

# Designing a Collaboration and Communication Process for a Garment Renewal Service

Master's thesis in Industrial Design Engineering

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# Abstract

The textile industry has a significant environmental impact and is one of the largest contributors to land and water use, greenhouse gas emissions, and raw material consumption. Transitioning the industry toward a circular economy is therefore essential, and one way to support this shift is by extending the lifespan of garments through repair and refresh. RecoMended is a company that provides industrial scale garment renewal services for other companies, enabling the resale or continued use of existing products. However, as industrial scale garment renewal services are new to the market, established collaboration and communication processes for developing service specifications are limited. As a result, the collaboration and communication process currently used by RecoMended is time-consuming, resource-intensive, and highly customer-specific, making it difficult to scale.

This study aims to investigate how the collaboration and communication process between RecoMended and its customers can be improved to support more efficient development of service specifications for garment renewal and allow RecoMended to scale its production. The research was conducted through interviews, workshops, and contextual inquiries with RecoMended and several of its customer companies. The collected data were analyzed and synthesized, resulting in the design of a proposed future collaboration and communication process together with a service toolkit.

The proposed design outlines a structured, step-based collaboration and communication process that is intended to support RecoMended and its customers in developing service specifications in a more informed and efficient way. The process is envisioned to be supported by a service toolkit consisting of standardized service packages intended to enable scalability in the production workshop, a reference library with visual and material examples of available renewal procedures, and a set of guiding questions designed to ensure that key decisions are addressed. While further development and testing would be required, the proposed process and service toolkit are intended to provide a foundation for clearer communication, more informed decision-making, and improved collaboration, thereby supporting RecoMended's ability to scale its garment renewal services.



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*Lovisa Gunnelius*

*Gothenburg, January 2026*

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# 1. Introduction

In 2020, global textile fiber production reached 109 million tons and is projected to grow to 145 million tons by 2030 (Deckers et al., 2023). This production has a major environmental impact, ranked as the third largest sector in land and water use and the fifth largest in greenhouse gas emissions and raw material use (Deckers et al., 2023). At the same time, almost 7 million tons of textile waste are generated annually in the European Union (EU) alone (European Environment Agency, 2024). In Sweden, Naturvårdsverket (n.d.-b) reports that four out of ten garments thrown away are still in good and wearable condition.

These trends conflict with the Global Goal 12.5, which aims to “substantially reduce waste generation through prevention, reduction, recycling and reuse” (Global Goal, n.d.). To achieve this goal, the textile industry must transition toward a circular economy, where products are kept in use for as long as possible to minimize waste (European Environment Agency, 2022).

According to the European Environment Agency (2022), implementing a circular economy occurs at all stages of a garment’s life. Designing clothes with circularity in mind involves selecting designs and materials that last long, enabling easy repair and remanufacturing, and preparing for eventual recycling. During the garment’s lifespan, an infrastructure that supports reuse and repairs is essential. Finally, at the end of a garment’s life, proper recycling ensures reuse of the material. European Environment Agency (2022) also highlights that the whole textile industry, from design to material recycling, together with consumers, is responsible for working towards a more sustainable future.

Extending the lifespan of garments is the most effective strategy for reducing environmental impact (Naturvårdsverket, n.d.-b). By doubling the number of times garments are used, the total climate impact can be reduced by almost 50 percent (Naturvårdsverket, n.d.-b).

Over the past few decades, the practice of repairing clothes has declined (Laitala & Klepp, 2018). With the rise of fast fashion and cheaper garments, the incentive to care for and extend the lifespan of garments has diminished (Laitala & Klepp, 2018). As a result, fewer individuals have repair skills, and fewer companies continue to offer repair services (Laitala & Klepp, 2018). However, Laitala and Klepp (2018) also note that this trend may be shifting, as interest in repairing garments has increased in response to growing awareness of the environmental

impacts of fast fashion and the traditional linear economy. As interest in repair increases, new companies are emerging to meet this demand.

RecoMended (n.d.) is a company founded in 2022, working to extend the lifespan of garments by increasing the number of times they are used before being discarded. The company consists of ten employees and operates a production workshop in Karlstad, where about 1,400 garments are processed each month. RecoMended provides several industrial scale garment renewal services to other companies in Europe. This positions RecoMended as one of the few companies globally that offer renewal services at an industrial scale for businesses. One of the services RecoMended provides is where businesses can send garments that need renewal, which RecoMended then sorts, refreshes, and repairs, enabling the customer to resell or continue using their own garments (RecoMended, n.d.). This service forms the basis of the present study and contributes to reduced textile waste and increased circularity through extended garment use.

To renew garments, RecoMended needs to establish a service specification with each business customer that defines how garments should be processed in the production workshop. The specification includes, among other things, which product categories should be renewed, washing requirements, and repair guidelines. However, there is currently no effective collaboration and communication process for developing these service specifications, as the services are new to the market. The current approach is time-consuming, resource-intensive, and inefficient, and each customer requires an individual solution. Improving the collaboration and communication process is therefore essential for scaling production efficiently and creating value for both RecoMended and its customers, ultimately helping extend the lifespan of more garments.

## 1.1. Aim

The study aims to investigate ways to improve the efficiency in the collaboration and communication process between RecoMended and its customers when developing the service specifications for garment renewal.

## 1.2. Research Questions

To achieve this aim, the study will address the following research questions:

1. What elements, decisions, and information should be included in the collaboration and communication process to enable scalable production and create value for both RecoMended and its customers?
2. How can the collaboration and communication process between RecoMended and its customers be designed to enable effective exchange, informed decision-making, and successful collaboration?

## 1.3. Objective

The objective is to design an efficient collaboration and communication process for developing service specifications for garment renewal that support RecoMended and its customers to communicate effectively, make informed decisions, and collaborate successfully, while supporting RecoMended in scaling its production.

## 2. Background

This chapter outlines the regulatory and industry context in which RecoMended operates. It presents key EU regulations and directives supporting circular textiles and describes Svensk Handel's new condition grading system for second-hand garments. Together, they provide the foundation for understanding garment renewal practices in the EU and Sweden.

### 2.1. EU Textile Regulations & Directives Supporting Circular Economy

The EU is currently transitioning the textile industry toward a circular economy, introducing several new regulations and directives to support this shift (European Commission, n.d.-a). The regulations and directives outlined below have either recently been adopted or are in the process of being implemented over the coming years.

#### Separate Recycling of Textiles

From January 1, 2025, all EU countries are required to have a separate collection system for textiles (Naturvårdsverket, n.d.-b). The purpose of this regulation is to promote more circular handling of textiles (Naturvårdsverket, n.d.-b). Collected textiles are gathered, sorted, and then reintroduced to the market either for reuse or, if they are damaged or worn out, for material recycling (Naturvårdsverket, n.d.-b).

#### Right-to-Repair Directive

On June 13, 2024, the European Union's Right to Repair Directive entered into force (European Parliament & Council, 2024). The directive establishes a common set of rules designed to encourage product repairs, which reduces waste and extends product lifespans (European Parliament & Council, 2024). Under the directive, manufacturers are obligated to provide repairs within a reasonable timeframe and at a fair price (European Parliament & Council, 2024). Currently, the scope covers large household appliances and some consumer electronics, with plans to expand the range of products included in the future, including textiles (Right to Repair Europe, 2024).

#### Extended Producer Responsibility (EPR)

The Extended Producer Responsibility (EPR) scheme for textiles and footwear entered into force on October 16, 2025 (European Commission, 2025). Under EPR, producers are required

to pay a fee for every product they place on the market. These fees are used to finance the collection, sorting, and recycling of textile and footwear products (European Commission, 2025). The fee is determined based on the sustainability performance of each product, creating incentives for producers to design more circular and environmentally friendly garments (European Commission, 2025). The EPR scheme aims to reduce textile waste, promote responsible resource management, decrease dependence on virgin raw materials, and encourage innovation in sustainable practices across the EU (European Commission, 2025). Member states are given 20 months to transpose the directive into national legislation and adapt their regulations, followed by 30 months to establish the required systems (European Commission, 2025).

### **Ecodesign for Sustainable Products Regulation (ESPR)**

On July 18, 2024, the Ecodesign for Sustainable Production Regulation (ESPR) entered into force (European Commission, n.d.-b). The ESPR is a framework regulation designed to increase product sustainability and support the transition to a circular economy within the EU. The regulations apply to nearly all physical goods placed on the EU market and enable the adoption of product-specific requirements aimed at improving product durability, reusability, upgradability, reparability, recyclability, and overall environmental performance (European Commission, n.d.-b).

In addition, the ESPR introduces measures such as Digital Product Passports (DPP), restrictions on the destructive disposal of unsold goods, and provisions to support green public procurement (European Commission, n.d.-b). Product-specific requirements for textiles, specifically apparel, are estimated to be adopted by mid-2027 (Naturvårdsverket, n.d.-a).

A Digital Product Passport (DPP) is a digital identity assigned to products, components, and materials, containing information relevant throughout the product's life cycle (European Commission, n.d.-b). The purpose of the DPP is to support product sustainability, promote circularity, and strengthen legal compliance (European Commission, n.d.-b). The specific information included in the passport will depend on the product category and may cover aspects such as material composition and origin, repair activities, recycling capabilities, and life-cycle environmental impacts (European Commission, n.d.-b).

Under the ESPR, the destruction of unsold textiles and footwear will be prohibited (European Commission, n.d.-b). This restriction aims to reduce unnecessary waste and encourage more circular handling of unsold goods (European Commission, n.d.-b).

The ESPR also strengthens green public procurement by requiring public authorities to purchase products that meet high standards of sustainability and circularity (European Commission, n.d.-b). This measure is intended to create market incentives for companies to invest in more sustainable product design and production practices (European Commission, n.d.-b).

## **2.2. Svensk Handel Condition Grading for the Second-hand Market**

On October 3, 2025, Svensk Handel (2025) published a condition grading system for second-hand fashion garments, intended to create a common language for describing the condition of used garments. According to Svensk Handel, the goal of having a common standard is to improve understanding between buyers and sellers, thereby supporting market growth. The system consists of a seven-step scale from “new” to A–F, with explanations for each category, including the degree of wear a garment has experienced, its appearance, its functionality, and additional comments.

### 3. Process & Method

The following chapter presents the process and methods used to address the study’s aim, research questions, and objective. To explore how the collaboration and communication process can be made more efficient, data were collected from both RecoMended and its customers and analyzed to create a proposed design. Figure 1 illustrates the overall study process, starting with an exploration phase that was gradually transformed into a design.

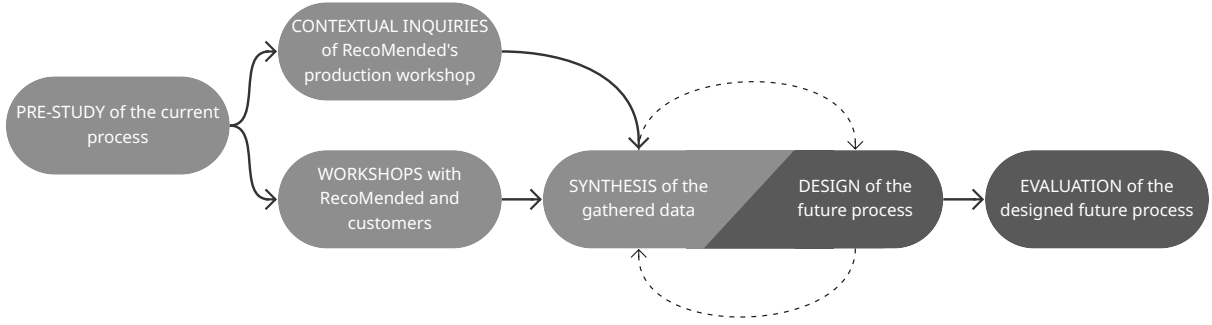


Figure 1: Illustration of the study process. The light gray illustrates the exploration phase and the dark gray the design phase.

The work began with a pre-study to understand RecoMended’s current collaboration and communication process, the service they provide, and the broader context in which they operate. The collected material was analyzed, forming a foundation for the rest of the study.

To further explore how the production workshop applies information decided in the collaboration and communication process, contextual inquiries were conducted in RecoMended’s workshop, and the resulting data were analyzed.

To gain a deeper understanding of the future collaboration and communication process to be designed, workshops were held with both RecoMended and their customers. The insights from these workshops were analyzed and synthesized along with the findings from the contextual inquiries through several iterations, which gradually shaped the design proposal. Iterative cycles between synthesis and design enabled continuous development and refinement of the solution.

Finally, the design was evaluated with RecoMended and one of their customers. The results were analyzed to assess the design’s effectiveness and identify areas for further development.

### 3.1. Pre-study

In the Pre-study, a walkthrough of the production workshop was conducted, an interview was held with RecoMended’s CTO (Table 1), and a review of internal documentation and external repair-related literature was carried out.

*Table 1: User studies during the pre-study*

Type, duration	Participants	Format
Walkthrough of production workshop, 90 min	RecoMended’s CTO, two production operators, one seamstress	In person
Semi-structured interview, 60 min	RecoMended’s CTO	In person

To understand the different steps garments go through in the production workshop, a walkthrough was conducted in which two separate customer processes were examined. First, the complete workflow for one customer was followed step by step, with each stage explained by the involved personnel or the CTO. Then, the same was done for a second customer. This was to allow for a comparison of the two workflows, making it possible to identify both differences and similarities. Questions were asked throughout to gain a deeper and more detailed understanding.

The purpose of the interview was to understand RecoMended’s current collaboration and communication process with customers, the reasoning behind their approach, and what challenges they experience with the process. The interview walked through the entire collaboration and communication process chronologically, from first contact to sending garments regularly. To help support reflection and make the discussion more concrete, the participant was asked to give examples from one ongoing customer’s journey. The interview guide can be found in Appendix A.

To further understand how RecoMended currently work, documentation created by RecoMended about the internal production workshop process and the information required at each production step was reviewed. In addition, two workshop manuals for two different customers were examined to understand what information they contain.

Finally, complementary research was conducted to understand the broader context in which RecoMended operates, including how repair processes are handled in other industries and how textile repair services are currently managed. This involved reviewing relevant literature and studies on repair services, as well as examining how different companies approach repair.

The notes from the production workshop walkthrough and the documentation provided by RecoMended were reviewed and analyzed to understand the production workshop process. The pre-study interview was transcribed and quotes relevant to the collaboration and communication process were identified. A KJ-analysis was conducted to group similar quotes and organize the material. Information related to the future collaboration and communication process was set aside for later steps in the study. In addition, the documentation provided by RecoMended and workshop manuals was examined to identify the questions that customers would need to address during the collaboration and communication process.

### 3.2. Contextual Inquiries in RecoMended’s Production Workshop

To understand how the personnel in the production workshop used the material provided through the collaboration and communication process, two contextual inquiries were conducted (Table 2). During each inquiry, personnel demonstrated how they handled a garment from start to finish in the production workshop (Figure 2). At each step, they explained the process, how they made decisions, and how they had learned to perform the task. Follow-up questions (Appendix B) were asked throughout to encourage elaboration and clarify their reasoning. The contextual inquiries were based on two different customer processes.

*Table 2: Contextual inquiries*

Type, duration	Participants	Format
Contextual inquiries on jeans, 60 min	One production operator, one seamstress	In person
Contextual inquiries on outdoor, 45 min	Two production operators, one seamstress	In person



*Figure 2: A step of the production workshop process demonstrated at RecoMended's production workshop.*

The contextual inquiries were transcribed, and relevant quotes, along with observational notes, were extracted. A KJ analysis was then conducted, in which similar quotes were grouped and summarized.

### 3.3. Workshops with RecoMended & Customers

To understand what RecoMended and their customers needed, expected, and wished for in a future collaboration and communication process, workshops were held. The workshops were designed to encourage open discussion and creative thinking. The activities and questions focused on imagining an ideal process rather than evaluating the current one.

#### Selection of Participating Companies

The workshops were conducted individually with RecoMended and each of four of their customer companies (Table 3). The companies were selected to create a diverse group, capturing differences and similarities in how the collaboration and communication process should function. Two of the customers had prior experience with renewal services, while the other two did not. The customers varied in terms of end users (paying or non-paying), type of garments sold, source of the garments to be sent to RecoMended (e.g., in-store collection, returns, complaints), and company size. Whenever possible, a group workshop format was used to gather multiple perspectives and encourage discussion.

Table 3: Workshops

Type, duration	Participants	Format
Workshop, 60 min	Jeans company, two participants	In person
Workshop, 75 min	Outdoor company, one participant	In person
Workshop, 60 min	Work wear company, one participant	Online
Workshop, 60 min	Fashion company, two participants	Online
Workshop, 60 min	RecoMended, CTO	In person

### Workshops Structure

The workshops were divided into four sections, designed to explore both what participants value in a collaboration with a company like RecoMended and the practical aspects of the future process. The workshop guide can be found in Appendix C.

The first section focused on understanding participants' motivation for recirculating garments and their reasons for choosing RecoMended. Starting with a familiar and accessible topic helped participants feel comfortable and eased them into the workshop discussion.

The second section focused on understanding what participants considered most important in a renewal service and how these translated into expectations for the garment renewal outcome. Participants were presented with a set of renewal service attributes (Figure 3), which they were asked to rank from least to most important and to complement with any missing attributes. The attributes were inspired by the operational aspects identified by Lechner et al. (2024) in their study on consumer priorities in repair services, which were grouped into thematic categories. After completing the ranking, participants explained their choices and responded to follow-up questions to clarify their preferences and desired deliverables.

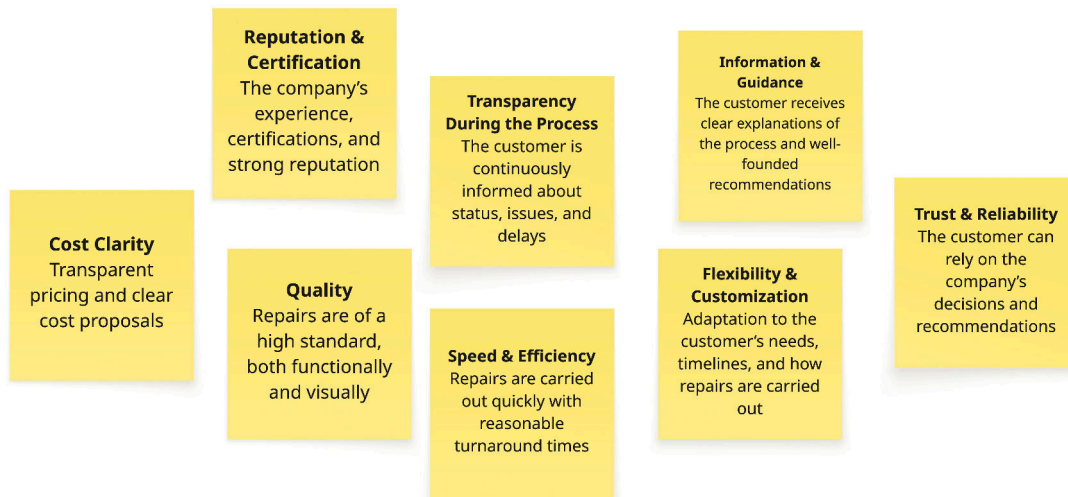


Figure 3: Attributes ranked by the participants from least to most important in a renewal service

The third section explored participants' views on the process of developing a service. For each question, participants were given a symbol which they placed on a scale from one to ten to indicate their preference, and then they explained their choices (Figure 4). Questions covered the desired length of the process (expressed in both weeks and number of meetings), the level of detail they wished to be involved in, the price they were willing to pay, and their preference for a ready-made package versus a customized solution. After all elements had been placed on the scale, the group discussed any contradictions (for example, wanting high involvement but very little time) and participants' ideas for resolving them.

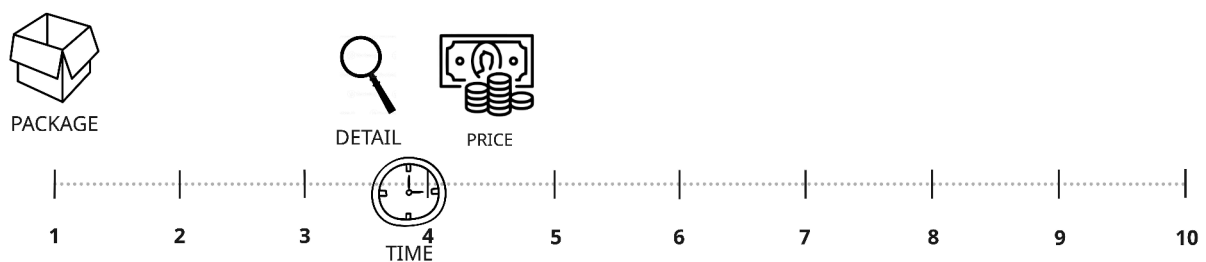


Figure 4: The scale with the symbols that the participants placed

The final section aimed to gather concrete input on how each company wanted the collaboration and communication process to function. Participants were asked to construct their preferred process using cards with suggested steps if they found them helpful, along with blank cards for any steps they wished to add themselves (Figure 5). They then arranged the cards in a sequence and described each step, explaining its purpose and the reasoning behind it.

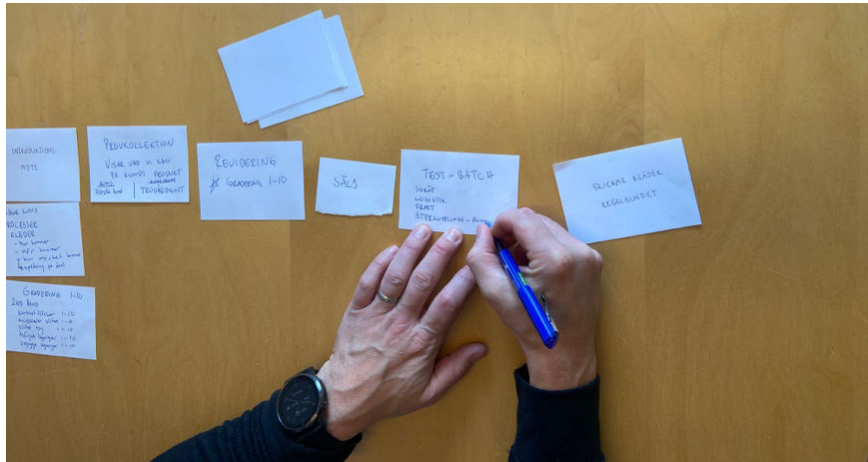


Figure 5: A participant creating their preferred collaboration and communication process

## Analysis & Synthesis

Each workshop was analyzed individually using the same procedure. First, the workshop material was transcribed, and quotes related to the collaboration and communication process, collaboration values, motivations for working with garment renewal, and preferred repair outcomes were extracted. These quotes were then organized into categories based on shared themes, and each category was summarized to reduce overlap and highlight essential information (Figure 6).

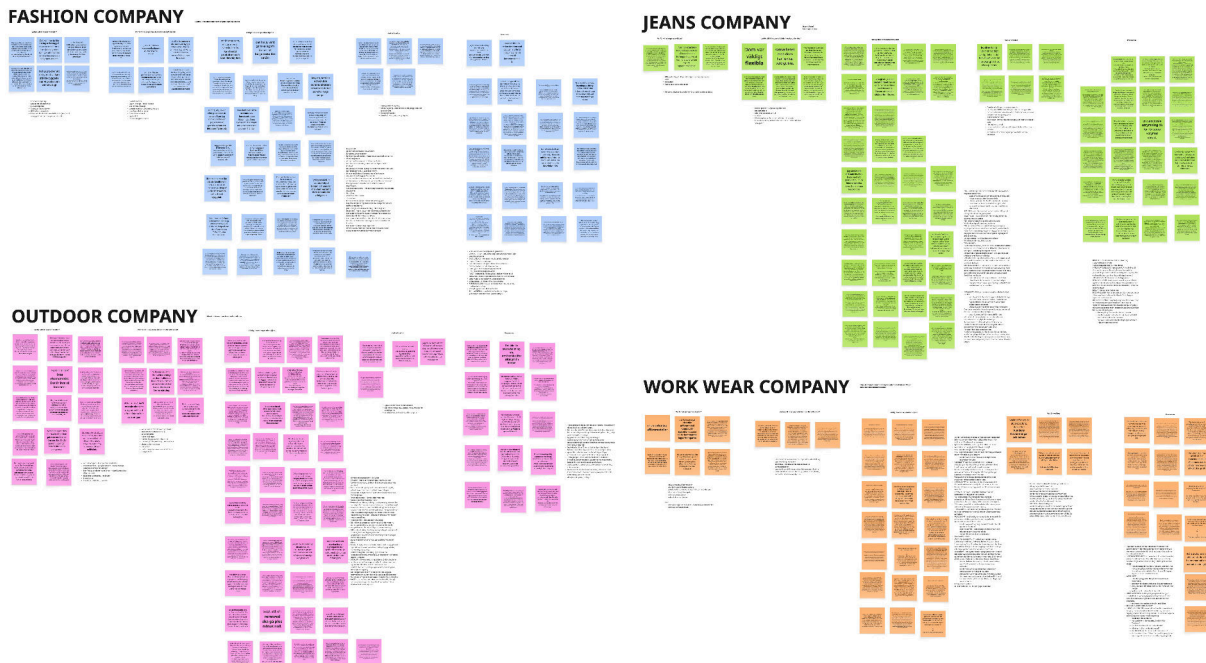


Figure 6: Workshops individually categorized and summarized. Each color corresponds to a workshop with a company.

The summarized data were reorganized and mapped onto each participant’s collaboration and communication process from the workshops to explore the data from a new perspective (Figure 7).

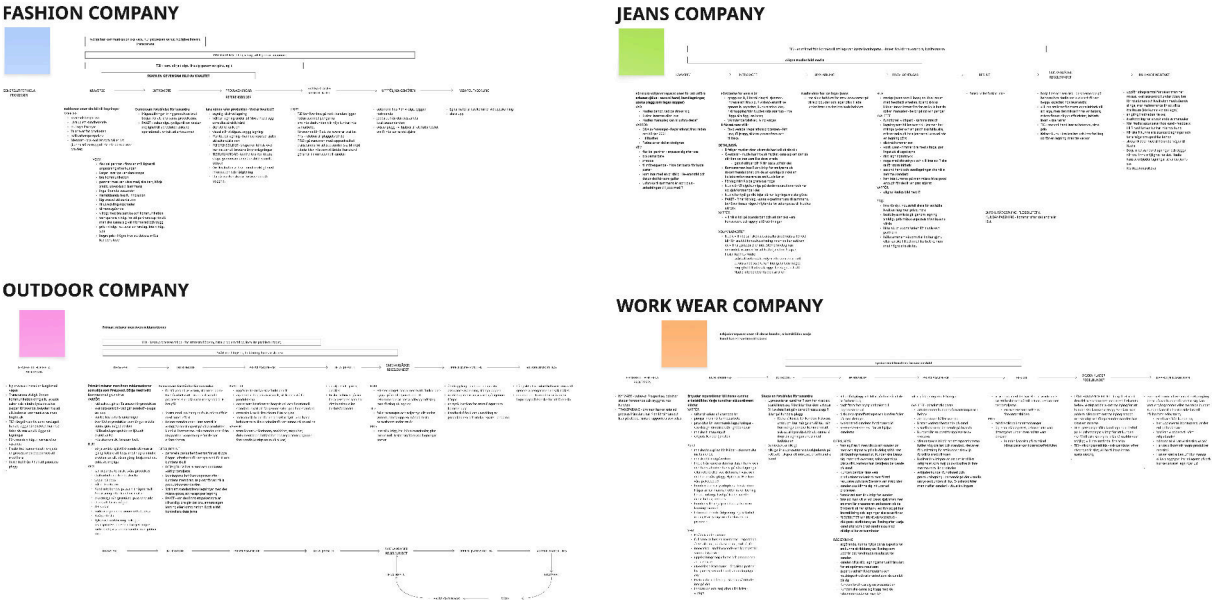


Figure 7: Each customer’s collaboration and communication process with data mapped into each step.

Finally, the individually analyzed processes were compared and synthesized to identify similarities and differences between the companies and RecoMended. The synthesized data were then combined with insights from the pre-study and contextual inquiries, creating a comprehensive overview of the collaboration and communication process that supported the iterative development of the design proposal.

### 3.4. Designing the Proposed Collaboration & Communication Process

The synthesized data served as a starting point, and an iterative approach was used, moving back and forth between insights from the synthesis and emerging design ideas to ensure alignment with the collected data. This process explored the overall collaboration flow between RecoMended and the customer, key steps within the process, and supporting materials used during the collaboration to facilitate communication. Visualizations were developed and refined through multiple iterations to examine how the findings could be structured into a collaboration and communication process (Figure 8).

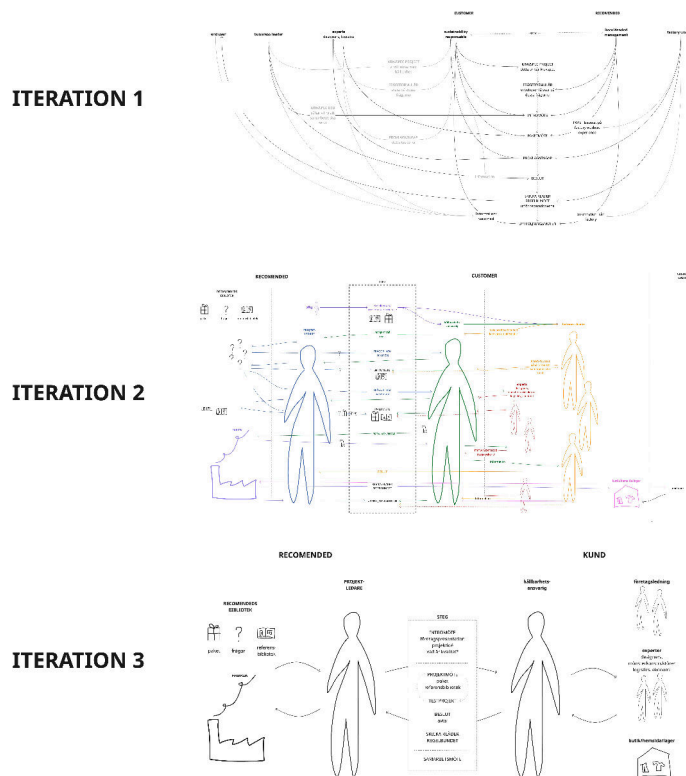


Figure 8: Iterations of a visualization developed progressively during the design process.

### 3.5. Evaluation of the Proposed Design

At the concluding stage of the study, an evaluation of the proposed design was carried out with one of the customers (Table 4) to assess how well the design addressed the identified challenges and to determine the next steps for development. The evaluation involved a presentation of the design, including examples of how it could be applied in their context. Following the presentation, the participant provided feedback and discussed their thoughts through the help of guiding questions (Appendix D), which helped clarify details, confirm general alignment, and identify any remaining gaps. Throughout the design process, feedback was also gathered continuously from RecoMended to ensure the solution remained relevant and aligned with their needs. To analyze the evaluation of the design, the discussion was transcribed, and relevant quotes were extracted and summarized.

Table 4: Evaluation

Type, duration	Participants	Format
Evaluation, 50 min	Outdoor company, one participant	Online

## 4. Understanding the Customer, the Current Process & the Production Workshop Context

This chapter describes how RecoMended currently collaborates with its customers and how these collaborations shape the renewal work carried out in the production workshop. This chapter considers customers' motivations and expectations, the current collaboration and communication process and its challenges, and traces how service specifications are implemented in the production workshop. Together, these insights provide the foundation for the proposed design of the future collaboration and communication process.

More specifically, the collaboration and communication process describes how RecoMended and its customers work together at an overall level as well as specifies how the communication is carried out, including content and structure. The key outcome of this process is the service specifications, which define the service the customer expects and the desired outcomes of RecoMended's service.

### 4.1. Customers' Motivations & Collaboration Requirements

To understand the conditions under which collaboration between RecoMended and its customers takes place, it is essential to first understand the customers themselves: why they engage in garment renewal and what they expect from RecoMended as a partner.

This section therefore presents, first, the motivations that drive companies to invest in garment renewal, and second, the requirements they place on RecoMended in the collaboration and communication process. Together, these insights clarify the context in which collaboration occurs and the expectations RecoMended must navigate.

#### Customers' Motivation for Garment Renewal

Based on the analysis from the collected data, customers have different motivations for working with garment renewal, which drive their collaboration with RecoMended. The following reasons were identified:

*Environmental responsibility* was a key driver. Companies wanted to minimize the climate impact of their products, make use of garments with defects, and avoid unnecessary waste. Many viewed garment renewal as the responsible and obvious choice to reduce environmental harm.

Some companies saw a *financial benefit* in reusing garments. By extending the life of existing products or reselling renewed items, they could avoid purchasing new garments as frequently or reduce the need for newly produced garments. Others did not expect an immediate profit; their aim was simply not to lose money on renewal. In the long term, they hoped that renewal would become a revenue source as the incentive to invest in it would increase. For some companies, collaborating with an industrialized partner like RecoMended was the most cost-effective solution, even when the renewed garments themselves did not generate profit.

Upcoming *EU regulations* (see section 2.1) were another driving factor. By acting proactively before the regulations come into effect, companies can experiment with garment renewal on their own schedule, identify what works best, and be prepared to adapt quickly once the rules are enforced.

For some companies, garment renewal is part of their *brand identity*. They aim to position themselves as pioneers and sustainable actors in the market. Offering renewal services aligns with their sustainability goals and allows them to demonstrate responsibility toward their products. In some cases, the patina or natural wear of renewed products even contributed positively to the brand's visual expression and market appeal. Companies also saw it as part of their responsibility to educate their customers, using renewal as a way to demonstrate what responsible consumption can look like.

Garment renewal also enables companies to monitor product performance by adding *quality control*. By understanding where and how their products fail, companies can improve future production. Renewal allows companies to maintain control over the lifecycle of their garments, ensuring the end-of-life process aligns with their standards.

While these motivations explain why customers choose to engage in garment renewal, they also influence what they expect from RecoMended as a collaboration partner.

## Customer Requirements for Collaboration with RecoMended

In addition to their motivations, customers have specific requirements for RecoMended as a business partner, as well as expectations for how the communication and collaboration process should function in practice. While some of these requirements are explicitly communicated to RecoMended, others remain implicit but are nevertheless important for RecoMended to recognize and consider throughout the collaboration.

The primary requirement from customers is that RecoMended should deliver *high-quality* renewal of garments. However, the definition of high-quality varies. For some customers, high-quality means invisible repairs that make the garment appear as new as possible. For others, durability is most important, ensuring that repairs withstand repeated use without tearing. Therefore, it is important that RecoMended understands what high-quality is for each customer.

Customers require RecoMended to be *flexible*, expecting RecoMended to be responsive to their requests and able to provide individualized solutions when necessary. The customers recognize that this is a complex service and value a collaborative approach, where both RecoMended and the customer work together to find the best solution for each situation.

Customers prefer partnering with a company capable of renewing garments on an *industrial scale*. This allows them to scale the number of garments renewed to receive high-quality renewal at a lower cost. Although RecoMended is in an early phase of development and does not yet operate an industrialized production, its trajectory toward industrialized production is important.

As garment renewal is a new field, customers value RecoMended's willingness to *innovate*. This demonstrates a commitment to finding the best solutions, experimenting with new approaches, and learning alongside the customer. Customers expect a forward-thinking and curious partner.

*Transparency* fosters trust, which is crucial in this partnership. Customers want to be informed about both successes and challenges, creating confidence in the collaboration and encouraging ongoing engagement.

Customers rely on RecoMended's *expertise* in garment renewal, as many lack knowledge in this area. Expert guidance builds trust and reassures customers that their garments are in capable hands.

Customers prefer a *quick and easy launch* to try the service quickly without significant investment. Starting small reduces financial risk and increases confidence in scaling the service. This is especially important because garment renewal is a new service for most companies, and they may be unsure of the outcome or how well it will meet their expectations.

Customers value a partner that provides a *complete service*, including storage, sorting, repairs, washing, and end-of-life management. A full-service provider simplifies logistics, as customers only need to coordinate with one company rather than several.

*Sustainable production* is an important requirement, including fair wages, safe and healthy working conditions, and environmentally friendly chemicals and materials.

These requirements shape the expectations placed on RecoMended and directly affect how collaboration and communication processes need to be structured.

## 4.2. RecoMended's Current Collaboration & Communication Process

As the service is new to the market and RecoMended is still in an early phase of organizational development, the company is in the process of formalizing and establishing its collaboration and communication process. The following section outlines the current collaboration and communication process and illustrates how service specifications are developed together with customers. Additionally, the accompanying challenges with the present approach are presented.

The current collaboration and communication process begins when the customer brings a project idea to RecoMended (Figure 9), based on their needs and motivations for garment renewal (see section 4.1). This is followed by a series of meetings between the customer and RecoMended to explore and define the deliverables. At some point during this phase, a test batch of garments is sent to RecoMended and repaired based on assumptions about the customer's expectations. Additional meetings are then held to jointly develop a service specification, which in the current process takes the form of workshop manuals. Such manuals describe how garments should be handled in the production workshop and what the service includes, which are used by the production workshop operators in the renewal process (see section 4.3). In the current process, each customer has a customized set of manuals tailored to their specific requirements. When the manuals are complete, an agreement is signed, after which the customer begins sending garments to RecoMended regularly. If garments with

specific defects that are not yet included in an existing manual are sent, follow-up meetings are required to clarify how they should be processed.

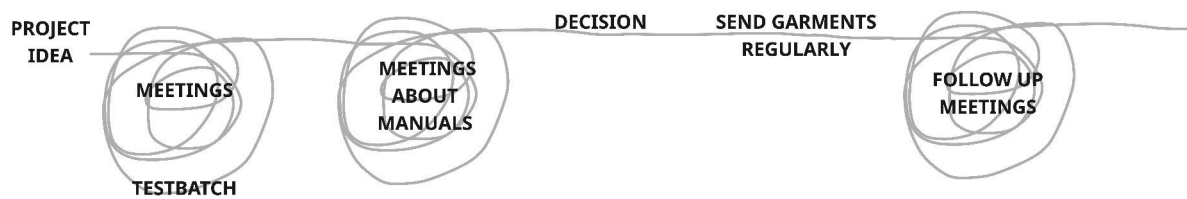


Figure 9: Current collaboration and communication process used to establish service specifications with RecoMended and their customers.

### Challenges in the Current Collaboration & Communication Process

While the current collaboration and communication process has enabled RecoMended to initiate collaborations and develop service specifications with several customers, practical experience has shown that it also contains challenges. These become particularly evident when the process is viewed from a scalability and efficiency perspective. The following subsection highlights the primary challenges identified in the current collaboration and communication process.

One key challenge is the lack of a clearly structured and defined process. Without defined steps or shared expectations, each phase throughout the collaboration process often requires more time and effort than necessary. This makes it difficult for both parties to fully grasp the purpose of each step and what is required to be prepared for efficiency. It also creates uncertainty about who should make decisions and how the process moves from one step to the next, which can slow down the process.

Another challenge lies in the development of service specifications and workshop manuals that are comprehensive. As the process is still new, important details are frequently insufficiently captured during the manual-development phase, increasing the need for follow-up meetings to clarify missing information. These additional meetings are costly in terms of time and resources for both RecoMended and the customer, making the collaboration harder to sustain over time.

The current practice of developing a unique, customer-specific set of workshop manuals also poses a challenge. While this approach offers flexibility as the customers often have varying needs, the lack of standardization makes it difficult for production personnel to work efficiently across different customers and to maintain consistent quality. Managing several parallel

manuals is time-consuming and limits RecoMended's scalability, while also creating uncertainty among production personnel who strive to deliver the correct quality but often lack clear and consistent guidance.

Communication is further challenged by the absence of a standardized vocabulary between different customers and RecoMended for discussing garments, construction details, and repair outcomes. Aesthetic preferences, in particular, are difficult to communicate verbally. Without sufficient visual references or standardized descriptions, reaching agreement on visual expression becomes time-consuming and imprecise. RecoMended's experience indicates that, although visual references have been used only to a limited extent, they have proven effective, implying that more structured visual material could significantly improve communication.

Finally, a challenge in the collaboration is finding a balance in decision-making roles. In some cases, customers specify in detail how repairs should be performed, placing RecoMended in a more reactive than guiding position. RecoMended continuously learns from its customers, many of whom possess valuable repair knowledge, and this exchange is an important part of the collaboration. At the same time, as RecoMended is still developing confidence in its own expertise, this dynamic can make it difficult to assert repair approaches that are more functional, efficient, or better suited to RecoMended's large-scale renewal. As a result, decisions may lean more toward customer preferences than toward RecoMended's professional judgment and understanding of its production system.

### **4.3. RecoMended's Renewal Process in the Production Workshop**

During the renewal process in the production workshop, the service specifications developed during the collaboration and communication process are put into practice. This section traces the journey of a garment through RecoMended's production system and clarifies how and where operational decisions are made. It also outlines the requirements that workshop manuals must meet to support efficient, scalable, and high-quality renewal work.

Each garment arriving at RecoMended's production workshop passes through a series of sequential steps, as illustrated in Figure 10. Each step is guided by its own manual that specifies the procedures to be followed.

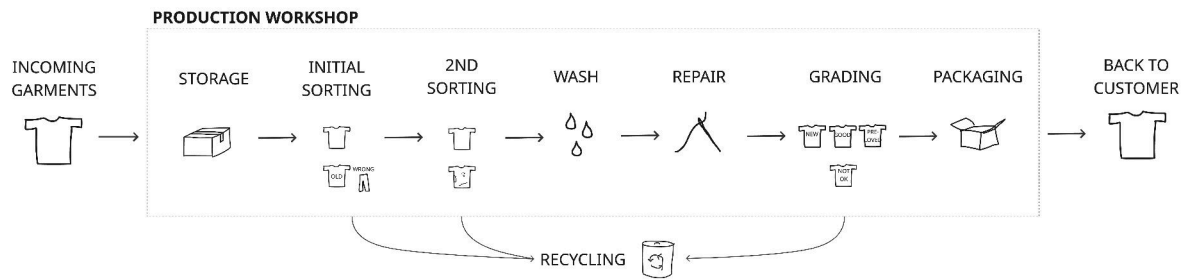


Figure 10: The renewal process the garments go through at the RecoMended production workshop.

Together, these manuals guide workshop personnel throughout production and play a critical role in ensuring consistent quality. A more detailed explanation of each step in the production workshop process is presented in Table 5.

Table 5: Each step of RecoMended’s production workshop process explained.

Step	Explanation of the step
Incoming Garments	Garments arrive at the RecoMended production workshop in bunches from each customer. The information RecoMended has about garments upon arrival, such as their type, condition, and quantity, varies.
Storage	Some customers request that their garments be stored at RecoMended before processing, either to align with seasonal return needs or to give them time to decide how the garments should be handled.
Initial Sorting	Garments are assessed based on their type to determine whether they will continue through the renewal process or be sent to recycling. Sorting can be based on collection, product category (e.g. first-layer garment, accessories), material type, or customer recalls.
Second Sorting	Each garment is thoroughly inspected for defects such as stains, damaged seams, faulty zippers or Velcro, wear, lint, or rips. All defects are documented, and the garment is assessed to determine whether it should continue through the renewal process or be sent to recycling.
Washing	The garments are washed according to the manual, which may include additional treatments such as waterproofing (Durable Water Repellent) or specialized washing for heavy soiling. Afterward, the garments are dried, either by hanging or tumble drying, and pressed if needed.

Step	Explanation of the step
Repairs	The defects found in the second sorting are repaired. Repairs range from simple fixes that restore functionality to more extensive work (e.g., seam ripping and fabric replacement) that restores the garment closer to its original look.
Packaging	The garments are packaged and prepared for return to the customers. Packaging depends on customer preferences; some garments are returned as they are, while others are prepared for direct resale to consumers.
Back to Customer	The renewed garments are sent back to the customer for resale or further use.
Recycling	Garments that are sent to recycling can sometimes be repurposed as repair material, such as patches or spare parts. Otherwise, the material is recycled according to each customer's requirements.

### Requirements for Workshop Manuals at RecoMended

To enable efficient production with consistent quality in RecoMended's production workshop, workshop manuals play a central role. By guiding production personnel through each step of the process and supporting decision-making, high-quality workshop manuals are essential. The following requirements define what is needed to produce effective and reliable manuals.

*The manuals must be comprehensive* and cover every step of the production workshop process. This includes not only common garment cases but also less frequent or unusual ones. When garments fall outside existing instructions, the manuals should clearly describe how non-standard or unclear cases should be handled, as these situations often create uncertainty among personnel.

*The manuals must describe each task clearly*, especially when there is a most efficient way to complete the work. They should explain both what to check (for example, starting by examining the care label) and what to look for at each step (such as ensuring that care label symbols are visible). At every stage, the manuals should specify what is acceptable and what is not. For instance, care label symbols must be readable; if they are missing or unclear, the garment should be classified as end of life. Clear instructions reduce the need for individual judgment, limit

unnecessary double-checking, which saves time, and help personnel feel confident that they are doing the right thing.

*The manuals should clearly communicate the customer's overall vision and quality expectations*, which is particularly important for aesthetic decisions that are difficult to assess without guidance.

*The manuals should be logically structured, easy to follow, and consistent across different customers*. Using the same layout and having the same type of information included makes it easier for personnel to switch between customers without confusion. A strong visual standard is essential, with clear examples using high-quality images and videos when necessary, to help communicate the information clearly. Whenever possible, digital systems should support the work to improve efficiency and consistency.

*The manuals should accommodate personnel with varying levels of expertise*. Full manuals containing all necessary information are essential for onboarding and training, while experienced personnel benefit from simplified, quick-reference guides for easy access and reminders once the material is learned.

*The manuals should support personnel to make confident decisions*. A clear decision-making framework helps the personnel explain why specific choices are made. Personnel should be able to refer to documentation when communicating decisions to customers, creating transparency, consistency, and security.

However, not all knowledge can be fully captured in manuals. Some expertise develops through hands-on experience over time. As personnel become familiar with the processes, they rely less on the manuals and mainly consult them when encountering special or unfamiliar garments. With experience, personnel develop a deeper understanding of each customer's garments, common defects, care requirements, and quality standards.

#### **4.4. Implications for Design**

Understanding customers' motivation and requirements, the challenges in the current collaboration and communication process, and the realities of the production workshop process highlight the need for a new designed process. A future collaboration and communication process must support effective communication, scalable production, and efficient collaboration.

To achieve this, the future collaboration and communication process should:

- Enable RecoMended and their customers to build trust by understanding each customer's motivation for garment renewal (see section 4.1) and allowing RecoMended to translate them into a tailored service.
- Meet the customers' collaboration requirements (see section 4.1), to create satisfied customers who feel confident investing in a long-term partnership with RecoMended.
- Directly address the existing challenges in the collaboration and communication process (see section 4.2) and provide clearer, more efficient ways of working.
- Support the production workshop process (see section 4.3) to ensure smooth production in agreement with customers.
- Enable the development of workshop manuals that meet identified requirements (see section 4.3), ensuring efficient and scalable high-quality production.

In summary, the future process should be designed to connect collaboration, communication, and production workshop operations into one coherent system that supports both RecoMended and its customers.

## 5. The Proposed Design of the Future Collaboration & Communication Process

This chapter presents the proposed design of a future collaboration and communication process, developed from the data presented in Chapter 4, to support an efficient and scalable garment renewal process. The design represents a vision for how RecoMended and its customers could collaborate more effectively in the future.

The proposed design includes a collaboration overview that illustrates the structure of a potential long-term partnership and introduces distinct levels of communication, each designed to address specific topics and support a more organized and effective process. The overview also clarifies that collaboration with each customer is intended to begin with a single project and can be extended through additional projects over time, enabling RecoMended to expand the service as the partnership develops.

The design further describes how interactions are to be organized between RecoMended and the customer, distinguishing what is intended to be done internally by RecoMended, what is to be done internally by the customer, and what is to be addressed jointly in meetings. This structure is intended to ensure that decisions are made by the right people at the right time and that everyone has a clear understanding of their responsibilities.

Furthermore, the design proposes clear process steps for developing service specifications within each project. These steps are intended to provide guidance on what should be done, in what order, and by whom. They are designed to help ensure that all necessary information can be captured while still allowing time to build trust between RecoMended and the customer.

Finally, the design includes a service toolkit, a set of internally developed materials that RecoMended is intended to use to support communication and to define and clarify its service offering in customer meetings. The toolkit consists of service packages, a reference library, and guiding questions. Together, these tools are designed to support scalability in the production workshop and help ensure that offered services can be delivered consistently.

# 5.1. Collaboration Overview with Communication Levels and Project Phases

To structure the long-term collaboration between RecoMended and its customers, an overview was developed showing how the work is intended to evolve through successive projects and clarifying that communication needs to occur at two different levels.

Communication within the collaboration is intended to take place at two levels: strategic and operational (Figure 11). The strategic level focuses on the overall relationship between the companies. At this level, RecoMended and the customer build mutual trust, develop an understanding of each other’s goals, and discuss motivations and requirements for the partnership (see Section 4.1). Strategic decisions are intended to be made at this level, and the relationship is fostered over time.

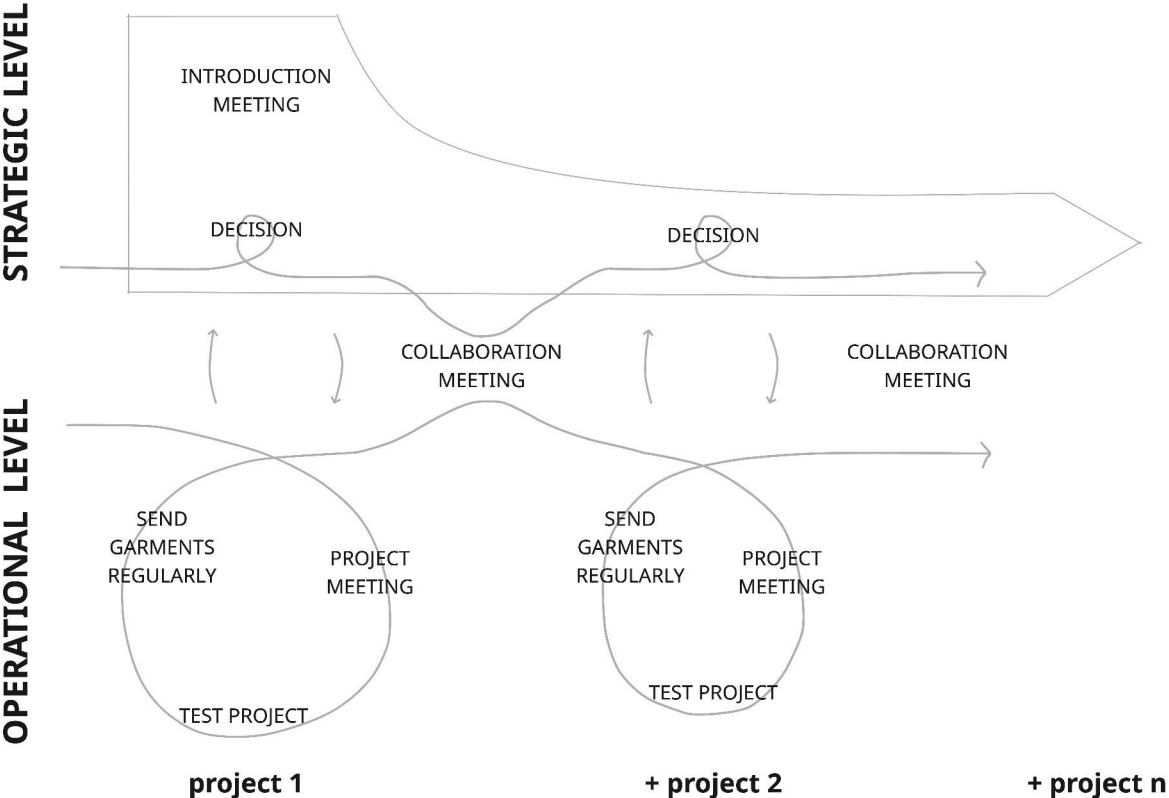


Figure 11: Overview of the collaboration and communication process across different projects, showing communication levels and their internal steps.

At the operational level, communication is intended to focus on the practical work required to carry out each individual project. The main goal at this level is to create a shared understanding of what quality means for the customer and to define clear deliverables. There is intended to be a continuous exchange between the strategic level and the operational level, as decisions made at the strategic level shape the projects, while experiences from individual projects feed back into strategic discussions at the strategic level.

Dividing communication into two levels is intended to help RecoMended and its customers recognize that both strategic and operational communication are essential for building a long-lasting, trusting partnership. This division is also intended to support a clearer meeting structure, enabling participants to focus on one level at a time.

Over time, the collaboration is designed to develop through a sequence of projects. The proposed collaboration design is therefore structured into sequential phases, beginning with an initial project that, where possible, is intended to be easy to implement. An example of such an initial project could be sorting and washing returned garments, as it involves a single renewal procedure offered by RecoMended with relatively few variations. This is intended to allow RecoMended and the customer to quickly initiate the collaboration and establish a working relationship (see Section 4.1). As the collaboration develops, additional projects can be added, allowing the service to gradually expand. Later projects may introduce additional garment categories or more complex renewal procedures, such as garment repairs.

To support the structure of work within each project, several steps are to be followed, some at the strategic level and others at the operational level. The first project includes an additional strategic step, the introduction meeting, which occurs only once. The trust and understanding built during this meeting are intended to carry forward into later projects. At the operational level, the time and effort required are expected to vary depending on the scope and complexity of each project. Between projects, collaboration meetings are to be held that may address topics at either level, depending on current needs.

## **5.2. Interactions Between Frontstage & Backstage Actors**

To further structure the process and clarify where responsibilities lie, an interaction model was developed to visualize what needs to take place during the collaboration between RecoMended and the customer, as well as what occurs in their respective backstages.

The collaboration and communication process is intended to occur between RecoMended’s project leader and the customer’s sustainability project leader (Figure 12). Together, they are intended to move the project forward by following the steps of the collaboration process to co-develop the service specifications. Before and after each step, both RecoMended and the customer are intended to work within their respective backstage to process the material from the previous step and prepare for the next.

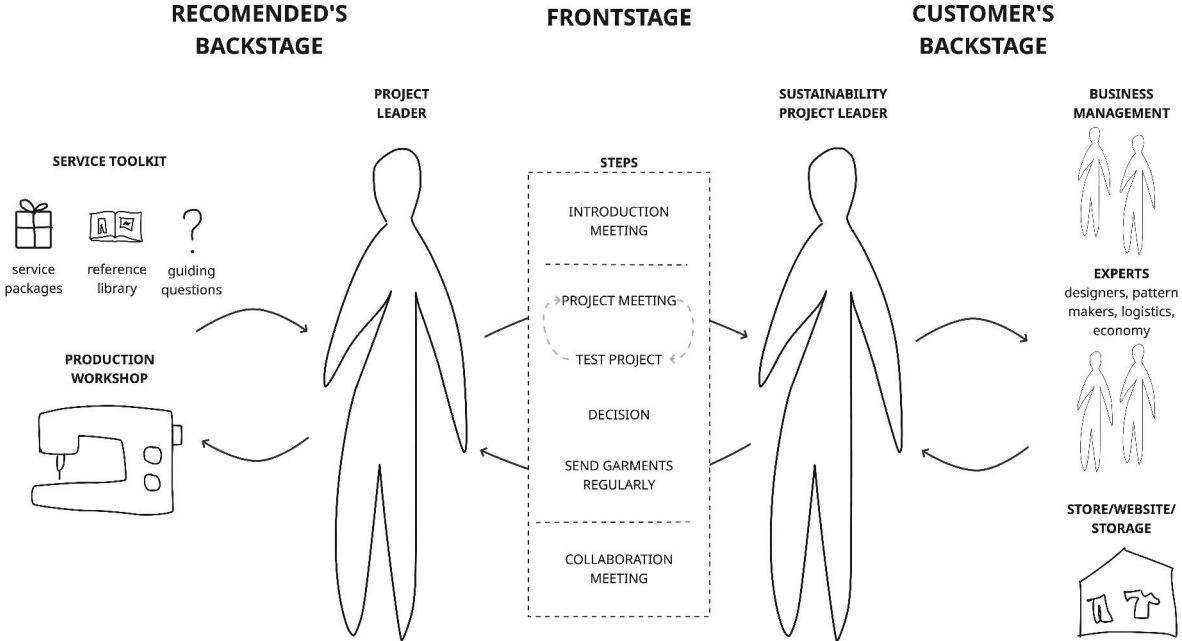


Figure 12: The interactions within a project, showing RecoMended’s backstage and the customers’ backstage.

At RecoMended’s backstage, the project leader will have access to RecoMended’s designed service toolkit (for a more detailed description, see Section 5.4), which contains pre-prepared material describing the services RecoMended offers and is used to support the different steps of the process. In the proposed design, the toolkit is essential for making meetings between RecoMended’s project leader and the customer’s sustainability project leader efficient and concrete, as it enables RecoMended to have prepared proposals that are feasible to deliver. This standardized toolkit aims to help reduce workload during the process while increasing consistency between customers.

RecoMended also has the production workshop in its backstage, where the garment renewal service is carried out. Throughout the collaboration and communication process, the project leader is expected to keep the workshops’ requirements in mind (see Section 4.3) to ensure that

the agreed service specifications can be implemented in practice. The service specifications should enable production personnel to work efficiently and with confidence. To achieve this, the specifications are intended to be translated internally into clear, well-structured workshop manuals, guided by the requirements described in Section 4.3.

At the customer’s backstage, internal work may involve business management and experts such as designers, pattern makers, logistics personnel, finance personnel, and store or e-commerce representatives. Although the internal organization is expected to differ between customers, the planning and processing of materials occur regardless. When needed, both the project leader at RecoMended and the sustainability project leader at the customer are intended to invite colleagues from their respective backstages to participate in steps where their expertise or input is required.

### 5.3. The Steps of a Project

The goal of each project is for RecoMended and the customer to co-develop service specifications, using the service toolkit to define the desired outcomes for the production workshop. By following the steps in the proposed future collaboration and communication process, this can be achieved efficiently. The steps are shown in Figure 13 and are also reflected in parts of Figures 11 and 12.

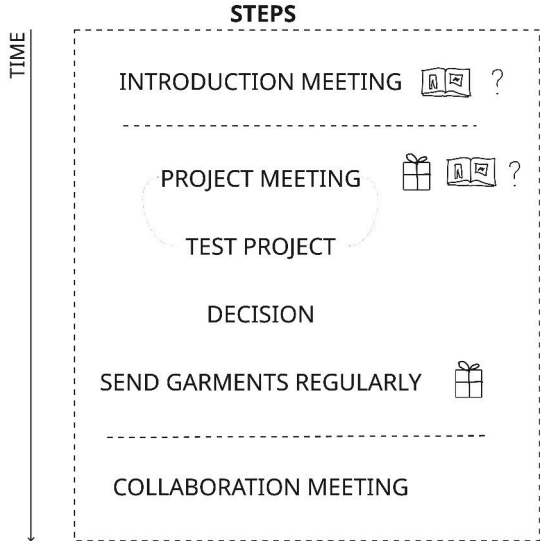


Figure 13: The steps of the collaboration and communication process within a project, showing where components of the service toolkit are used.

## Introduction Meeting

The purpose of the first step, the introduction meeting, is for the customer and RecoMended to get to know each other and build a shared understanding. This meeting is particularly important at the beginning of a partnership, as it lays the foundation for trust and a long-term relationship. In later projects, the information gathered during the first project's introduction meeting becomes a shared baseline. The meeting should consist of three parts: company presentations, discussion of the project idea, and exploration of what quality means for the customer.

During the first part, both companies present themselves, their vision, and how they work. The presentation is equally important for both RecoMended and the customer, as both parties need to demonstrate that they are reliable partners.

This initial exchange is intended to enable customers to evaluate RecoMended as a potential long-term partner. Through the information shared, customers can assess whether RecoMended's direction, working approach, and level of commitment align with their own expectations and requirements (see Section 4.1). Given that garment renewal is a developing field, this evaluation is particularly important for building trust and confidence in RecoMended's ability to deliver and to drive future development.

RecoMended, in turn, needs to understand who the customer is and whether they are a suitable partner. This includes understanding expectations for the renewed garments and for the collaboration overall. Some customers prefer RecoMended to work autonomously, while others want close involvement and decision approval. RecoMended also needs to understand the customer's previous experience with garment renewal and how much guidance they expect.

In the second part of this step, the customer's project idea is discussed. RecoMended must understand practical aspects such as expected garment volumes and shipment frequency to assess capacity and feasibility. The level of detail in the customer's project idea varies; some will come with well-defined needs, while others bring only a general ambition to increase circularity and want help developing the specifics.

Based on the discussion of the project idea, the introduction meeting is designed to support a rapid first project, typically focused on a simple and well-defined scope. This often involves selecting a project that offers a high impact with limited complexity, allowing the collaboration

to be tested in practice. A fast initial project helps establish trust and provides both parties with confidence before expanding the collaboration.

The project idea may also include the customer's own repair manual if they have prior experience with repairs. Otherwise, customers are expected to rely on RecoMended's expertise and review proposals for how their garments should be handled.

The third part of this step is establishing what quality means for the customer, as this varies significantly between customers. One customer may prioritize discreet, invisible repairs, while others value highly durable repairs that can withstand heavy wear, even if they are more visible. As a result, RecoMended needs to have several different ways of restoring a defect depending on the customer's quality requirements. However, all customers share two basic quality expectations: the garment's functionality must be fully restored, and it must be hygienically clean.

To support this discussion, RecoMended is intended to use its reference library (see Section 5.4) as a mediating tool, enabling both parties to develop a shared understanding and communicate more effectively about quality. Guiding questions (see Section 5.4) are also intended to be used to ensure that all necessary aspects are addressed at this stage.

### **Project meeting**

The next step is the project meeting, where the goal is for the customer and RecoMended to agree on a service package that defines the service specifications. During the meeting, RecoMended presents a suggested service package (see section 5.4) based on previously gathered information, using the reference library (see section 5.4) to illustrate the suggested quality. The customer then reviews the service package, and together with RecoMended, they refine the details until both are satisfied. Throughout this step, RecoMended is intended to use the guiding questions (see Section 5.4) to ensure that all relevant information is captured. It is crucial for RecoMended to adapt to the customer's needs to maintain trust and satisfaction, while ensuring the solutions remain economically and sustainably viable.

The level of detail checked at this step varies: some customers focus only on whether the repair is completed, while others examine specifics such as thread type and stitch length. Understanding these preferences allows RecoMended to tailor the presentation of the service

package appropriately. Depending on the decision-making structure, the customer may need to take the service package for internal review before final approval.

### **Test Project**

The next step of the proposed collaboration and communication process is the test project, where the service package agreed upon in the previous step would be put into practice. This is intended to allow the customer to experience the entire service, from sending garments to receiving them again, and to see firsthand how the repairs are performed.

The customer would send a batch of garments in need of renewal to RecoMended, which would then process them according to the agreed service package and return them. The customer evaluates whether the quality meets their expectations and gains insight into RecoMended's communication, speed, and documentation. If the quality aligns with expectations, trust and credibility are reinforced, and confidence in RecoMended's ability to deliver is established. If the customer is not fully satisfied, the service package can be revisited and adjusted in a follow-up project meeting. Testing the service is particularly important at the start of a collaboration as it provides a positive initial experience that encourages the customer to continue using the service.

### **Decision & Sending Garments Regularly**

Based on the information gathered, the agreed service specifications, and the service experience, the customer would decide whether to continue working with RecoMended and sign an agreement. To secure this decision, RecoMended would need to demonstrate that they can deliver the desired quality, satisfy the end user with the renewed garments, and meet the expectations of the decision-makers. Once an agreement is in place, the customer would begin sending garments to RecoMended regularly, and RecoMended would process them according to the agreed service package (see Section 5.4).

### **Collaboration Meetings**

Collaboration meetings are intended to take place at both the strategic and operational levels (Figure 11), depending on the topics that need attention. Their overall purpose would be to foster the relationship and trust developed throughout the collaboration, as well as to make decisions and address any issues that arise. Meetings may focus on the current projects, on potential future projects, or on a combination of both, depending on the situation.

When the focus is on current projects, discussions can include whether the customer is satisfied with the quality received and whether any adjustments or clarifications to the service package are needed. Depending on the decisions made in the service package (see Section 5.4), some customers may also request data and statistics, such as the number of garments renewed or the types of repairs performed, to support their internal processes and external sustainability reporting. Non-standard garments that fall outside the agreed service package can also be addressed during these meetings, while the aim is to minimize these exceptions, they may still occur. Some customers prefer RecoMended to make autonomous decisions regarding these garments, while others wish to be involved in decision-making, which can be handled during the meeting. Transparent reporting of deviations is important to maintain trust.

When the focus is on potential future projects, discussions may include proposals to add new garment categories or expand the service package. RecoMended may also suggest additions based on observations from the production workshop or its expertise. These conversations can lead to new project ideas and serve as the starting point for the next project.

The frequency and format of collaboration meetings vary depending on the customer, the stage of the project, the service package, and the volume of garments involved. Meetings would occur weekly, monthly, or on demand, and would take place online, in person, as standard discussions, interactive workshops, or through written feedback submitted in advance, all depending on the topic of the meeting.

## 5.4. The Service Toolkit

To create structure and standardization across RecoMended's service offerings and improve communication, a service toolkit was developed as part of the proposed design. It consists of pre-developed materials to be used throughout the collaboration and communication process to clearly convey services and support the development of service specifications with the customer. The toolkit is part of RecoMended's backstage (Figure 12) and consists of three components: service packages, a reference library, and guiding questions.

### Service Packages

The service package is intended to define the service specifications and represent the mutual agreement between RecoMended and the customer regarding expectations, quality, and the visual expression of the garments. By clearly outlining what will be delivered, the service

package is intended to serve as a shared reference that documents the agreement between the parties, while also contributing to increased customer confidence and trust in RecoMended’s services. The core structure of the service package is defined in this design, while its exact format and practical use are intended to be refined through further development and testing.

Each service package consists of four main components: *customer-specific details*, *renewal procedures*, *condition grading*, and *feedback* (Figure 14). During the process, RecoMended and the customer are intended to review each component together and make decisions that define the service. The solutions in each component could either be tailored elements to the specific customer or selected among predefined solutions (levels). These decisions collectively form the customer’s individual service package.

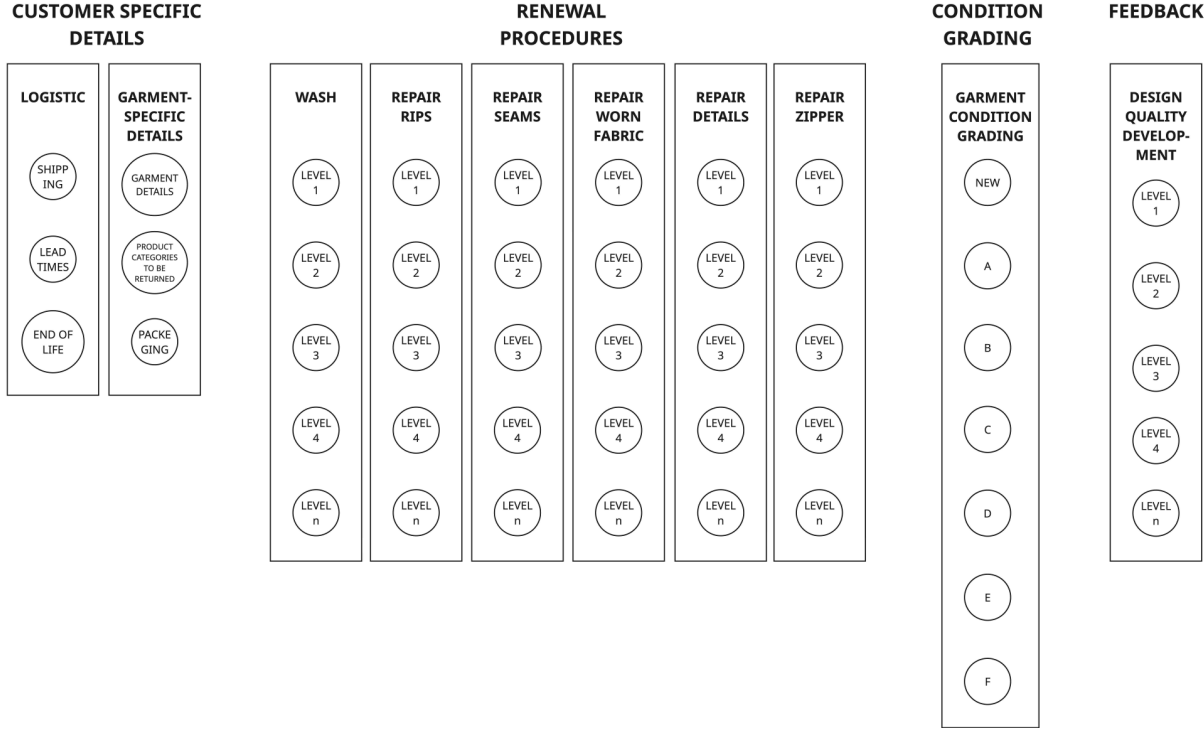


Figure 14: An overview of the four components in a service package, illustrating the categories and subcategories that RecoMended and the customer must decide on, as well as the different levels available within each category. The number of levels and their contents have not yet been defined.

The *customer-specific details* component includes all practical decisions for the service that must be customized for each customer. This covers logistics, including shipping arrangements (such as how garments are delivered, how frequently, and how they are returned), lead times, and decisions regarding end-of-life handling and recycling. It also includes garment-specific

details such as garment information (e.g., material, technical specifications), which product categories should be processed, and packaging requirements (e.g., folding instructions, hangtags).

The next component of the service package is the set of *renewal procedures* a garment can undergo, such as washing, repairing rips, or fixing seams. The customer has to decide on the exact procedures they want RecoMended to use for each garment group. Each renewal procedure consists of several levels, representing different ways in which the procedure can be performed to adapt to the customer's quality expectations. For example, for washing: Level 1 may involve washing according to the care label, Level 2 may involve washing according to the care label but adding a water-repellent finish, Level 3 may address heavily stained garments requiring special treatment, and so on. These levels are visualized with the help of the reference library. For each garment group, the customer and RecoMended are intended to jointly select the level that RecoMended will use. If a customer cannot fit their requirements into an existing level, the design allows for a custom level to be developed, though at a higher cost, since non-standardized processes are more demanding for the production workshop. Not all renewal procedures need to be included in a service package; only those relevant to the customer. After reviewing the relevant renewal procedures and selecting a level for each, the customer will have defined a clear set of renewal procedures for the service package.

The number of levels of each renewal procedure varies depending on how many standardized variants RecoMended intends to offer. According to RecoMended, they most often have around five different standardized alternatives for most renewal procedures. The exact definitions of each level have not yet been developed and will need to be designed further. If RecoMended notices a recurring need for a customized level, it can later be formalized into a new standardized level.

The third component is *condition grading*, where the customer defines the expected standard of the renewed garments. Customers decide how many grading categories they want RecoMended to apply and which specific categories to include. These grading categories are visualized with the help of the reference library, showing exactly the standard a garment from each category will have. The grading system from Svensk Handel (see section 2.2) can be used as a reference to ensure alignment with industry standards. The condition grading might differ between the customer's garment groups depending on the customer's specific wishes.

The final component of the service package is *feedback*, in which the customer specifies what type of information they want to receive during the collaboration meetings. This may include data for sustainability reporting or production development, insights about garments that reach end-of-life and the reasons behind it, or recurring defect types. Such information can help customers improve the reparability and circularity of their products. Here, RecoMended is intended to offer different levels of feedback, from which the customer can select one or several, depending on their needs.

Working with defined service packages will offer several benefits. For customers, the service packages provide clarity and reassurance, as they can clearly see what will be delivered and how quality will be expressed, with the reference library helping to visualize the selected levels. For RecoMended, service packages create operational efficiency by reducing uncertainty, minimizing the need to recreate materials for each project, and enabling personnel to work consistently and accurately. This standardization also supports scalability: multiple customers can use the same service package, production personnel can follow clear manuals, and preparation for new projects is faster because the framework already exists.

Service packages are intended to serve as a tool for RecoMended to demonstrate its expertise. Customers with limited prior knowledge of garment renewal gain a clear understanding of the service, while RecoMended can ensure consistent quality across all projects. This transparency and tangible reference are intended to allow customers to make informed decisions that align with their brand and expectations (see Section 4.1).

In summary, systematized service packages are expected to improve operational efficiency, reduce errors, establish trust, and enable RecoMended to scale their services, all while providing customers with a clear and reliable view of what to expect.

## Reference Library

The reference library is designed to serve as a comprehensive collection of all the different renewal procedures RecoMended will be able to perform. Each renewal procedure will have its own page, providing information about the procedure, before-and-after pictures, and a physical sample to demonstrate the effect. Figure 15 shows a prototype page from the reference library, illustrating how a single renewal procedure could be presented.



*Figure 15: A prototype of how a page from the reference library could look, including information, pictures, and a physical sample of the renewal procedure.*

The reference library is designed to serve as a visual and tangible communication tool that RecoMended is intended to use to explain its services and help customers understand the types of repairs available. It will allow customers to see and feel differences in quality, making it easier to grasp subtle variations and compare renewal procedures in terms of visual expression, durability, and feel to match their preferences. By providing a tangible reference, the process to develop service specifications is expected to become quicker and more efficient, while also building trust, as customers can clearly see and experience the quality they are to agree on.

### Guiding Questions for Information Collection

To deliver a high-quality service in each project, RecoMended will need to gather all relevant information about the customer and the garments. To achieve this, a set of guiding questions for each step of the process was developed (Appendix E). These questions will serve as material to guide discussions during the steps and will help ensure that all necessary information is collected at the right time to provide a complete service. Having these guiding questions

organized is intended to reduce the risk of missing critical information and to ensure that data will be gathered in a structured, logical order. For confidentiality reasons, not all guiding questions are included in Appendix E.

Before a step, RecoMended will be able to share the guiding questions with the customer to help them prepare, ensuring the right people and information are available for decision-making. The goal is for all participants to be well-informed, enabling accurate decisions to be made efficiently.

Some questions are general and more open-ended, such as understanding what quality means for the customer or the desired visual expression. Others are more specific, including details about the customer's garments, what garments to renew, and practical matters such as lead times.

## 5.5. An Example of How the Proposed Process Could Be Applied

The following example illustrates how the proposed collaboration and communication process, together with the service toolkit, could be used in practice.

A customer who sells T-shirts, tops, and hoodies online approaches RecoMended with the goal of increasing the resale rate of returned and claimed garments. RecoMended identifies this as a suitable application for its services and proposes an introduction meeting as a first step in the collaboration.

To prepare for the meeting, RecoMended selects a relevant subset of renewal procedures from the reference library to support communication around quality and visual expression. In addition, the guiding questions for the introduction step are reviewed to ensure that all necessary information will be addressed during the meeting.

During the introduction meeting, both parties present their organizations and begin establishing a working relationship. Potential project ideas are discussed, and RecoMended suggests starting with a limited and straightforward initial project that allows the customer to quickly experience the service. One proposed project involves the customer sending all returned and claimed garments to RecoMended, where the garments would be sorted and washed so that those meeting the defined quality level could be resold. At this stage, the discussion also focuses on what quality means for the customer. The reference library is used to support this dialogue,

enabling the customer to express preferences related to aesthetics, durability, and overall appearance.

After the introduction meeting, RecoMended summarizes the information gathered and prepares a preliminary service package proposal. For this initial project, RecoMended suggests using the renewal procedure “washing” at Level 1. In preparation for the upcoming project meeting, RecoMended also shares the relevant guiding questions with the customer, allowing them to prepare internally and ensuring that the meeting can be conducted efficiently.

During the project meeting, RecoMended and the customer jointly review each component of the service package: customer-specific details, renewal procedures, condition grading, and feedback. Customer-specific details such as logistics and lead times are discussed and agreed upon. For the renewal procedures, RecoMended presents the proposed washing level using the reference library to illustrate the expected outcome. The customer confirms that the suggested level aligns with their quality expectations. Condition grading is then discussed, with RecoMended presenting a proposal based on earlier quality discussions. The parties agree to use the three highest grading levels. Finally, feedback requirements are defined, with the customer requesting data to support sustainability reporting.

Following the meeting, the customer conducts internal discussions with decision-makers to confirm the service package. The reference library is used internally to communicate the agreed quality levels. Once the service package is approved, the customer sends garments to RecoMended for processing according to the agreed specifications. Because standard levels from the renewal procedures and condition grading have been selected, the production workshop can follow existing manuals, enabling a smooth and efficient start to the collaboration. The renewed garments are then returned to the customer.

After reviewing the returned garments, the customer confirms that the results meet their expectations. An agreement is signed, and the customer begins sending garments regularly. Monthly collaboration meetings are established to follow up on ongoing work.

After several months of collaboration, RecoMended observes a recurring number of hoodies and zip-up hoodies with defects that could potentially be repaired. During a collaboration meeting, RecoMended proposes expanding the service to include repair procedures, and a new project meeting is scheduled to start the second project.

Ahead of this meeting, RecoMended prepares an updated service package proposal, drawing on the experience gained from the previous project. During the project meeting, the customer and RecoMended agree to retain the same customer-specific details. For renewal procedures, RecoMended proposes adding repairs for rips, seams, and details. Repairs of fabric and zippers are discussed but excluded, as they either do not meet the desired quality level or are not economically viable for the customer. For repairs of rips, the customer requests an alternative level, which RecoMended presents using the reference library, allowing the customer to compare options and select a preferred level for this renewal procedure.

The condition grading remains unchanged, while the feedback component is expanded to include information on recurring defect types identified by RecoMended. This information is intended to support the customer in improving future product design and production. Following these decisions, a test project is carried out to evaluate the updated service package. When the customer is satisfied with the outcome, they decide to continue sending garments for repair according to the revised service package, and regular collaboration meetings continue as part of the ongoing partnership.

## 5.6. Insights from Customer Evaluation of the Proposed Design

The evaluation of the proposed design presented in this chapter showed that the designed collaboration and communication process would be highly appreciated. The structured steps for developing service specifications, supported by the service toolkit, were seen as creating a clearer and more efficient workflow in which both parties better understand the decisions being made. According to the participant, this structure would save significant time. The process was considered particularly valuable for customers with limited experience in garment renewal, as it would guide them through the decision-making and make it easier to compare and select suitable solutions.

The design of the collaboration overview, including the project-based approach and the two levels of communication, and the description of interactions with the frontstage and two backstages, was described as intuitive. The distinction between strategic, long-term discussions and operational decisions was considered useful, as it supports both relationship building and operational clarity. Overall, these elements were seen as helpful in clearly distributing responsibilities between the parties involved.

The participant appreciated the structured nature of the service packages and the broad range of available options. The feedback component was seen as particularly valuable, as it closes the loop by bringing learning from later stages in the product's life back into production and development. This was perceived as an important mechanism for ensuring the desired quality over time.

The reference library was regarded as a strong trust-building element. By presenting technical details, visual examples, and test results, it demonstrates RecoMended's competence and reassures customers that the services offered are feasible and reliable.

The participant emphasized the value of RecoMended "knowing which questions need to be answered," since customers often lack this overview themselves. The guiding questions were therefore seen as contributing to a more time-efficient process and helping ensure that the right people on the customer side are involved at the right moments.

The flexibility of the process was highlighted as an important strength. While it offers a clear framework to guide decision-making, it still allows customers to adapt the collaboration to their specific needs. This balance between structure and adaptability was considered crucial for long-term partnerships.

Although the evaluation was largely positive, several aspects were identified as needing continued refinement. Pricing needs to be discussed at some point in the process, but the most appropriate timing and format may vary between customers and therefore remains to be developed. Service packages must also be adapted for different product categories, since materials require different renewal procedures.

## 6. Discussion

The following chapter discusses how the study addressed the aim, research questions, and objective, as well as how the proposed future design of the collaboration and communication process compares to the current, limitations of the study and lastly, the recommendations for further development.

### 6.1. Aim, Research Questions & Objective

*The study aims to investigate ways to improve the efficiency of the collaboration and communication process between RecoMended and its customers when developing service specifications for garment renewal. This was achieved through user studies with both RecoMended and its customers to understand the current collaboration and communication process and its challenges, as well as to explore needs and expectations for a future process. Based on insights from these user studies, a structured future collaboration and communication process was designed to demonstrate how the process could be improved.*

Research question 1: *What elements, decisions, and information should be included in the collaboration and communication process to enable scalable production and create value for both RecoMended and its customers?*

The study shows that several challenges exist in the current collaboration and communication process, and that both customers and the production workshop place specific requirements on how the process should function. To address these issues and support both scalability and value creation, a set of core elements was developed as part of a proposed future collaboration and communication process.

First, a collaboration overview is intended to define how communication could take place at different levels and to clarify that the collaboration is organized through sequential projects. Second, the interaction model is intended to explain what happens during meetings between RecoMended and the customer, as well as what activities take place in their respective backstages between meetings. Third, the service toolkit is introduced as an essential support, consisting of the service packages, the reference library, and guiding questions. Lastly, a set of defined process steps that is intended to guide the development of service specifications from initial discussions through to final agreement.

The proposed process clarifies which decisions must be made at each step, what information needs to be exchanged, and which interactions are required to move the work forward. It also highlights the preparatory activities that must occur outside the meetings to ensure that discussions are efficient and decision-ready. Together, these components define what needs to be included in the process to enable scalability while creating value for both RecoMended and its customers.

Research question 2: *How can the collaboration and communication process between RecoMended and its customers be designed to enable effective exchange, informed decision-making, and successful collaboration?*

This question is addressed by presenting a proposed future collaboration and communication process and illustrating how it is intended to function in practice. The design systematizes the collaboration so that everyone involved understands the sequence of steps, their roles, and their responsibilities. The service toolkit is intended to streamline discussions by reducing unnecessary decision-making and ensuring that all relevant topics are addressed.

By structuring communication in this way, meetings are expected to become more focused, customers would gain a clearer understanding of the service they are agreeing to, and RecoMended would feel more confident in leading the process. As a result, the collaboration is intended to become more efficient, with decisions based on the right information at the right time, and more likely to succeed.

*The objective is to design an efficient collaboration and communication process for developing service specifications for garment renewal that support RecoMended and its customers to communicate effectively, make informed decisions, and collaborate successfully, while supporting RecoMended in scaling its production.*

The process presented in this thesis is a proposed future design and has not yet been implemented in practice. Its evaluation is therefore based on participant feedback and conceptual assessment. From a customer perspective, this evaluation indicates that the proposed design has the potential to achieve the stated objective if implemented.

The proposed process introduces a clear and systematic structure that is intended to help both parties understand where they are in the project and what is expected next, thereby reducing uncertainty and the need for additional clarification meetings. The use of the service toolkit is

intended to support efficiency by providing prepared materials that could be reused across projects, minimizing the need to create new content each time. Additionally, the increased level of standardization is intended to help shorten onboarding and learning time for workshop personnel and contribute to more consistent quality across customers. Together, these outcomes demonstrate that the designed future process has the potential to make collaboration more efficient while supporting scalable production.

## 6.2. The Current Process Compared to the Proposed Future Process

The following discussion compares RecoMended's current collaboration and communication process with a proposed future process developed in this study. While the process could have been designed in several different ways, the key contribution of the proposed design is that it provides RecoMended with a clearly defined structure to work from.

In the current process, steps are loosely defined and supporting materials are often created on an ad hoc basis. In contrast, the proposed future process is designed so that each step would be supported by pre-developed materials and clearer role definitions. This structured approach is intended to increase efficiency, enable projects to start more quickly, and support a more standardized way of working in the production workshop. Together, these improvements are expected to help RecoMended handle a larger number of customers while maintaining consistent quality.

A key difference concerns how service specifications are created. In the current process, specifications are developed directly as workshop manuals. In the proposed process, the specification first becomes a service package, which is then translated internally by RecoMended into workshop manuals. This approach allows customers to focus on the outcomes they want, while RecoMended takes responsibility for how these outcomes are implemented in the production workshop. As a result, discussions become more relevant for the customer and RecoMended gains greater flexibility to structure production workshop documentation in a more effective way.

Both the current and proposed processes support RecoMended's overarching goal: extending the lifespan of garments by increasing the number of times they are used before being discarded. However, the proposed process is designed to be more scalable and efficient, enabling RecoMended to work with a larger number of customers. Over time, this may contribute to

reduced use of new resources, as existing garments are maintained and reused for longer, thereby lowering environmental impact.

Another key consideration is the balance between customization and standardization. The current process is highly customized, which can limit efficiency in the production workshop and requires significant time and resources. The proposed process introduces the concept of service packages to create a more standardized foundation, along with clearer steps to follow throughout the collaboration. At the same time, it still allows room for adaptation where it is meaningful. It also creates standardized steps to follow in the process. However, excessive standardization would risk reducing customer satisfaction, as some customers may feel constrained by a system that does not fully reflect their needs or brand identity. The goal is therefore not to remove flexibility, but to build a structure that enables customization within standardization: customers choose from clear options, while RecoMended adapts details where it adds real value. Achieving this balance is expected to be an ongoing learning process for RecoMended as the proposed process is implemented and further developed over time.

### 6.3. Limitations of the Study

While this study presents a proposed future collaboration and communication process, several questions remain regarding its feasibility, scope, and practical implementation.

An important question remains regarding the extent to which the collaboration and communication process can realistically be standardized to the degree proposed in this design. The proposed process represents a future vision, but the study does not fully assess whether this level of standardization is feasible in practice. Much of the proposed standardization relies on the service packages and the reference library covering a wide range of renewal procedures, materials, and applications. In practice, a reference library illustrating all possible procedures across different fabrics and use cases would likely become extensive and resource-intensive to develop and maintain. This raises the question of whether investing in such a comprehensive reference library would ultimately be more time-efficient than developing samples and specifications on a per-customer basis, as is done today. Similarly, while service packages are intended to enable standardization, it remains uncertain whether they can be defined broadly enough to suit a wide range of customers without compromising customer satisfaction. If many customers still require individual adaptations, the intended efficiency gains for the production workshop may not be realized.

Another challenge concerns organizational capacity. Realizing the proposed design would require a significant investment of time and resources from RecoMended, which may be difficult for a relatively young company with limited capacity. Prioritization would therefore be necessary.

Based on the work conducted in this study, a gradual and prioritized approach to standardization appears most realistic. Rather than attempting to fully develop a comprehensive reference library from the outset, RecoMended could initially focus on documenting and structuring renewal procedures for the materials that are most frequently used and requested, and where the company already has substantial knowledge. RecoMended currently possesses documented before-and-after images and experience from a range of renewal procedures, and building the reference library using this existing material would allow the concept to be tested with relatively low additional effort, while maximizing the value of work already done.

A similar incremental approach appears appropriate for the service packages. Beginning with well-established renewal procedures, such as repairs of rips, would make it possible to define, test, and refine service package levels in practice. This would allow RecoMended to gradually evaluate which elements can be standardized effectively and which require continued flexibility, adjusting the system as experience is gained. Overall, starting small and iteratively developing the reference library and service packages over time is likely to be more feasible and less risky than attempting full standardization immediately.

Another limitation of the study is that the evaluation conducted provides only limited insight into the process's feasibility. One customer perceived the proposed design positively at a conceptual level, indicating some initial support for the approach. However, a single data point is insufficient to draw broader conclusions. Additionally, the evaluation focused on perceived value and conceptual usefulness rather than comparative or quantitative measures, limiting the ability to assess actual efficiency gains. Further evaluations involving multiple customers and real project implementations are needed to understand how the process functions in practice and whether it leads to measurable improvements, such as reduced time spent on service specification development, fewer clarification meetings, or lower resource use.

A further limitation is the limited number of user studies conducted, which did not allow for data saturation. As a result, the findings may not capture the full range of perspectives and experiences, making the results less robust. Similarly, the number of customers included was

small. While the selected customers represented a broad range in terms of garment types, involvement in the process, and end-customer focus, the small sample size limits the ability to generalize findings across the wider customer base. Additionally, all participating companies were leaders in circularity, which may have biased the results toward more advanced sustainability perspectives. Companies with less experience in circular business practices might not be able to adopt the proposed process immediately.

A further limitation relates to the use of Svensk Handel's grading scale for assessing garment condition. The scale is relatively new and has not yet been thoroughly tested in practice, particularly for repaired garments. The grading scale is developed for grading second-hand garments that are not renewed. Currently, all garments being repaired are assigned to the lowest grade, which does not always reflect their true condition.

Within the proposed process, the grading scale would nevertheless offer added value as a shared, externally recognized reference point that can support communication and increase transparency for customers. Using an established industry scale can make condition assessments more understandable and credible, particularly for customers unfamiliar with garment renewal. However, the scale does not fully capture the nuances introduced by renewal procedures, which are central to the services RecoMended offers. RecoMended must therefore determine how the grading system should be adapted or supplemented to be applied operationally and with the company's broader, international ambitions. Future calibration and testing of the grading scale are necessary to ensure that it functions effectively and consistently within the proposed process.

## 6.4. Recommendations for Further Development

The design of the collaboration and communication process developed in this study represents an initial step toward systematizing RecoMended's work and enabling production to scale. Based on the findings of this study, several areas have been identified that require continued development and testing.

Firstly, to address the uncertainties, further development and testing of the service toolkit is necessary. The different levels within the service packages must be clearly defined, including the relationship to Svensk Handel's grading scale, so that they can be tested in practice. The reference library should be expanded so that each renewal procedure has its own page, allowing

for its intended function to support communication to be tested, while helping identify which procedures can realistically be standardized and which require individual adaptation. The guiding questions should also be continuously refined to ensure all relevant topics are addressed throughout the process. In the initial phase, a baseline version of the toolkit could be developed and continuously updated as services evolve. This would allow RecoMended to try it out and understand what works and what does not without spending excessive resources, prioritizing elements that offer the greatest efficiency gains.

Secondly, the proposed collaboration and communication process should be tested in real projects with multiple customers. This would address the conceptual nature of the current evaluation and allow RecoMended to observe practical challenges, efficiency gains, and customer satisfaction. Learning from these experiences could guide further development and refinement of the process.

Additionally, future studies involving more customers from different groups are recommended to better understand varying preferences. A broader customer base would allow identification of common patterns as well as group-specific needs, enabling more tailored services and recommendations.

The current study focused specifically on renewal for second-hand garments and did not include individualized renewal services for single garments, another service that RecoMended offers, which many customers request. Future development could extend the process to encompass single-garment renewals.

Pricing was also outside the scope of this study, even though it is an important aspect of the collaboration and communication process. Further work is needed to determine when and how pricing discussions can be integrated into the process in a way that supports clarity while maintaining flexibility.

Finally, although the proposed process was designed specifically for RecoMended, aspects of it may be transferable to other organizations working with renewal or circular business models. Future research could explore the adaptation of the process to other companies in the textile industry or even other sectors, supporting broader implementation of circular practices.

## 7. Conclusion

This thesis aimed to investigate how the collaboration and communication process used to develop service specifications between RecoMended and its customers could be made more efficient, and to propose a future process that addresses these challenges. This was achieved by studying the existing collaboration and communication practices and the involved stakeholders through user studies, which were synthesized into design implications. The key implication was the need for a structured process that supports clear communication, clarifies roles and responsibilities, allows for flexibility, and ensures that customer-specific quality requirements are met, as well as better support for scalability in the production workshop.

Based on these insights, a proposed future collaboration and communication process was developed. The design is intended to improve efficiency by systematizing the collaboration through a clear structure, defined responsibilities, and sequential steps for developing service specifications, supported by the service toolkit. The service toolkit functions as a communication aid that enables effective discussions about quality, supports customers in making informed decisions, and facilitates a more consistent and reliable collaboration. In addition, the toolkit supports RecoMended's ability to scale its production by standardizing service offerings.

By systematizing the process, RecoMended is expected to be better positioned to collaborate with a larger number of customers. The service toolkit supports efficiency and quality consistency in the production workshop, enabling garments to be processed more quickly and reliably. In the long term, this can contribute to extended garment lifetimes, reduced demand for new production, and positive environmental impact.

A key limitation of this study is the limited number of user studies, which did not provide full saturation and may therefore not capture all possible variations in customer needs and collaboration practices. The proposed design should therefore be understood as a foundational framework that requires further development and validation through testing with customers. Nevertheless, the design presented in this thesis lays the groundwork for more effective collaboration between RecoMended and its customers and contributes to the broader goal of enabling more sustainable use of garments.



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# Appendices

## Appendix A: Pre-study Interview Guide

### Processen

Vi ska gå igenom processen för att komma fram till ett avtal med kund. Välj en kund att utgå ifrån. Berätta i detalj hur varje steg går till. Jag ställer frågor under tiden.

- Har du en kund vi kan utgå ifrån?

### Första kontakt

- Vem har första kontakten, RecoMended eller kund?
- Vad kommuniceras här? Från RecoMended och från kund?

### Första mötet

- Hur ser första mötet ut? Varför?
- Vad är viktigast att gå igenom först?

### Vidare kontakt

- Hur kommer ni fram till vilken sorts lagningar en kund vill ha? Hur presenteras de olika sorters lagningar? Bilder? Prover?
  - o Vad tycker du om det sättet? För- & nackdelar?
  - o I vilken detaljnivå går ni in på? Är det en önskan från kunden eller från er sida?
- Pris? När diskuteras det?
- När går RecoMended's befintliga system (områden på kläder, gradering) igenom? På vilket sätt?

### Avslutning

- Hur skrivs kontrakt?
- Hur försäkras ni er om att båda parterna är överens och har samma vision? Provplagg som går igenom fabriken så kund får ett exempel?

## Generella tankar om processen

- Vad har funkat bra?
- Vad har fungerat mindre bra?

## Befintliga system

- Olika områdena på ett klädesplagg, (A (alltid synligt), B(synliga) & C (insidan)), hur fungerar dom för er och kunderna?
  - o Funkar dom för alla kunder?
  - o Hur kom ni fram till dom?
- De olika graderingarna av kläder (new, excellent, good and pre-loved), hur fungerar dom för er och kunderna?
  - o Funkar dom för alla kunder?
  - o Hur kom ni fram till dom?
- Hur hanterar ni kunder som har olika behov för olika sorters plagg, ex outdoor och mode?

## Appendix B: Contextual Inquiries Structure & Guiding Questions

### Introduktion

- Syfte kort: att förstå processen för att kunna föreslå förbättringar.
- Fokus inte är på att bedöma deras arbete, utan på att förstå hur manualerna används och hur de funkar. Du är expert och jag vill lära mig!
- Spela in - GDPR

### Observation

- Följ den personens uppgifter genom reparationsprocessen.
- Notera flödet: vilka steg tas, vem gör vad, när uppstår frågor/beslut?
- Lägga märke till kommunikation: används manualer? Stämmer de? Behöver personalen improvisera?
- Dokumentera både det praktiska (steg, verktyg) och det informella (tyst kunskap, diskussioner).

### Korta intervjufrågor under tiden

- Hur använder ni manualen i det här steget? Är den tydlig? Saknas något?
- Vad händer om ni stöter på något som inte står i manualen?
- Finns något som skulle göra det lättare för er i det här steget?
- Vad tar mest tid eller känns onödigt krångligt?
- Om du fick önska en sak för att förenkla ert arbete, vad skulle det vara?

## Appendix C: Workshop Guide

### Intro – 5 min

Välkomna till denna workshop! Jag heter Lovisa och studerar till civilingenjör i Teknisk design på Chalmers. Den här workshopen är en del av mitt examensarbete i samarbete med RecoMended. Syftet är att undersöka hur kommunikationen mellan RecoMended och er kunder kan bli mer effektiv när manualer för klädreparation tas fram. En bättre process sparar tid och pengar för alla. För att lyckas behöver jag förstå ert perspektiv, era behov, önskemål och tankar om processen. Därför är jag väldigt glad att ni deltar idag.

Processen att ta fram manualer, är ni med på vad jag menar med det? *Riktlinjer för hur kläderna i fabriken ska behandlas, vilka kläder ska in i fabriken, hur ska de tvättas, hur ska de lagas, hur ska de graderas efteråt, hur ska de skickas tillbaka osv.*

Jag har med mig GDPR-avtalet som jag också skickade tidigare på mail. Jag vill gärna spela in våra diskussioner för att kunna analysera dem i efterhand. Så jag är tacksam om ni skriver på det.

Upplägget är att vi ska gå igenom fyra olika övningar. Jag kommer presentera varje övning och sen kommer vi att diskutera den i efterhand. Har ni några frågor innan vi börjar?

### Introduktion av varandra – 5 min

Namn, roll på företaget, hur ni har varit involverade med RecoMended.

### Reparera kläder – 10 min

Två frågor som ni ska få svara på

- Vad är anledningen till att ni vill reparera era kläder?
- Vad är anledningen till att ni valde just RecoMended för att reparera kläderna?

### Viktigast hos en reparationstjänst – 10 min

Citat om tjänsten på lappar som ska rangordnas utifrån vad ni anser är viktigast hos en reparationstjänst från minst viktigt till mest viktigt. Lägga gärna till egna lappar om det är något ni ser saknas. Efteråt går vi igenom dem en och en så får ni berätta hur ni tänker. Om det är någon ni inte förstår så är det bara att fråga.

- Varierar denna prioritering över tid? I början av processen, genom processen, efter processen.
- Vilka förväntningar eller önskemål har ni på själva åtgärderna (tvätt och reparation)? Vad är kvalitet för er?

#### Att ta fram manualer tillsammans – 10 min

Skala från 1-10 där olika parametrar ska graderas. Placera varje symbol på skalan där ni tycker den passar in och förklara varför.

- TID - Hur lång önskar ni att processen att ta fram manualer ska vara? *1-ett möte, 10-ett halvår (från första mötet till att kläder skickas kontinuerligt)*
- DETALJ - Vilken detaljnivå vill ni vara involverad på vid framtagning av manualer? *1-vill att RecoMended bestämmer allt, 10-vill bestämma alla detaljerna själv*
  - o Skillnad i hur noggrant det är över sortimentet?
- PRIS – Vilket pris är ni beredda att lägga på reparationer av kläder? *1-minsta möjliga för att återställa funktionen på plagget, 10-pris spelar ingen roll, bara plagget återställs till rätt kvalitet*
- PAKET – Vad är er inställning till att köpa ett färdigt paket vs eget förslag? *1-färdigt paket, 10-eget förslag*

#### Processen post-its – 10 min

Ni ska få designa hur ni önskar att samarbetet ska se ut genom att skriva de olika stegen på separata lappar. Jag har förberett några förslag på steg som ni kan använda om ni vill: introduktionsmöte, provlagningar, detaljbeslut och skicka kläder regelbundet. Förklara vad varje steg innebär och varför det är viktigt.

- Vilket stöd eller vilken information skulle vara mest värdefull för er i de olika stegen?
  - o *Pris? Bilder? Samples?*
- Fysiska möten vs digitala möten vs digitala formulär?

#### Avslutning – 5 min

- Finns det något ytterligare som ni vill tillägga som vi inte har pratat om hitintills?

Tack så mycket för att ni ville vara med. Så intressant att lyssna på vad ni har att säga.

## Appendix D: Evaluation Guide

Jag kommer att hålla en presentation om designen jag har kommit fram till. Ställ gärna frågor under tiden om du inte förstår. Efteråt har jag några diskussionsämnen som du ska få berätta dina tankar om.

### Hjälpfrågor efter presentation:

- Vad är din generella respons på upplägget? strategic - och operational-nivå, backstage och frontstage, de olika stegen i processen, RecoMended's bibliotek. Är det realistiskt? Hade det varit hjälpsamt och i så fall varför?
- Vad tror du om upplägget att RecoMended tar fram material som diskuteras på möten istället för att material tas fram tillsammans under möten?
- Testprojektet, är det tillräckligt att ha dem så sent och få se referensbibliotek innan?
- Vad vill du som kund ha för underlag inför möten?
- Frågor på möte vs frågeformulär

## Appendix E: Guiding Questions for the Service Toolkit

Table E.1: Guiding questions to answer either before or during the introduction meeting.

Fråga	Svarsalternativ	Kommentar
Vad önskar ni för tjänst av RecoMended?	<ul style="list-style-type: none"> <li>- Sortering av returer/reklamationer</li> <li>- Tvätt</li> <li>- Reparationer</li> <li>- Kundreparationer</li> <li>- End-of-life lösning</li> <li>- Kvalitetskontroll</li> <li>- Annat</li> </ul>	Få en grundförståelse för önskad tjänst
Vad är anledningen att ni vill återcirkulera era kläder?	<ul style="list-style-type: none"> <li>- Följa lagstiftningar</li> <li>- Bra för miljön, Ställa om till cirkulär ekonomi, minska klimatavtrycket</li> <li>- Ta ansvar för produkterna</li> <li>- En del av kundens brandidentitet</li> <li>- Kostnadsbesparing</li> <li>- Patina är snyggt</li> <li>- kvalitetskontroll</li> <li>- Kontroll på flöden (avfallshantering)</li> </ul>	Förstå drivkraft - används i intromöte
Hur samlas kläderna in som skickas till RecoMended?	<ul style="list-style-type: none"> <li>- Returer</li> <li>- Reklamationer</li> <li>- I butik från kunder som har använt kläderna</li> <li>- På arbetsplats</li> </ul>	Uppfattning om skick och vad för defekter som kommer
Var hamnar era kläder efter RecoMended?	<ul style="list-style-type: none"> <li>- Säljs online till kunder</li> <li>- Säljs i butik till kunder</li> <li>- Återförs till ägaren</li> <li>- Återgår till lager</li> </ul>	Förstå hur likt original återställning behöver vara. Förstå ledtider, snabbare om det återförs till ägaren jämfört med lager
I vilket skick är majoriteten av kläderna i när de kommer till RecoMended?	<ul style="list-style-type: none"> <li>- Ny produkt</li> <li>- Nyskick, Aldrig använd, endast provad</li> <li>- Mycket bra skick, använd en eller ett fåtal gånger och har ett mycket bra helhetsintryck</li> <li>- Bra skicka, Använd flera gånger. Väl omhändertagen. Inga fläckar/enstaka små fläckar som går bort i tvätt, tyget kan vara noppigt.</li> <li>- okej skick, Varan är fortfarande funktionell för sitt ursprungssyfte men upplevs som använd.</li> </ul>	Använda sig av gradering från Svensk Handel. Uppfattning om skick och möjliga åtgärder som behövs

Fråga	Svarsalternativ	Kommentar
	<ul style="list-style-type: none"> <li>- Dåligt skick, omfattande defekter. Kräver stora reparationer och/eller kemptvätt. Stora repor, stora fläckar</li> <li>- Återvinning, Så pass mycket defekter och slitage att varan inte kan användas eller säljas för sitt originalsyfte.</li> </ul>	
Vad är de vanligaste defekterna?	<ul style="list-style-type: none"> <li>- fläckar</li> <li>- seams</li> <li>- zippers</li> <li>- Velcro</li> <li>- waterproofing</li> <li>- lint removal</li> <li>- rips</li> <li>- slitet tyg</li> </ul>	Förstå vilka åtgärder som framför allt kommer behöver utföras
Vilken volym kläder förväntar ni er skicka? Hur ofta?		Uppfattning om volym för att se om kunden är relevant för RecoMended
Vad kan ni om återställning av era kläder sen tidigare?		Uppfattning om hur viktig expertisen hos RecoMended är. Om de kan mycket, inte lika viktig. Om de kan lite, väldigt viktigt och förtroendeingivande
Vad för klädskategorier kommer till RecoMended?	Fylla i vilka plagg som kommer in, detaljer om plaggen kan komma sen	Veta vilka produktkategorier det handlar om och om RecoMended kan hantera dem

Table E.2: Guiding questions to answer during the introduction meeting

Fråga	Svarsalternativ	Kommentar
Vilken detaljnivå att vara involverad på?		
Vad är kvalitet för er?	<p>Reparationer – alltid återställd funktion</p> <ul style="list-style-type: none"> <li>- Återställa funktionen men ej enligt original, <i>billigare</i> vs Som original visuellt, <i>dyrare</i></li> <li>- Diskret lagning vs slitstark lagning</li> <li>- Diskret lagning vs workwear utseende, lagningen blir en feature</li> <li>- Utseende är mindre viktigt vs snygg lagning</li> </ul> <p>Tvätt – alltid hygieniskt rent</p> <ul style="list-style-type: none"> <li>- hygienisk ren vs inga fläckar</li> <li>- tyget upplevs använd vs tyget upplevs som nytt</li> </ul>	<p>Här är det viktigt att få en förståelse för vad kunden menar när de säger kvalitet. Är det att plaggen klarar mycket slitage eller att de är så lika originalet som möjligt? osv</p> <p>Förslag på parametrar nedan som kommit upp under samtal med kund.</p> <p>Använda referensbiblotek till hjälp!</p> <p>Fokus ligger på att få ett grepp om deras vision när det gäller kvalitet för att kunna lägga fram ett bra förslag senare</p>

Table E.3: Guiding questions to answer either before or during the project meeting.

Fråga	Svarsalternativ	Kommentar
Vilka kläder ska återcirkuleras?	- Vilka produktkategorier ska återcirkuleras? Vilka material? Kollektioner? Recall produkter?	Info till grov sortering och vilka kläder som ska åtgärdas
Detaljinfo om kläderna som kommer in	material, lager, tekniska detaljer, tvättråd, färger	
Vad för typ av smuts är vanligt förekommande på kläderna?	- Olja, svåra fläckar, Sminkfläckar, Matfläckar, Blod, Vanlig användning, Svett	Tillsammans med tidigare info ger detta vilket tvättpaket som ska användas
Hur vill ni att kläderna ska paketeras efter återställning?	- Ingen specifik önskan om hur de ska vara vikta/paketerade - Vikta och paketerade för att kunna säljas	

Table E.4: Guiding questions to answer during the project meeting.

Fråga	Svarsalternativ	Kommentar
Finns det någon speciell info vi bör ha när det gäller hur ni vill att era kläder ska tvättas?		TVÄTT, gå igenom förslag på paket och diskutera.
Finns det någon mer info vi bör ha när det gäller hur ni vill att era kläder ska repareras?		REPARATION, gå igenom förslag på paket och diskutera
Vilka kategorier vill ni sälja? Detta är våra förslag. Baserat på val blir detta plagg som går till end-of-life eftersom de inte lever upp till kategorierna. Vad tänker ni om det?		GRADERING, gå igenom olika graderingar och diskutera var kunden vill landa
Detta är i detalj hur olika defekter kategoriseras i denna kategori. Major, minor osv. Vad tycker ni om det?		Om kunden önskar vara detaljstyrd
Vill ni ha återkoppling till er produktion om t ex kvalitetsproblem vi upptäcker?		Förstå om kunden önskar designkvalitetsutveckling
Vill ni samarbeta i framtida hållbarhetsutveckling?		Förstå om kunden önskar designkvalitetsutveckling
Uppföljningsmöten	<ul style="list-style-type: none"> <li>- Vid behov</li> <li>- En gång i månaden</li> <li>- En gång i veckan</li> </ul>	
Vilken information kommer med kläderna vid leverans?	<ul style="list-style-type: none"> <li>- Instruktioner för fabriken. ex tvättas, tvättas + lagas</li> <li>- Ingen</li> <li>- Sorterade på något sätt</li> </ul>	
Vilken information om ett plagg finns på plagget?	<ul style="list-style-type: none"> <li>- Tvättråd, material osv</li> </ul>	
Vid paketering. Ska samma artikelnummer användas eller ska det ändras?		

Fråga	Svarsalternativ	Kommentar
Vad händer med kläderna som hamnar i end-of-life?	<ul style="list-style-type: none"> <li>- RecoMended använder material till reparationer</li> <li>- RecoMended återvinner (Vem ska RecoMended skicka kläderna till?)</li> <li>- Åter till kund</li> </ul>	
Oklara plagg som inte passar in i paketet, hur ska de hanteras?	<ul style="list-style-type: none"> <li>- Kund vill ta beslut (Samlar ihop kläder till möte, Skickar kläder med frågor, Endast återkommande problem, ej enstaka plagg)</li> <li>- RecoMended tar ett beslut baserat på expertis och kunskap om kunds önskemål</li> </ul>	
Om eget material, hur ska eget material skickas efter och lösas logistiskt?	<ul style="list-style-type: none"> <li>- RecoMended beställer från kund vid behov</li> <li>- RecoMended beställer via specifik återförsäljare</li> <li>- Andra alternativ</li> </ul>	
Hur ska packlistan till kunder struktureras?		
Var ska kläderna skickas efter återställning?	Adress	
Vilka produktkategorier ska prioriteras vid behov?		
När ska kläder skickas tillbaka?	<ul style="list-style-type: none"> <li>- Direkt när de är reparerade</li> <li>- När X kg kläder är reparerade</li> <li>- Innan X säsongen</li> <li>- Inom X dagar</li> </ul>	
Hur ska kläderna skickas tillbaka?	<ul style="list-style-type: none"> <li>- Lådan som de kom i</li> <li>- Annat förslag</li> </ul>	



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