

Exploration of ReX Roles for customised manufacturing companies

1

Which ReX roles could fit your organisation?
Mark the relevant roles.

Product & Component Focus

**ReX
services at the
customer site**

*Disassembly, identification and labelling, packaging, return
logistics / protective transport*

**ReX
preparatory
processes**

*Inspection and value/condition assessment, identification and
labelling, cleaning, calibration...*

**ReX core
activities**

*Disassembly, dismantling, reassembly, assembly, repair,
upgrade, testing, validation, labelling, packaging...*

**ReX logistic
support tasks**

*Picking, kitting, preparing repair kits, storage, labelling,
packaging, shipping...*

**ReX
life-extension
services**

*Condition monitoring (measurement, reporting...), periodic
inspection, traceability (location, composition, availability...),
maintenance, repair...*

Component & Material Focus

**ReX activities
for side and
by-product streams**

*Identification, sorting, separation of side and by-product
streams, preparation for optimal processing and recycling*

**Component /
material trader**

*Sales of components and materials via sales outlets,
webshops, thrift stores...*

Data focus

ReX data enricher

*Adding information and data to existing datasets, enriching
existing datasets with data/info from manual interventions*

ReX data collector

*Generating data from ReX activities: lifetime, quality,
status, location, availability/accessibility, composition...*

2

What already exists?
Which activities help match this role?

3

In which department do you see activities matching the selected ReX role(s)?

Metalworking

- ☐ Sawing
- ☐ Punching (laser, press...)
- ☐ Cutting
- ☐ Bending
- ☐ Welding (steel, aluminium, stainless steel...)
- ☐ (Hard) soldering
- ☐ Cladding / overlay welding
- ☐ Painting
- ☐ Powder coating
- ☐ Drilling
- ☐ ...

Cabling

- ☐ Assembling wiring harnesses
- ☐ Connecting connectors
- ☐ Testing and validating wiring
- ☐ Labelling harnesses
- ☐ Wiring (control) cabinets
- ☐ ...

Assembly

- ☐ Assembly, disassembly and replacement of parts
- ☐ Mechanical (screwing, clipping, pressing...)
- ☐ Permanent joining (gluing, wrapping...)
- ☐ Replacing parts, labels, cables...
- ☐ Disassembling
- ☐ ...

Cleaning

- ☐ Blasting
- ☐ Steam cleaning
- ☐ Car wash process
- ☐ Dry-ice blasting
- ☐ Degreasing
- ☐ Chemical cleaning
- ☐ Drying
- ☐ ...

Testing and validation

- ☐ Visual inspection: presence/absence of labels, identification...
- ☐ Testing of wiring harnesses, sensors, devices (via test setup)
- ☐ Calibration of devices, components (via test setup)
- ☐ Functional testing, assessing 'output'
- ☐ Condition assessment via periodic activities: inspection, data (images)...
- ☐ ...

Repair and adaptation

- ☐ Repair: coating, labels...
- ☐ Replacement of parts (cables, plugs, seals, wear parts...)
- ☐ Maintenance: cleaning, reconditioning, replacing consumables or wear parts (filters...)
- ☐ Software reset (data wiping...)
- ☐ Installing software updates (via test bench)
- ☐ ...

Kitting, packaging and storage

- ☐ Applying labels, scanning/registering, linking data
- ☐ Kitting parts (assembling repair/installation kits)
- ☐ Packaging of assembled kits (e.g. repair kits including instructions)
- ☐ Storage and distribution of parts for shipment on request
- ☐ Packaging and shipping
- ☐ Storage and distribution of parts for shipment on request
- ☐ ...

Sorting

- ☐ Separation of by-product streams: separating materials (cutting, manual sorting, trimming, unscrewing...)
- ☐ Dismantling products made of textiles, plastics, metals, electronics, wood
- ☐ ...

Sales and data

- ☐ Webshop B2B, B2C, B2G
- ☐ Data enrichment for AI training: evaluating images...
- ☐ Data enrichment: adding info from physical products to databases (e.g. scanning and validating)
- ☐ Data validation: checking available data following an intervention (e.g. app with location, status...)
- ☐ ...

4

Which projects and customers fit this?

5

Which actions can you take to move this forward?