# PRODUT REPORT

# Research for Systemic Change in Fashion Consumption. Service Design for Sustainability

How to design a systemic change in Fashion Consumption with Service Design and encourage people to engage in a Circular Economy journey?



University: Aalborg University Copenhagen

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Title: Service Design for Sustainable Consumption in Fashion

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#### THE AIM

This report is outcome of the design research process on Sustainability and Sustainable Consumption, and it aims to provide the client with an overview of the designed sustainable solution.

#### **ABSTRACT**

Globalization and the spread of knowledge through technology have shifted economies from manufacturing/ product based to service based. This transformative path has increased demand for service design and user experience design to create an additional value for both companies and users. Simultaneously, social and environmental challenges keep increasing their scope, reflecting the rise of trends such as sustainability. With consumers becoming more conscious about their lifestyle and knowledgeable about the global environmental challenges, they have started to reflect this knowledge into their purchasing decisions for products and services. As the second biggest industry, fashion has a tremendous impact on economies and the Planet. Therefore, sustainability is specifically evident and demanded. To meet these new needs, companies are slowly shifting their strategies towards more eco-friendly products and operations and ensuring a stable and competitive position. The Experience Economy, which technology and the collective rise of services have enabled, now it is the time for fashion retailers to consider how to embed sustainability services as a value-adding experience to their product offerings as a way of innovation and also as a strategic approach towards their customers.

**KEY words**: sustainability, circular economy, service design, innovation, systems thinking, design thinking, services

In recent years, the essence of services and the speed of change have changed drastically, and it will no longer be enough to master the conventional aspects of service delivery. Companies must learn to exploit the capacity for service innovation made possible by four emerging patterns in order to capture the opportunities. (McKensey, 2015) Higher aspirations of clients. More than ever with immediate results, customers demand greater engagement, customization, personalization, and mobility from services. They expect to see them in others as well as they see cutting-edge service developments in one industry; see the proliferation of self-service kiosks from airline check-ins to the retail and hospitality industries. As industry boundaries gradually blur for consumers, businesses need to look beyond their immediate river for new ideas.

The advent of the mobile Internet. Approximately 1.5 billion smartphones are currently in use globally and more than 100 billion applications were downloaded in 2013. Service distribution is transformed by the resulting mobile and self-service possibilities. The disruption of the taxi industry by Uber is just one prominent case. With far-reaching consequences for financial services and retailing, developments in digital payments are rapidly spurring mobile commerce. Monito and Remote Access.

#### A POTENTIAL CHALLENGE IN INNOVATION.

Even though Design Thinking is the way to succeed, we cannot overlook some of the challenges hidden in innovation.

Compared to Service Design, which is a systemic way to organize people, technology, and resources around the idea of creating value, innovation has no pre-defined structure. Still, it is rather a sporadic action, which happens in momentum rather than a planned, systemic manner. introduced by Franks Johansson (2006). "The Medici Effect" is the science of combining knowledge from different domains to come up to innovative, world-changing ideas and insights. Those, the author argues, comes from people with no experience in a certain domain but is rather a result of an intersection of different field, ideas, people and cultures. Similarly, services represent the configurations of people, technologies and other system service resources, which cocreate value (Maglio et at. 2009).

Design does not center around a single point of view, but it is systemic in nature and should aim at more thoroughly and completely understanding the needs of the user (Armson, 2011).

## THE CONTEXT

# The Triple Bottom Line and Design Thinking

The triple bottom line represents the foundational pillars of Planet, Profit, and Society, which in this report are the foundations of the sustainable environment, working in synergy, complimenting, and positively supporting each other. It is essential to address it because a sustainable business model captures The Triple Bottom Line.

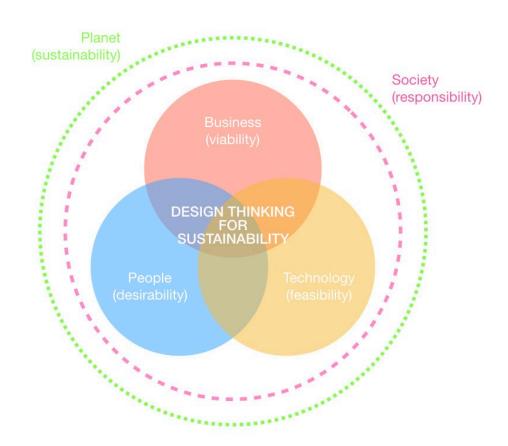


Figure 1. The Triple Bottom Line

Above is an illustration as to how this report works with sustainability. It illustrates the three traditional aspects of the model, which include Profit, Planet, People with two additional concentric circles for Planet and Society. In this report, the researcher relies on these three pilers – People, Business and Technology, as foundational and underlying the logic of the Design Thinking process for Sustainability. The two outer rings guide the design thinking within the societal norms and social responsibility perception, for example, ethical activities along the value chain, local community support, fair trade and environmentally friendly operations. Society is perceived as a subset of The Earth/ Planet. The conscious designer must consider the Planetary limited resources and rely solely on these resources for economic and social well-being. Said in other words, the additional external rings represent the sought Environmental Responsibility in Design solutions for service, where Design Thinking is the central logic around People, Business and Technology reinforced by the circles of Society (responsibility) and Planet (sustainability).

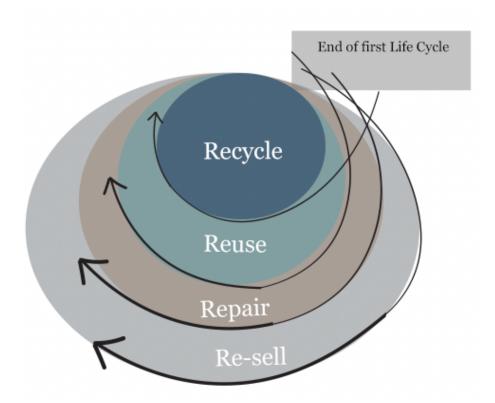


Figure 2: Circular economy Model as the preferred service outcome

# Combining two logics

# 1. Circular Economy (applying Systems Thinking)

Not only is it necessary for future service designers to understand the basics of this circular way of thinking, but also this is an area where future service designers can make impact and act responsibly. (Kirsen van Dam, Circular Design Lecture and Workshop, 2019) Covered in the theoretical framework and desk research, the topic was studied in order to draw a holistic picture and gain the right amount of knowledge and realize the possibilities, challenges, and boundaries currently existing. It is worth highlighting that in the framework of this report, CE and Sustainability are used as interchangeable terms.

## 2. User Environment (applying Design Thinking)

The design process starts with unfolding the contextual environment through online observations and expert industry interviews with representatives from the three case study companies. Their professional insights helped to understand the users' demand for sustainability from a business perspective. The experts shared their current and plans to respond to these customers' needs and expectations. Further in the report, an actual user perspective was obtained through in-depth interviews and surveys, which addressed both the Danish and international fashion consumers.

#### MAIN PROBLEM STATEMENT:

"How to design a sustainable way of consuming clothes and thus engage users in Circular practices?"

## **Sub-question**

"How can customers experience the enhanced value of a sustainable product through a service? Design of a service for the sustainable experience of clothes."

# From INSIGHT:

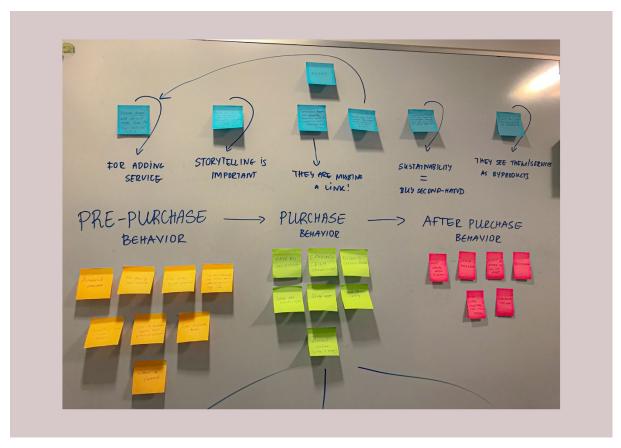


Image 1. Clustering Map (Survey insights)

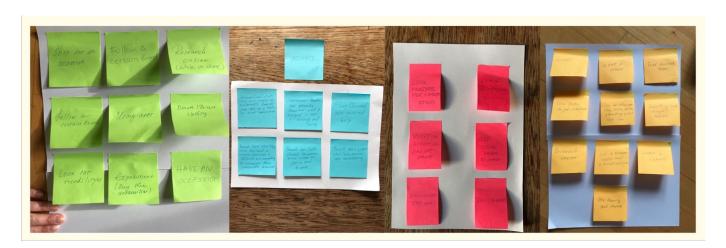


Image 2. Zoom in on findings above; Pre-purchase- Purchase- After-Purchase

# **To Problem Identification:**



Figure. 3 Identifying the pain point

# The two main Pain point for users are:

- 1. The user consumes linearly they still engage in buy and use activity. The disregard of clothing happens outside the retailer, meaning retailers do not see the disregard phase as a responsibility, and users therefore enter a linear sell-buy relationship over and over again.
- 2. Users find a pain point in consuming clothes they have challenges in planning the shopping experience (based on logic and reasons). Consumption equals the decision preceding buying behavior (motives); how to consume sustainable (as per the needs in my wardrobe, do I really need another T-shirt), how to disregards sustainably etc.

**TO Solution** 

3. Design manifest



Thomas J. Watson Jr. CEO of IBM 1956-1971

Image. 3 "Good design is good business."

The Design Manifest serves to outline the goals of the service solution, key features and the scope of its use for businesses.

- **Problem Description** consumers' main pain point is pre and post consumption and choice management. Their decisions are not always planned, and people do not know how to manage the end of life for the clothing. The final step in the clothing ecosystem is therefore missing.
- **Constraints** it is difficult to shift behaviors.
- Companies profiles and design capabilities all three case companies are already engaged in sustainable production (backstage). My profile will help with design knowledge and facilitation of the adoption of a new service model for user value
- Characteristics the goal of the design project is to achieve a sustainable service offering, which integrate in its essence the following design principles of Multiple Use-Cycle Design (Kirsten van Dam, Service Design for Sustainability Workshop, 2019)
- 1. Provide a product as a service.
- 2. Extend the life cycle of a clothing.
- 3. It will be an intersection of experiences, existing business and individual knowledge and practices (Morelli, De Götzen, Simeone, 2020)
- 4. Design to activate a set of aggregated knowledge (from existing practices, as mentioned before users and companies already know what sustainability for them is and are practicing it in ways relevant to their beliefs.)
- 5. It will be based on Design thinking for sustainability and systemic thinking.
- 6. It will be based on Service thinking principles.
- 7. It will allow Co-creation, which is currently missing on all three business operational profiles.
- 8. It will use Data to generate new behavioral insights and use them in the future to base decision-making processes and draw strategies on.
- 9. It will utilize the "as a service" model.
- 10. A solution, which will engage in Behavioral economics, Design for Behavior and Sustainable change in a network (the missing element after the purchase phase), bringing the sustainability approach in a digitalized network promoting style and sustainability. It will also bring the desired storytelling and engage consumers in Omnichannel experiences empowering and educating them. And considering the dual nature of service (Morelli, 2009) the new solution will avoid the negative side, which relates to depriving people from certain skills, by placing it only in the hands of the service-providers.
- 11. It will make design interactable

# THE DESIRED SERVICE LOGIC THEN BECOMES THE FOLLOWING: PRODUCING - SELLING - BUYING - USING - MANAGING (WHICH RESULTS IN CIRCULAR ECONOMY) THROUGH SERVICE APPROACH

# Proposition

# BUSINESS MODEL BASED ON COLLABORATIVE USE

So far, the research has show SMEs seem commitment in their pursuit of circular business models in the clothing industry, and consumers are showing interest and practice, too.

Therefore the research proposes a new service business model, which is based on collaborative use of clothing.

PROTOTYPING

SCENARIO 1. THE USER GETS INTRODUCED TO THE SAAS (SUSTINABILITY-AS-A-SERVICE) FOR FIRST TIME

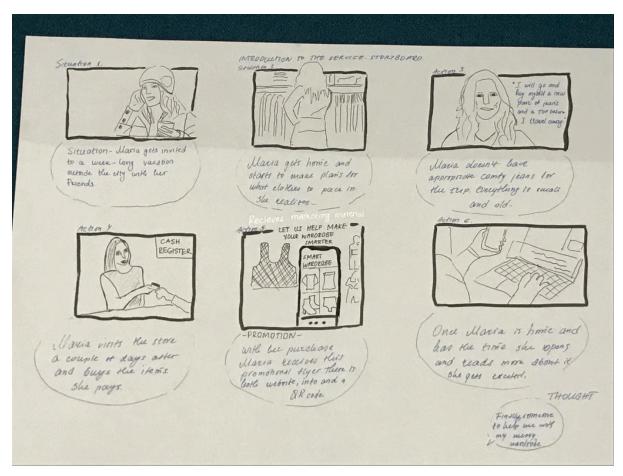


Image 4. Sketch 1

SCENARIO 2. THEY DOWNLOAD THE SERVICE AND UPLOAD THEIR WARDROBES BY SCANNING THEM.

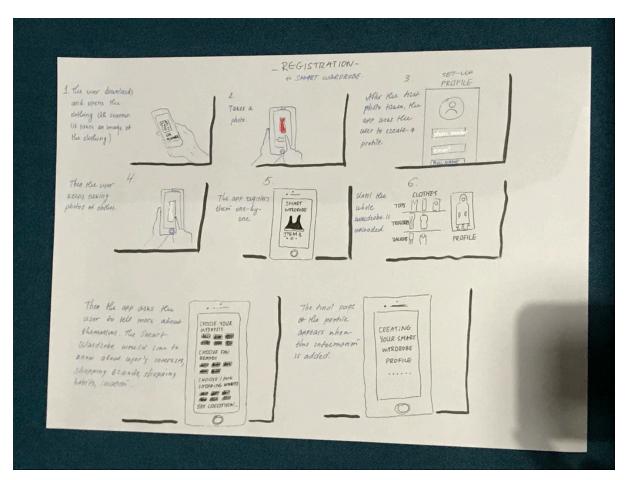


Image 5. Sketch 2

SCENARIO 3. THE SERVICE WILL GIVE SUGGESTIONS EVERY DAY TO THE USER.

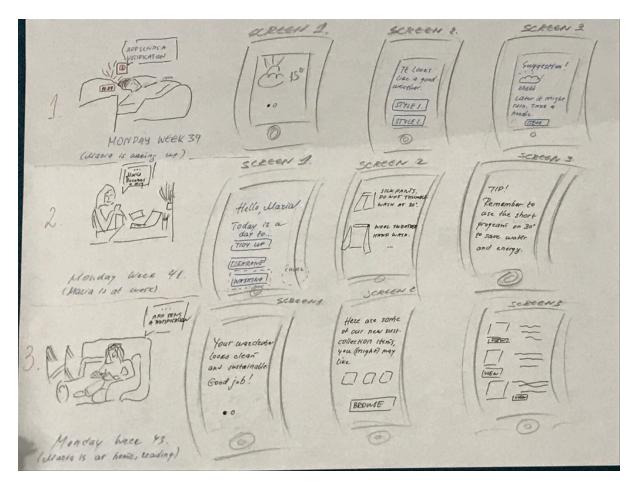


Image 6. Sketch 3

Scenario 4. And it is also possible to register the QR clothing each time you have it on for bonuses.

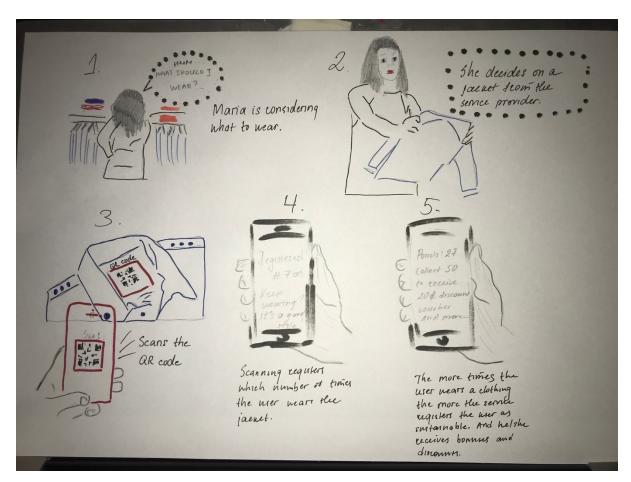


Image 7. Sketch 4

SCENARIO 5. WHEN THE USER WANTS TO DISCARD THE CLOTHING, THEY CAN SCAN THE QR CODE AGAIN, AND THE APP WILL GIVE THEM THE FOLLOWING OPPORTUNITIES – RE-SELL, RE-USE, SWAP.

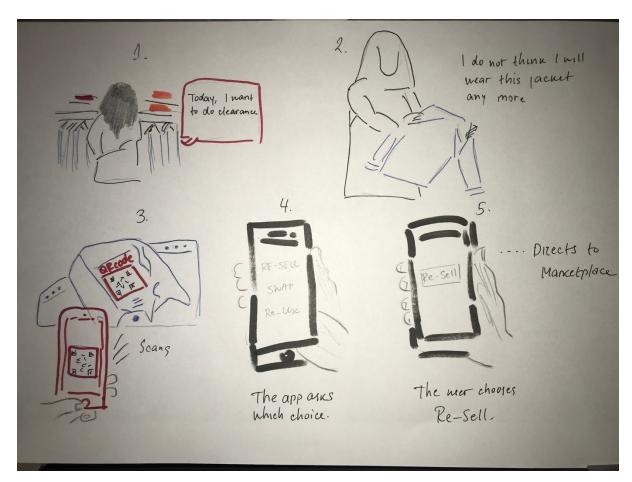


Image 8. Sketch 5

# MOTIVTIONAL MATRIX

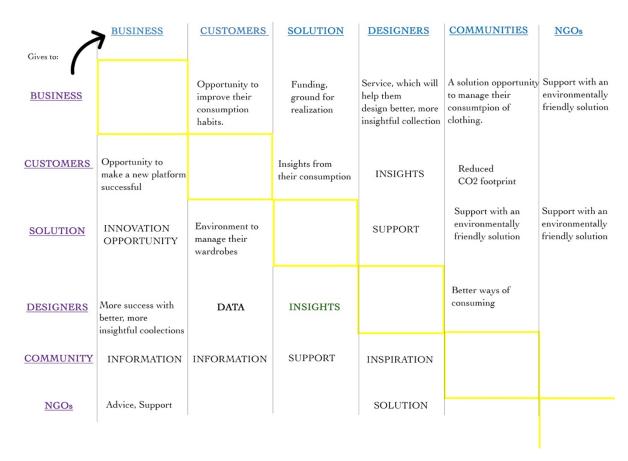


Figure 3. Motivational Matrix

# **Business Implications**

#### 1.New Business Model canvas

Since the company will adopt services, they will also have to work with a new Business Model canvas, which will guide the delivery of the value. The new service BMC is a combination of ReDesign (2018) and Service Model Canvas.

It is an easy, manageable and holistic tool to inform businesses on the key new business aspects.

For example, as discussed earlier in the report under Industry Best practices, many companies use unconventional materials from workwear leftovers to create new products. Such new, alternative partnerships are enabled by the change of mindset and expressed in the Service Sustainable Business Model Canvas.

/Fashion consumers /Conscious /Sustainability entusiasts /Technology entusiasts /Organizers	SUSTAINABLE SERVICE PROPOSITION  /Clothing management /Styling advices /Bonus rewards /Consumption overview	CHANNELS  / Mobile app  / Website		SUSTAINABLE KEY ACTIVITIES  / Getting people to agree and digitalize their wardrobes. / Updating website and app. / Supporting issues	/ Scanning wardrobe clothes with QR technology
/ When users buy new clothes / When they wear a QR label clothing / When they want to discard a clothing	ACTORS  Brands a developing agency supporting staff customers staff	COMPETITORS  / Trendsales / Facebook markets / dba / Kanzee / Mooch / By Rotation / Neu		KEY RESOURCES  / Mobile app / Marketing team / Product development team / Customer Support team	COSTS  / Cost free for uesrs / Costs concernign the development of the app
ROV (return on value) - number of subscriptions - number of use of the QR service				ck er satisfaction ncy of use	

Figure 4. New Service Model Canvas

The new service offer is based on the proposed new aspects of the redesign Canvas (2018), which proposes fashion design as a tool for sustainability.

# **Design Implications**

The most prominent implication is that design becomes more interactive, hopefully bringing more value to users through this interactivity. Good design starts at the beginning of the life cycle and is a simple design. Clothes will be sewn with a QR code label as proposed below for the purpose of enabling the capture of data and user management.

# The possible new outlook of a design:

Our new collections include a QR code to help you track your garments with our SaaS Service.

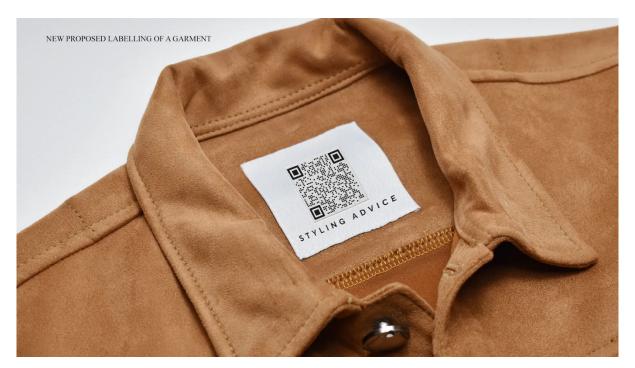


Image 9. Proposed New label design

#### Future consideration

As future consideration the report would like to examine more users to research and test the new service. For the ones reporting this, for the embracers of the concept. More in depth study of CE systems.

## Conclusion

Design thinking aims to achieve value for consumers and innovation for businesses. This research method is evidence that there is value in participating in user research. Service design is a rich discipline that offers a wide range of resources that allow various stakeholders to converse and help them find new ideas and solutions. In how consumers perceive and how consumers consume and act, design has become paramount, and this is why so much focus is being put on it. Design is agile in its ways, from product design, which is

very physical, to service design, which is designed with users in focus. Due to its wicked nature, Design for Sustainability is a particularly challenging area, based largely on beliefs and preconceived values. User research is therefore so critical for the right implementation.

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