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Material Value Chains

## Monitoring of waste collection: Case security paper

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### Motivation

- Security paper pickups are documented traditionally as a paper form.
- Waste management requires a lot of work and costs.

### Service idea

- Customer orders pickup of bin by email.
- Server agent set up customer account, and orders will be transferred to digital order book of collection.
- Server agent arranges the collection plan and truck driver navigates to the address.

### Monitoring technology

- Every bin is labelled with RFID-tag and identified by mobile interface.
- Reader identity, time and process labels and other data is transferred to TCS (Transport control system in truck) and cloud service.
- Data is analyzed and reported in real time to waste management company and customer.



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### Service results

- Customer will get by email the destroy document concerning agent's security paper.
- Collection follows the route plans of pickups.
- Waste management company will monitor the orders, bins in waste points and destroy process by same service. (Kalustorekisteri)
- Customer information is transferred to billing system.



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