preferring To Good To Go deals instead of regular deals. The low profit may have to do with the type of business and how each business do business. Even though businesses may want to reduce food waste and become a part of the green transition, the efforts in doing so cannot affect profits negatively (Jydske Vestkysten, 2016). Additionally, it is unclear how many resources are actually being saved or utilized directly as a result of the concept, as an increase in consumers purchasing expiring foods not necessarily equals a decrease in food production. However, due to the popularity among consumers it may have the potential to inspire them to engage in a more sustainable behaviour and lifestyle.

#### Summary

- Innovative way of approaching depletion of resources caused by the food industry.
- Firmly established business and consumer network in Denmark and abroad.
- Potentials in reducing resource consumption in the food industry as well as promoting a sustainable lifestyle to consumers.

#### 3.3.3 H&M's Sustainability Strategy

In April 2018, Center for Grøn Omstilling in Aalborg invited businesses and other relevant stakeholders to participate in a meeting focused on sustainability becoming "part of a store's DNA". The sustainability coordinator of H&M Denmark, assisted by an H&M department manager, was one of the speakers invited to inform and inspire retailers and other businesses on how to incorporate sustainability into their business models.

For many years, the H&M brand has not been associated with sustainability. As one of the world's largest clothing-retail companies with over 4500 stores and around 171.000 employees worldwide, the significance of H&M's environmental footprint has lead to the company adding sustainability to their main pillars in 2015 (H&M, 2018). H&M's fast fashion business model is responsible for large consumption of resources of especially water, fuel, and chemicals used in the production. Environmental issues associated herein are primarily water pollution caused by the release of untreated effluents as well as air emissions and excessive noise and odour pollution (Karthik and Gopalakrishnan, 2014).



Image 3.8: Imagery of one of H&M's sustainability concepts, the Conscious Collection.

H&M explains that becoming more sustainable is necessary due to the company's high resource consumption; the potentials for developing the business model; customers expecting sustainable products; and that it attracts and retains employees. In short, the strategy is to take advantage of the size and influence of the company, to lead sustainable development in the fashion industry, while being a fair and equality-minded business. In order for the strategy to succeed, the company believes that it is necessary to engage change-makers, which they identify as customers, business partners, and employees. Change-makers are people who H&M believe can help push the industry towards sustainable development.

On a department level H&M has introduced its employees to the concept of sustainability through an education portal, where employees can get relevant information, and the individual department stores are, moreover, obligated to have an employee meeting each morning. Here topics in regards to sustainability and other environmental matters in relation to the store operation and management can be discussed. They have a well-functioning and influential network that allows for knowledge-sharing on group level and between department stores.

#### Summary

- Large international organization with potentials of changing and innovating the fast fashion clothing industry.
- Influential network of employees, business partners and customers that the company considers change-makers in regards to pushing the clothing industry in a sustainable direction.
- In spite of having an environmental unsustainable business model, new initiatives are being introduced to become more sustainable.

#### 3.3.4 Central Themes

The examples of Food Loop, To Good To Go, and H&M were different perspectives of business initiatives. Now that they have been presented, we can define central themes relevant to our re-

search. They function as fundamental strokes with which we will draw the lines for our problem formulation and research questions.

#### Networks

- · Food Loop Business network in a local community.
- To Good To Go Business and consumer network in Denmark and abroad.
- *H&M* Influential network of employees, business partners and customers.

#### Innovation

- Food Loop Utilizing waste as a resource in the local community.
- To Good To Go New approach in food waste reduction.
- *H&M* Potentials of changing the fast fashion clothing industry.

#### Sustainable Development

- Food Loop Sustainable resource management through local business collaborations.
- To Good To Go Resource reduction and sustainable lifestyle promotion.
- *H&M* New initiatives introduces to the business model to become more sustainable.

#### 3.4 Conclusion of Problem Analysis

Sustainable development on a societal level is supported by the Danish government and defined as *Green Transition*. In the official government statement about the transition, considerations for Danish jobs, competitiveness, and cost-effectiveness of public investments and spending are key points. In relation to municipal initiatives, we have explored two examples within the retail and industrial sector. We explored the example of Kalundborg Symbiosis and found the social dimension to be an important element in that network. Moreover, we examined Aalborg Municipality and found that their sustainability strategy from 2016-2020 includes the re-development of Grøn Butik, now known as Netværk for Grøn Detail (NGD). In NGD, the business network of Vodskov has been profiled as a front-runner by the municipality. However, the empirical findings from our initial research suggested otherwise. We discovered the green profiling of the community to be unjustifiable to a certain degree, due to the community's limited knowledge and engagement.

As a baseline for our further research, we examined the sustainable development initiatives Food Loop, Too Good To Go, and H&M's sustainability strategy, in a state-of-art analysis. Here, we found three central themes embedded in the initiatives: *Networks, Innovation,* and *Sustainable Development*. We consider these fundamental themes to our overall research, and therefore they will serve as the foundation for our problem statement and research questions, which are presented in the following chapter.

### **Problem Statement**

In the previous chapter, the problem area has been analyzed and the underlying aspects have been explored. We found that there are several sustainable development initiatives apparent in Denmark, and that they all include aspects of innovation and collaboration. We identified that the social dimension in sustainable development is valuable to the success of such initiatives, as a key element in developing trust, commitment and an exchange of ideas. This relates to the theme of knowledge-sharing, which was echoed in our examination of the Netværk for Grøn Detail (NGD) initiative in Vodskov Erhvervsforening. The participating retail businesses expressed uncertainty about the strategy of the initiative, and articulated a need for knowledge-sharing between members of the network and community.

This is the outset of our master thesis. In collaboration with Aalborg Municipality and Vodskov Erhvervsforening, we explore the strategy development for the initiative, through principles of knowledge management.

#### 4.1 Problem Statement

Aalborg Municipality has established the Netværk for Grøn Detail to increase the sustainable development of businesses in the municipality, with Vodskov Erhvervsforening considered a frontrunner. However, the current status and strategy of the initiative is unclear to the businesses of Vodskov Erhvervsforening. An exploration of current perceptions and strategic options is needed, for the initiative to flourish.

#### 4.1.1 Research Questions

Our research design will be based on the notion that knowledge and learning are social phenomenons, and the applied theoretical framework will be Wenger's concept of *Communities of Practice*, as a framework for understanding learning in networks.

To adequately explore the problem statement, research questions have been formulated, based on the three themes from the state-of-art initiatives; *networks*, *innovation* and *sustainable development*. The research questions are as follows:

- 1. What are the current perceptions of sustainable development among the businesses in Vodskov Erhvervsforening?
- 2. Which challenges and opportunities exist in driving sustainable development and innovation in the network?
- 3. How can networks be utilized to explore strategic elements for innovation and sustainable development in Vodskov Erhvervsforening?

## **Research Design**

To adequately address the problem statement, it is necessary to gather empirical data representative of the businesses' current perceptions towards sustainable development, and the aspects that they themselves identify as challenges and opportunities for the Netværk for Grøn Detail (NGD) initiative in Vodskov. This data is acquired through a qualitative research design, with multiple methods applied. The design of our research is influenced by our academic backgrounds in the field of cultural anthropology, with the stance that culture permeates all human activity (Hylland Eriksen, 2004) and that learning is a social phenomenon reflecting human nature (Wenger, 1998). The aim of our research is to explore the current network of Vodskov Erhvervsforening, the opportunities and challenges of the new initiative, and how the concept of Communities of Practice can be utilized in knowledge management for the NGD initiative in Vodskov.

In all research, the researcher applies certain philosophical assumptions that provide direction, and form the paradigm of the research. Assumptions such as...:

"the researcher's view of reality (ontology), how the researcher knows reality (epistemology), the value-stance taken by the inquirer (axiology), and the procedure used in the study (methodol-ogy)."

(Creswell, 2017)

The philosophical assumptions of this research are rooted in phenomenology, the study of the structures of experience and consciousness, where reality is merely perceived by the human consciousness (Jacobsen et al., 2009). We assume that concepts such as reality and knowledge are socially constructed, and that they are generated from the multiple realities we humans experience. This is what make up our research paradigm, since paradigms are constituted by "a set of basic beliefs that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the *world*" (Guba and Lincoln, 1994).

In figure 5.1, the philosophical assumptions and overall paradigm for this research is illustrated.

Ontology	There is no single reality. Reality is constructed through social practices.
Epistomology	Practices are interpreted to discover underlying meaning.
Axiology	Values are significant in interpretation. Subjective values affect the research.
Theoretical Frame	Interpretivism and phenomenology.
Methodology	Qualitative methods; interviews, workshop, vox pop, literature studies.

Figure 5.1: Research paradigm and philosophical assumptions, adapted from Creswell, 2017

#### 5.1 Methodology

Based on the paradigm of this research, the chosen methods have been qualitative and inductive, and reflective of the interpretive research design. The methodology include: literature studies, semi-structured interviews, workshops, focus groups and vox pops.

We chose to apply multiple methods to examine the research problem and to gather data, since it allows us to cross-reference the findings and thereby facilitate a triangulation and a validation of the data (Bogdan and Biklen, 2007). Applying the methods concurrently also enforces the execution of each methods, by having the insights gained from one strengthening the execution of the next. For example, conducting individual interviews before carrying out a focus group interview can provide the researcher with knowledge of each informant's life-world perspective, which then can be applied to the interview guide for the focus group interview and thus the researcher gains an even deeper insight into the researched culture. The process can be repeated, by using the findings from the focus group interview as a foundation for more individual interviews. This can be time-consuming, but will most likely strengthen the final results (Ibid.).

#### 5.1.1 Literature Studies

Literature studies have been used in this research to gain theoretical insight into the contexts and topics explored, and they have been carried out continuously throughout the entire research. Initially, it was used to yield an understanding of the conditions surrounding the issues explored; mainly the current state of sustainable practices and green transitions in Denmark.

We additionally used it when determining and assessing the project's research design and methodology.

Finally, we conducted literature studies on the theoretical framework of the research - particularly on the concept of *Communities of Practice*, in order to use its theoretical considerations in the data analyses.

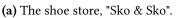
#### 5.1.2 Semi-structured Interviews

"The interview is a way of gaining insight into a person's life-world perspective in different contexts."

(Brinkmann and Tanggard, 2010)

One of the main methods to our research have been the interviews we conducted with some of the businesses in Vodskov Erhvervsforening. We conducted the interviews to gain insight into the involved businesses' perception of and experience with sustainability in their current practices, innovation and networking in their community. The findings have been used in the main analysis of our research, and to prepare and execute the workshop, the focus group interviews and the vox pops.







(b) The supermarket, "Rema 1000".

Photo 5.2: Two examples of the interviewed businesses in Vodskov.

Interviews can be structured in different ways depending on the aim of the research. They can be planned and structured in advance, with the questions being asked in a pre-determined order, or they can be unplanned and unstructured, with the questions being asked spontaneously (Kvale and Brinkmann, 2009).

In this research, the interview format has been semi-structured, with the questions being prepared and based on our research questions. However, the questions have been structured in a way that allows the informant to answer spaciously. This means that he/she can reply to the question unobstructed, and thereby reveal aspects unknown to the researcher. The questions were put into an interview guide that served the purpose of guiding the interview, so that the answers sought by the interviewer were obtained in spite of straying statements.

The interview guide was based on the literature studies and interviews with Martin Quientero Hansen from Netværk for Grøn Detail. The interview guide is shown in Appendix A, section A.2.

The interview questions have been structured, based on our research questions, and thus the scope of the questions has been:

- To what extent the businesses have experience with sustainable development in their current practices.
- How the businesses perceive Netværk for Grøn Detail, and what their reasoning for participating in the network is.
- The possible challenges and opportunities that the businesses identify in regards to furthering the sustainable development and innovation of the businesses in Vodskov Erhvervsforening.
- How the businesses define the current network of Vodskov Erhvervsforening, and to what degree (if any) they collaborate with the other businesses.

We interviewed informants from seven businesses in Vodskov Erhvervsforening. They were: a secondhand store, a supermarket, a pharmacy, a real estate developer, a cleaning company, a shoe store, a wine specialist and a pharmacy. Most of the businesses were selected for interviewing on the recommendation of our primary informant from Aalborg Municipality and Netværk for

Grøn Detail, Martin Quientero Hansen. We interviewed Hansen in the initial phases of our research, and he has been working with Vodskov Erhvervsforening on their participation in the network. Thus making him qualified to identify key informants, such as the chairman of Vodskov Erhvervsforening and others spearheading change.

Business	Position
By Anjiden	Owner
Rema 1000	Store Manager
Sambyg A/S	Co-Owner
SJÖBERG & SIMONSEN	Owner
Sko & Sko	Sales Assistant
Vin-Gaven	Owner
Vodskov Apotek	Pharmacist and Purchaser

Table 5.3: Table showing the informants interviewed, by business and position.

All of the interviews were recorded and later transcribed and coded. The recordings are available via the following link: http://kortlink.dk/u42m.

To be able to analyze the data from the interviews, *meaning condensations* (Kvale and Brinkmann, 2009) are necessary. These have occurred throughout the entire research, whenever we have formed opinions or interpretations of the research and the informants' statements. These interpretations are necessary to understand the meaning of the statements and the context of the research. The analysis and the meaning condensations are affected by our search for meaning and answers to the problems explored (Ibid.).

#### 5.1.3 Workshop

"A workshop can be a very effective method for gaining many kinds of knowledge, competencies and experiences while collaborating on creating something new."

(Jakobsen, 2015)

In this research, we have used the workshop method to make the businesses of Vodskov Erhvervsforening (VE) come together and collaborate on the new initiative: their new role as participants in Netværk for Grøn Detail. The purpose of the workshop was to strengthen the businesses' collaboration and communication with one another, as well as to discover drivers and barriers for the implementation of more sustainable practices in VE.

Workshops are important elements in most user-driven processes, since they provide the users - in this case the businesses of Vodskov Erhvervsforening - with an opportunity to apply their input to the developing process (Kanstrup and Bertelsen, 2011). By participating in different exercises and taking part in a collaborative process, the workshop creates a sense of ownership among the participants (Kelley, 1954). This sense of ownership can affect the success of the

Business	Position
Blomsterpigen	Store Manager
Brunø	Sales Assistant
By Anjiden	Owner
Bækgaard Optik	Co-Owner
Lyd & Billede	Store Manager
Rema 1000	Store Manager
Sambyg A/S	Co-Owner
SuperBrugsen	Store Manager
Vin-Gaven	Owner
Vodskov Apotek	Pharmacist
Vodskov Avis	Editor and Consultant
Vodskov Kro	Inn Manager

end-solution, since the participants are more likely to find it appealing and useful due to their personal involvement in its development.

Table 5.4: Table showing the workshop participants, by business and position.

Prior to doing a workshop, it is necessary to define its goals and the themes that should be focused on, along with preparation of activities and materials needed (Kanstrup and Bertelsen, 2011). The goal of our workshop was mainly to facilitate a forum which could enable a dialogue between the participants.

We arranged for the workshop to be held at Vodskov Kro, where Vodskov Erhvervsforening usually have its meetings. The workshop consisted of two activities: a focus group session and a prioritization exercise.

There were 12 businesses present at the workshop with 13 participants total. An overview of the participants can be seen in table 5.4 above. There were a variation of businesses present; both supermarkets, two clothing stores, a florist, an optician, a wine specialist, a pharmacy, a real estate developer, an audio store, the inn and the local newspaper. All of the participants, including us as facilitators, wore name tags throughout the entire workshop to enhance the communication between all. We began the workshop with a presentation of our research and of the two workshop activities, which will be presented in the two following sections.

#### **Focus Groups**

The first activity of the workshop was the focus group session, where we divided the participants into two groups and positioned them in two different rooms to avoid interference between them. The format of a focus group interview is characterized by open dialog, where participants are able to express different points of view. The facilitator is responsible for presenting themes and moderating the dialogue between participants while creating a pleasant atmosphere (Kvale and Brinkmann, 2009). The purpose of a focus group is not to reach any agreements, but simply to create a forum where different opinions can be expressed. The results of a focus group is often

many different statements on the same theme, and the volume of similar statements can indicate the general opinion of the group.

The interview guide for the focus group interviews was based on the findings from the individual interviews and the literature studies. The interview guide is shown in Appendix A, section A.2. The scope of the questions has been:

- How the businesses expect the NGD network to affect their sustainable development, and how they expect to affect the NGD network.
- To what extent the businesses can identify challenges and opportunities for their sustainable development.
- How the businesses plan on communicating the possible changes to customers, partners and others outside of the VE network.

The 13 participants were separated into two groups of 6 and 7 people, each with one facilitator. The size of a focus group is important for the facilitator's ability to guide the discussion and moderate the participants (Kvale and Brinkmann, 2009). Too many participants can result in an overwhelming amount of statements, which the facilitator cannot record. It can also affect the participants involvement in the discussion, by making it harder for individuals to communicate their opinion or even stifle them completely. Too few participants can create a shortage of opinions and thereby the results will be unrepresentative of the total target group of the research. The ideal size of a focus group is six to ten participants led by a single facilitator (Ibid.).



Photo 5.5: One of the two focus group interviews with Vodskov Erhvervsforening.

The sessions were audio-recorded to ensure the documentation of the participants' dialogue. The recordings are available via the following link: http://kortlink.dk/u42m.

#### Pin the Post-It

The second activity was a prioritization exercise developed for this specific workshop and research. The exercise is based on *gamification*, where simple game-design principles are applied to non-game contexts to increase engagement (Kapp, 2012). Games are ideal for facilitating conversations about needs and for generating ideas (Kanstrup and Bertelsen, 2011). When developing a game it is important to define what knowledge you want the "players" to express and to clearly define the rules of the game (Ibid.). The purpose of this exercise was to have the participants prioritize the drivers and barriers that they themselves identify in the implementation of new, sustainable practices into their current activities.

The game was played after the focus group interviews and with all the participants playing it simultaneously. The participants were instructed of the game play during the opening presentation and again at the beginning of the play-through. The game consists of a bunch of post-it notes and two posters; one for barriers and one for drivers. The game is illustrated in figure 5.6 below.



Figure 5.6: Illustrations of the game Pin the Post-It, with post-its pinned to the Barriers diagram.

The game play is quite simple and consists of three steps:

- 1. **Pen:** Individually, a player writes down an idea, issue or thought that he/she believes is relevant to the NGD project in Vodskov.
- 2. **Prioritize:** Now the player needs to prioritize the importance of the post-it for the project. The closer to the circle's center, the more important the post-it is. The prioritization step can be done individually or in collaboration with other players.
- 3. **Pin:** The player pins the post-it to the relevant poster, under the theme most suited. There are four themes; *Environmental*, *Social*, *Economic* and *Other*.

The play-through was recorded through photographs and by collecting the written post-its, which have been transferred into a table. The table is presented in our main analysis and can be found in section 7.2.2. Two of the photographs are attached in Appendix A, section A.3.

#### 5.1.4 Vox Pop with Vodskov Citizens

At this point in our research, we have included the perspectives of the two main stakeholders; Aalborg Municipality and Vodskov Erhvervsforening. However, since the purpose of Netværk for Grøn Detail is to "actively strengthen the retail stores' environmental profiles" (Aalborg Kommune, 2018b), we find it important to also include the citizens of Vodskov who are the main customer group for Vodskov Erhvervsforening's businesses. The consumers' demands influence the businesses' actions and supply heavily, and therefore we need to gain insight into their perspectives on sustainability and green transitions in Vodskov.

We have chosen to use the vox pop interviewing method to gain this insight. Vox pop is an abbreviation of *vox populi* which translates into "voice of the people" in Latin. The purpose of a vox pop is to gather data on the general opinion of one's chosen target group (Adams, 2001). In this research, the target group is the citizens of Vodskov who regularly shop at the businesses in Vodskov Erhvervsforening.

We conducted the vox pops on the main business street of Vodskov, during the town's Open By Night event where an extraordinary amount of citizens attended. We managed to interview 53 different citizens, all either currently or previously living in Vodskov. The informants were both men and women, and between 16 to 90 years in age. Approximately 50% were asked individually and 50% were asked in small groups of 2-3 people.



Photo 5.7: The main business street of Vodskov, during the Open By Night event.

Contrary to the semi-structured interviews, the vox pop enables a high frequency of informants being interviewed in a short period of time, without scheduling the interviews in advance. This is due to the format being less formal and comprised of only two to four simply-phrased questions. We posed four questions, with three of them being rating scales on the ordinal level, where the informants rate their opinion on a scale, and then explaining the reason behind their choice. The first and third question were on a regular rating scale, where the level of importance was rated. The second question was on a Likert scale, where the informants evaluated a statement by their level of agreement/disagreement (Likert, 1932). An example of a rating scale question can be seen in image 5.8 below.

The vox pops used in this research is attached in Appendix A, section A.4. The results of the vox pops consisted of both quantitative and qualitative data, which was analyzed and used in the main analysis, see chapter 7.

Don't know	Not important	Less important	Important	Very important
Why?				

How important is sustainability to you?

Image 5.8: Example of vox pop question, including the prioritization scheme.

When conducting interviews of any sort, the interviewer is responsible for informing the informant of the intent and focus of the research and on the context that their statements will be used in. We began every vox pop with a short explanation of our collaboration with the municipality and Vodskov Erhvervsforening, and of the purpose of our research. We wore name tags and sweatshirts with Aalborg University's logo on them to ensure the visibility of our roles as students and researchers.

# Chapter 6

# **Theoretical Framework**

In this chapter, we present the theoretical framework of our research and its application. The theoretical framework is based on the concept of *Communities of Practice* (CoP) proposed by an-thropologist Jean Lave and educational theorist Etienne Wenger, in 1991. The concept deals with the process of cultivating learning and knowledge-sharing in communities and organizations, with Vodskov Erhvervsforening (VE) being an example of such. The concept is applicable to this research, since we intend to explore the strength of the network, and how knowledge management can be utilized in facilitating innovation and sustainable development in the NGD initiative in Vodskov.

## 6.1 Communities of Practice

A community of practice (CoP) is defined as:

"a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly."

(Wenger-Trayer, 2018)

In other words, members of a CoP have a shared interest, profession and/our purpose, and they evolve their knowledge through shared experiences, strategies and/or tools. In organizations, the occurrence of CoPs can be valuable, since they:

"drive strategy, solve problems, generate new business, promote the spread of best practices and develop people's professional skills."

(Wenger and Snyder, 2000)

For many organizations, there is a challenge in shifting knowledge exchanges from individual behaviours to cooperative ones (Nahapiet and Ghoshal, 1998). A key element of CoPs is their ability to drive knowledge-sharing, which in organizations may lead to higher productivity (Wenger and Snyder, 2000). For this reason, the concept has become an integral part of many organizational structures, where they replace the more formal structures in covering the knowledge stewarding tasks (McDermott and Archibald, 2010). The concept has become a tool for capturing the tacit knowledge within an organization.

CoPs can occur in many forms, meaning that they can vary in size, shape, life-span and/or location. They can be intentional or spontaneous, and they can be unrecognized or even institutionalized (Wenger et al., 2002). They are not always formalized and therefore not necessarily seen in the formal structures of an organization, as illustrated in figure 6.1.

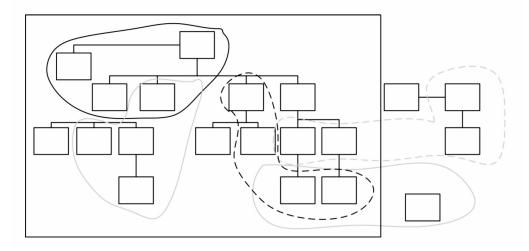


Figure 6.1: CoPs illustrated as informal organizational groups (Wenger, 2000).

In the case of Vodskov Erhvervsforening, the businesses are members of several CoPs, both as members of the well-established business organization and as members of the new NGD initiative. Furthermore, the individual businesses might have shared values and interests that form the basis for other, less formal, communities within NGD and VE.

CoPs are characterized by their possession of the following traits (Wenger, 1998):

- **Domain**: The identity of the CoP is defined by the shared domain of interest. The domain is the common ground, the purpose and the boundaries guiding the members and their learning (Ibid.).
- **Community**: The members invested in the domain and collective learning. The community includes the social structures, the shared ideas and the relations between members. The community as a whole is the framework for learning (Ibid.).
- **Practice**: The members are seen as practitioners that develop a shared practice, through experiences, tools and/or strategies. Developing a shared practice takes time and requires a continuous interaction between the members (Ibid.).

A central theme of Wenger's concept is the notion of duality. He identified four notions of duality that each deal with certain topics; the duality of participation-reification deals with meaning, the duality of designed-emergent deals with time, the duality of identification-negotiability deals with belonging, and the duality of local-global deals with relations between different CoPs (Wenger, 1998).

In our research, the duality of participation and reification is the most relevant notion, since it links to learning and knowledge-sharing. According to the theory, learning occurs in a *nego-tiation of meaning*. Meanings are constantly negotiated through the shared experiences of the community's members, and relies on participation and reification (Ibid.)

**Reification** is the process of turning experiences and abstract thinking into objects representing the "thingness" of our experience (Ibid.). It has been described as *"the freezing of knowledge in* 

*a concrete artefact*", such as tools, symbols, stories and concepts (Polin, 2008). Wenger stressed that though it is impossible to completely translate meaning into concrete form, reification is an effective process for producing devices that can explain meaning to members and outsiders (Wenger, 1998). The screenings conducted by Aalborg Municipality are examples of such objects of reification.

Wenger also referred to reification as a double-edged sword; too much if it will confine learning and stifle creativity, but without it, there will be no anchors for learning (Ibid.).

**Participation** is the active involvement in social practices, and is fundamental to social learning (Ibid.). It is described as both the act of doing and as the sense of belonging - the latter being established through connections to other members.

Participation is the translation of the reified into experiences and the contextualization of meaning. It balances reification, and is necessary to avoid the potential stiffness of practices that reification can bring (Ibid.).

The duality of reification and participation is a balance and not a conflict, when the two components align learning and knowledge-sharing occurs.

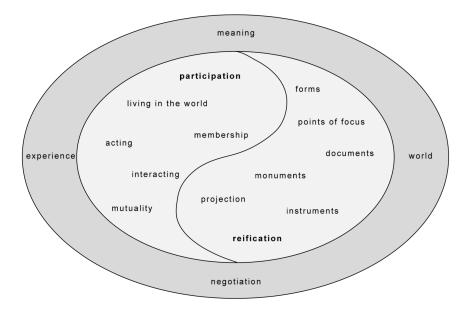


Figure 6.2: The duality of participation and reification (Wenger, 1998)

#### 6.1.1 Boundaries and Brokering

As people, we can participate in several communities of practice, simultaneously. Being a member of a CoP means having a competence in that community, and through multi-memberships knowledge and experience can be exchanged between CoPs. In a company, the department head will belong to both the community of her department and the community of the management group. Spanning the boundary between the two is the main function of her position. It is in such multi-memberships that connections are created, and in those *boundary encounters* that practices are influenced (Wenger-Trayer, 2018). "Communities of practice cannot be considered in isolation from the rest of the world, or understood independently of other practices. Their members and their artifacts are not theirs alone. Their histories are not just internal; they are histories of articulation with the rest of the world."

(Wenger-Trayer, 2018)

Boundary encounters can change the way a community defines its own identity and practice, and such change can contribute to innovation and development in a community. For boundary encounters to be successful, a member needs to straddle the different communities and facilitate an exchange process (Ibid.) This process is called *brokering* and:

"The job of brokering is complex. It requires enough legitimacy to influence the development of a practice, mobilise attention and address conflicting interests. It requires the ability to link practices by facilitating transactions between them, and to cause learning by introducing into a practice elements of another."

(Wenger, 1998)

Identifying brokers in a community is a way of facilitating an increase in knowledge-sharing across communities, which thus enables the community to evolve and to innovate on current practices. Communities of practice can in many ways be seen as entities for innovation, networking and development.

#### 6.1.2 Cultivating Communities of Practice

CoPs are not something we can create, since they develop organically through people's interest and interaction. However, a certain level of design can accelerate their evolution. The purpose of doing so is to take advantage of existing knowledge and make new knowledge flourish (Wenger et al., 2002).

Wenger et al. has developed seven principles for cultivating CoPs, and they are as follows:

#### 1. Design for Evolution

As mentioned, CoPs will develop naturally, but through intentional elements of design, their evolution can be accelerated. The key to designing for evolution is to identify and activate elements that catalyze community development, not to enforce structures (Ibid.). An example of a design element is the introduction of experts, where insights from other disciplines can change the existing practices. Wenger et al. described the design process with the following analogy:

"Physical structures - such as roads and parks - can precipitate the development of a town. Similarly, social and organizational structures - such as coordinators and meeting - can precipitate the evolution of a community."

(Wenger et al., 2002)

#### 2. Open a Dialogue

On this principle, Wenger et al. highlights the importance of opening the otherwise closed dialogue of CoPs up to the perspective of outsiders. An open dialogue between insiders and

outsiders provides insight that can evolve the community, since outsiders can bring new perspectives and are less affected by the history of the community. Such new perspectives increases the potential for development (Ibid.). Insiders possess knowledge of the current practices and of the collective experience of the community, which can be helpful in identifying possible pitfalls for further development. An open dialogue between insiders and outsiders create opportunities for evolution (Ibid.).

#### 3. Invite Different Levels of Participation

Wenger et al. identified several levels of participation in a CoP, with some members being more active than others. The core group are a small cluster of members who participate intensely and take on the leadership of the group, with one of its members being the community coordinator. The active group is also small and with members participating actively, but with less intensity as the core group. The peripheral group is the largest group, with members who rarely participate actively. Peripheral members are often observers who gather insights without sharing it publicly. This group is often in possession of valuable and untapped knowledge. Lastly, there is the group of outsiders. These are non-members, but people with an interest in the community, such as customers, suppliers and other stakeholders (Ibid.).

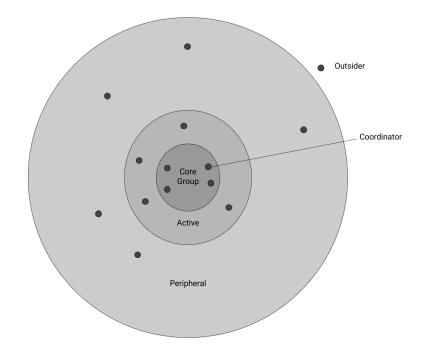


Figure 6.3: The degrees of community participation (Wenger et al., 2002).

Wenger et al. described a good community design as one that invites the different levels of participation in, since the aliveness of the community is improved by doing so (Wenger et al., 2002).

#### 4. Develop Public and Private Spaces

Most of a community's activities are public to all members and allows them to share, discuss and evolve their ideas. However, more private activities between smaller groups or individuals allows the members to develop personal relationships, in which insights can also be exchanged. The public spaces serve as more ritualistic events, and are essential for the shared experience of the community, and the private spaces are for the smaller, daily exchanges (Ibid.).

#### 5. Focus on Value

The core of a CoP is the value that its members believe in. It might change over time, but it is important to have members be explicit of the value and to discuss it continuously. The value is the main driver for the community's evolution (Ibid.).

#### 6. Combine Familiarity and Excitement

For a CoP to be successful, there must be both a sense of familiarity and a sense of excitement within it. Members should feel comfort and support in a neutral space, where they can speak freely to their fellow members. Such safe and familiar spaces generates shared thinking and a flow of ideas. At the same time, members should feel that there is a drive in the community, which creates the sense of excitement (Ibid.). The balance between both components supports the community's evolution.

#### 7. Create a Rhythm

All communities posses their own rhythm of events and activities, which provide the community members with a sense of liveliness. In the cultivation process, it is important to nurture the rhythm to sustain the dynamism of the community's development. Finding the right rhythm can be challenging. If it is too fast, the members will become overwhelmed and their engagement will be stifled. If it is too slow, they will become sluggish and uninterested (Ibid.).

We have used this chapter to present Wenger's concept as our theoretical framework. The seven principles for community cultivation will be applied to the empirical data, in the third section of the main analysis (see section 7.3.1). We consider and utilize the concept as a framework for understanding learning in networks.

# Chapter 7

# Analysis

In the following chapter, the empirical data will be presented and analyzed. The analysis has been divided into three sections, with each section focusing on one of the research questions. Firstly, the current perceptions towards sustainable development in Vodskov Erhvervsforening will be analyzed, using the empirical data from the individual interviews with businesses, and the vox pops with Vodskov citizens. Secondly, the challenges and opportunities that Vodskov Erhvervsforening (VE) might face in their new endeavour as members of Netværk for Grøn Detail will be explored through the findings from the individual interviews and the workshop. Finally, the analysis will include an examination of the implementation of new initiatives into the existing business network, utilizing Wenger's seven principles for cultivating CoPs.

## 7.1 Vodskov Erhvervsforening & Sustainable Development

In this section, the current perceptions towards sustainable development in Vodskov Erhvervsforening will be analyzed, in order to answer research question 1:

What are the current perceptions on sustainable development among the businesses in Vodskov *Erhvervsforening*?

The analysis will be based on the empirical data gathered in the semi-structured interviews. Excerpts from the interviews will be presented throughout the analysis to support the featured themes. The themes chosen are the results of meaning condensations and codings of transcripts. Following the analysis of the businesses' own perspective, we will explore the results of the vox pops with the citizens of Vodskov. This is to compare the stakeholders' perceptions and to expand on the context of the new initiative.

#### Level of Sustainability

This theme deals with the businesses' perceptions towards sustainable development and to what extent they currently apply environmentally-friendly practices. All of the informants had reflected upon their practices prior to the interviews, and several of them had been screened by the municipality.

The informants said the following on the matter:

"I'm very aware of sustainability, especially in my product choice. I know that the things I get in are only socially and environmentally sustainable. That's why I think it's exciting to be part of this new initiative."

- Owner

"I don't know what our challenges are in regards to sustainability. We'll have to deal with that as it comes. But I think it will be small steps, and many of those will make a big difference."

- Co-Owner

"The biggest challenge for me is that all of my products are non-essentials, so I have to focus on the production of them. Are they organic? Are the bio-dynamic? And so on. Waste-wise, I don't have much excess. Only a bit of cardboard from packaging."

- Owner

"Our main (sustainable) activity is recycling, but unfortunately we don't have much control of our product choice and there is a lot of heavy plastics in the packaging of our products."

- Pharmacist

"As a sustainable business, I take many things into account. Such as proper wages, collective agreements, labour regulations, chemistry and transportation."

- Owner

The informants' perception of their sustainability level differs from business to business, with some of them being highly aware of their practices and even centering their business around a sustainable image, and with others being largely unaware of their current level and their opportunities for change. We found the partition to be quite balanced among the businesses interviewed. A common notion among the informants was the curiosity of new, sustainable practices, and an excitement to be involved in the NGD initiative. Additionally, several of the informants had already implemented new practices based on the municipal screenings.

#### **Collaborations within VE**

This theme deals with the current communication and collaborations within Vodskov Erhvervsforening. As mentioned in the problem analysis (see section 3.1.1), the social dimension is often significant to the success of sustainability projects, and includes collaborations with peer businesses. VE has 104 members with only a small group participating in the new initiative. This can to some extent be explained by the variation of businesses, with many belonging to the construction industry and not the retail industry, which is the main focus of Netværk for Grøn Detail. There are 25 retail stores and four supermarkets in Vodskov. However, several of the retail stores are not involved in the new initiative. The informants said the following on collaborations within VE:

"We mainly collaborate around the Open By Night events, and I collaborate with the inn for functions. We don't really have any green collaborations at the moment."

- Owner

"Most of us have busy workdays, and things are going really well in Vodskov, so people really don't speculate on what could be done differently."

- Store Manager

"We don't collaborate with the other businesses. We've offered our sustainable services to them, but have been declined due to the increased costs."

- Owner

When addressing the new initiative and the support within the organization, the informants said the following:

"I think it's a shame that not everyone is supporting the project, when it is something we're doing as a town. It isn't rocket science and we don't expect to hold people accountable for anything. That's why it irritates me that some people won't join."

- Store Manager

"In the initiating meeting with the municipality, we had to give an indicator of what the attitude was towards the project, and there was an unanimous agreement on the project being useful and positive for the town."

- Owner

"We haven't really been told a lot about Netværk for Grøn Detail. We've had the screening, but most of the changes needed are out of our hands, because we're a chain. But we want to be part of the initiative to support the environment and for the unity in the town."

- Pharmacist

"For me, sustainability is about more than the environment. It is also about people, and I am optimistic about the people from NGD. But I don't have much faith in politicians and the municipality, since they aren't even sustainable themselves."

- Owner

From the statements, we can deduce that the collaborations within VE are currently limited to the planning and execution of a few public events annually, e.g. the Open By Night events held biannually. The businesses do not collaborate with each other on aspects concerning their individual business model or value chain, e.g. transportation and waste management. Nevertheless, all of the informants expressed that they anticipated their collaborations to increase through the NGD initiative. They collectively agreed that the implementation of sustainable practices requires or benefits from collaborations between the businesses of VE.

#### The Customers

In this theme, we examine the businesses' perceptions of the customers' opinions towards sustainable development and new, environmentally-friendly practices. The informants were asked to address the influence the changes might have on their image and branding, to which they said the following:

"Our customers choose us, because the quality of our service is high. Not because we are a sustainable business. They do not request the sustainability, so it's just a plus."

"We'll get a good image out of it. Being concerned with the environment is a good signal to send to the customers."

- Co-Owner

"I haven't really thought about branding. The municipality praise us for our labelling of products, showing which ones are organic and such, but I don't now if it has any importance to the customers."

- Store Manager

From the few statements given to this theme, we can derive that the businesses' general perception of the NGD initiative is that it will be well-received by their customers, and that it will have a positive effect on the businesses' branding. The businesses would deem sustainable practices somewhat important to their customers, but not as something the customers demand and which have a significant influence on their choice of store.

#### 7.1.1 The Citizens of Vodskov

In this section, we will explore the results of the vox pops with citizens of Vodskov, with the purpose of comparing the businesses' perception of their customer group with the opinions expressed by the group itself.

The citizens were asked to answer three questions on a scale from 1 to 4, and then asked to expand on their choice. The three questions and the results will be presented in the following.

The first question of the vox pop was on the general importance of sustainability to the individual citizen. The informants could choose to answer on a scale from *Not important* to *Very important*. The distribution of their answers is illustrated in the following bar graph (figure 7.1):

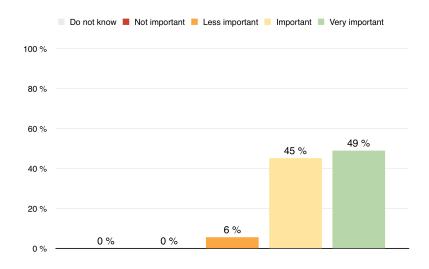


Figure 7.1: Q1: How important is sustainability to you?

From the graph, we can see a tendency among the citizens' choices and thereby to what extent sustainability is significant to them. The graph clearly shows that sustainability is either important or very important to the large majority of the citizens asked. When asked to elaborate

on the reason behind their choice, almost every informant replied that it was due to; the future of our planet, the consequences for the generations to come, and/or the current environmental balance and wildlife. The mere 6% of the citizens that deemed it less important replied that they were losing faith in the term, due to the lack of transparency in the manufacturing and shipping of products.

In the second question, the citizens were asked to state their opinion of the businesses in Vodskov, in regards to their level of sustainability. They were asked to what extent they would agree with the following statement: *The businesses in Vodskov are 'green'*. Their answers are illustrated in the bar graph below (figure 7.2).

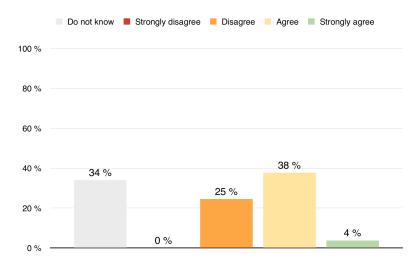


Figure 7.2: Q2: To what extent do you agree with the following statement: The businesses in Vodskov are 'green'?

The results are less uniform in comparison to the previous question. 38% of the citizens would agree that the businesses are sustainable, but only 4% would strongly agree. The two groups explained that they could only see a few initiatives in the stores currently, such as reduced prices on nearly expired products. 25% of the citizens disagreed with the statement, and explained that they could not see any green initiatives in the stores. The remaining 34% were not able to answer the question, because they simply did not know what the businesses' level of sustainability is, and they attributed it to non-existent communication on the matter.

In the third question, the citizens were asked to evaluate the importance of the businesses in Vodskov being environmentally-friendly. The distribution of their answers is illustrated in the following bar graph (figure 7.3):

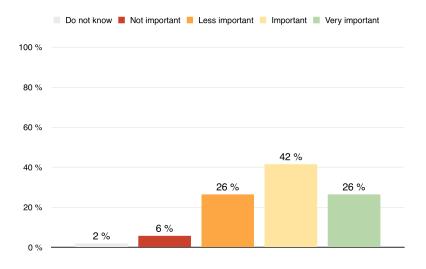


Figure 7.3: Q3: How important is it to you that the businesses in Vodskov are "green"?

The graph shows a more varied distribution of answers than the two previous ones, but with a majority of the citizens finding it important that the businesses in Vodskov are environmentally-friendly. 42% found it important and 26% found it very important, with many explaining that they believe retailers dictate the consumers' sustainability level through their supply. Some added that consumers generally prioritize proximity in their choice of store, and consequently purchase whatever is supplied by their local businesses. The 26% that found it less important and the 6% that did not find it important at all argued that Vodskov is too small to make a difference and that it therefore does not matter whether or not the businesses are focused on sustainability.

When concluding the vox pops, the citizens were given the opportunity to suggest ways for the businesses of Vodskov to become more sustainable. These are the suggestions deemed most relevant by us as researchers:

"You could have an information center or information stands somewhere in the city, where it was possible to get information on the project and different initiatives. I think people would use that."

"They should increase their advertising and, you know, tell the good stories, so we know what they are doing."

"Generally, we need more knowledge-sharing on the national level, but it would be nice if there were like courses in sustainability in Vodskov. You could have guest speakers come in and give talks about like "How to make Vodskov greener?""

#### 7.1.2 Sub Conclusion

From the analysis of the individual interviews with businesses in Vodskov Erhvervsforening, and the vox pop interviews with citizens of Vodskov, we can conclude the following:

• Level of Sustainability: The businesses' level of sustainability varies significantly, with some having already implemented changes and increased their awareness on the matter, and with others not yet having evaluated their current practices or made changes.

- **Collaborations within VE:** The internal collaborations in the organization are currently at a minimum, with only a few meetings and events annually. The members expect the new NGD initiative to boost the amount of collaborations.
- **The Customers:** The businesses assume that new, sustainable practices will be well-received by customers, but that the customers currently do not prioritize it.

The citizens themselves generally find sustainability important and would like the businesses of Vodskov to be focused on the matter, and believe the businesses need to increase their marketing of such practices.

To summarize, the current attitude towards sustainability in Vodskov Erhvervsforening is defined by a willingness to change, and an optimism towards the implementation of new practices and collaborations within the organization.

## 7.2 Challenges and Opportunities for Vodskov Erhvervsforening

In this section, we will analyze and identify the possible challenges and opportunities that can currently be found in the organization and its surrounding community, in order to answer research question 2:

Which challenges and opportunities exist in driving sustainable development and innovation in the network?

In the analysis, the empirical data from the workshop activities will be presented and categorized, in order to identify the current drivers and barriers described by the businesses themselves. The first part of the analysis will deal with the findings from the focus group interviews, and the second part will deal with the results of the idea-generating game, *Pin the Post-It*.



Photo 7.4: One of the two focus groups discussing their involvement in NGD.

#### 7.2.1 Focus Group Findings

As mentioned in section 5.1.3, we conducted two focus group interviews with 13 participants in total. The interviews were guided by facilitators with prepared interview questions (see A.2), and were audio-recorded.

#### Drivers

One of the main drivers identified was the organization's strong sense of unity and the solidarity between the businesses. Several of the participants referred to it:

"Vodskov is a proud town, where we would like to be first-movers. There is a good sense of solidarity and we stand together."

- Store Manager

"We also brag about each other, and I think that benefits us all. We almost make a sport of endorsing local shopping. We talk to the customers and suggest that they, for an example, buy their shoes at Sko&Sko instead of buying them in Aalborg."

- Co-Owner

Also, one participant expressed that being a part of a larger network could affect the individual businesses positively, while another believed the municipal facilitation of the network to be important:

"Half of my customers are out-of-towners, so for me it's great to be a part of something that expands beyond the city limit. That has a lot of value for my business."

- Owner

"Even though you feel small, you get the feeling that we stand together."

- Owner

The participants also identified the need for communication on their current and future practices, which could act as a driver for internal motivation and marketing of the initiatives:

"I think it would be great if we could measure our process. It would be cool with something in the city that visualized it. Who's participating and how far are we? It would be nice for the customers and it might create some competition between us. We all have the competition gene."

- Owner

"I think we need to tell the positive stories from the individual stores. For example, if Peter have reduced food waste with 10% at his store. And it has to be even the smallest stories, so that people know that it isn't only the big moves that matter, but that they can be small as well."

- Store Manager

#### Barriers

A barrier identified by the participants was on motivation and on following up on initiatives, where a suggestion for ongoing, structured follow-ups could be a solution:

"The most difficult thing is to stay motivated. Right now we're sitting together and the ideas are flying, but in two week we might be down to our usual level."

- Editor

"A lot of the barriers are linked to follow-ups. If I'm not reminded of things, then they'll just die out. It's about being reminded of it, and it doesn't have to be a lot - maybe just a few bullet points on our progress at the meetings."

- Store Manager

One participant expressed the importance of not having to spend extra resources on initiatives, whereas another believed that the businesses should be more engaged in events facilitated by the municipality:

"It's very important that it doesn't become more difficult for our employees. We've talked about installing a cistern for rain water, but if using the water will require my employee to use more time on watering the plants, then I'm not interested. It mustn't be any more difficult than it already is."

- Store Manager

"We also have to better at showing up for the meetings, and to be represented at the meetings organized by the municipality in Aalborg."

- Store Manager

Two participants expressed a necessity for knowledge-sharing and receiving municipal guidance to further development of initiatives:

"I think information is needed. I know that we have 200 organic products, but I don't know whether or not they are sustainable. Which are eco-friendly and energy-efficient? If we share our knowledge in a network, I think it would benefit us all in the end."

- Store Manager

"We'll probably need outside help. Maybe the municipality could come to our meetings and maybe bring some experts that could tell us something and inspire us. Because I think we'll run out of ideas at some point."

- Co-Owner

All of the participants had input and seemed eager to contribute with ideas. The groups did not communicate during the activity or discuss the questions in advance, but the ideas and issues proposed were similar in the two groups.

#### 7.2.2 Pin the Post-It

The second activity of the workshop was the idea-generating game, *Pin the Post-it*. Participants were asked to formulate ideas on potential drivers and barriers, either in groups or individually. Additionally, participants would categorize and decide the ideas' level of importance by placing the post-its on the designated areas of the posters (see photo 7.5).

The post-its from the exercise have been transferred into two tables (see 7.6 and 7.7) to organize and visualize the points of view. Similar to the posters from the workshop, the two tables have four categories with three levels of importance. The formulations by participants vary from oneworded notions to more elaborate statements, with some being general and some more specific. The implicit nature of some of the post-its can be explained by the focus groups being prior to the game, and thus some of the notions had already been discussed by the participants in length.



Photo 7.5: Workshop participants prioritizing drivers and barriers.

Table 7.6 shows diversity in responses both in the categories and in their level of importance, where drivers for change in the economic and social category generally are deemed more important than those in the environmental category. Some ideas with similar attributes and/or meaning are placed in different categories and levels, which is elaborated upon in the following paragraphs. To get a better overview, the post-its are put into four themes.

#### **Beyond Vodskov Erhvervsforening**

One idea suggests that it is *important* to attract outsiders to the city's collaboration, while another idea suggests that it is *less important* to inspire others in the area. These ideas are linked by the idea of expanding activities outside of Vodskov, with both the potential economic benefits from collaborations with other businesses through green initiatives, and with green activities inspiring businesses and citizens within the local area. Another idea, categorized as *very im*- *portant*, suggests advertising for Vodskov's green initiatives in the whole municipality. This is, as the previous idea, rooted in the potentials of economic benefits by exploiting their green image to attract new customers and gain publicity in the Aalborg area. The idea of expanding the business network outside of Vodskov are especially relevant, since many businesses in Vodskov already are dependent of out-of-town customers and business partners. Another essential point is that an expanded business and customer network perhaps will increase the resilience of the community.

	Less important	Important	Very important
Economic		Follow-up on the initiatives.	Advertising for Vodskov's green initiatives in the whole municipality.
		Attract outsiders to the city's collaboration.	Take advantage of the good collaboration within Vodskov Erhvervsforening.
		Find a project manager.	
Social		Unity.	Share the good ("green") idea.
		Facebook.	Visibility of the good ideas.
		A forum for sharing ideas and suggestions.	
Environmental	Inspire others in the area.	A common container for paper and cardboard.	
	The school gathers waste and gets a reward pr. kilo gathered.	Get the citizens on "the green wave".	
	The city's location with Hammer Bakker to the north and Limfjorden to the south. Green areas.		
Other			

Table 7.6: The drivers for change, identified and formulated by the workshop participants.

#### Within Vodskov Erhvervsforening

In regards to the internal business network of Vodskov, one idea suggests that it is *very important* to take advantage of the good collaboration within Vodskov Erhvervsforening. From our experience members of Vodskov Erhvervsforening have good personal relationships, and are dedicated as a group in developing and driving the business community forward. This is certainly an advantage when it comes to developing and driving sustainable practices and innovation in the community. Another idea finds unity *important*, which correlates with the necessity of having good relationships in the business union. However, this is not only unity within the union, but also with other actors in the community, such as the school, church, sports associations and others.

#### **Internal Communication**

Two ideas, categorized as *very important*, suggest sharing the green idea, and that good ideas should be visible. Also, a forum for sharing ideas and suggestions were deemed *important*, along with the notion of using Facebook as the platform. The business community already has a Facebook page, but the guidelines for using it are not clear, and therefore it is not being used by many. Nevertheless, the page has potential for facilitating both business-to-business and business-to-customer communications due to its widespread usage. Members would be able to quickly share

sustainable ideas, arrange green event etc.

#### Suggestions for Sustainable Development

Participants also noted specific ideas that could be implemented. For example, one suggests that it is *important* to have a communal container for paper and cardboard. Another notion deemed *important* suggests finding a project manager to manage the process of developing, implementing, and driving sustainable practices in the community. This notion is first and foremost based on participants not having sufficient resources as time, money, and expert knowledge in sustainability to achieve the aim of becoming greener. Even though businesses are guided and supervised by the municipality through screenings, meetings, and different events, the idea of having a manager dedicated to Vodskov and being affiliated with the community would be advantageous, but also a challenge in regards to allocating the resources necessary.

	Less important	Important	Very important
Economic		Are the customers willing to pay for sustainability?	Choosing products. Being knowledgeable.
		Waste management.	
Social			Facebook.
Environmental		Choosing products / production.	
Other		Lack of time due to business and few employees.	A project manager.

Table 7.7: The barriers for change, identified and formulated by the workshop participants.

Table 7.7 shows different barriers. In contrast to the previous table, participant had fewer postits. This may have to do with most participants being optimistic about the green transition and seeing potential in changing to more environmental sustainable business models - an optimism we have experienced throughout the research. Moreover, the barrier that participants came up with are categorized as either *important* or *very important*, which may indicate that they are sincerely concerned with sustainable development. Due to fewer post-its, this table has two themes.

#### **Products & Customers**

Participants were generally concerned with products and customers. One noted that it is *very important* to become knowledgeable about green products when choosing products to offer for sale. This may be a major barrier for some businesses. Not only because they have limited knowledge about green products, but also due to specific types of retail having limited green product ranges, which makes offering sustainable product even harder. In addition to this, there were concerns about green products being more expensive. Another example also noted the barrier of navigating around and choosing green products and production, which for many participants is challenging.

#### **Limited Resources**

In the same way as with products and customers, participants were concerned with lacking resources, as time, money, and expert knowledge. On post-it expressed a lack of time due to business and few employees, whereas another was concerned with not having a project manager that would directly be associated with Vodskov Erhvervsforening. The project management post-it was also posted as a driver, meaning that participants may find it achievable and necessary as well as crucial for the network to develop.

#### 7.2.3 Sub Conclusion

From the analysis of the workshop activities with the businesses of VE, we can conclude the following:

- **Opportunities** VE has a strong network, and being a part of the NGD initiative has strengthened their willingness to take part in sustainable development. The businesses are optimistic about the possibility of developing sustainable business practices. They even have specific suggestions for improvement, such as identifying a project manager to spearhead the development.
- **Challenges:** VE does not have a structured forum for knowledge-sharing, which limits the current exchange of green ideas and experiences among businesses. Also, many businesses are unwilling or unable to allocate resources for furthering development and maintain sustainable initiatives, and they are concerned with a lack of motivation and an unclear strategy within their network.

In summary, there are several opportunities and challenges for Vodskov Erhvervsforening in regards to sustainable development. VE is a network with the potential for sustainable development, but is missing several elements important to the facilitation of this development. We will explore this notion in the following section.

## 7.3 Strategic Elements for Future Development

In this section, the we will explore the empirical findings further and apply Wenger's principles for cultivating communities of practice, in order to answer research question 3:

How can networks be utilized to explore strategic elements for innovation and sustainable development in Vodskov Erhvervsforening?

The analysis will be based on the empirical data and meaning condensations, and on observations from our interactions with participants in the network.

#### 7.3.1 Cultivating CoPs

As mentioned in chapter 6.1.2, the purpose of cultivating CoPs is to take advantage of existing knowledge and to generate new knowledge through elements of design. In the previous analyses, we have found that the businesses in Vodskov Erhvervsforening would define their current

interactions to be minimal, with only a few collaborations annually. They also express a need for knowledge-sharing and assistance to boost innovation. These are issues that an intentional cultivation is intended to prevent and/or eliminate.

Wenger's reification-participation duality and principles for community cultivation could be means of mitigating the issues of knowledge management in Vodskov Erhvervsforening, since they take into account the need for balancing the different aspects of knowledge and for reinforcing the notion of CoPs as environments for knowledge-sharing and learning. We will now apply Wenger's principles for cultivating CoPs to the organization of VE:

#### 1. Design for Evolution

The first principle is about the implementation of design elements as catalysts for the community's development. In the theoretical framework, the example of inviting experts into the community was presented. This element was suggested by both the members of Vodskov Erhvervsforening and the citizens of Vodskov, as a way of gaining insight into better practices and to expand on existing knowledge.

The members of Vodskov suggested both external and internal experts, meaning that they also saw an opportunity to engage the more peripheral members of the community. We will expand upon this suggestion in the third principle.

#### 2. Open a Dialogue

Understanding the need for an open dialogue between insiders and outsiders of the community is an essential principle for the evolution of a CoP. Vodskov Erhvervsforening seems to have understood this need well, through their willingness to participate and even spearhead the municipality's initiative. They have welcomed the outside perspective on current practices, and are open to dialogue.

A possible issue that we can pinpoint, is the community's attitude towards the dialogue. The members are open to the perspective of outsiders, and to receive insights and feedback from others, but aside from one member and one post-it idea in the workshop, they have not expressed a great interest in sharing their knowledge with outsiders. The member is not a member of the core group of the community, and he would almost be considered a peripheral member, since he is not very active in the community. He is a new member, but is very knowledgeable and passionate about sustainable development, and he has attempted to share this passion with other members. Unfortunately, he has not had any success in sharing his knowledge with his fellow community members. He did not participate in the workshop, but he participates in events outside of the local community, and is thus willing to share his knowledge with outsiders. When we asked the other members about their interest in participating in events arranged by the municipality, they replied:

"We shouldn't do that. We need to use our energy here and not participate in all that unnecessary stuff (pangel) in the city."

- Co-Owner

There is a plausibility of the dialogue becoming one-sided, and not being a two-way communication between Vodskov Erhvervsforening and interested parties. Opening a dialogue up to the perspective of outsiders can be an uncomfortable process, since it can involve criticism of current practices. However, for change and innovation to occur, current practices need to be evaluated and possibly changed or eliminated. The active members of VE is expecting change of practices, through the NGD initiative, and therefore the open dialogue is quite essential.

To highlight the aspect of external criticism to current practices, the sustainable development initiative of the fast-fashion clothing-retail company, *H&M*, is a useful example (previously presented in section 3.3.3). The initiative have faced a vast amount of criticism, since the company is the second-largest global clothing retailer and the epitome of the fastfashion industry. The irony of the company's involvement in sustainable initiatives has caused enormous amounts of criticism from customers, competitors and more. Through the initiative, the company is sharing information on current practices and its intentions for sustainable development, in order to invite outside perspectives in. Though criticized, the open dialogue have helped the company in achieving a more environmentally-friendly profile, and to establish partnerships, e.g. with the acclaimed Ellen MacArthur Foundation.

#### 3. Invite Different Levels of Participation

In this principle, we focus on the different levels of participation within the CoP, which we briefly touched upon in the previous principle, when we highlighted the different activity levels of some of the members.

As mentioned in the theoretical framework, there are three main levels of participation: the core group, the active group and the peripheral group. Additionally, there are the outsiders who do not participate. In Vodskov Erhvervsforening, the distinction between the three levels are quite clear. The core group is the board of the organization, who lead and arrange meetings and events in the community. The active group is the businesses who participate regularly in the community activities. We estimate this group to have around 20 members, with most of them participating in the NGD initiative. The largest group is the peripheral group with at least 70 members. Most of these are businesses outside of the retail sector, such as construction companies, and are as such not the main focus of the initiative. However, they are still members of the CoP, and it is likely that they possess insights valuable to the development of the CoP.

Wenger et al. described a valuable community design as one that invites the different levels of participation in, since the aliveness of the community is improved by doing so (Wenger et al., 2002). An example of an initiative where several levels of participation are connected, is the *Too Good To Go* concept, previously mentioned in section 3.3.2. The concept is build on a principle of connectivity, by creating a platform for communication between businesses and their customer base. The different levels are included in the concept, from creators and businesses to customers and peripheral members. In many ways, the concept's aliveness is due to this connectivity. There is room for improvement though, since the connectivity is more vertical rather than horizontal, meaning that the different member groups are connected to each other and not to the other members within their group, e.g business-to-business or customer-to-customer.

Vodskov Erhvervsforening should try to design for connectivity, in order to increase the involvement of the different types of members, since it could increase their collective knowledge and thus means for innovation.

#### 4. Develop Public and Private Spaces

One of the strength of Vodskov Erhvervsforening as a CoP is its solid foundation and structures, which can be attributed to the organization's maturity and embeddedness in the local area.

It is important to create space for privacy and individuality in CoPs, to ensure that members can share their experiences and insights one-on-one. Currently, there are no such spaces intentionally structured in Vodskov Erhvervsforening, since members only gather in public meetings. However, the need for such structure was expressed by several members of the community. They suggested a buddy system, where they could be partnered up with one other member from a similar business as their own, so that they could share their ideas and experiences. One of the informants said the following:

"It could be great if we had like a monthly meeting, where we talk about the initiative and help each other out."

- Store Manager

#### 5. Focus on Value

This principle is firmly ingrained in the organization, with the members having a clear sense of the common value of their network. We experienced that many of the members expressed their content with the unity of the organization and of the positive effect it has on their business. They expressed this regularly and unsolicited, and at the workshop it was discussed vividly. As presented earlier in this analysis (see section 7.2.1), two members said the following on the matter:

"Vodskov is a proud town, where we would like to be first-movers. There is a good sense of solidarity and we stand together."

- Store Manager

"We also brag about each other, and I think that benefits us all. We almost make a sport of endorsing local shopping. We talk to the customers and suggest that they, for an example, buy their shoes at Sko&Sko instead of buying them in Aalborg."

- Co-Owner

We would define this principle as the strongest one for the community, and a driver for the community's future development. However, there is a possibility that the CoP's value might change, when the community develops and incorporates new practices - as might be the case with the new initiative and focus on sustainable development.

#### 6. Combine Familiarity and Excitement

On this principle, the organization is currently doing very well. The close-knit community oozes of familiarity and belonging, with the active members referring to it as a little family. They feel comfortable among one another and express pride in the support they give to each other. This is a strength to the community of practice. It should, however, be highlighted that the active group represents less than half of the CoP's members, so this sense of familiarity might not be shared by the CoP as an entity. It could thus be argued that the multiple CoPs exist in the overall CoP of VE, with members coming together on different values.

Regarding, the sense of excitement in the CoP, there is a certain drive at the moment, due to the NGD initiative. Having to innovate on current practices and work on sustainable development is new to the community and different from their regular activities. The active group expresses excitement on the matter, and they have been positive with our involvement as researchers.

The organization has proved its ability to incorporate excitement and to differ from the more familiar pattern, when they took part in Knæk Cancer, a national campaign for cancer research, and arranged a cornucopia of extracurricular activities in the town. The pacesetters of the organization rallied the members on the matter, and in collaboration with most members they planned approximately 50 fund raising initiatives, such as a gala event at the inn. Their contribution to the campaign came to a total of 403.000 kroner (TV2 Nord, 2014).

The importance of balancing a CoP between excitement and familiarity has also been emphasized by Jonatan Marcussen, from the *Food Loop* project, as mentioned in the problem analysis chapter (see section 3.3.1). When discussing the management of the project, he explained that the most time-consuming aspect was participant motivation, which he defines as vital to the success of a project. Marcussen said that participants will always be more interested in the initial phases of a project, and that a drop in activity is normal, when hurdles appear. In the case of Food Loop, Marcussen especially has a difficult time with participant motivation in the winter period, where lower temperatures and fewer daylight hours affects the participants' willingness to garden and spend time outdoors.

Based on Marcussen's experiences, a drop in excitement could be expected in Vodskov Erhvervsforening's new initiative. However, being aware of a possible drop is an advantage for the CoP, since the hurdle can be ascended through strategic planning.

#### 7. Create a Rhythm

This is the least graspable of the principles. The rhythm of a CoP is ever-changing and its pace various, making it difficult to estimate. Creating a rhythm is about finding a balance between the thrill of news and the comfort of stability. In its current form, Vodskov Erhvervsforening has a functional rhythm in place, where several meetings and events are planned and repeated annually. There are member meetings twice a year, with social events happening as extracurricular. In contrast to this routine, the NGD initiative is a special events that breaks the regular rhythm and creates milestones for the community. It can thus be said that by participating in the initiative, Vodskov Erhvervsforening is advancing their current rhythm through a mix of knowledge-sharing and idea-generating.

By applying Wenger's principles to Vodskov Erhvervsforening, we have identified strategic elements for the planning of the CoP's participation in the NGD initiative. The organization is generally well-established as an overall CoP for the business community, which is a strength for its evolution and an excellent foundation for knowledge management. The new initiative will conceivably involve an implementation of new practices and events, and thus a change in the CoP's current dialogue, spaces and rhythm. The sustainable development initiatives, presented in chapter 3, have served as examples and have provided insights into possible challenges and opportunities.

#### 7.3.2 Identifying Brokers

The aspect of boundaries, and specifically boundary encounters as arenas for learning and knowledgesharing, is worth accentuating in the case of Vodskov Erhvervsforening. The active members of the CoP have expressed a need for external expertise and a willingness to learn from outsiders, in order to develop new practices.

Identifying brokers can facilitate an increase in knowledge-sharing across communities, and thus enable them to innovate on current practices. However, the brokering role is a complex one, requiring that the community member possesses *"enough legitimacy to influence the development of a practice, mobilise attention and address conflicting interests"* (Wenger-Trayer, 2018).

In the case of Vodskov Erhvervsforening, there are several of the active members that could possess the needed legitimacy, and some peripheral ones that possess the needed multi-memberships. The issue lies in finding members possessing both. The peripheral members - particularly one of them - are interested and participating in events outside of the CoP, which allows them to straddle the boundary through multi-memberships. The active members - particularly the ones in the core group - are considered the pacesetters of the community, and as such have legitimacy to mobilize the other members' attention and spark interest in activities. We have not come across a member currently possessing both legitimacy and multi-memberships, and thus it is difficult to pinpoint an ideal broker.

The chairman of the board is one of the more eligible candidates, as he possesses legitimacy and, as the contact point to the municipality, is somewhat involved in another CoP. However, he clearly expressed an unwillingness to participate in the municipality's events and would not take on more responsibilities. Another possible candidate, is the peripheral member mentioned in the second principle, in the previous section. He possesses passion and multi-membership, but is considered an outsider to most of the CoP members. We have contemplated the possibility that he could become quite valuable to the community and perhaps a great broker, if the value of the CoP evolved into a more sustainability-conscious one. We will explore this notion of a value shift in the following chapter, section 8.1.

#### 7.3.3 Sub Conclusion

In this analysis, we have explored how the principles of Communities of Practice can be utilized to identify strategic elements for innovation and sustainable development in Vodskov Erhvervs-forening. By applying Wenger's seven principles for cultivating CoPs to our empirical findings, we have highlighted different areas of the current CoP, and have found aspects that should be considered, changed and/or taken advantage of, with the purpose of improving knowledge management.

Vodskov Erhvervsforening should focus on connectivity between its members, and between insiders and outsiders. Their is a need to engage the peripheral members of the community, to tap into their knowledge and mobilize their attention. Additionally, the organization should open a dialogue with outsiders, and to be acceptable of criticism of their current practices and values. This is a possible pitfall for the quite proud community. Lastly, the most important aspect is to take advantage of the active members, who are passionate and willing to change. These will be the driving factor in the community's sustainable development and innovation.

## 7.4 Conclusion of Analyses

In the first sub analysis, we established that the businesses of Vodskov Erhvervsforening's possess different perceptions of sustainability, but share a willingness to develop their current practices. Furthermore, we identified that the businesses collaborate minimally, and expect an increase in collaborations with the new initiative. Lastly, we found that customers responded positively to the prospect of sustainable development among the businesses.

In the second sub analysis, we explored the opportunities and challenges for sustainable development in Vodskov Erhvervsforening, with the active members of the CoP. The participants in our workshop activities identified several areas of improvement, with suggestions for future practices and events. The general themes of the input was on knowledge-sharing, networking and communication.

In the third sub analysis, we applied Wenger's seven principles for community cultivation to our empirical findings. We identified several strategic elements for knowledge management, that can be used to further the sustainable development initiative in Vodskov Erhvervsforening. Most of the elements had a connection to internal knowledge-sharing and external communication. The community needs to increase their knowledge-sharing through a restructuring of current practices, by implementing strategic elements, such as private spaces, open dialogues, and the identification of brokers.

# **Chapter 8**

# Discussion

In this chapter, we will reflect upon our findings and discuss the possible limitations and effects of our research. In the first section, we will consider the evolution of Vodskov Erhvervsforening's current CoP, and the likelihood of changing the firmly settled community. In the second section, we will discuss the effects of our research, and address the difficulties with measurability, and the possibilities for future research.

## 8.1 Changing the Current CoP

The strength and beauty of CoPs comes from the voluntary nature of the members' participation, and that it is driven by a personal belief in the value of the CoP. The CoP of Vodskov Erhvervsforening is currently a strong and proud community, based on its members' belief in unity and solidarity as a small business network. They attribute their collective business revenue and individual business success to the alliance, in many ways. Currently, this is the value the community members are focused on; the profitability and security of the organization.

According to Wenger, the value of a community is what it thrives on, and a key element in cultivating CoPs is to encourage its members to be explicit about the community value and to discuss it continuously. He also points of that the value is likely to change, due to the evolution of the community.

In section 7.3.1 of our analysis, we briefly noted the possibility of a value shift being evoked by the Netværk for Grøn Detail (NGD) initiative. This notion is based on our discovery of peripheral members of the current CoP, which are excited by the prospect of sustainable development and innovation within Vodskov Erhvervsforening. They are driven, and passionate about expanding their current knowledge, and sharing that knowledge within the organization. This is a major opportunity for value evolution. However, the core group and most active members of the CoP have expressed their firm believe in the new initiative being an add-on to the current value of the CoP. This was clearly conveyed in the individual interviews and in the focus groups.

In contrast to this, Wenger's concept of community development exists, in which communities have an end-of-life - unless they transform (Wenger, 2004). Its central argument lies in the principle of living things constantly evolving through transformations, e.g. the human transformation from baby to full-grown adult (Ibid.). From this life cycle perspective, Wenger has created a model for community development, comprised of five stages; potential, coalescing, maturing, steward-ship and transformation (Ibid.). In the early stages - *potential* to *maturing* - the scope and value of the community is still being defined by its members, through negotiations and open dialogue. In the late stages - *maturing* to *transformation* - the community is managing its boundaries, establishing routines and sustaining momentum (Skelton, 2017). The five stages are illustrated in figure 8.1.

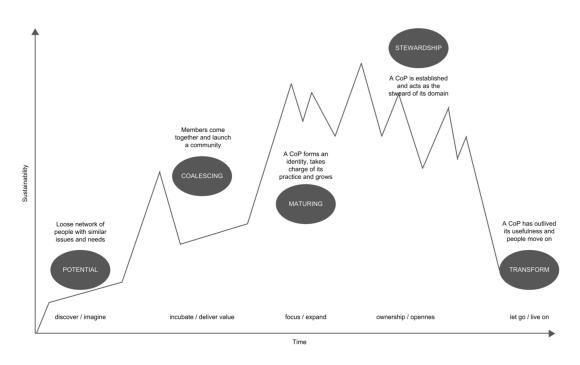


Figure 8.1: The stages of community development (Wenger et al., 2002).

In the model, the jagged line represents the energy level and visibility that the community generates over time (Wenger, 2004). Wenger argues that communities start out as mere potential and evolve until they are either transformed or no longer relevant in their domain. He amplifies that the stages of development are mere typical and not prescriptive of a community's development, and that the duration of the various stages are indeterminable and may differ from CoP to CoP just as some people experience their adolescence in their fifties (Ibid.).

We highlight this concept of community development, due to its applicability to our discovery of the peripheral members interest in sustainable development and innovation within the current CoP. We would argue that the current CoP of VE is placed in the transformation stage, since it is solidly cultivated in its domain, and there is an interest in increasing the domain through the NGD initiative. The transformation stage is where CoPs either evolve into new domains, or meet their end (Ibid.). This is not necessarily as morbid as it sounds. CoPs can remain in their current stage, but it is likely that the current members will seek new domains through a loss in interest. It is also possible that communities merge in this stage, or that the current CoP splits up into a series of distinct ones, due to the domain becoming too complex (Ibid.). We suspect the latter to be a genuine prospect in the case of Vodskov Erhvervsforening, if the core community members do not recognize the peripheral members interest in change. If the community members no longer believe in the value of the community, they could abandon the CoP and move on to another, or create their own and co-exist. It is therefore possible that the NGD initiative could be the stepping stone for a new CoP in the business network of Vodskov. One where sustainable development is the main value, and where the community activities are focused on collaborations beyond the Vodskov area.

Such a CoP could even benefit the current CoP, by supplying knowledge through collaborations and generating an increase in business revenue, through external partners getting connected

to the business network of Vodskov. However, if Vodskov Erhvervsforening aspires to sustain the current CoP, they must strategically implement an infrastructure that supports knowledgesharing. For as Wenger said:

"The most successful communities have always combined bottom-up enthusiasm and initiative from members with top-down encouragement from the organization."

(Wenger, 2004)

## 8.2 The Effects of Our Research

In our research, we have used theoretical principles on knowledge management and applied them to our methods and the analyses of our empirical data. On a theoretical level, the approach should benefit knowledge-sharing and learning in Vodskov Erhvervsforening, with the aim of creating innovative sustainable development initiatives. This would entail an implementation of the strategic elements found in our analyses, and thus a change in the organizations' activities. A change that increased innovation and the sustainable development in the organization.

However, if the strategic elements is actually implemented as suggested, how do we measure the effect(s) of them? We cannot set up specific goals for the implementation, since the overall strategy for the initiative in Vodskov is still unclear to the organization. This dilemma is quite common in qualitative research, since the subjects of investigation are often elastic concepts rooted in the experiences of individuals. It is focused on meanings, concepts, metaphors, symbols and/or descriptions (Berg, 2012). The context of the researched is ever-changing, and cannot be recreated in a controlled setting, as it can be with most quantitative research.

What we are able to do, is to recognize indicators of the possible effects. In our interactions with Vodskov Erhvervsforening and the municipality, we have been given hints of changes. The main activity of our research has been the workshop with businesses from the organization, where we facilitated knowledge-sharing between the members of the CoP. We used Wenger's principles and created a public space, where an open dialogue could take place, and where the community members had the opportunity of discussing the value of their community. As Wenger argues, it is essential for the CoP to have an open dialogue between both insiders and outsiders, with us as researchers taking the role of the outsider. We questioned there current practices and thus introduced the outside perspective to the community. We also provided an element of excitement to the familiarity of the community, by facilitating this extracurricular activity.

The outcome of the workshop turned out to be more than just empirical data for our research. At the Open By Night event in May, we met Martin Quintero Hansen, our primary contact to the municipality, who praised the workshop as a real catalyst for change. He informed us that it had sparked engagement among the businesses, who had created several initiatives, based on their experiences in the workshop. When we went by some of the businesses at the event, they told us that they had created a collection center at the second-hand store, where citizens could hand in used or worn-out clothing for recycling.

Such initiatives are clear indicators of our research having an effect on the implementation of the NGD initiative in Vodskov, and on the ability of Wenger's principles for knowledge management (Wenger, 2004). The workshop participants engagement had increased and they had found

common ground for furthering initiatives for sustainable development within the community.

We expect to see further indications of our research's effect on June 18th, where we will be having a hand-over meeting with Vodskov Erhvervsforening. The purpose of the meeting is to present our research results and to give the organization our recommendations for their future strategy. Additionally, we will produce a pamphlet with information on the initiative for the general public, as an example of communication material that can be created to further the knowledge-sharing process.

But how do we measure the effect in the future? A limitation to our research is time, since we will not be able to gather further evidence on our research's effect on the initiative within the time period for this study. It would be interesting to see if we could detect further indicators of change at the next Open By Night event, which is held in August.

# **Chapter 9**

# Conclusion

The purpose of this master thesis has been to examine the implementation of the sustainable development initiative, Netværk For Grøn Detail (NGD), in the business network of Vodskov, and to explore how networks as arenas of learning and knowledge-sharing can be utilized in the development of strategic elements for innovation and sustainable development.

The research has been based on the following problem statement:

Aalborg Municipality has established the Netværk for Grøn Detail to increase the sustainable development of businesses in the municipality, with Vodskov Erhvervsforening considered a front-runner. However, the current status and strategy of the initiative is unclear to the businesses of Vodskov Erhvervsforening. An exploration of current perceptions and strategic options is needed, for the initiative to flourish.

The research has been conducted through a research design rooted in cultural anthropology and phenomenology, with the use of qualitative methods for gathering empirical data. The theoretical framework of the research has been Wenger's concept of Communities of Practice, which has been utilized as a tool for learning in networks.

14 businesses from Vodskov Erhvervsforening (VE) have participated in workshop activities and/or have been interviewed individually, and the findings from the activities have been analyzed, in order to adequately address the research questions. The research scope has been threefold, and has included; an examination of the current perceptions of sustainable development among the businesses of VE; analyses of the challenges and opportunities that exists in development and innovation of the network in the initiative; and an exploration of the utilization of networks to explore strategic elements for innovation and sustainable development in Vodskov Erhvervsforening.

The participating businesses' perceptions of sustainable development are varied and generally characterized by their shared willingness to develop current practices, and to activate the connectivity of their existing business network. In the individual interviews, several businesses expressed an interest in collaboration with peer business to increase innovation and knowledge-sharing - the lack of which they identified as a current barrier for sustainable development. The challenges and opportunities for innovation and development in the network was identified by the businesses in the workshop activities, through a facilitation process that generated ideas and shared knowledge. The workshop participants was given a public space for learning and used the open dialogue to discuss the value and purpose of their collaborations in the NGD initiative. The challenges identified included; communication with stakeholders outside of Vodskov Erhvervsforening, particularly customers; spaces for learning and knowledge-sharing, such

as lectures by experts; and strategies, especially specific guidelines and goals. Among the opportunities, the participants suggested specific events and structures for furthering communication of practices and internal learning, such as the set-up of a buddy system for peer learning.

Finally, in the application of Wenger's principles for community cultivation to the network of Vodskov Erhvervsforening, elements for strategy development of the NGD initiative was identified. The network of VE benefits from its close-knit nature, and there is a high degree of connectivity among members, through the network. However, the organization is not currently applying this advantage to collaborations for sustainable development, innovation and learning. Utilizing Wenger's principles as a tool for learning in networks, can increase engagement, ambition and innovation in the organization. Evidence of this was detected in the outcome of the workshop event, where the participating businesses initiated several collaborations, based on engaged participation and knowledge-sharing.

Furthermore, the research has highlighted the possibility of several sub-communities evolving within Vodskov Erhvervsforening. Sub-communities among the businesses of VE, provide a dynamism in the organization and they should be utilized to create innovation and development within the organization. There is no need for Vodskov Erhvervsforening as an entity to spearhead the sustainable development in Vodskov, but there is a need for the organization to facilitate learning. The emergence of sub-communities from different sectors, such as retail and construction, could form the strategy for the entire organization. The shared interest and domain of members is key to learning in networks, since engagement and trust is build upon shared practices.

Based on the conclusions of this research, recommendations for fostering learning in the business network of Vodskov Erhvervsforening has been developed and will be presented in the following section.

#### 9.1 Our Recommendations

The following recommendations are specific to Vodskov Erhvervsforening, and are based on the entirety of this research, and on the suggestions made by the businesses within the retail sector, participating in the research activities.

#### **Create Spaces**

As the workshop event proved, creating a shared, public space for knowledge-sharing and innovation affected the drive and engagement of the participating businesses. Therefore, we recommend that such spaces for learning and exchanging ideas should be implemented into the future strategy of the NGD initiative in Vodskov.

Specifically, we suggest using the proposed buddy system to generate private spaces for the participating businesses, so knowledge-sharing between peer businesses are facilitated. This will most likely increase innovation and learning in the network.

Another suggestion for the creation of spaces is public meetings with the citizens of Vodskov. In the vox pop interviews, we found that several of the respondents were interested in lectures of sustainable development and practices, and would like information on the initiatives taking place in their community, e.g. the NGD initiative. For the structuring and strategic development of spaces, we suggest that the participating businesses create an event plan covering the next year. Such a structure can create milestones for the participating businesses, and assist in sustaining motivation and interest. The event plan could be in the form of an annual cycle, illustrating the events on a wheel, serving as a timeline.

#### **Project Manager**

Based on Wenger's concept of CoP and on the essential role of brokers in regards to knowledgesharing, we recommend that brokers are identified and utilized as project managers for the sustainable development initiative in Vodskov. The businesses who participated in this research showed a shared passion for sustainable development in the retail sector, and could be the founding members of a blooming CoP with the aim of furthering such development. Among those participants, a broker could be identified and given the role of project manager, with the purpose of facilitating communication and collaboration.

#### **Communication Material**

Several key informants in this project highlighted the necessity of communicating the new initiative and possible changes in practices externally, especially to customer and the general public. This was highlighted by both the businesses in Vodskov Erhvervsforening and the citizens of Vodskov.

We recommend that Vodskov Erhvervsforening distribute written material on the initiative, e.g. a pamphlet with information for the general public. We have designed a proposal for such a pamphlet, and will present it to the organization on June 18th, at the hand-over meeting.

#### Assistance from Aalborg Municipality

Our final recommendation, is focused on the municipality's involvement in the initiative. Assistance from the municipality could be valuable in maintaining and driving knowledge-sharing and innovation in the network, through their ability to add insight from outside the core community. Additionally, the municipality is a point of contact to several stakeholders that could be useful in future collaborations. The municipality could also assist with some of the previous recommendations, e.g. with creating spaces for learning, and producing and distributing communication material.

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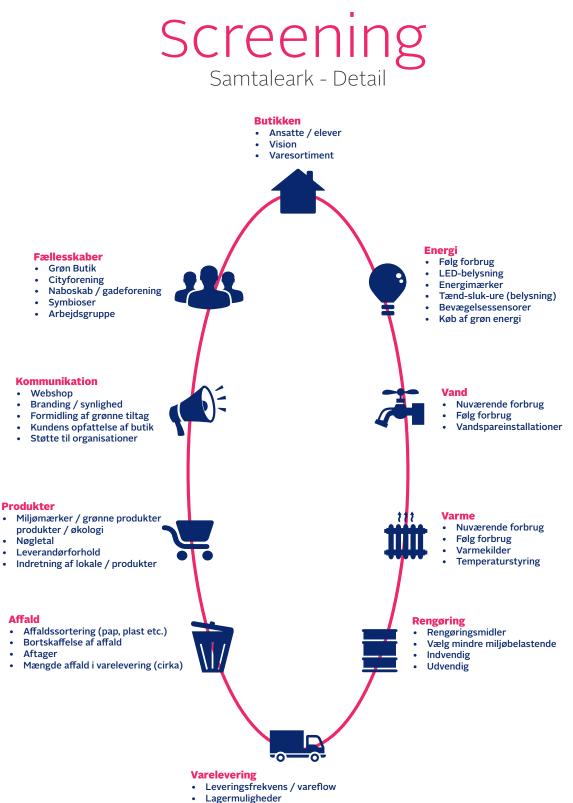
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# Appendix A

## A.1 NGD's Screening Agenda



- Indflydelse på levering / ønsket indflydelse?
- Fjernlager

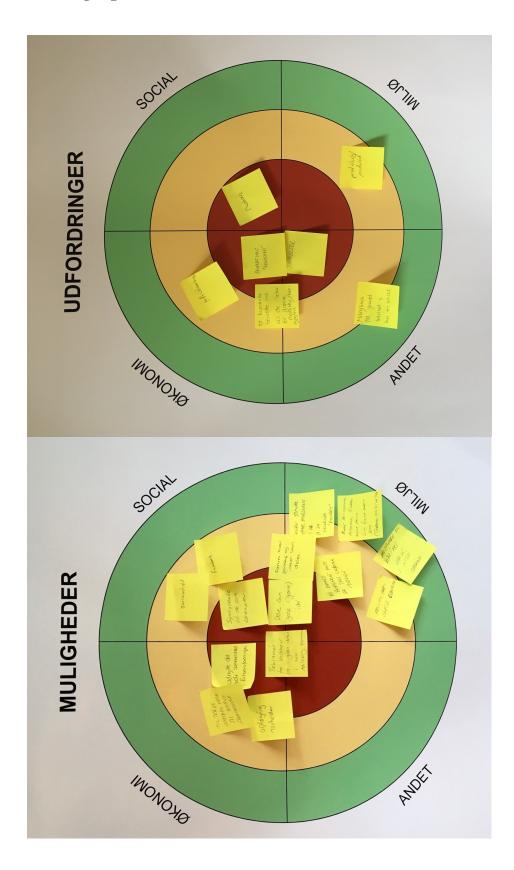
<b>Businesses</b>
Individual E

Research Question	Interview Question(s)
	Intro til butikken: Services, produkter, kundegrupper, medarbejdere, anciennitet.
What is the current attitude towards sustainability among the businesses in Vodskov Erhvervsforening?	<ul> <li>Hvordan fik du kendskab til NGD?</li> <li>Hvilke grunde er der til at du er med i netværket?</li> <li>Branding</li> <li>Miljø</li> <li>Økonomi</li> <li>Andre?</li> <li>Hvad har været de andre butikkers grunde?</li> <li>Hvad gjorde I før NGD?</li> </ul>
Which challenges and opportunities exist in driving sustainable practices and innovation in the case community?	<ul> <li>Er der sket nogle ændringer i jeres butik, efter I er kommet med i NGD?</li> <li>Blev I opmærksomme på noget ved screeningen?</li> <li>Hvad synes du'l er jeres butiks udfordringer ift. bæredygtighed?</li> <li>Hvorfor?</li> <li>Hvordan samarbejder I med de andre butikker? Ift. grøn omstilling.</li> <li>Nogle mere andre?</li> <li>Hvad kan I som butik blive mere bæredygtige og miljøvenlige?</li> <li>Hvad kan andre butikker gøre?</li> </ul>
How can sustainable initiatives be cultivated into the case community?	<ul> <li>Hvordan kan konceptet NGD forbedres i Vodskov?</li> </ul>

# Focus Groups

Research Question	Interview Question(s)
What is the current attitude towards sustainability among the businesses in Vodskov Erhvervsforening?	<ul> <li>Hvorfor vil I gerne være en del af Netværk for Grøn Detail?</li> <li>Hvad handler Netværk for Grøn Detail om?</li> <li>Hvad kan netværket gøre for jer? Og for miljøet?</li> <li>Hvad kan I gøre for netværket?</li> </ul>
Which challenges and opportunities exist in driving sustainable practices and innovation in the case community?	<ul> <li>Hvilke udfordringer er der ved at blive grønnere?</li> <li>Hvilke muligheder har I for at blive grønnere i Vodskov Erhvervsforening?</li> </ul>
How can sustainable initiatives be cultivated into the case community?	<ul> <li>Hvordan synes I at nye initiativer skal komme til live i VE?</li> <li>Hvilke kanaler skal anvendes til at informere om de nye initativer?</li> </ul>

## A.2 Interview Guides with Vodskov Erhvervsforening



## A.3 Photographs from Pin The Post-It Exercise

## A.4 Vox Pop for Vodskov Open By Night



Hjælp to specialestuderende, der undersøger bæredygtigheden i Vodskov Erhvervsforening.



#### AALBORG UNIVERSITET

Hvor vigtig er bæredygtighed for dig? - sæt ét kryds.

Ved ikke	Ikke vigtigt	Mindre vigtigt	Vigtigt	Meget vigtigt

Hvorfor?

Vurdér udsagnet: Butikkerne i Vodskov er grønne. - sæt ét kryds.

Ved ikke	Meget uenig	Lidt uenig	Lidt enig	Meget enig

Hvorfor?

Hvor vigtigt er det for dig at butikkerne i Vodskov er grønne? - sæt ét kryds.

Ved ikke	Ikke vigtigt	Mindre vigtigt	Vigtigt	Meget vigtigt

Hvorfor?

Har du forslag til hvordan butikkerne i Vodskov kan blive grønnere? Hvis ja, hvilke?

TAK FOR DIN HJÆLP!