IHCI Project Proposal

Rules

- Submit a Google Doc, NOT a PDF or a Google slide.
- Use the default fonts, line spacing, and font size unless specifically required in the assignment.
- After submission, the Google Doc will get automatically locked, so you won't be able to make any changes.
- Standard plagiarism rules apply.
- Your submission will not be considered for grading and feedback if you do not follow these guidelines.

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Grover, Nishant Tomer Project Group Number: P1

HCI Group No.: B-8

Problem Statement

Problem Statement: "Huge amounts of fashion waste produced by manufacturing firms and designers isn't recycled or repurposed."

Stakeholders: The stakeholders include big cloth manufacturing firms, fashion designers and fashion brands and most importantly recyclers.

Need: 'Fashion Recycled' aims to connect fashion manufacturing firms to appropriate recyclers so that the cloth waste generated does not find its way to oceans and landfills.

Insight: Fashion waste accounts for **at least 7%** of the **total waste** produced globally and according to www.weforum.org, **less than 1%** of this is **recycled**. This highlights the problem of inappropriate waste disposal which is present worldwide.

Background of the Problem and Motivation

Fashion waste is growing at such a rapid rate that it needs to be controlled properly. It is **extremely impactful** to the environment and our lives too. The following are some

statistical facts from https://earth.org/statistics-about-fast-fashion-waste/ that made us understand the depth of this problem and convince us to act upon this issue:

- **1. 92 million tonnes** of textile waste is produced every year.
- 2. The apparel industry's global emissions will increase by 50% by 2030.
- **3.** The average US consumer throws away **81.5lbs** of clothes every year.
- 4. The number of times a garment is worn has declined by around 36% in 15 years.
- **5.** The fashion industry is responsible for **20%** of global waste water.
- **6.** It takes **20,000 liters** of water to produce **one kilogram** of cotton.
- 7. \$500 billion is lost each year because of under-wearing and failure to recycle clothes.
- 8. Nearly 10% of microplastics dispersed in the ocean each year come from textiles.
- 9. 2.6 million tonnes of returned clothes ended up in landfills in 2020 in the US alone.
- 10. Fast fashion brands are producing twice the amount of clothes today than in 2000.

Currently, the majority of the waste disposal system for fashion waste is largely **unorganized**. The presence of multiple **small scale players** in this industry has led to the current state of mismanagement. Further, there is **no proper way** for manufacturers to contact recyclers.

We, at 'Fashion Recycled', aim to solve this problem by bridging the gap between manufacturers, designers and recyclers.

We have observed that this problem is not bound by any regional or national boundaries hence it is a global crisis to be resolved. The **9th SDG** "Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation" and **13th SDG** "Take urgent action to combat climate change and its impacts" shall also be worked upon through our initiative.

SDG = Sustainable Development Goals

Scope

Our solution is to create a website where **big cloth manufacturers and designers** can place pickup orders for their fashion waste.

It would be a **simple and easy** way to use the interface where they can **specify date and time** of pickup after entering essential **details** such as the **length**, **material type** and **color** of the consignment.

The cloth **quality** will be **assessed** and **cross checked** at the time of pickup. The cloth would be **directly shipped** from the manufacturer to the recycler, so, it results in a **hasslefree experience**.

Further, a dedicated section would be present for recyclers to register with us and place orders. The recyclers would get the cloth delivered at **a very cheap rate** as compared to market rates of the same cloth.

Contributions

Rachit Bhandari - brainstorming, motivation, scope

Nakul Grover - brainstorming, motivation

Parv Goyal - brainstorming, problem statement

Pratham Bansal - brainstorming, scope

Nishant Tomar - background of the problem, problem statement