Share Your Closet?

An exploratory study of collaborative consumption business models and consumers in fashion industry

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Abstract

Sustainability has become one of the key challenges in the fashion industry, which has been criticized for intense resource use, severe environmental impacts and wasteful business model. There have been a lot of new attempts and initiatives to promote sustainable fashion consumption. Collaborative consumption has been highlighted as one of the alternatives to conventional mass consumption. The idea of clothes sharing business model is both relevant as a business opportunity based on the idea of collaborative consumption and as a means to encourage more efficient use of clothing that will potentially contribute to reducing the resource flows of textiles in society and consequently environmental impacts. However, little is known about how different types of clothes sharing systems operate as a business model and a sustainability strategy. This paper explores in what way may Collaborative consumption business models of clothing contribute to reducing resource flows of textiles in the society. This study employs a comparative case study methodology of two clothes sharing organizations. Specifically, the author uses in-depth interviews and survey data to examine the business models and consumer perceptions that reflect environmental implication of clothing sharing organizations. Key findings lead to conclusions that the two studied clothes sharing business models are more sustainable in both value proposition and value creation and delivery system; however, they experience difficulties in value capture. As for consumers of clothing sharing service, collaborative consumption model has played a certain role in changing their purchasing behavior, environmental awareness and other practices. However, at present collaborative consumption of clothes remains a small-scale phenomenon with challenges reaching the mainstream market. The substan when translating and interpretingtial effect of reducing resources flow of textile remains unjustified.

Keywords: sustainable fashion consumption, collaborative consumption (CC), clothes library,

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Abbreviations

CC-collboarative consumption

1 Introduction

Overconsumption of goods in our society, especially in the fashion industry, has been accelerated in the last decade, which leads to enormous negative environmental and social impacts. The critiques of fast fashion business model have been brought up while different initiatives have been taken to make the whole business sector more sustainable. However, little is known about the changes in environmental effect by the adoption of different types of innovative business models in the clothing sector.

1.1 Problem definition

Sustainable issues associated with producing and consuming clothing and other fashion goods around the globe are substantial and can never again be ignored. Clothing contributes 5-10% of environmental impacts across the EU25 and is following most huge classes after food and drink, housing and transport (WRAP, 2013b). While simultaneously, reduction of clothes' price and expansion of fast fashion culture has lead to an extraordinary ascent of clothing consumption and waste. The number of pieces of apparel bought per capita increased from 9.0 in 2000 to 13.9 in 2012 worldwide (Caro & Martinez-de-Albéniz, 2014), but most used dress either end up in the back of the closet or an incinerator, while just a small portion is reused and recycled (Palm et al., 2014). Tighter environmental legislation and nature resources scarcity has pushed companies' management agenda for sustainability. Many manufacturer leaders have involved in this movement, such as H&M, Mark&Spencer, with eco-friendly practices in its supply chain to reduce the environmental impact (Deloitte, 2013).

Fast fashion is a volume business, regardless if these fashion companies figure out how to moderate its environmental impact progressively from one year to the next, its business keeps on expanding, and that environmental footprint stays enormous—and far from sustainable. Efficient production methods and eco-materials are insufficient to achieve a sustainable fashion industry. The issues that happened after purchased are often neglected and even accelerated by current fast fashion business model- a model that drives a larger and more frequent consumption of clothes and created a disposable culture (Caro & Martinez-de-Albéniz, 2014; Marc Bain, 2015). These critiques of fast fashion calls for new innovative business models, which can increase the proportion that garments are reused, therefore, release this nature recourse-intense industry out from the loop of sales volume dependency.

It seems to be sufficiently hard if this is the end of the story of fashion industry's sustainability dilemma. However, a critical partner was dismissed-consumer. Consumption of fashion goods has turned out to be inherently connected to the satisfaction of many psychosocial needs. Fashion consumption is now more recreations rather than basic needs of warmth and shelter (Niinimäki & others, 2013). 83% of people were found that care about fashion trends and would like to adopt some of them before they are out of date (Birtwistle & Moore, 2007). How to meet consumers' fashion needs without hurting economical and sustainable development is a question. New radical ways must be created to present a win-win-win situation for all producer and consumer - and for the environment.

The business models build around the idea of collaborative consumption (CC) may offer a solution. The term 'collaborative consumption', raised by Ray Algar, a U.K.-based management consultant, and popularized by Rachel Botsman and Roo Rogers, gives a name and is infusing fashionability into time-honored activities such as sharing, bartering, lending, trading, renting, (re-) gifting, and swapping (MacArthur, 2013).

Fueled by the success and development of CC in many industries, like Uber (car sharing), AirBnB (space sharing), these schemes has gained widespread popularity (Pedersen & Netter, 2013), and out of that CC business models in clothing sector are mushrooming in Nordic countries. Examples include physical shops like Swedish initiative Lånegarderoben established in 2010, which serves as a library where people can borrow clothes instead of books. The idea is to be able to renew the wardrobe without contributing to increased consumption (Lånegarderoben, 2015). Or online service like Vigga started in 2014, a Danish company that lease of baby and children's wear. The idea is that babies and children growing fast, leasing a package of clothes that always fit is more sustainable than owning clothes, which has to be regularly replaced (Vigga, 2015).

The business model of CC in the clothing industry has been received great expectation to its potential in transforming the conventional business model to a sustainable path and address different stakeholder's needs. A Deloitte report Fashioning sustainability suggests developing more sustainable consumption models like CC as one of the six strategies for driving sustainable consumption (Deloitte, 2013). The working paper Sustainable textile initiatives and suggestions for a Nordic Roadmap published by Nordic Council of Ministers in 2014 sees these CC models as sustainable business models that can replace the fast fashion (Klepp et al., 2014).

Clothes CC initiatives are both pertinent as business opportunities and as approaches to promote a more efficient utilization of clothing that will bring down the environmental footprint of fashion production and consumption. A report of Environmental benefits from reusing clothes indicated that reusing clothes can significantly contribute to reducing the environmental burden of clothing (Farrant, Olsen, & Wangel, 2010). However, few studies attempted to examine how different types of CC system can work as a business model and a sustainability strategy.

Nonetheless, given that the concept of CC has yet to take hold in the mainstream fashion industry, the hopes associated with CC business models remains unjustified. Accordingly, there are great motivations to pay attention to these CC systems and investigate its business viability and sustainability profit in the present world practice and figure out approaches to scale-up these thriving business models by learning barriers and opportunities.

Thus, this thesis addresses the problem of unwarranted expectations that are placed on the collaborative consumption of clothes and its potential to environmental impacts. In this paper, the author wants to discuss the innovative clothes-sharing model as a strategy to change consumer behavior in order to reduce the textile consumption volume. The author wants to show here not only that the business model per se might contribute to the reduction of environmental impact of consumption through increasing the reusing of clothing, but also, that clothing sharing influence consumer behavior.

PURPOSE

With this context in mind, this study intends to understand better in what way may CC business models contribute to reducing resource flows of textiles in the society? To answer this question, the following sub-questions will be answered:

- 1. What are the existing CC business models in clothing sector?
- 2. What are consumer perceptions about CC business models in clothing sector?

3. How much do CC business models contribute to reducing resources flows of textiles in society?

1.2 Delimitation and limitation

The study is focusing on the CC business model in clothing sector-a business service that allows people to access clothes, share wardrobes without owning items. Collaborative consumption, sharing, sharing initiatives, clothes sharing, sharing initiatives and CC business models are used interchangeably. Two clothing libraries, as representative cases were studied. Similarly, the term "clothing" means the fiber and textile material worn on the body in this study, synonyms used in this paper like apparel, garment, attire, accounterments, array, clothes, wear, outfit, fashion do not refer to particular different things.

The focus is on the environmental profit of such a model. Displacement effect is the direct environmental profit of such activities. However, the business activity indirectly influences environment throughout clothing's lifecycle. To achieve the research question, economic aspect and other business model elements of such a business model have been studied as well.

As the developments of the business are dynamic, the paper sets a chronological deadline and reflects the situation up to May 2015. Information on the performance of the libraries in Nordic countries is collected personal interviews with business representatives and libraries' customers/potential customers, a limitation in terms of representability lies in the small number of individuals from two group: business owners and customers.

Moreover, insufficiency of quantified data is a considerable limitation, for various reasons, interview with several potential informant could not be arranged, Efforts were made to compensate for the limitation and ensure the quality and accuracy of the information provided, by also looking at written statements and other publicly available sources. The interview data encompass only the self-reported behaviors and views of a small group of limited and specific consumers.

Another limitation has been the language barrier. This is an issue worth mentioning since almost all the official website of these businesses are in their original language (Swedish, Danish, Norwegian, etc.), and little literature specifically studied this model, the author has to process data from documents written in other languages. Such as the data of consumer's view on Chare (Clothes sharing organization) was attained from a survey result originally written in Danish and processed by the author. In this regard, any mistakes or omissions when translating and interpreting data remain the responsibility of the author.

1.3 Audience

The main target group includes stakeholders involved in the current discussions about sustainable CC business model in fashion industries in Nordic countries, which includes organization representatives, customers and potential customers, local authorities, fashion retailers.

As for organization representatives, this research will give them a reflection about their business activities from consumer's perspective and a better understanding of business performance and their implications, and the future for this business.

Local authorities /municipality/state and policy makers plays a supportive role in this case, they should be interested in taking part of the results of this study since it will give them a

holistic picture of this particular business model in fashion sector, and what are the supports they can provide to better facilitate the business development, and what are the implications to go about transforming the prevailing pattern of production and consumption to a more sustainable one.

Consumers (library members or potential members) will get a better picture of the options for fashion consumption, this should be interesting information to influence their consumption behavior.

Fashion retailers/brands or designers, who as a supplier of clothes may take this study as a channel to get insight of these business initiatives, it may trigger their business model innovations or designing clothes in a more sharing-friendly way, or opportunities for future cooperation with the organization owners.

It appears that the topic of clothing libraries as an alternative to conventional consumption pattern have not been given enough attention in the scholastic literature, especially lack of data from a consumer's perspective. This report will give an overview of clothing sharing business with a focus on two fashion library cases, and in-depth information about their practices and what areas it is be needed to conduct more in-depth research. The study should for that reason be of interest also for the research community who are, or wants to work within this field.

1.4 Disposition

Chapter 1 presents the background and significance of this thesis. It focuses on the need for sustainable fashion consumption pattern and collaborative consumption business model as a suitable alternative. Then it talks about the aim of the study, which is to justify the environmental potential of CC business model. Last but not least can be found a description of the scope and limitations as well as the audience.

Chapter 2 has been dedicated to the methodology. It contains an overview of the business model literature, the choice of criteria and indicator for consumer analysis. It also explains the general method of data collection.

Chapter 3 is based on a literature review and gives an overview of CC, CC model in the clothing sector, it also provide a number examples of different type clothing CC. Also, it examines different types of consumer's perception toward sustainable clothing consumption.

Chapter 4 contains both findings from the case studies of the two organizations and their customer's interview result. It displaces in the structure of business model analysis framework, and consumer analysis framework adapted by the author.

Chapter 5 is an analysis part contains the comparison of two organizations, comparison of two groups of consumers and comparison and interpretation from the literature review.

Chapter 6 is a discussion that focuses on the future of clothing sharing business: barriers and opportunities.

Chapter 7 is the concluding chapter that presents the main findings of the study and explains whether and how the thesis contributes to anything new. The chapter provides several recommendations for the future research.

2 Methodology

The objective of this chapter is to present the research approach that taken to the show the aim of the study and answer the research question. It contains an overview of the business model literature, presents the link behind consumer behavior and environmental impact, and the reasoning behind the choice of consumer analysis criteria. Finally, it describes the methodological approach for data collection and the literature sources that have been used.

Business model

2.1.1 What is a business model?

It is turning out to be progressively prevalent to discuss business models, and the concept of the business model is broadly used. Wirtz (2011) notes that the term business model evolved into a popular expression that was not used consistently or precisely as a part of either in practice or a scholarly world. Since the first definition of business model by Timmers (1998), there have been many continuous endeavors to characterize business models in business literature, the terms business model, business idea, business concept, revenue model, or economic model were frequently used interchangeably. In any case, there is no universal definition of business model (Lee & Casalegno, 2010; Wirtz, 2011).

One of the more basic definition of the term 'business model' was proposed by Osterwalder & Pigneur (2010) as describing the rationale of how an organization creates, delivers, and captures value (economic, social, cultural or other forms of value). Correspondingly, Teece (2010) claims that the essence of a business model is the manner by which the enterprise passes the value to customers, attracts customers to pay for value, and turns those payments to profit. It, therefore, reflects management's hypothesis about what customers need, how they want it, and how the enterprise can organize to meet best those needs, get paid for doing so, and make a profit. Thus, a business model is conceptual instead of financial. Both definitions center on 'value' in a business model thinking.

2.1.2 A Business model innovation for sustainability development in fashion industry

There has been a noteworthy concentrate on new and innovative types of business models in lately. Teece (2010) points out that figuring out how to capture value from innovation is a key element of business model design. Business model innovation is progressively perceived as a key to conveying more prominent social and environmental sustainability in the modern system. Business model innovations for sustainability are characterized as: Innovations that create significant positive and/or significantly reduced negative impacts on the environment and/or society, through changes in the way the organization and its value network create, deliver value and capture value (i.e. create economic value) or change their value propositions (Bocken, Short, Rana, & Evans, 2014) Moreover, regarding the attention on 'value' in a business model, sustainability business models are deciphered to propose the values 'being in tune with nature', 'Preserving the environment', and 'Social responsibility' among different values as its core values (Lee & Casalegno, 2010). Lee & Casalegno (2010) argues the value proposition would provide a quantifiable environmental and social value together with monetary value in a sustainable business.

On the other hand, one of the perspectives on approaches towards sustainable future fashion that literature presents identically is: business model innovation or sustainable business model (CSCP, 2013; Deloitte, 2013; Klepp et al., 2014; MacArthur, 2013; Niinimäki & others, 2013; Palm et al., 2014; Tekie et al., 2014; WRAP, 2013b). Nonetheless, comprehension of sustainable business models and the alternatives available for innovation for sustainability appears to be limited at present (Tekie et al., 2014). Thus, a study from a business model Perspective for sustainability development in the fashion industry is necessary.

2.1.3 Conceptual business model framework

For the purposes of this thesis reach, a simplified analytical framework is necessary which identify different types of business activities that are specifically relevant to bringing the sustainability profit, meeting the consumer and economical needs.

While the similar situation with the definition, there are also plenty of variations in the components of a business model. Richardson (2008) summarizes previous literature about business model elements and then develops a comprehensive business model framework, which include three main elements: the value proposition, the value creation and delivery system, and value capture. Value proposition is what the firm will pass on to its customers, who are the target customer, and what the firm's fundamental strategy to win customers and build competitive advantage, The value creation and delivery system is about how the business will generate and convey that value to its customers and the source. Value capture is about considering how to create income and make the profit from the provision of good, services or information to users and customers (Richardson, 2008). Osterwalder & Pigneur (2010) believes that a business model can be best described by 9 elements to show the logic how a company create value, which are: Customer Segments, Value Propositions, Customer Relationships, Revenue, Streams, Cost Structure, Key Resources, Key Activities, Key Partnerships, Chanel, Revenue Streams. These nine components together are also called business model canvas to understand how a company creates delivers and capture value. Bocken, Short, Rana, & Evans (2014) note both of them capture the core of a business model and overlap business essentials somehow. Bocken, Short, Rana, & Evans (2014) also combine these two frameworks of business together, develops a comprehensive conceptual business model framework.

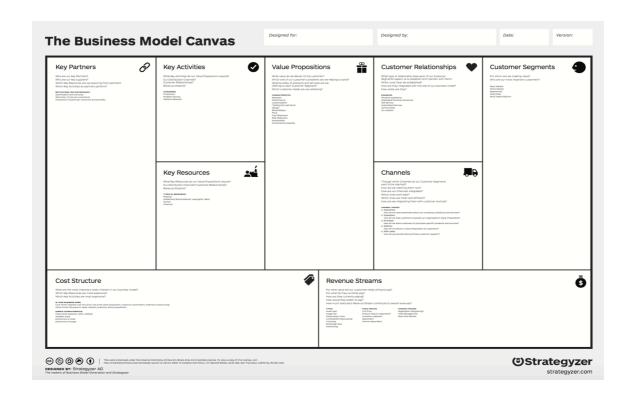


Figure 2-1 The Business Model Canvas

Source: http://www.businessmodelgeneration.com/canvas/bmc

This framework presents a useful overview of business model elements and describes how a business model creates values. Thus, this framework present by Bocken, Short, Rana, & Evans (2014) and business model canvas will serve as an analytical framework to analyse two cases later. The framework is shown as below:

Table 2-1 Conceptual Business Model Analysis Frame Work

sition	Customer Segments	Characterizes the deferent groups of individuals or organizations an enterprise plans to reach and serve
Value proposition	Value Propositions	Depicts the products and services that create value for a particular Customer Segment
Value	Customer Relationships	Describes the sorts of connections a company sets up with particular Customer Segments
and	Key Resources	Describes the most imperative resources needed to make a business model work
ation syste	Key Activities	Describes the most essential things a company must do to make its business model work
	Key Partnerships	Portrays the network of suppliers and partners that make the business model work
Value deliv	Chanel	Explains how a Company communicates with and reaches its Customer Segments to deliver a Value Proposition
Value capture	Revenue Streams	Means the money a company creates from every Customer Segment (costs must be subtracted from revenue to create profit)
V; cap	Cost Structure	Describes all costs required to manage a business model

Source: Adapted from (Bocken, Short, Rana, & Evans, 2014; Osterwalder & Pigneur, 2010; Richardson, 2008)

2.2 Consumer analysis

This section intends to provide theoretical framework for the second sub-research question. A study of Mistra Fashion project (Esben Rahbek Gjerdrum Pederse & Kirsti Reitan Andersen, 2013) presents that new initiatives are called for to help translate positive consumer disposition toward sustainable fashion into regular consumption choice.

It mentions several initiatives that trigger changes in dominant consumer perception and practices and argues that the big move on the field of sustainable fashion will be 'developing creative ideas' that encourage sustainable consumption, which includes sharing, swapping, leasing, reusing, repairing, and reconstructing.

2.2.1 Innovation and consumer

It is believed that changing consumer behavior is vital for reaching a more sustainable society. The unsustainable pattern of consumption and production is understood as the major reason for the continued degradation of the global environment. Over the long haul, a change in consumption practice is essential to make a society that does not surpass the carrying capacity of the earth when satisfying consumer's needs. In the connection of production and consumption, innovations are usually proposed as a strategy, which from one point of view lessens the environmental effect and then again empowers economic development (Meijkamp, 1998).

The definition of innovation refers to the diffusion of innovation theory (Rogers, 1998): an innovation is 'an idea, practice or object that is perceived as new by an individual or another unit of adoption'. The conventional definition of innovation has often been interpreted as a new technology (Meijkamp, 1998), in this study the author takes innovation as a broader concept, which includes not only advancement of technology but also the changes in the organization of consumption process, the input of manpower and the nature of the required consumption activities (Meijkamp, 1998). This Paper regards the 'innovation' as the new business model of clothing sharing and the group of individuals involved in clothing sharing as early adopters.

The term early adopter means early customers of new organizations, frontline products, and advanced technologies. This group of individuals adopts innovation early on, They are typically less concerned with value and danger and more concerned with the chance to attempt more eager to acknowledge immature or pricey items in return for right on time access to what may be a more advanced products. Organizations target on this group of people because that they have the impact on different customers. Early adopters buy rapidly and promote new products/service and technology via word of mouth. They can be guinea pigs to test new products. Early adopters are known for giving authentic input and recommendations to change (Carnite, 2015).

In the author's assumption, CC of clothing leads to early adopter's needs of fashion being fulfilled in the new commercial market offer. This offer attempts to produce a certain desired function unit for the consumer, being able to wear fashionable clothes but not owning clothes.

2.2.2 Consumer behavior change

As discussed above, the study will focus on the group of early adopters, to see their behavioral change after the adoption of the new way of clothing consumption. There is little literature regarding about how the consumer behavior changes after the adoption of an innovative business model and its correlation to environmental impact. According to the study by

Meijkamp (1998) about car sharing and consumer behavior changing, which notes that this is a very new field, thus proposed his conceptual model to analysis consumer behavior changing based on consumer's self-reported qualitative data. Based on the research question and Meijikamp's suggestion, the author develops two questions with respect to the case of clothing sharing:

1. What are the motivations of the adoption of clothing sharing by the individual consumer?

The interviewees are basically clients of the clothes library, so in this case they already accepted the innovative way of consumption, to see the motivations of the use of the clothes library can lead to the actual satisfaction of the experience.

2. What are the satisfaction levels of consumers?

Once consumer, convinced of joining the clothing library service as their new way of fashion consumption, it is essential to keep these people as long-term customers. This is not only essential from a business point of view, but if clothing sharing organization succeeds in doing so, it will prove that, in the long run, clothing sharing is also a feasible concept. If customers are not satisfied with clothing sharing service and leave the service organization, this would mean that, in the long term, purchasing the service of clothes rather than purchasing the ownership of clothes is not a viable solution for fulfilling consumer's needs. A high service quality perception can be considered as a key concept in retaining the customer. The concept of CC in clothing sector is an approach that, in theory, leads to the increasing reuse of clothes and to reduce consumer's consumption of clothes volume. However, positive consumer acceptance is a necessary condition for realizing the desirable environmental effects. In case of little consumer acceptance, the implementation in the market would fail and, in that case, the practice value of the concept would be negligible. It can reasonably be argued that the practical value of clothing sharing depends on its long-term consumer acceptance.

3. What are the changes in clothing consumption behavior after the adoption of clothing sharing and what is about this environmental impact?

This question is a new element in the overall environmental assessment, especially concerning innovative clothing sharing business model. So a comparison of the past mobility behavior with new behavior is needed. Clothing consumption behavior refers to the three stages of clothing life cycle, purchase, use, and disposal. Reducing the environmental impact of clothing requires a reduction in the new purchase of clothes and also indirectly changes in the other behaviors to a more sustainable way. On the other hand, Clothing sharing provides the consumer with flexibility in consumption and leave the consumer the option of buying clothing again. It has to be figured out that the consumers take clothing sharing as substitutional or additional.

In this case, the conscious change can be seen as part of the change, though there will be gaps between knowing-saying- doing, it still essential to see that change as the very first step of moving towards a sustainable consumption pattern.

Based on the rationale above, a conceptual framework is formed by the author for interview question development and results analysis purpose. Given the explorative nature of the study, some additional elements will be examined (interviewees demographic information) as background information to provide an overview:

Table 2-2 Consumer Analysis Framework And Indicators

Consumer perception	Indicator	Methodology
Motives for becoming a member	Perception about CC	Detailed qualitative case studies based on literature review and semi-structured interview, survey
Satisfaction	Opinions about the service	Detailed qualitative case studies based on literature review and semi-structured interview
Behavior change	Purchase Use Maintenance Awareness	Detailed qualitative case studies based on literature review and semi-structured interview studies and some practicality quantitative when measuring reduce of purchase

Source: inspired by (Meijkamp, 1998), developed by the author

2.3 Overall data collection and analysis

To answer the research questions, this study employs a comparative case study methodology of two clothes sharing organizations. Each case study comprises a mixture of research methods. First it starts will a literature analysis. LUB search and Google Scholar have been used to find books, articles, journals and reports on the subject of CC in the fashion industry. Given CC is an emerging groundswell, most descriptive and theoretical statement is sourced recently. The most comprehensive study that seems to have been published on the research area is: Evaluating the financial viability and resource implications for new business models in the clothing sector. The study is the first quantitative study of such emerging business models. Moreover, a paper published by CBS Center for Corporate Social Responsibility: Collaborative Consumption: Business Model Opportunities and Barriers for Fashion Libraries is the one of the first attempts to examine new business models of CC in general and the fashion library concept in particular (Pedersen & Netter, 2013) These two publications intrigued the author's thoughts in research gap finding and will be used as theoretical background in the analysis of the business model of clothes sharing to discuss its environmental impact and potential to transform the dominant consumption pattern. As for most of the information about clothes sharing companies, organizations and phenomenon have been found on their official website, while some of the information are from other external sources that have been written related to the clothes sharing concept.

Besides the secondary data from existing literature and information gathered from web site, the analysis is also based on primary data, semi-structured in-depth interviews with two representatives and fifteen subscribed members from clothes libraries, and on-site observation by the author. In detail, the semi-structured interview question design builds on the area of research focus with one selected co-founder from Resecond, and one founder from Chare. As for those fifteen interviews with randomly chosen shop visitors, they were undertaken in the shop of Resecond in Copenhagen. It consists of women at the age of 21-65 from a wide range of occupation background. The qualitative interview method is seen as a preferential alternative since the study is explorative in nature and addresses a relatively new field that has, so far, receives limited scholarly attention.

In addition to interviews, the study will also apply the survey designed and rolled out by Chare as data supplement, which reached 78 completed responds, and 98 interrupted ones (not valid so that will not be used in the analysis). This survey is based on the data self-reported by respondents from the Internet. The distribution of interested in being a subscription-based

member vs. members/ex-members is about 50/50. It consists of women at the age of 15-45, with 50/50 distribution among students and people with jobs. The respondent base for the survey is sufficient and representative enough to draw a conclusion from. However, the original idea with the survey by Chare was to investigate how they can maintain their members and recruit more new members. The survey does not build conformably on the research question of this study.



Figure 2-2 Contact Group

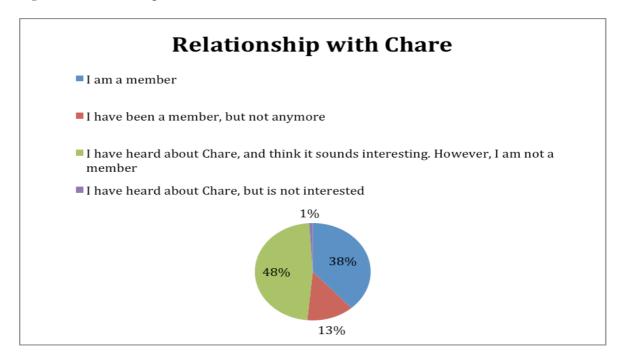


Figure 2-3 Respondens distributeon

Source: Chare

The data collection took place from February to May in 2015 by the author, and the findings got to the research questions from empirical studies will then be analyzed according to the analytical framework presented below. This is how the data be analyzed in the following section.

3 Overview of collaborative consumption

3.1 The rise of collaborative consumption

3.1.1 Introduction and definition

Have you noticed, there is a movement of sharing booming around the world. Humans have a long history of sharing and cooperating since the early origin of our species, and it is a nature of animals' instinct behavior, however modern normalization of selfish behaviors made people forget about sharing (Buczynski, 2013). Sharing is not new, but the way people are doing it now is different from anything that has been attempted in the past (Buczynski, 2013). Sharing has been existed forever, but over the last decade, it has grown from means of transaction between small group friends and family, to become a global movement of business, which created and are increasing creating value in the billions. PwC estimated that five primary sharing sectors (peer-to-peer finance, online staffing, peer-to-peer (P2P) accommodation, automobile sharing and music video streaming) have the potential to increase global revenues from \$15 billion to \$335 billion by 2025 (PwC, 2014).

PwC's (2014) special topic of megatrends, pointed out that the collisions of four megatrends (technological breakthroughs, climate change and resource scarcity, rapid urbanization and demographic and social change) is creating a new social dynamics of sharing. The trend consumers increasingly value access over ownership that is often labeled as 'sharing economy', which is all about connecting demand to spare capacity or spare assets. The book 'What's mine is yours' refers this groundswell to 'collaborative consumption' (Botsman and Rogers, 2010). In Economist (2013), various results of sharing were named as 'collaborative consumption', 'asset-light lifestyle', the 'collaborative economy', 'peer economy', 'access economy' or 'sharing economy'. These terms are being used synonymously and being thrown into the mix (Botsman, 2013). The author of "What's mine is yours" provided clarification of four terminologies, collaborative economy, collaborative consumption, sharing economy and peer economy (2013).

Table 3-1 Definition Comparison

Collaborative economy	An economy built on distributed networks of associated individuals and communities versus centralized systems, changing how we can produce, consume, finance, and learn.
Collaborative consumption	An economic model based on sharing, swapping, trading, or renting products and services, allowing access over ownership. It is reinventing not just what we consume but how we consume.
Sharing economy	An economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits. It is currently largely talked about P2P marketplaces but equal opportunity lies in the B2C models.
Peer economy	Person-to-person marketplaces that facilitate the sharing and direct trade of products and services built on peer trust.

Source: Botsman, 2013

Though the term has different meanings, they overlap with the common core ideas. They all show a power shifting from big, centralized institution to distributed parties. It changes the role of the consumer in economy and society from the passive role to the initiative status (creators, collaborators, financiers, producers, providers). In addition, they not only presented a new way of asset utilization but also share common values (collaboration, empowerment, openness and humanness) and drivers (tech innovation, values shift, economic realities, environmental pressures) (Botsman, 2013).

Respectively, different terms have their distinct systems. For collaborative consumption, according to Botsman and Rogers (2010), there are three types: product service systems, redistribution markets, and collaborative lifestyles. It has three distinct transaction models that can be applied. While the styles of sharing according to Buczynski's book (2013) "Sharing is good" has been categorized into two. One is peer-to-peer sharing, which often refer to local collaborative consumption, also online P2P. The other one is sharing companies (B2C) and Business-to-business sharing (B2B). Collaborative consumption also has similar three distinct transaction models that can be applied, similarly which is B2B, P2P, B2C or enterprise.

Different from the majority, Wosskow defines sharing economy as the online platforms that help people share access to assets, resources, time and skills (2014). It highlights the technology development in contributing the sharing economy movement while several issues attribute to this factor as well. Due to the concerns about time, safety, money, people and trust, sharing has faded out through human development history and now coming back again in a new way.

However, its development comes along with many issues. Buczynski writes a whole chapter to talk about what can go wrong with the sharing experience, mostly attributes to the online basis nature of sharing economy: which include Items and services can be misrepresented by the provision of online information (pictures and works), unintentional accidents like lost and broken shared things, intentional theft or vandalism, bad/too Few Reviews leads to no participants, legal troubles with tax and rental law issues. Without a doubt, sharing economy (or collaborative consumption) is a social dynamic that grow fast with the undeniable bonding of technology development.

3.1.2 Benefits of collaborative consumption

As mentioned in the beginning, PwC claims that four megatrends: technological breakthroughs, climate change and resource scarcity, rapid urbanization and demographic and social change created the sharing economy movement (2014). Without mentioning about the rapid urbanization factor, Botsman analyzed that tech innovation, values shift, economic realities and environmental pressures as four drivers (Botsman 2013). The Economist (2013) emphasized on the materialism and overconsumption leads to sharing. Similarly, Buczynski (2013) first pointed out that growing population drives an unprecedented mass consumption, and the waste has nowhere to go.

Even there is another trend called 'green economy' which means the realization of human environmental impact and delegation in making a sustainable product and purchase. Despite the perfect environmental awareness of the 'green economy', it is still consumerism. Though the things can be greener, but it wouldn't fix the problem of resources scarcity people are facing. All the market is telling consumers that buying more green products can save the planet, but most people know consumption gets nowhere. The current economic system concentrates on supply and demand, producers and consumers. These two sides relationship indicates an endless domination of the market (Buczynski, 2013).

On the other hand, the sharing economy operates on entirely different premises. Different from the market economy, producers and consumers are not constant conflicting anymore, instead, sharing economy integrates individuals and businesses as members of the same ecosystem. Thus, Botsman and Roger said, "Collaborative Consumption is that it fulfills the hardened expectations on both sides of the socialist and capitalist ideological spectrum without being an ideology in itself. It demands no rigid dogma" (Botsman and Roger 2010).

Besides being the driver and necessity of sharing, it enables people to realize the enormous benefits of sharing access to products and services over ownership, at the same time (Bostman and Rogers, 2010) sharing bolsters the local economy by encouraging community involvement, let people to make new friends and become active, promoting self-sufficient behavior and accountability, innovation and entrepreneurship, and provided grants access to underserved populations.

Sharing protects the environment by reducing waste, energy consumption, and encouraging investments in smart design and development of new products. Sharing saves money by decreasing cost both in economic and labor (Buczynski, 2013; Bostman and Rogers, 2010). Yet, in spite the factor of making and saving money, 97 percent of users of sharing economy services have positive feedbacks, and even that the experience itself is made better using shared models of consumption compared to traditional services (Wosskow, 2014). It increased the flexibility and employment opportunities for women to work in the UK, and women had become active actors in sharing economy in the UK (Wosskow, 2014).

Buczynski (2013) almost includes everything for sharing economy: housing/lodging, goods, skills/time, transportation, food, space, money, B2B Sharing Resources. There are so many things can be shared, however, some sectors are active, some are not. Literature often focuses on the prominent sharing services—those based around accommodation and cars. The Economist (2013) mentioned famous examples like Airbnb of the housing sector, and peer-to-peer car rental services and taxi-like of the car sharing industry. Wosskow (2014) proposes the three areas for the future, where the sharing economy is developing – and where the next surge of innovation may come from, which are fashion, food, and personal tools (e.g. Power tools).

3.2 Collaborative consumption of clothing

Sharing of clothes is not new practices - people have always borrowed and rented clothes from friends or shops since ancient times, and people now tend to do more with their old clothes rather than throwing away. The emergence of online platforms like eBay, Amazon, Blocket and Threadup has made it easier to swap and re-sell clothes peer to peer (Wosskow, 2014). In the meantime, a number of alternatives to conventional consumption of clothing are emerging and developing, from the type of business that people have been the most familiar with, like second-hand and vintage stores to innovative activities such as buy-back scheme of garments by large-scale retailers. In order to provide a picture of the rise of new business models in clothing sector, typical examples around Nordic region are listed below, however non-exhaustive:

3.2.1 Initiated by brand/producer/retailer

Stormberg

A Norwegian retailer of sportswear represented a take-back approach where customers send garments back to stores and then get a discount on their new buy. The discount relies on upon the type of items. The project cooperates with the Red Cross and returned clothes sent to Latvia and gave to needy people (Stormberg, 2015).

Boomerang

A Swedish retailer re-sale their own-brand vintage garments. They offer a 10 percent discount on a new piece of clothing if the customer returns their old ones. The old piece of clothing is then repaired and re-sold in six of their shops around Sweden as Boomerang Vintage. Since the project was launched, more than 7000 articles of clothing have been handed in for reuse in the stores (Boomerang, 2015).

Filippa K

Swedish Filippa K has established a second-hand corner in their "regular" stores for used items of their own brand. Customers can hand in Filippa K clothes, which they no longer use. When the attires are sold on to a new customer, the old owner gets a commission. If used clothes can't be resold, it will be donated to charity (Tekie et al., 2014).

Katvig

Kativig is a Danish maker of children's clothes. Because of the way of children's fast growing, numerous clothes only used a couple of times before the wearer outgrows them. Katvig, therefore, organizes swap parties for their customers, where the customers can exchange similar amount of Katvig garment in a bigger size or a more suitable selection for an alternative season. Katvig also adopted leasing models, where customer can order a package of baby clothes in the desired size, and later exchange with the package for a bigger size (Katvig, 2015).

3.2.2 Initiated by the third party

a. Entity stores:

Klädoteket

A leasing library for clothes initiated by four young students based in Malmo where customers can borrow clothes for free for a couple of weeks, it is a typical volunteer driven project aim for non-profit but increasing the reusing proportion of old clothes, it also provide repair and sewing service for their customers (Tekie et al., 2014).

Lånegarderoben

It serves as a library where you can get garments rather than books. The thought is to have the capacity to renew the closet without adding to increased buying (Lånegarderoben, 2015).

b. Online platforms:

Trendsales

Trendsales is a Denmark originated fashion bazaar where consumers can buy, offer and trade more than 150 unique classes of amongst different things, garments, shoes and so on. A large portion of the products are secondhand, however numerous people also companies offer hand crafted and new things. The target group is principally ladies aged 18-32 years, however clients are of all ages and both genders (Klepp et al., 2014).

Share Your Closet

Share Your Closet is an Internet clothing library where ladies can share garments, shoes and adornments with each other. Share Your Closet is an Internet platform where individuals from the group can transfer pictures of things they don't utilize themselves and therefore wish to impart to others. For each thing, which is obtained to another member, the member gets a point for which they can borrow another thing. The system is accordingly cash free, yet gives a motivation to share great quality and attractive things. (Klepp et al., 2014)

As shown above, there are many innovative initiatives going on in the clothing industry with the notions of increases re-uses and recycling of clothing. However, an individual company or organization may engage in some different activities related to the concept of CC. such as Katvig, Lånegarderoben. Teece (2010) advocates that diverse mixes of activities can make an unlimited scope of attractive business models. Hence, activities/ initiatives, which can be, incorporate as feature of a business model yet which can likewise involve the core of an enterprise model.

3.3 Consumer's attitudes towards clothing consumption

For the purpose of the study, it is essential to understanding public's perception, attitude and behavior to sustainability and sustainable clothing. Several researchers consider the different group of people's attitudes towards sustainable clothing consumption. Department for Environment Food and Rural Affairs has done a comprehensive research about public's understanding of sustainable clothing (Defra, 2008), this study notes numbers of key findings:

Purchase Fashion and cheap clothing influence clothing choices the most, even the environmentally-aware consumers make purchase decisions most influenced by the considerations of personal factors and economy rather than of sustainability impact.

Use People's everyday use and disposal of clothes is affected by habits routines and concepts of cleanliness which may outweigh informed views on sustainability. However, public are open to change their behavior if particular information on energy saving, laundry is given.

Disposal People have high willingness to give clothes to charities, but not necessarily because of the sustainability awareness, facilities accessibility and convenience seems to be more important. Similarily, WRAP's Reuse displacement shows that has the 54% of the people donate textile to charity shops (WRAP, 2013a)

Awareness The level of knowledge of the sustainability impacts of clothing is low. When people behavior pro-environmentally, this was not necessarily intentional instead but this may because of the regular routines and personal habits. While individuals might know which clothing practices are good from a sustainability perspective, they do not necessarily act on this knowledge.

Second-hand/Share/hire/rent Over 37% of people would like to purchase secondhand textile, but only about 1% people are willing to lend textile(WRAP, 2013a). A paper on toy library provides implication. Ozanne & Ballantine (2010)explore the reason why consumers choose to share over buying, and prove that sharing may be one potential alternative market structure that may be adopted by anti-consumption consumers, who feel a sense of belong to their toy library and bold, strong anti-consumption, frugality and sharing values.

The study also found that people's don't distinct the different of reuse and recycling, however, people's willingness towards sharing is not explored. The research indicated that consumers could be convinced to change their practice in relation to sustainability by being encouraged and enabled to consider more on their behavior (Goworek, Fisher, Cooper, Woodward, & Hiller, 2012).

Different from the general public, there is a group of consumers called-sustainable fashion pioneers, who actively engage and shape their discourse around the notion of sustainable fashion (Bly, Gwozdz, & Reisch, 2013). This group of people is found well educated, with good access to sustainable fashion knowledge. The reason they engaged in this sustainable fashion consumption various, but there is a consensus shows that they value the notion of sustainability. Through the different life stage of clothing, this group of people also shows pro-environment behavior. They try to cease shopping or purchase only small amount of good quality clothing. However, overall, clothing care is neither the focus of this group, they do limited laundry, although primarily because it is better for the clothing. During the end-of-life phase of clothing, the sustainable fashion pioneers presents they don't throw clothing away, and actively engaging in recycling and other pro-environmental behaviors, such as repairing of clothes, sewing, upcycling (Bly et al., 2013).

4 Case studies: business model and consumer behavior change

4.1 Area of investigation: the case of clothing library

A clothing library is a business model, which has popped up in the last few years in many places around the world such as the UK, Australia, and Netherland and especially has become quite popular in Nordic courtiers. It is also mentioned as "clothes library" or "fashion library".

The idea was first mentioned on Internet blogs. McLaren (2008) says clothing library is another impeccable example of a product service system (PPS) where you get the service of a thing without having to possess it and all the expense and upkeep time that requires. A wide range of types of clothing can be found at a clothing library, from suits for prospective employee meet-ups to prom dresses for low-pay teenagers. Numerous fashion libraries pick a particular group to serve, for example, the unemployed or pregnant women(wiseGEEK, 2015), example can be found as Belmont Clothes Library in Western Australia and Maternity Clothes Library in UK.(La Leche League Oxfordshire, 2015; McLaren, 2008)

The earliest definition of "Fashion library" in academia was characterized by Pedersen & Netter (2013), which is a subscription-based service that allows people to share wardrobes. Later Nordic Council of Ministers released a report EPR systems and new business models recognized clothing library as the enterprise model similar to an 'ordinary library' where clothes are lent and borrowed rather than books or music. The report also summarized some common feature of a fashion library business model: The business model can be run on a voluntary basis with free rental or as an organization with customary enrollment charges. The library can be either physical or virtual. (Tekie et al., 2014)

There are different models, yet normal for them are that can be taken home garments, which has been given/donated to the library for a certain period e.g. 2 weeks(Tekie et al., 2014). A clothes library is accessible for individuals who need particular pieces of clothing for different reasons, yet would prefer not to buy these pieces of clothing. Lots of people who have experience with clothing libraries are on the lower end of the wage level and they can't manage the cost of new garments, while others are just thrifty, and see no point of purchasing clothes that might be worn few times (wiseGEEK, 2015).

In theory, the potential environmental advantage of the model is to make more utilization of apparel amid its useful lifetime. The model gives clients the chance to update their closet without the need to buy new items (Tekie et al., 2014). Sustainia (2015) brings up a term "sustainable style library" and claims three sustainability potentials (1) Environmental: extends the lifecycle of underutilized garments, (2) Social: an affordable alternative to fast fashion that allows more people to wear quality garments, (3) Economic: avoid expenditures on overconsumption of clothing. The study of WRAP also estimated that the large-scale leasing system for clothes could be assumed to displace a new garment at a 1:1 ratio (WRAP, 2013).

Table 4-1 Non-Exhaustive Examples And Information Of Clothing Libraries

Resecond, Copenhagen	http://resecond.com	
Lånegardenroben, Stockholm	http://www.lanegarderoben.se/	
Klädoteket, Goteborg	http://www.kladoteketgoteborg.se/	
Chareroom, Copenhagen	http://chareroom.dk/	
Lena, Amsterdam	http://www.lena-library.com/	
United Archive, Copenhagen	http://www.sustainia.me/items/vintage-clothing-library/	
De Kledingbibliotheek, Utrecht	http://www.dekledingbibliotheek.nl/	

Source: Internet

4.2 Selection of the two business model cases

Two Organizations are seen as interesting for the thesis- Resecond and Chare. Apart from location accessibility, time availability in terms of the research scope and limitation, these two organizations that have appropriately fitted the idea based on Collaborative consumption in the fashion sector. They possess physical shops, and aim to promote reusing of clothing without compromising the beauty, and most importantly seek to serve on the similar group of people. It could be worthy to examine these two shops' sustainability performance from a consumer's perspective. What is also interesting in view of the current study is that the two organizations differ in terms of the two business model elements under analysis based on (key resources of clothes, and key partnerships) and in that respect has the potential to provide a good basis for drawing conclusions.

4.3 Case 1: Resecond

4.3.1 Business model

Overview. Resecond is co-founded by the Skyttes(a Danish couple) in September 2012. Currently there are two shop sites, with one located in Copenhagen's Jægersborggade and the other one in Århus's Jægergårdsgade. When joining to be a member, customers need to bring their own dresses they would like to contribute to the communal closet and they can swap the same amount of dresses in return.

Customer segments. The customer segment of Resecond entity shop is female between 20 to 50 years old who love dresses, most of the members live closed by. Besides, they released a new smartphone app where both men and women can exchange everything with each other on a virtual platform, from clothes and accessories, books, wine and plates - locally and complimentary to each other. They target the group of people who want to save money, and be conscious with fashion consumption. The owner emphasizes that those people who have the problem with secondhand are definitely not their customers.

Value proposition. Resecond offers its member a walk-in closet that give its member options to renew closet without creating new consumption and paying full price. One of the Key Value propositions advance by Resecond is that they need people to give before they take, turning the transaction model upside down. As a shared walk-in closet with members preloved dresses, the history of the dress is an important part of the value proposition and component of clothes story-telling is an essential component of communication. Members in Resecond

write small stories about the history of the garments on handwriting tags, nostalgic associations inside of the group. Lastly, Resecond highlights the value of reusing and sharing to save the planet.

Channels. The main channel for individuals to share garments is the physical spaces of the libraries, which situated on a famous road in Copenhagen. Other than its settled physical stores, Resecond has added to another smartphone App, will allow members to swap their clothes directly online with all kinds of goods and without limitation of locations. They also have well designed, and frequently managed online networking on Facebook to encourage the communication in the middle of members and proprietors. Importantly, members in Resecond promote the concept of sharing via word of mouth to raise the awareness of their company.

Customer relationships. Sustaining customer relationships is done in the physical store and through online networking. Members appreciate the social factor that accompanies exchanging clothes in a physical slot, having the chance to see another person happy in your own particular garments, and sharing in the story of the colthes. The site is updated each time the shop open, informing about new arrivals, new events, donations, pictures and awesome stories about conscious consumerism. As of late, they began to offer repair services, which is part of the monthly subscription. It can be strategies to build up connections with clients generate and address sustainability all in the meantime.

Revenue stream. Revenue is mainly from the participation fee of current 300 individuals. Membership is issued on a one-month basis, and costs 139 DKK (It used to have a half-year basis membership system which costs 600 DKK, notwithstanding, one-month basis seems to provide a faster turnover) and the App obliges a small amount of transaction fee for swapping. Additionally, Resecond gets financial support from the municipality and NGOs, all kinds of press and national TV, which compensate them to pay the rent and cover fixed costs of utility and salary. Lately, Resecond is introducing a leasing model, requires members to pay a rental fee and reasonable cleaning fee.

Key resources. One of the Key resources of Resecond seems to be dresses, which in a fluctuating stock of nearly 350 pieces, most of the dresses are pre-owned, and it is very seldom that one finds a new dress. Resecond started out being exceptionally strict with the taste and quality, but the taste is diverse. Now it still seek to sort out dresses of a quality that can be worn and washed up to 40 times without going out of style. It is tricky that since the members do not have to return the swapped dresses back to Resecond, also the member is the major source where dresses come from, rather than the tangible 350 pieces of dresses, Resecond holds a key resource of swapping, exchanging platform, physical (two shops) and virtual (an App). With respect to the human resources, Resecond is run by two part-time paid shopkeepers on minimum wage, which depends heavily on the staffs' idealism, enthusiasm, drive, and commitment. The owners of Resecond quit their jobs and devote their life to sharing economy business. However, lack of revenue and staff brings about constrained opening hours, which may collide with the working hours of members.

Key partnerships. Resecond is a shared walk-in closet, so the shop has, what the members bring to it, but not all kinds of clothes, otherwise they need a huge store. It additionally gets donations; yet do not have any corporation with brands shops. When the dresses are worn out, they send them to the Salvation Army. Then again, there is a tragedy of common that 10-15% of the free ride clients, come with the worse quality and take the best stuff. The better the quality is given, the better the shop will get.

Key activities. In opening hours, there is a staff to arrange the dresses, clean up the library, serve clients, and handle swapping and obtaining, registering new members, uploading photos of new entries. Key activity except opening hours is to scale up its customers. Moreover, as it is a new business model based on CC, the shop owners are frequently reached by the media and by people inspired by the idea. Resecond also seeks to restyle great quality garment that are out of fashion. Last thing worth specifying, Resecond insist no advertising because advertising has the opposite meaning- not reducing consumption but rather it is promoting more consumption.

Key partnerships. Members are both upstream and downstream partners for Resecond since members are suppliers who contribute their dresses to the swap shop. Media and press are also regarded as Resecond's partner, since they spread the word and convey its idea to public, and currently Resecond is trying to establish relationship with other brand regarding about donation, however, given the business model of Resecond, brands haven't decided how to participate in their activities.

Cost Structure. The main costs of running swap shop concern fixed cost for example rent, electrify and maintenance, also the Personnel. The average cost of one shop with personnel costs is 15.000 DKK. The staff is semi-voluntary only paid by minimal wage. The staff in Copenhagen said, I could get paid four times more than here by teaching phycology at school, working here need to be a little idealistic.

4.3.2 Consumers and their attitudes

Demographic information. It appears that interviewees are mainly well-educated women, from age 21 to 65, 40% of them are students, and the rest of 60% are employed. Most of them live nearby the neighborhood.

Visiting frequency. Out of 15 interviewees, 8 of them visit once a week, and 4 of them visit Resecond twice a month, and 2 of them visit once a month or less. It suggests that for those who visit Resecond often, tend to have more flexible time such as on maternity leave or students or retired.

Thoughts about sharing, second hand, collaborative consumption. It is not surprising that all of the interviewees have positive opinions about sharing, secondhand. Some of them were early adopters of secondhand since many years ago, they are familiar with the idea of secondhand have no issues about the pre-loved dresses, some of them thinks secondhand can continue the life of an item, and the sentimental factor attached with an item made binning difficult and wasteful. They believe that historical stories behind of items make pre-loved things even more attractive. Indeed, only 2 of the customers are specifically clear about the

term "collaborative consumption" or "sharing economy" or collaborative consumption businesses models.

Motives for being a member. The most mentioned reason is the novelty of the 'share your closet' concept. Two-thirds of the interviewees of said the concept is awesome, and they want to be part of the trend. Reusing of things is the second most mentioned motive, which correspond to the notion of environmental protection, saving resources. For those members who are students, all of them has mentioned economical factor, to be a member is cheaper and allows them to try different dresses.

Satisfaction. Half of the customer seems quite happy about the service of Resecond and indicate that they will continue to be members in the future, however the other half customer found that the quality of the dresses in Resecond varies a lot, or the opening hour collide with their working hour, will withdraw the membership afterwards. It is noticed that due to the different size, quality and taste of dresses, almost half of the member don't find what they like. This is considered as the primary reason of withdrawing membership; the other one is about convenience in terms of location and opening time. All of the members show that they would like to talk about the clothes that swapped from Resecond, share the idea with friends. Some already introduced Resecond to friends successfully and made them become new members.

Behavior change

Purchase (volume and what kind of product). It is found that members' consumption pattern various a lot, 7 of respondents buy 1-2 pieces of clothes per month, 2 of them only shop twice a year, and 6 of them said that they do second hand, vintage and flea market shopping often to keep them shopping new clothes less frequently. Regarding about sustainable fashion products, all of them don't necessarily shop "green" clothing, but if it happens the price of eco-fashion is affordable, they would love to buy it over normal clothing.

After coming to Resecond, there is purchase behavior change happened in some individuals. There are two groups of people, one group of individuals, 8 out of 15 say they shop less, after come to Resecond. One member says they feel it is an obligation after becoming a member, so that try to make use of Resecond as much as possible and to avoid shopping. The membership has a reminding effect whenever she is feeling like shopping. Some see they buy less, but only dresses, but the shopping frequency for rest kind of clothing remains the same. As for one frequent user of Resecond, she says she sees herself buying fewer dresses but also do shop in the flea market.

The other group of people think they don't buy less, because they don't find the dress they like here, or they are buying fewer dresses only, but instead save the budget for other kind of garments Resecond doesn't provide.

Use (cleaning, drying, other maintenance). There are 5 members try to wash clothes less frequent, and avoid using drying machine, but the reason is to keep the clothes from worn out over saving water and energy. Only a few noticed the environmental impact of clothing during user phase, and most of them know little knowledge about sustainable cleaning and drying method. It was indicated by some individuals that washing clothes are more a habit than

something consciously changeable. As for maintenance like repairing, all of them do sew on buttons, easy fix of clothing, but if the clothes are worn out or with a non-washable stain, they will consider disposing of them. 7 of them mentioned that they don't know about in what way is sustainable clothes cleaning, and would like to learn the knowledge of it.

Disposal (donation, recycling). Interviewees have very high conscious with recycling. All of them suggest that Resecond is a way to give a new life of their old (simply get bored with the passage of time) dresses but still in good condition. Besides, 9 of them resell clothes to secondhand, vintage shop and flea market. 3 of them sometimes donate clothes to charities, Salvation Army, however, not necessarily to donate every time due to the fact of inconvenience.

Awareness change. Members were asked about the Resecond' sustainability influence on themselves, one says, after being a Resecond member, she started to take good care of clothing and other things, Resecond triggered her idea of maintaining, cherishing things in order to pass by the thing someday to others. The other mentioned that after learning about the concept of Resecond, she started to pay more attention to the field of sustainability, not only in clothing but also other sectors.

4.4 Case 2: Chare

4.4.1 Business model

Overview. Chare is a fund raising project of Danish Refugee Council, established in 2014 in Copenhagen's Hyskenstræde. Chare is a physical clothing library, where members can borrow varieties of clothes for two weeks at a time, based on a monthly subscription costs 159DKK, on top of that each item has a borrowing cost of 20or 30 DKK depends on the after use cleaning method.

Customer segments. The customer segments is mainly between 25-50, lots in 30s, academically educated. Chare targets in the group of women who have taken a choice of wanting to act responsibly in the world and are already interested in sustainability and reuse, but at the same time don't necessarily shop second-hand, don't want to compromise on the beauty, and having need for dressing up, going out and look nice. By having new high-quality clothes, Chare addresses this group.

Value proposition. Chare is a physical leasing service platform with plenty of new clothes based on the subscription model, which allows members to try with various styles without having to pay full price. It has been discovered that Chare has two propositions: a sustainable fashion consumption initiative and a fund raising project of Danish Refugee Council. Chare also developed a sustainable cleaning initiative, which doesn't encourage the customer to clean borrowed clothes themselves instead Chare takes care of clothes. This is part of the reasons why Chare set up, to minimize the environmental impact during cleaning/drying and prolong the lifespan of clothing by taking good care during the use phase.

Channels. The main channel for customers to partaking garments is the physical spaces of the store, which situated on a famous shopping district in Copenhagen. Besides their fixed

physical stores, Chare is starting to put its full inventory online. They also have well designed, and frequently managed online networking on Facebook and Instagram to encourage the communication in the middle of members and proprietors.

Customer relationships. Despite conventional in-store service, Chare has a well-designed homepage, regularly managed Facebook and Instagram account and newsletter to communicate with its customer and potential customer. As for Facebook account three posts per week minimum, 1. About new arrivals, 2. Other initiatives about sustainable fashion, such as the story of Resecond, 3. Knowledge about enlightening people how to wash clothes environmentally friendly, eco-fashion designing, durable clothing material, to change the consumer consumption pattern and lifestyle. Moreover, Chare starts to work politically with environmental issues, addressing the need of fashion business to start thinking about recycling process and sharing economy, and reduce the climate consequences of looking good.

Revenue stream. The revenue mainly comes from 100 members, there haven't been many members in Chare since it only has established less than 1 year, the founder said, Chare needs to have 200 members to be break-even. The membership fee is 159DKK per month. Also, members pay for the cleaning from 20-30 on each piece of the clothes borrowed to compensate for the cleaning cost. Chare is financially supported by Puljen til grønne ildsjæle(Danish Refugee Council).

Key resources. The clothes collection Chare can offer its members is obviously a key resource. The collections are sponsored from 25 medium size well-known brands and designers, such as Garni. Chare also receives donations from VIP-persons, singers, and members as well. The inventory has all kind of clothes for looking extra nice, but no basic collections like jeans or Tshirt include. The collections are classic, for grown-up women but don't have many clothes for young girls. They only concentrate on three sizes of clothes 36, 38, 40, in order to have big enough clothes collection for every member. Regarding human resources, 20 volunteers work in marketing, membership registration, Facebook group and one half-time paid representative (just to save the budget but she works full-time indeed). A wide range of Danish designers supply the library with women's clothes. In addition, it is possible for privates to donate items of good quality and style.

Key partnerships. Chare cooperates with about 25 brands and designers as suppliers to donate clothes permanently, like Garni. Donation with young designers is considered as sells window for the designers' brand to be acquainted with. Big brand, they donate and think it's a good idea and regard it as part of their CSR project because money will go to Danish refugee council. A group of voluntary university students also plays a role in spreading the concept of Chare on blog and Internet. Lastly, Chare is sponsored by Danish Refugee Council.

Key activities. In opening hours, there is a number of staffs to arrange the dresses, clean up the library, serve clients, and handle swapping and obtaining, registering new members, uploading photos of new entries. One of the key activities of Chare is to complete the database of clothing online, and also negotiate with more brands to get more donations. Chare is also in charge of cleaning as part of the maintenance and sustainability practice. They try to clean the clothes in a sustainable way with less water, energy, and less detergent, at the same

■Other

■Unemployed

sector

sector

■Employee, public

■Employee, private

Self-employed

■Student, higher

education

education

Student, highschool

time to ensure the durability of clothes. Moreover, as it is a new business model based on CC, the shop owners are frequently reached by the media and by people inspired by the idea. Chare testifies that the efforts required to create online clothes inventory takes a significant amount of time and, consequently, demand greater human resources.

Cost structure. 45000 DKK per month, mainly for the rent since Chare holds a big showroom, and salary for one half time paid personnel. The customers pay maintenance like cleaning and in case damaging, thus this part is covered by customers.

4.4.2 Consumers and their attitudes

Demographic information. As mentioned above in the methodology, respondents are mainly young women aged 15-45 years, with a 50/50 distribution of student and people in work. Although the age spread is relatively large, these are a relatively homogeneous group in the field of clothes and fashion, which is reflected in the rest of the fashion industry's marketing. Therefore, I see the following section does not distinguish between the two groups.

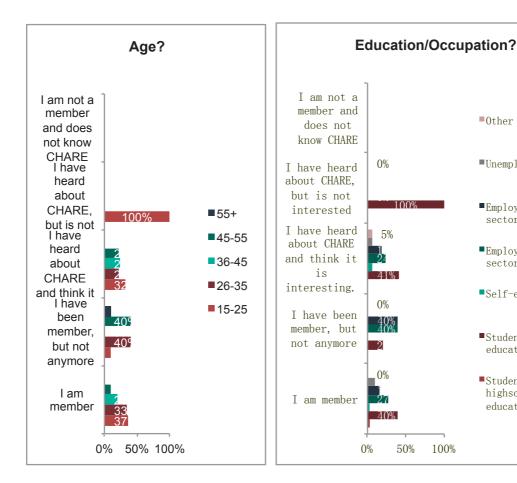


Figure 4-1 Demographic Information (Age and Ocupation)

Visiting frequency. At least once a month, 70% of people borrow clothes from Chare a couple times per month and usually make at least once use of the things borrowed.

Thoughts about sharing, second hand, collaborative consumption. Out of 78 respondents, 60% of them use other sharing economy initiatives, As indicated by the figure, Airbnb and Gomore are most well-known business initiative about sharing economy, few knows about Resecond and Vigga, etc., similar type of initiatives in clothing industry. To question about why people don't use sharing economy initiatives, it is clear that most people just has no knowledge about it, a minor group of people think the product/service don't meet their needs. It seems they are not "early adopter" like, and do not know the concept very well.

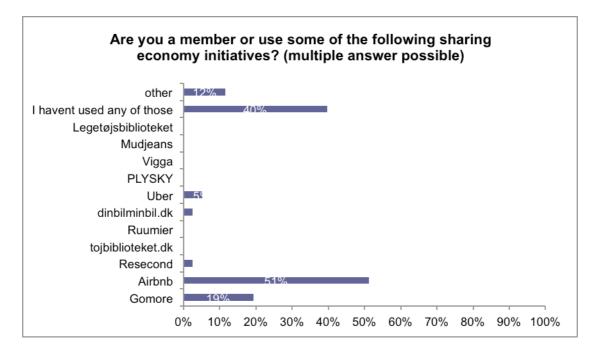


Figure 4-2 Experience on Sharing economy initiatives

Source: Chare

Motives for being a member. They generally like: stylish designer clothes/clothes in high quality /beautiful clothes, also care about sustainability / Environment/share economy. To be more detailed they desire to change consumption habits: they want to reduce their clothes consumption for environmental reasons or they want to reduce the clothes consumption for the sake of their own economy. On top of these, they desire to access something extra: they want to go expensive/ fashionable / exclusive dressed, and they want more choices (extension of own wardrobe). Among all of these reasons, most of them join because of novelty, and then sustainable economical reasons came after. Shown on the figure 4-3. The author takes 2,3,6,7,8 as novelty related motives, 1,4,5 as sustainability related motives, and 4 as the economic related reasons.

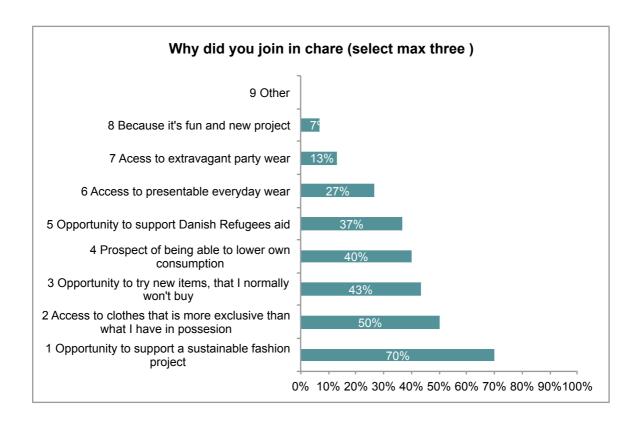


Figure 4-3 Motives for being Chare Member

Source: Chare

Satisfaction. The empirical data turns out not 100% fits the criteria of satisfaction, however, it indicates some level of satisfaction, respondent want Chare to be improved in numbers of different aspects of their service: 1, to prolong the opening period, for members, 43 % answered it would be significantly more convenient if Chare were open more days every week (the opening hours are fine) 2, to improve the convenience of access to the service, for those who quit, 50% presents that the inconvenience made them quit the membership, 70% of the former members would consider becoming a member again if it were easier to drop off clothes and see what's available at the shop 3, to expand the wardrobe inventory: 40% of those who have quit list not being able to find the clothes they want as the direct cause, they demand more everyday clothes and more casual party attire. Behavior change.

Purchase (volume and what kind of product). Purchase (volume and what kind of product) Out of 30 members who have answered, 67% feel they buy less. The reasons for buying less remain unknown from the survey. Doing a rough calculation, (30*60%*2)+(30*7%*4)=44.4, the author take the median number for the group of individuals answered (I buy 1-3 pieces of clothes less each month), which is 2; and the author take the minimal number 4 for the group of individuals who answered (I buy4+ pieces of clothes less each month), thus, at least Chare displace 44.4 pieces of new garment per month. Given that only 30 members responded, if it multiplies 100 of current member, at least 148 pieces of new garments will be displaced. Moreover, according to Chare's fonder, 125 pieces of clothes will be borrowed out per month. Thus, the displacement effect is 1:1.148, which

means that per pieces of loan will displace 1.148 pieces of new clothes. As for the consumers have experience of Chare more than two months, they can gradually figure out there are buying less rather than the new adopters. The same thing happened to ex-member of CHARE as well, 60% of individuals feel they are buying less, the proportion is slightly lower than current adopter, it can be indicated that to these group of consumer, Chare service is a kind of additional rather substitutional. Additionally, 30% of the member experienced that they no longer need to buy clothes for specific events. 50% of people have experienced buying fewer but the better quality of clothes.

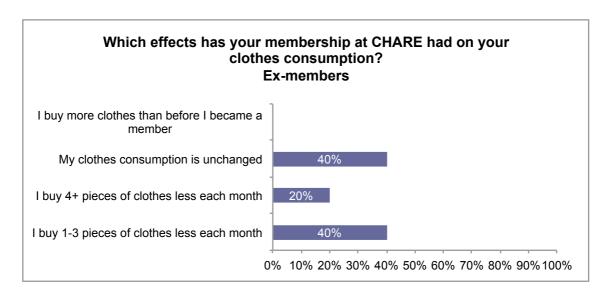


Figure 4-4 Effects of Chare Membership on Clothes Consumption (Ex-member)

Source: Chare

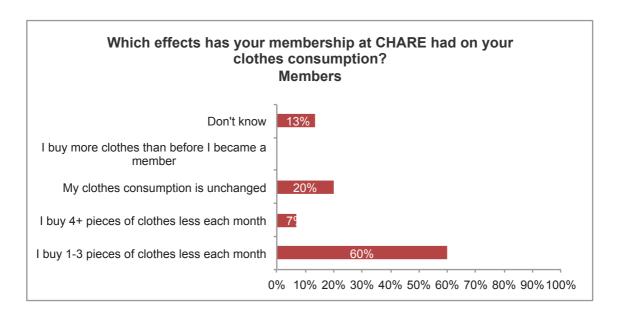


Figure 4-5 Effects of Chare Membership on Clothes Consumption (Ex-Member)

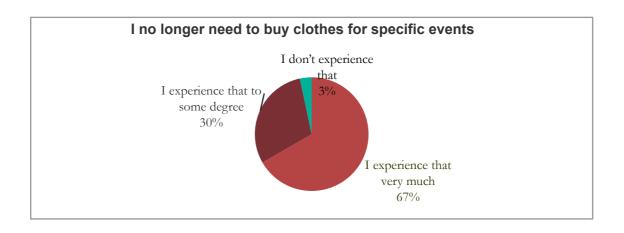


Figure 4-6 Effects of Chare Membership on Clothes Consumption (Special Clothes)

Table 4-2 Effects of Chare Membership on Clothes Consumption

How long have you been a member?					
	I buy 1-3 pieces of clothes less each month	I buy 4+ pieces of clothes less each month	My clothes consumption is unchanged	I buy more clothes than before I became a member	Don't know
Base	18	2	6	0	4
1-2 months	11%	0%	50%		100%
2-5 months	61%	50%	33%		0%
5-11 months	28%	50%	17%		0%

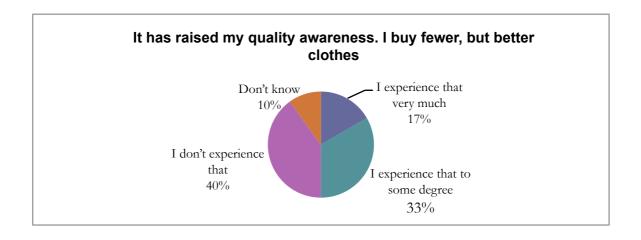
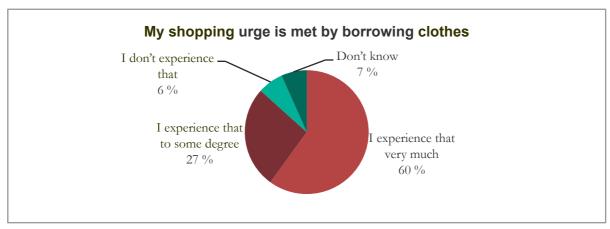


Figure 4-7 Effects of Chare Membership on Clothes Consumption (Quality Awareness)

Use (cleaning, drying, other maintenance). No data acquired, but as Chare provide centralized service for cleaning and has a fine for damaging. It is likely that they using clothes more carefully to avoid penalty and frequently washing clothes.

Disposal (donation, recycling). No relevant data acquired, however, it can be predicted that some member will donate their good quality clothes to Chare if they don't think they will wear them anymore.

Awareness change. It has been shown that many positive advantages that Chare has brought up related to other perceptions of sustainable clothing: 60% of people thought that Chare quench the shopping urge, 50 % of members become more aware of the environmental impact of the clothing industry, also 50% of member think Chare service has raised their quality awareness.



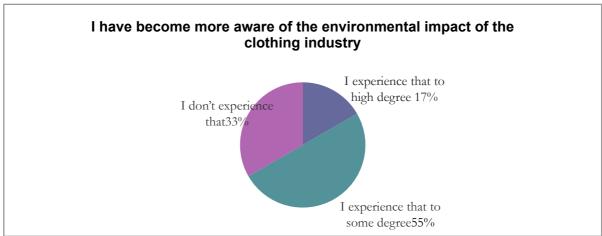


Figure 4-8 Effects of Chare Membership on Clothes Consumption (Shopping Urge)

Figure 4-9 Effects of Chare Membership on Clothes Consumption (Environment)

5 Analysis of findings

5.1 Comparison of business models

This chapter analyses the finding above studies, and will follow the structure business model analytical framework. First of all, the concept of fashion library seems ill-defined. Resecond was the most mentioned library in literature and internet, according to Tekie et al. (2014) a clothing library is similar to an 'ordinary library' where clothes are borrowed and lent instead of books and music, however, in case of Resecond, they define themselves as walk-in closet rather than clothes library, they provide a platform for swapping and swapping for ownership. Hence, the concept of a library seems to be more likely access based consumption rather than ownership swapping. Moreover, it is found that these two business models are continuously improving, changing and innovating their commercial activities. Thus, the business model here is more activity-based rather than a fixed model. They both put forth sustainability as the main value proposition, and try several of approaches to be as sustainable as they can in terms of value creation and delivery system, however, they experience difficulties in value capture. When look at two cases, there are lots of similarities and differences:

Value propostion:

Customer Segments. Resecond and Chare seem aim to reach and serve the similar niche market, women who love fashion want to try different styles, want to save money, and at the same time want to be conscious about fashion consumption and sustainability development in Copenhagen. Indeed, Resecond tries to reach out a broader customer segment includes both men and women globally by its App, while Chare tries to emphasize its high-quality new dresses to approach those people who have concerns about second-hand clothes.

Value Propositions. To attempt to encourage the reusing of clothes, both the organizations have again put conscious fashion consumption in their value proposition. They serve as an alternative to conventional fashion consumption; offer a physical playground for the fashionista to save money without creating new consumption. Besides, Resecond also bonds members with preloved clothing storytelling and linked costumer's affection of clothing consumption. Chare in this case, is trying to provide various services not only service of fashion clothes but also sustainable cleaning.

Customer Relationships. Both of them make the proper use of internet, the social media platform to optimize their service for customers. They try to provide information related to their clothes as well as conscious consumerism, sustainability communication. As for Resecond, it utilized user communities to become more involved with customers and to facilitate the connection between community members by offering storytelling and repairing service.

Value creation and delivery system:

Key Resources. Concerning resources, both the companies acquired clothes from key partners, from members or certain designers, brand retailers. It seems no problem for the Chare, since it receives high-quality new clothes mainly from brands and designers. However, the system of Resecond made its business vulnerable, quality control is difficult and subjective, receiving low-quality dresses will lessen their ability to maintain current members. As mentioned above, both companies highly depend on the voluntary based work or individuals devotement, again then, it makes the business model vulnerable.

Key Activities. For both organizations, their key activities are similar to traditional fashion retailers. They do same kind of routines to keep the business running. In order to further its community character and spread the word, another activity for them is to engage members and promote the organization on social media platform. Additionally, being contacted by media, people who are interested in the idea of clothes sharing. The everyday work of running a fashion library requires human resources, and in short supply developing and growing the organization can present a challenge.

Key Partnerships. Companies do not work in isolation but rely on the contributions of different business partners (Pedersen & Netter, 2013). The partnership may be a route forward to enhance the long-term survival and development of clothing libraries, both of them has connections with public such as students and media who help them to spread out via the word of mouth. Thanks to its business model, Chare has good relationship with brand and designers thus ensure its supply with good quality of clothes and represent a commonly beneficial approach to customers with a sharing service that offers exclusive, cutting-edge garments collection. Resecond, however, needs to expand its partnership with brand and designers.

Chanel. Both the companies have physical shops in a city center place, which allow members to go conveniently, and online platform allows them to present new arrivals instantly. Resecond has app online allow everybody to exchange without limitation of locations. However, it is disconnected with their service of physical shop inventory. Similarly for Chare, so far, no opportunities for reserving clothes online exist.

Value capture:

Revenue Streams. Both the organizations are 100% membership-based initiatives. For both organizations, the revenues stream is the membership fee and sponsorship. None of them actually makes money from the business.

Cost Structure. The cost structure reflects the mainly voluntary nature of both organizations. The main cost of running a fashion library concern fixed cost as such rent, electricity, and personnel (only a little). Both of them have means to employ staff besides the voluntary worker.

5.2 Comparison of consumer behavior

Demographic information. Investigation shows, that interviewees are mainly well-educated women, from age 21 to 65, 40% of them are students, and the rest are employed. Most of them live nearby. The interviewees from Resecond and Chare appear to be the similar group of people, with an even distribution of students and people in work. However, the age spread is large, these are a relatively homogeneous group in the field of clothes and fashion. In Resecond's case, the large difference of age may be the cause of the quality issue as well since people in different age have different taste for sure. Most of the members visit these organizations frequently in order to renew their wardrobes. However, it largely depends on member's time flexibility.

Thoughts about sharing, second hand, collaborative consumption. Similar to the literature study, people has higher acceptance towards second hand rather than renting or hiring. This could be indicated by the high awareness of secondhand but low awareness of the concept of collaborative consumption. The empirical study shows that people have identically favorable opinion regarding about second-hand purchasing. The result indicates that

leasing/renting/sharing is a niche market. Only the group- anti-consumption consumers adopt it strictly.

Motives for being a member. As previous study founds out, motives for taking innovative service/product is a combination of novelty, sustainability and fashionability and economy reasons. Which answer the assumption in the early chapter, CC of clothing early adopter's needs of fashion being fulfilled in this new business model, the concept of sharing clothes produced certain function unit for this group of consumers that also proved business owner's target of customer segments.

Satisfaction. Both two companies seem to have almost same issues regard to satisfaction. It is not surprising that not all the people can be content with the service. First, the quality and inventory is always an issue for fashion consumption, as fashion is something related to personal preference, and people are different from each other in taste, size. It is almost likely impossible to meet expectation of all. When comes to fashion, accessing to a garment's function unit is hard to define. Second, the opening period is limited. Thus, not all members can visit the physical library in-person. However, the limited human resources of both organizations constrain their ability to solve this problem. However, the diffusion of innovative business requires the members' promotion via word of mouth (Carnite, 2015), and luckily, all members are willing to talk about Resecond. If most customers can be satisfied, in the long run, the impact of the business will expand in the future.

Behavior change

Purchase. None of the literature has indicated that the purchase behavior will change after the adoption of the clothing sharing practice. Both the Resecond and Chare members, more than half of them have experienced buying less after becoming a member. In case of Chare, it displaces 148 pieces of new garment with the 100 bases of members. The displacement ratio with load and new clothing is 1: 1.148, which is much higher than the WRAP (2013) estimation of 1:1. The possible reasons for the variation of behavior are: 1.the garments from Resecond and Chare have satisfied their needs of being fashionable and having new looking. Hence, there is no more necessity of new purchasing. 2.The service is a reminding, quenched their shopping urge, they feel like making use of the service as much as they can.3 The service has met their need of clothes for the special occasion. The other group of people, who don't see themselves buying less may due to several reason as well: 1.the service don't meet their needs of being fashion and the quality/taste of the garments don't live up to their expectations. Thus, they have to buy as much as usual. 2. The service of clothing sharing is creating another kind of consumption, these group of people take clothing sharing as additional rather than substitutional.

Use. As shown in the literature, public generally has low awareness of sustainability during user phase. The practice of using, cleaning highly depend on their daily habit, even among the sustainability aware group, their daily routine have stronger effect on their behavior rather than environmental awareness (Bly et al., 2013; Defra, 2008). Similarly, in case of Resecond members, the influence of clothing sharing doen't likely influence on member's behavior towards clothes using.

Disposal (donation, recycling) Studies has approved that public have high awareness of clothes disposal (WRAP, 2013a). The empirical study shows the same result that all Resecond members show great concern with recycling, do participate in donation.

Awareness change. The assumption in the previous section is approved, both Resecond and Chare have positive influence on members awareness of sustainable clothing, in terms quenching the shopping urge, quality awareness, taking care of clothes and general knowledge about environmental impact of clothing industry. The CC model indeed influences on members' perception and practices and drive members towards a more sustainable direction in clothing consumption.

5.3 How does it contribute to reducing the textile flows in the society?

A numbers of studies have shown the potential environmental benefit of reusing clothes (Deloitte, 2013; Farrant, Olsen, & Wangel, 2010; Tekie et al., 2014; WRAP, 2013b). Both Resecond and Chare aim to maximize the proportion that garments are reused. However, there is no quantitative data to show how much reusing proportion increased and what is the displacement effect. Indirectly, both the organizations developed numbers of activities besides reusing clothes. Resecond initiated repairing services to upcycle good quality clothing, insisted no advertisement for Resecond, which is a radical movement towards anti-consumption, it is a paradox that at the same time Resecond advocates sharing in many ways and tries to develop multi-channel through the internet, App, physical store and word of mouth. Chare initiated centralized cleaning service with various kinds of methods such as airing, less detergent, efficient water and energy using. Importantly, both of them put effort on nudging consumer's environmental awareness through social media. As a result of clothing sharing and other effort made by CC clothing practices, it is obviously that members are changing their fashion consumption behavior and sustainability awareness. This is something less studied academically. However, given the nature of the explorative study, no quantitative data is acquired. It is unclear that for how many times the clothes can be used for circulating in practice? As for a fraction of people doesn't see they reduce shopping new garments, is it creating a new option of consumption?

Given the big population base in Copenhagen in comparison to the small group of customer segment, it is still an initial business at the moment. It is hard to see substantial profits on an environmental or social level. The potential to reduce the textile flow in the society highly depends on the number of new garments that are being displaced when people chose to borrow rather than purchasing. According to the survey result by Chare and author's calculation, 148 pieces of new garments will be replaced by 125 pieces of loans. However, the composition of displaced textile is unknown, the precisely environmental impact reduction can't be estimated. It wouldn't be fair to draw any conclusion on the environmental effect or contribution to reducing the textile flow based on such small segment of people, but at least we see people change in a more sustainable way. However, the calculation is not based on the member's self-reported data, the accuracy needs to be examined in the further studies.

Due the other group of people who don't see their reduction in fashion consumption, this displacement effect might however not be directly transferred to a clothing library. Membership of a library potentially expands a consumer's wardrobe several times over, which potentially could increase the displacement effect. Thus, a high overall displacement effect and resulting benefits can only be expected if the cost of library membership is equivalent to what the consumer would have spent on new clothing.

6 Discussion and Recommendation: What is the future of clothes sharing

How to change consumer mindset? Sharing clothes instead of owning them demands a significant change in perception and behavior. However, we have yet to see this transformation in fashion consumption. How to change consumer mindset is crucial to the change the dominant mass consumption society to a sustainable one. The group of early adopter shows a certain degree of behavior and awareness change in especially in terms of purchasing. The theory of how does App get popularized may offer a hint for clothing CC business, building strong relationship with customer and provide them optimal service, and the reputation may be started to spread via word of mouth. On the other hand, the spread of the business model is dependent on increasing knowledge and acceptances in the population to borrow/ lend clothes. This could be provided via information campaigns (preferably supported by the fashion industry) or by use of behavioral change tools such as nudging.

How to scale up consumer segment? The business of clothing sharing only serve to a small group of people, who love fashion, care about environment, and don't want to spent much money in renewing closet at the same time accept sharing as an alternative to owning. The group of people is relatively small in comparison with another group of population, Pedersen & Netter (2013mentions small, local designers often have difficulties accessing the market through mainstream retailers. Therefore, it may be possible to build an alternative fashion library concept with the active participation of collectives or smaller suppliers (designers), who pay a small fee for promoting their work for limited period of time to a relevant audience.

How to certain the clothing resources? CC of clothing can't stay open long if the garments accessible are not appealing to its customers. As suggest by both group of members, clothing quality, clothing style, clothing size, and clothing durability. Therefore, organizations may benefit from upgrading their collections. According to Claus (Resecond co-founder), they pick clothes qualified for at least 40 times of circulation. However, the nature of swapping create the tragedy of common, small group of free riders come with the worse quality and take the best stuff will lead to a vicious circle, adjusting business model like Chare may provide indication for Resecond. Moreover, some items should perhaps be excluded from the collections due to low demand (observed by the author). As for Chare, adding up more daily basic dresses will help.

What is the value proposition? A successful clothing sharing business model requires that the organization takes care of the issue for customers in somehow. Experience from some of the members interview indicates that style and convenience even economical reasons instead of sustainability may be the key drivers for members, i.e. permitting individuals to explore with styles and try distinctive designer garments without needing to pay the full price. A key advantage of fashion libraries is by all accounts that those members get a chance to try with styles and looks without having to pay full price. Accordingly, the inquiry is whether the clothing-sharing organization should be advertised on the premise of style as opposed to sustainability. As indicated by Botsman & Rogers (2010), it is uncommon that sustainability is the primary driver for building up a CC initiative. Much of the time, sustainability can rather be conceptualized as a positive reaction to CC initiatives.

How to create a new way of sharing economy? The countries where sharing economy really works is the US, UK and Australia (personal communication, 2015), they do not have

good social welfare system to take care of each other, if people are set off from jobs, they have found way to earn some money, and the quickest way to earn money is to share skills, share brain, and stuff. In Denmark, where has one of the world's best social welfare system, therefore, it's not necessary for people to share stuff. The people in Denmark where have started sharing, are sharing to save the planet, while the people in UK, the US, Australia they share to earn money, that's two ways to go into sharing: either go to sharing economy to save the world repair the planet, or go into sharing economy to earn some quick money, when sharing economy is booming right now, it is people to walk in to earn some money quick, but in Denmark it is slower but it focus on sustainability more. The problem of sharing economy it is making a new form of slavery, where people work it for really low wage, Denmark has to provide a new form of sharing economy, taking a basis of core in the way we hear this country very good at seeing people's rights, salary, insurances, is time to find a Nordic way of sharing, don't turn people into slaves, and repair the planet.

What can we learn from other sectors? The idea of CC has gained widespread popularity since the Rachel Botsman and Roo Rogers popularized the term in the book "what's mine is yours"(2010). CC is ultimately about people sharing and collaborating to meet the certain need, whether it concerns transportation, accommodation, take the examples of AirBnB and Uber, fashion obviously has yet to take the mainstream. Though among all types of CC business model, they build on the same concept of sharing access to products or services, instead of having individual ownership, however, sharing economy isn't the panacea to solve the entire problem with overconsumption and resources scarcity. We have to recognize that the nature of product and service various largely. Car and accommodations both have the property of a high monetary value, and long product lifetime and people have a long history of sharing this kind of product/service, taxi, and hotel, etc. Maybe the product and service of clothing isn't designed for sharing. The public needs of mobility, accommodation have some criteria that can be duplicated, thus leads to a wide spread of business success. However, the needs of fashion clothing is very personal, and the criteria for a piece of good clothes seems impossible to be listed out, cutting, material, quality, color, size, it turns out to be something that can't be a volume production in terms of function unit.

7 Conclusion

The problem addressed in this study concerns first of all, the limited attempts to study about clothes sharing business model with unwarranted premises and its potential in reducing the flow of textile related to the challenging issues of unsustainable fashion consumption. Second, it analyzed the issue from both business model and consumer's perspective with empirical data. Based on the problem statement, the following research questions were formulated: 1. What are the existing CC business models in clothing sector? 2. What are consumer perceptions about CC business models in clothing sector? 3. How much do CC business models contribute to reducing resources flows of textiles in society?

7.1 Main findings and conclusions

This study discovered the CC business models in clothing sector with a focus on two clothes sharing organizations based in Copenhagen. Among all kinds of CC business practices in the clothing sector, these two models are similar in terms of the concept of fashion library. However, this was discovered later in the empirical study. Resecond is more a physical swap shop rather than a library. The differences between these two organizations made the study journey interesting.

Both organizations seek to serve the group of customers with the high awareness of sustainability and needs of being fashionable. They provide the identically value proposition package: sustainable, fashionable, economical and novel. Their strategies for reaching out customers on the internet and in daily service are remarkable, such as swapping smartphone online app, storytelling, repairing service, centralized cleaning, conscious consumerism and social media networking. These attempts with the CC concept together show high profile in sustainable fashion consumption. On the other hand, they deliver the key resources-fashionable clothes to customers. However, low-quality clothing resources, limited human resources, and low financial viability have made clothes-sharing business vulnerable. The revenue of such business models is highly dependent on the numbers of members. For this moment, CC business model in the fashion industry has not yet to take hold in the mainstream fashion consumption pattern.

Consumers who have engaged in CC of clothing are shown higher awareness of sustainability issues. The involvement of clothing sharing has somehow changed consumption pattern, especially with purchase behavior and disposal behavior. Remarkably, one of the case investigated with Chare shows, the practice of being a member of fashion library, lead to a significant amount of purchased new clothes displaced in a ratio of 1:1.148. The displacement effect is even much higher than previously studied estimation. As for the members don't realize purchase behavior change, CC might be an alternative consumption option for them rather than substitutional. Furthermore, CC business model is playing a role as an educator to influence continuously on member's perception and practice of sustainable clothes consumption. However, However, at present collaborative consumption of clothes remains a small-scale phenomenon with difficulties reaching mainstream market, the substantial effect on reducing resources flow of textile remains unjustified.

The CC business models in clothing sector not only increase the reused proportion of a garment but also bring positive influence on consumer's behavior and awareness education toward sustainable consumption. However, the effect highly depends on the scale of the business and market acceptance of this new consumption practice.

7.2 Suggestions for future research

This paper is one of the first attempts to examine new business models of CC in clothing sector. The study contributes to the discussion of whether and how fashion sharing and collaboration hold promise to contribute to sustainable fashion consumption. The aim of this master study was to develop a better understanding of clothing-sharing initiative and its potential in reducing the textile consumption in the society. The aim was fulfilled thought indepth case studies from both business model and consumer perspective.

The research has only looked at two organizations in Copenhagen with limited amount of quantitative data. Expanding the research and analyzing other business models or business models in other region as well might provide valuable insights into what the determinants are for different clothing sharing business to develop. More detailed researched could be also look into how to scale up this model in fashion sector, such as policy tools or how to coeoprate with dominate retailer.

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