

2018

Co-design processes for cleaning and facilities services system

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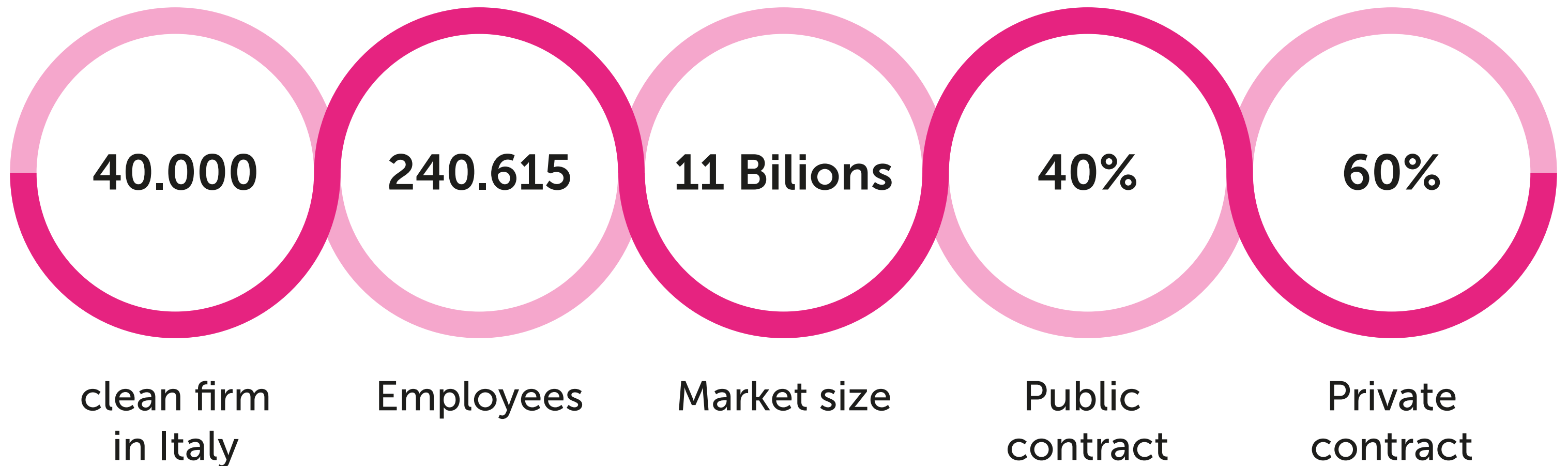
Co-design processes for cleaning and facilities services system

Claudio Germak, Luca Giuliano, Lorenza Abbate

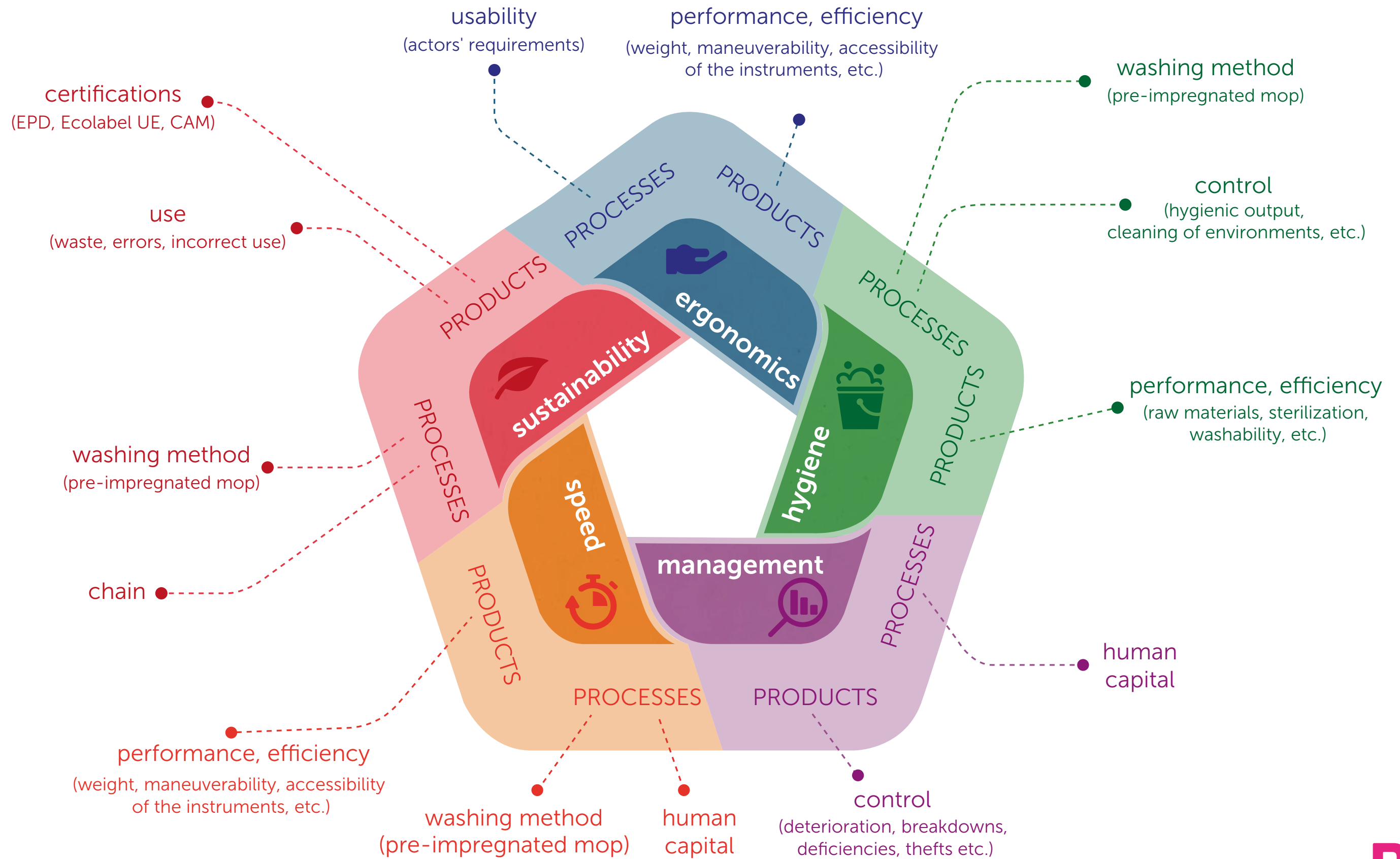


PROFESSIONAL CLEANING IN ITALY

CLEANING CHAIN | production > distribution > service



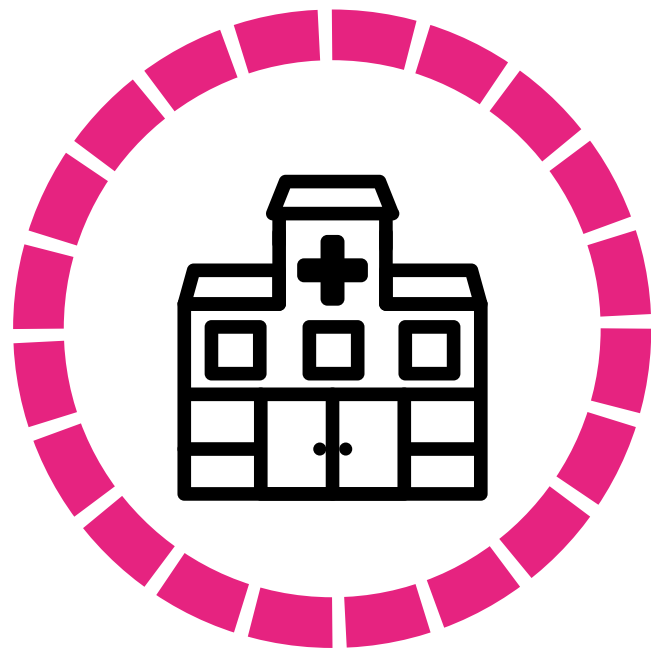
ASSETS



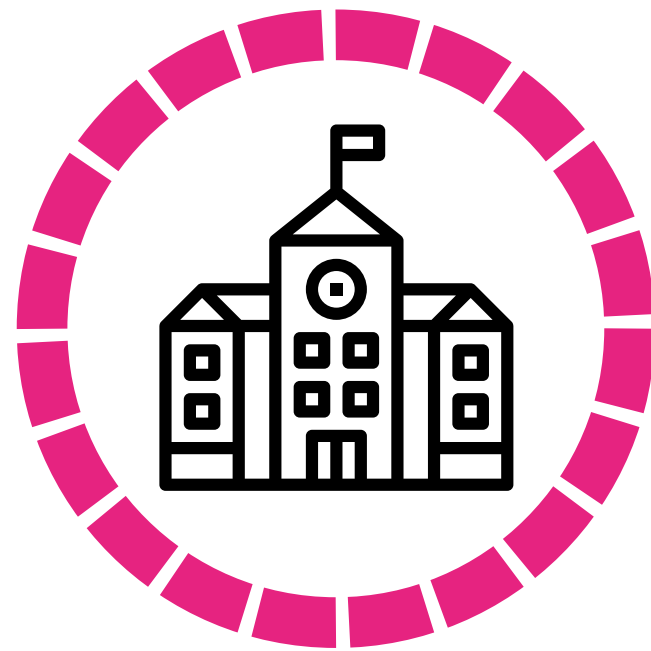
CLEANING OFFER STATE OF THE ART

SERVICES | cleaning > furniture > welfare (management and training)

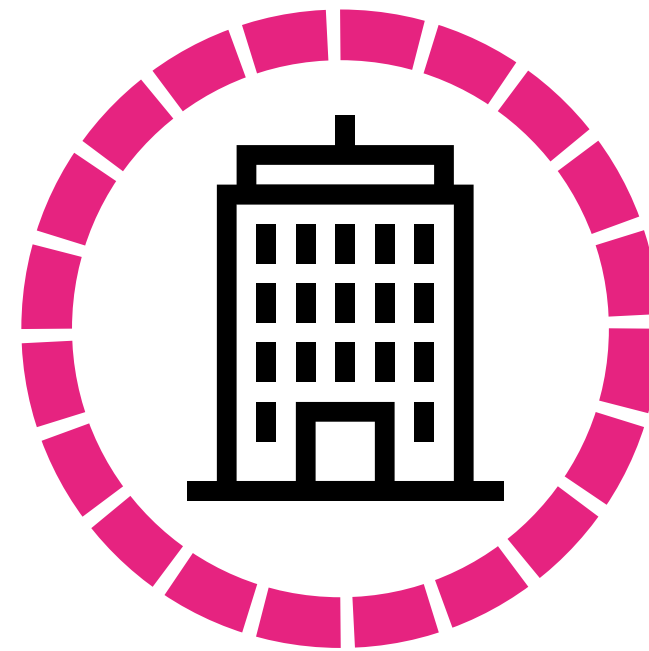
ENVIRONMENTS:



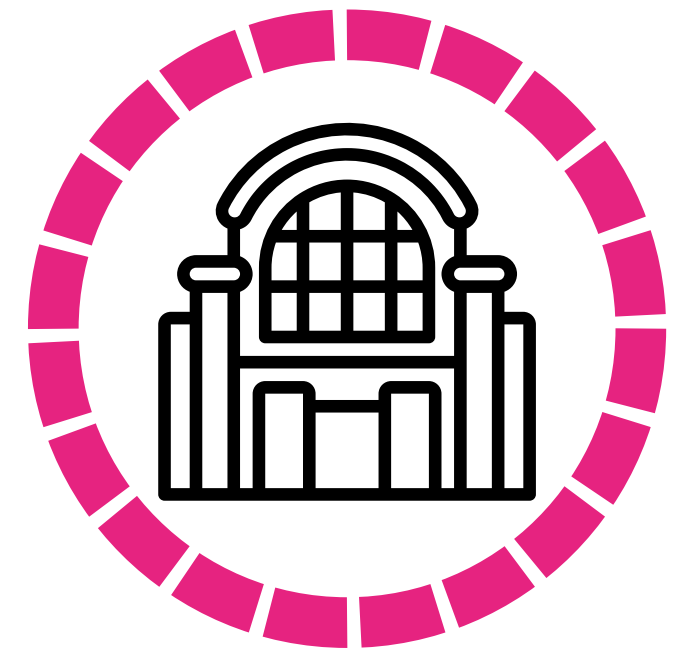
hospitals



schools



industries



malls

STATE OF THE ART SUGGESTIONS

SMART PRODUCTION

"... new production technologies shared by production-related actors that foster collaboration between people, machines and systems."

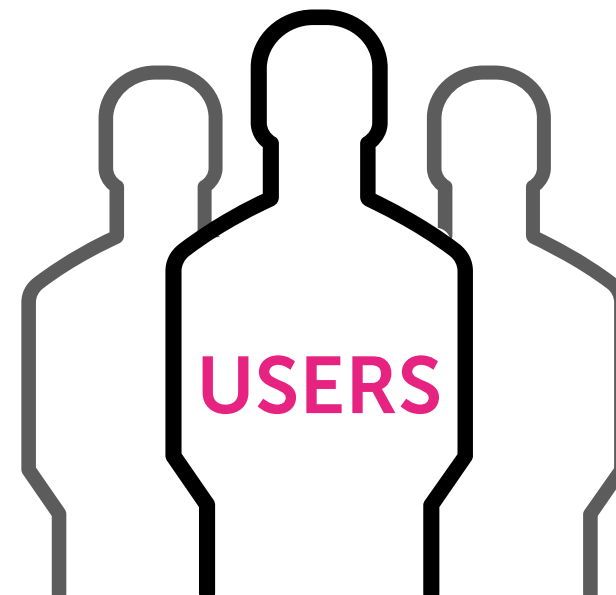
SMART SERVICES

"a new generation of information and technical infrastructures that helps manage and monitor systems, exploiting the logic of maximum integration between all the actors of the production chain, including customers "

SMART DEVICES

"...interactive electronic gadgets that understand commands sent by users. and help in daily activities. They are defined by their ability to connect to a network to share and interact remotely"

involve





SOCIAL INCLUSION

The act of making all groups of people within a society feel valued and important.

PARTECIPATORY ECONOMICS

The underlying values that PE implement are equity, solidarity, diversity, workers' self-management and efficiency (defined as accomplishing goals without wasting valued assets).

USING HCD AND CODESIGN STRATEGY FOR:

- > Identify the virtuous relationships among actors, processes and tools
- > Implement them systematically in the supply chain of cleaning activities.
- > Identify needs
- > Build a creative environment

UX TEST

HOW



ethnographic
questions

WHO



10
highly skilled
users

WHERE



Mirafiori city
of design

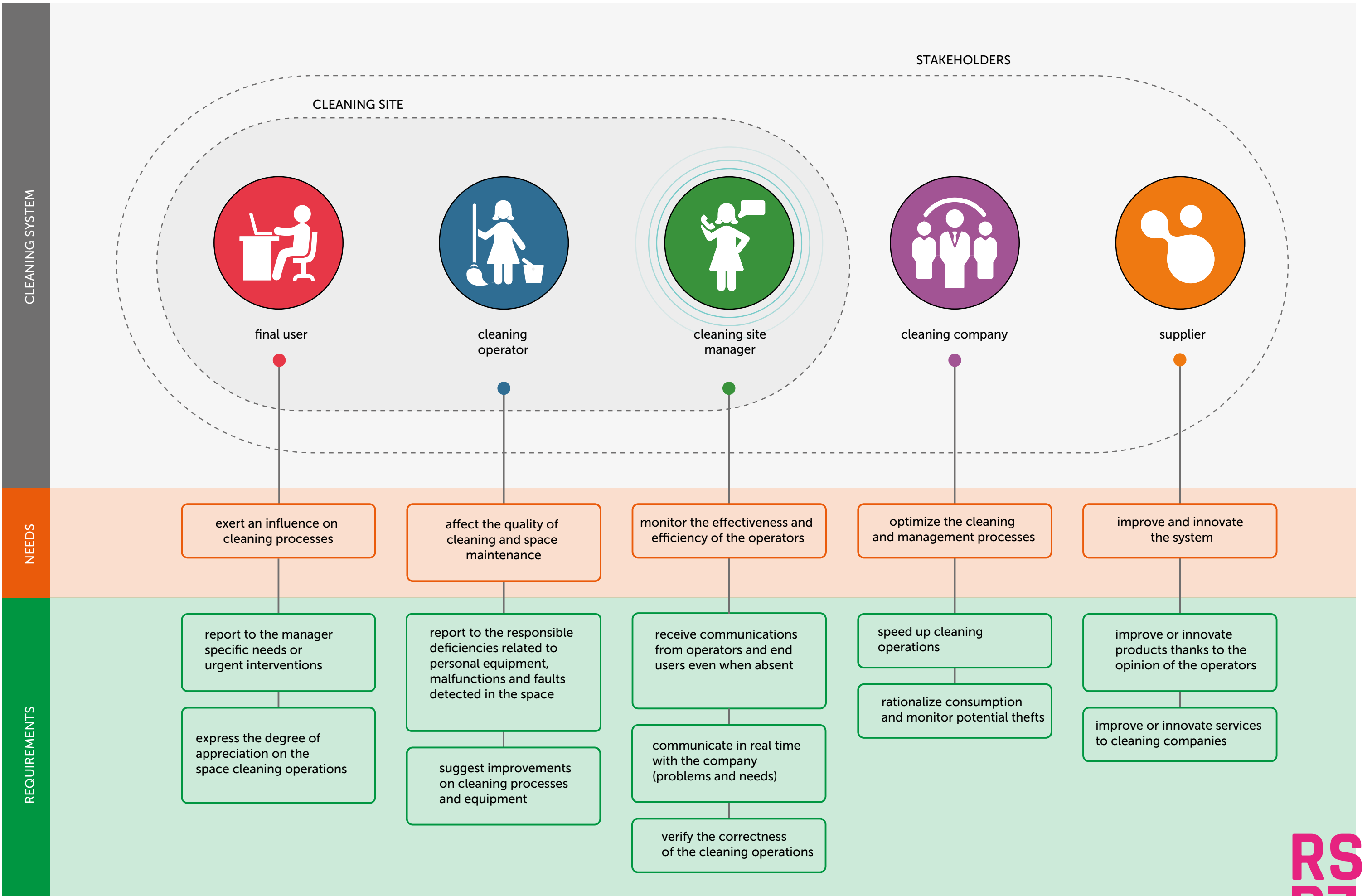
TOOLS



Mops

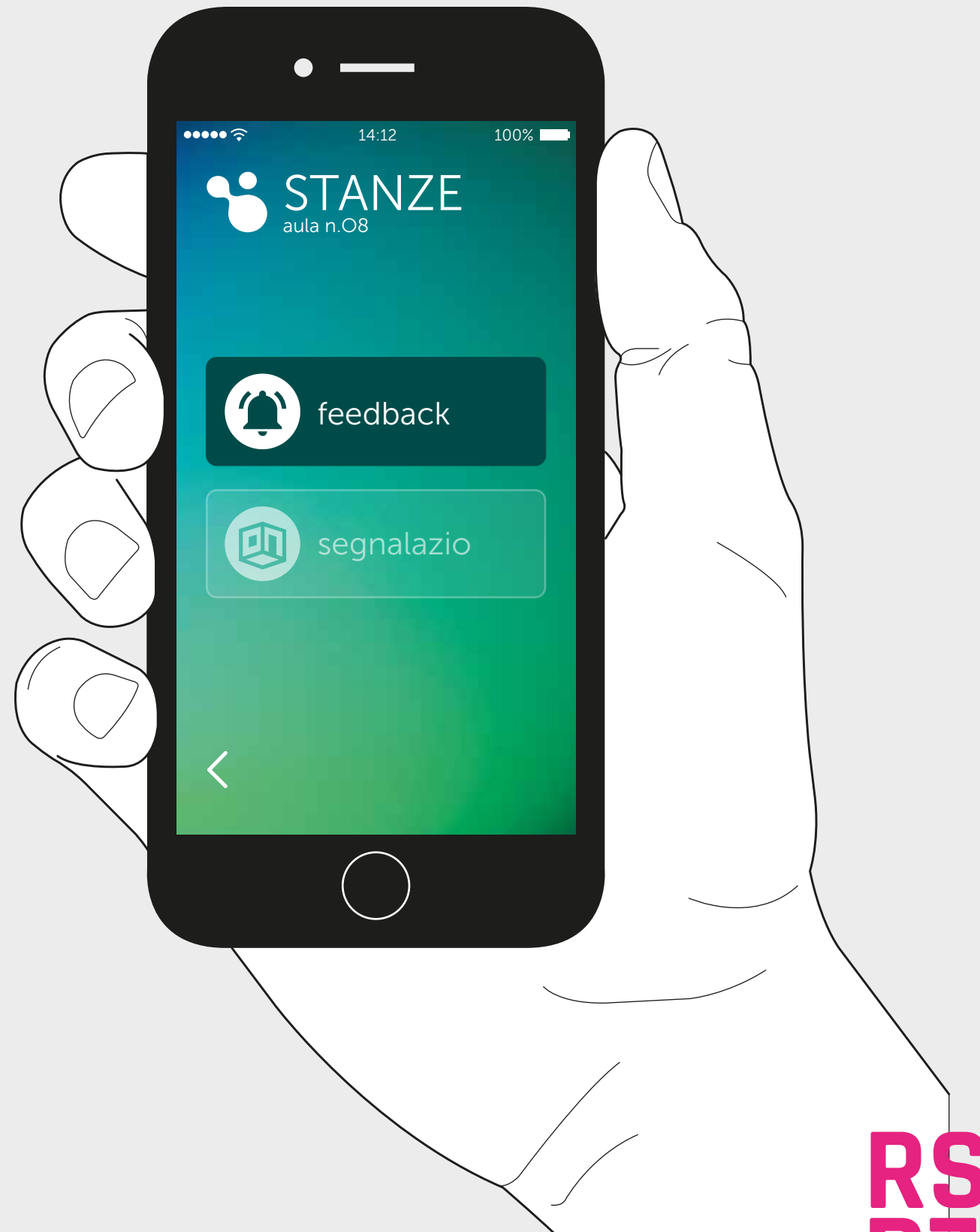
DESIGN INSIGHT

- > movements and fatigue factors
- > social aggregation
- > linguistic gap
- > communication and management (towards users and firm)

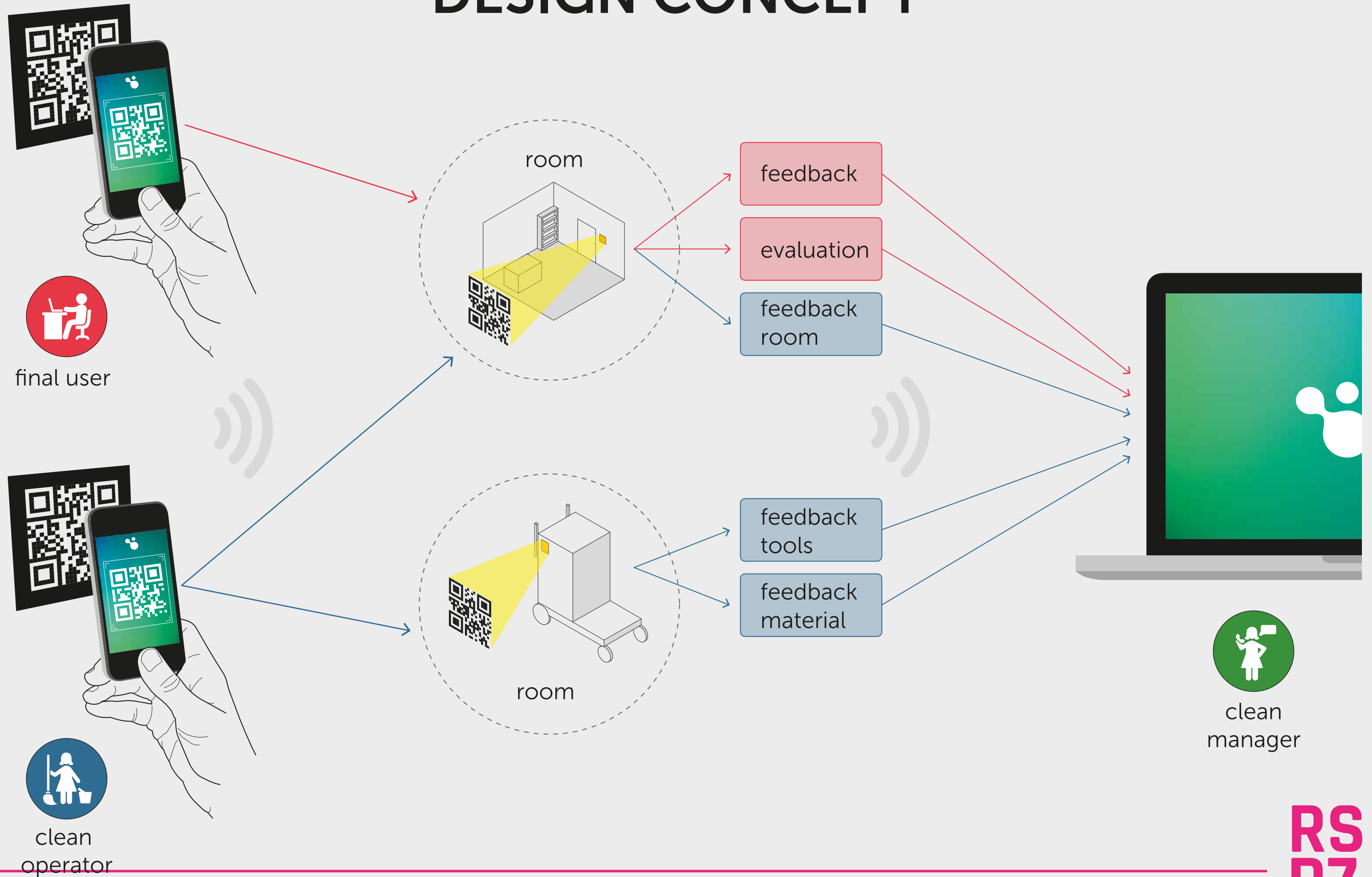


DESIGN CONCEPT

- Automated and interconnected production models;
- Intelligent and communicating products;
- Traceability of processes that fosters collective information;
- Shared and collaborative production model at the supply chain level;
- Cloud storage of a significant amount of collected data and their accessibility.



DESIGN CONCEPT



DESIGN CONCEPT

