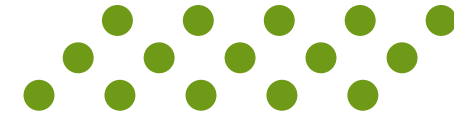**DIGITAL TEXTILE RETURN SOLUTION**

THE TEXTILE GREEN MILE

DTRS – DIGITAL TEXTILE RETURN SOLUTION from Theoremus

Where:

Our solution offers cities with proactive and forward-thinking communites an opportunity to progress into smart textile recycling.

The solution creates a textile recycling reward scheme that can be accessed by citizens using their smartphones and with the help of special smart bin in their local area.

How:

The DTRS App is design to onboard customers and let them participate in the textile return scheme by allowing them to trace, evaluate and receive rewards for eco-friendly activity, giving access at the same time to Recyclers to more and better quality of used textiles.

STEP 1

1

The User launches the DTRS App:

…to register by creating a profile and adding their address to subscribe to receive 10–15 red bags via post.

Each bag is labelled with a unique QR code—part of our traceability system. Scanning the QR code using the app, initiates the garment tracking process.

2

Easy features:

Users specify from given options a textile details like clothing type, size and optionally a brand, giving them additional brand incentives.
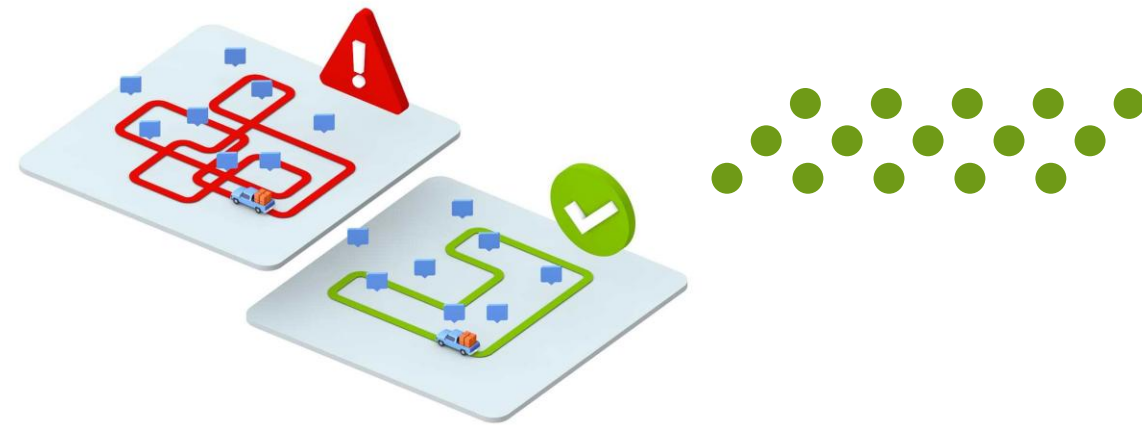
STEP 2

Users deposit the red QR bags into recycling bins that have been recommended through the app, ensuring the closest and most convenient drop-off location.

Participating bins are outfitted with QR codes, which customers should scan upon depositing their bags. Advanced volumetric sensors and labels affixed to the inner bin surface are providing real-time fill level monitoring information that is transmitted to the solution backend over NBIoT connectivity.
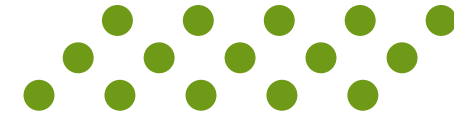
CLOTHES & SHOES

CLOTHES & SHOES

STEP 3

As collection truck drivers arrive to empty the bins, they record fill level data and offer their own assessments via a user-friendly driver app.

The data gathered from those assessments and the volumetric sensors reading recorderd in the system could in the future unlock potential route optimization and solution enhancements.

STEP 4

At the sorting centers, trucks offload collected textile so that their weight may be measured. Even individual weight of a red QR bag could be assigned to it.

The staff in the sorting centers scan and open the red QR bags, verifying the number of items claimed by the user and sorting them in one of the two destinations of each individual mentioned piece: 1. to secondhand shop/donation or 2. to recycling.

STEP 5

Upon completion of verification at sorting centers, customers receive notifications about their textile future destination and variable incentives that could come from both:

1

The Municipality – in the form of city points, reduced waste collection taxes or different bonuses;

2

Retailers – benefits, like discounts or vouchers at retailers could be offered to incentivse the community to on more environmentally-friendly roles and initiative.

Enjoy fashion, download the App and recycle!

THEOREMUS