

# Challenges of Industry 4.0



# Faurecia in a nutshell



\* Value-added sales: Total sales less monoliths sales

# Faurecia in a nutshell

## ■ Product lines

### SEATING



Seat structures, manual and electric seat mechanisms, comfort products and systems, trim, complete seat assembly

### INTERIORS



Instrument panels, door panels, center consoles and acoustic modules

### CLEAN MOBILITY



Technologies for emissions control, energy recovery, weight reduction, acoustic performance

- **Designed & manufactured by 100 000 persons in 35 countries, 30 R&D centers & 250 plants...**
- **... featuring wide range of processes to manufacture and assemble components included in the final product.**

# Uses case 1 : 3D Printing, a revolution?

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## ■ High promises & potentials :

- Accelerate developments time, printing mock up & prototypes
- Enables ultra personalization & one batch sizes for final parts
- Enables functionalization



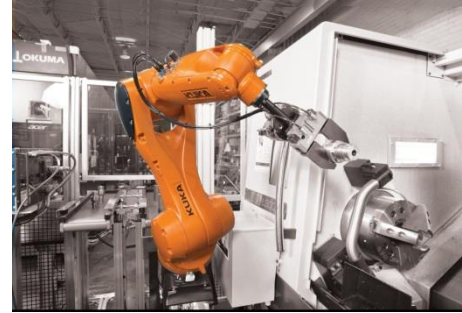
## ■ Challenges:

- Increase **speed** & reduce **costs**
- Master the **process** parameters & NDT
- Develop the **materials** fitting to the needs
- New design **mindsets**

## Uses case 2: Automate tasks, robotics applications

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- Automating material supply for assembly : Bin picking, Kitting, Positioning in tool...



- Automating assembly tasks : clipping, screwing, riveting, welding trajectory correction ...



- Challenges: Ensure **High dexterity** (variety of shapes &, stiffness), **robustness** ... & **speed**



## Use cases 3: Train people off line

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- Train to operate a sewing machine



Simple .. really?

- **Challenges** : gesture detection / cognitive evaluation of training performance

**·faurecia**  
inspiring mobility