



Alliance for IoT
and Edge Computing
Innovation



The End User Requirements Collection/Smart Manufacturing Case

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5th Oct. 2023



6GStart

Agenda

1. Introduction
2. D-BEST
3. Customer Journey
4. Use Cases
5. Demo

A blue-themed event banner with a network background. The text reads: "6G SNS SAVE THE DATE" in large white letters. Below it, a light blue bar contains the date and time: "Thursday, October 5, 2023 | 14:00 - 16:00 / Online". The main text below the bar says: "Digital Innovation Hubs (DIH) to strengthen knowledge exchange with SNS community and collaboration". At the bottom left is the URL "https://smart-networks.europa.eu". On the right side, a vertical blue bar contains the text "IMPACT ASSESSMENT AND FACILITATION ACTIONS WORKSHOP" and a 6G logo at the bottom right corner.

6G SNS

SAVE THE DATE

Thursday, October 5, 2023 | 14:00 - 16:00 / Online

Digital Innovation Hubs (DIH) to strengthen knowledge exchange with SNS community and collaboration

<https://smart-networks.europa.eu>

IMPACT ASSESSMENT AND FACILITATION ACTIONS WORKSHOP

INTRODUCTION

METHODIH is a methodology for DIHs aiming at supporting DIHs with a structured approach, providing four basic tools to define a sustainable offering matching their customer-base needs:

- The Service Portfolio Analysis (D-BEST)
- The Customer Journey analysis
- The Digital Transformation Pipelines
- The Business and Governance Model



D-BEST



DATA

Data ecosystem building inside and among companies and data spaces

TECHNOLOGY

Hardware/Software solutions

BUSINESS

Business planning and access to financial pools

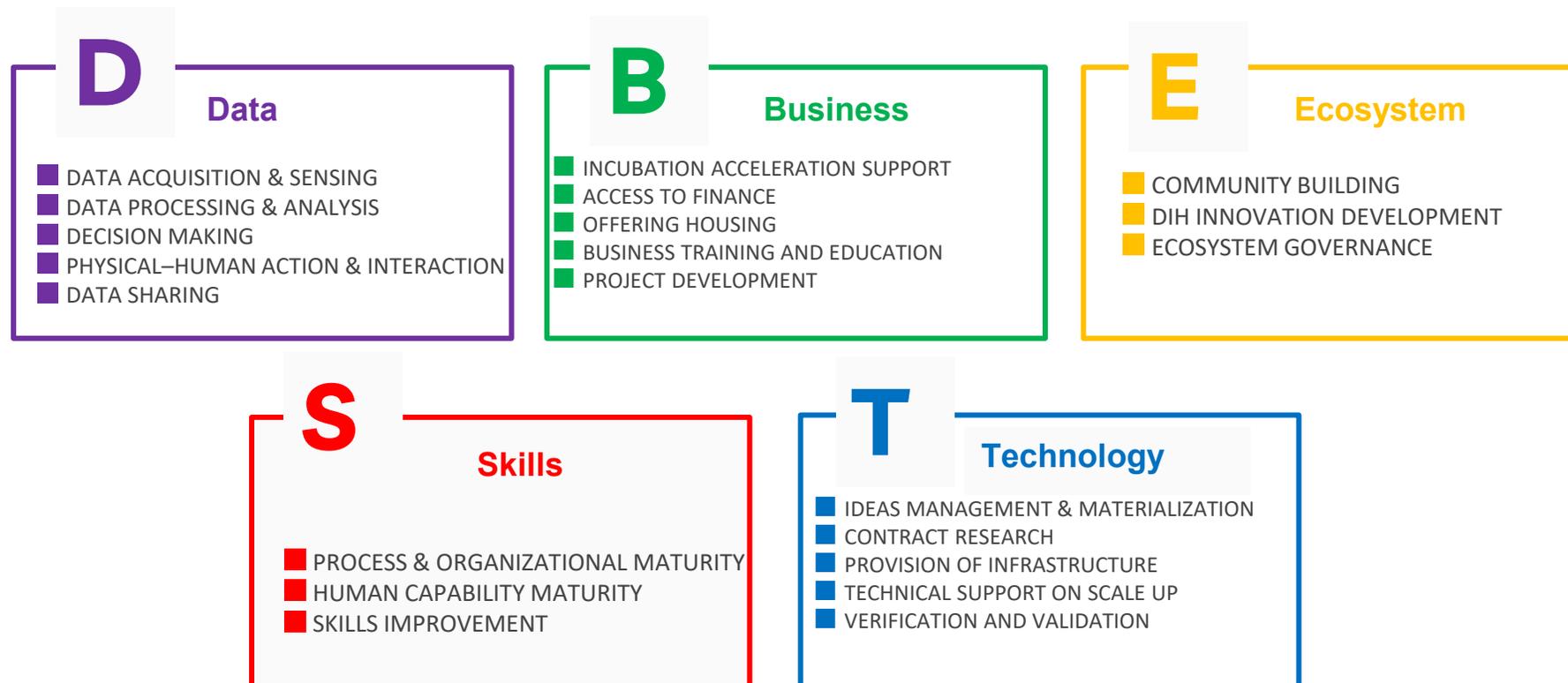
SKILLS

Skills for ecosystem building, technology and business enhancement

ECOSYSTEM

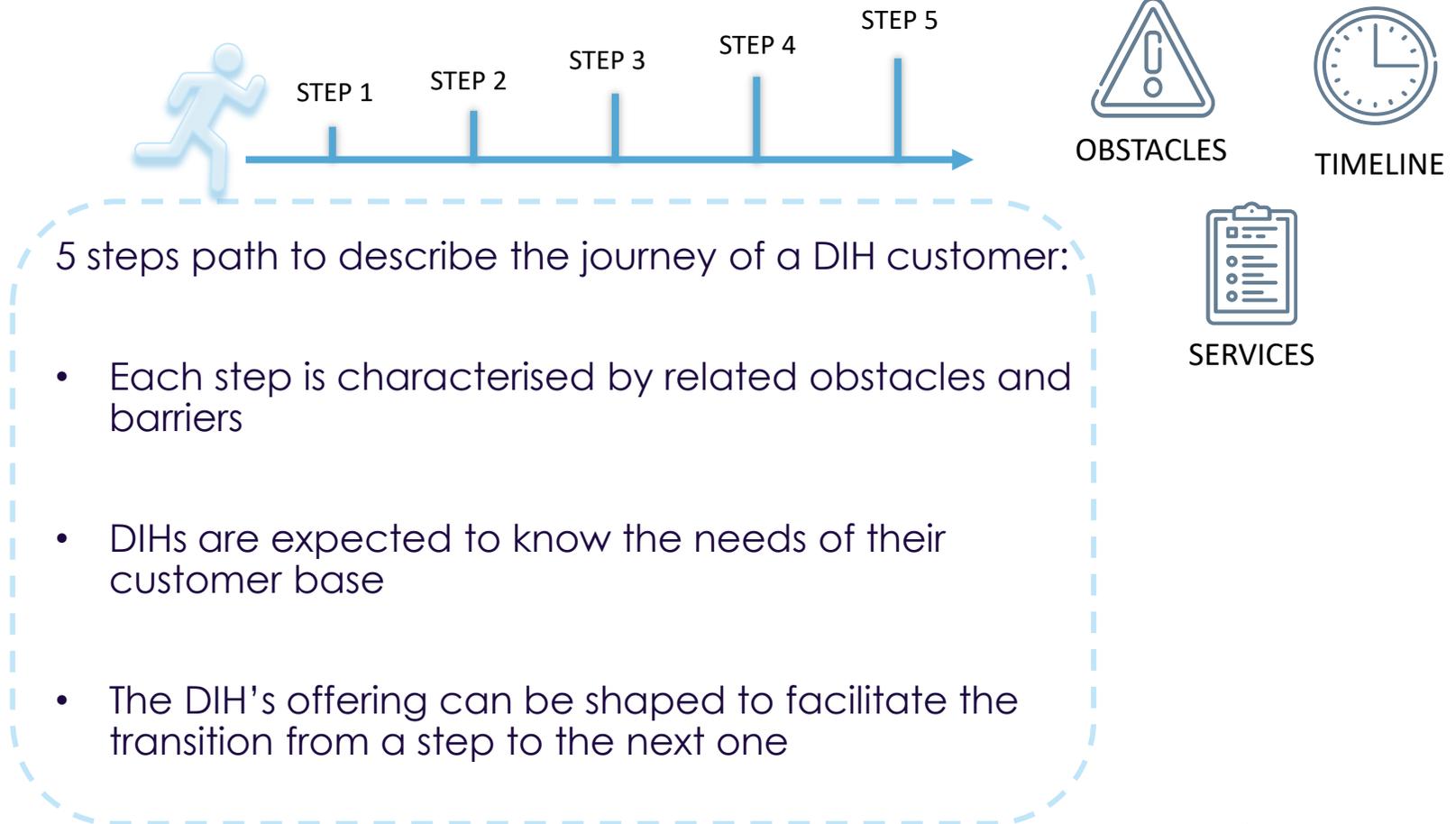
Structuring relations, communication, community building

Types of services in the D-BEST reference model



Customer Journey Analysis

- Customizable templates for six different customer types (Technology Provider, Technology User, Student, Policy Maker, Start-up, Experimenter)



Services Pipelines

Identify provided services (AS-IS) and future services (TO-BE)

SERVICE PORTFOLIO CONFIGURATION

D-BEST taxonomy

CUSTOMER JOURNEYS

- Technology users
- Technology providers
- Students
- Start-ups
- Policy makers
- Open call winners, etc.

Identify the customer base

TRANSFORMATION SERVICE PIPELINES

One for each Customer Journey cases, also Success Stories can be represented through SP

Build the customer journey pipeline: identify if more services are required or identify complementarities with other DIHs

Service pipelines help to match the DIH offering with the customer base needs. As well, service pipelines help to better visualize this matching.



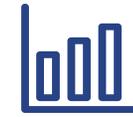
OBSERVATION



AWARENESS



EXPERIMENT



EXPERIENCE



ADOPTION

D **Data**

- DATA ACQUISITION & SENSING
- DATA PROCESSING & ANALYSIS
- DECISION MAKING
- PHYSICAL – HUMAN ACTION & INTERACTION
- DATA SHARING

B **Business**

- INCUBATION ACCELERATION SUPPORT
- ACCESS TO FINANCE
- OFFERING HOUSING
- BUSINESS TRAINING AND EDUCATION
- PROJECT DEVELOPMENT

E **Ecosystem**

- COMMUNITY BUILDING
- DIH INNOVATION DEVELOPMENT
- ECOSYSTEM GOVERNANCE

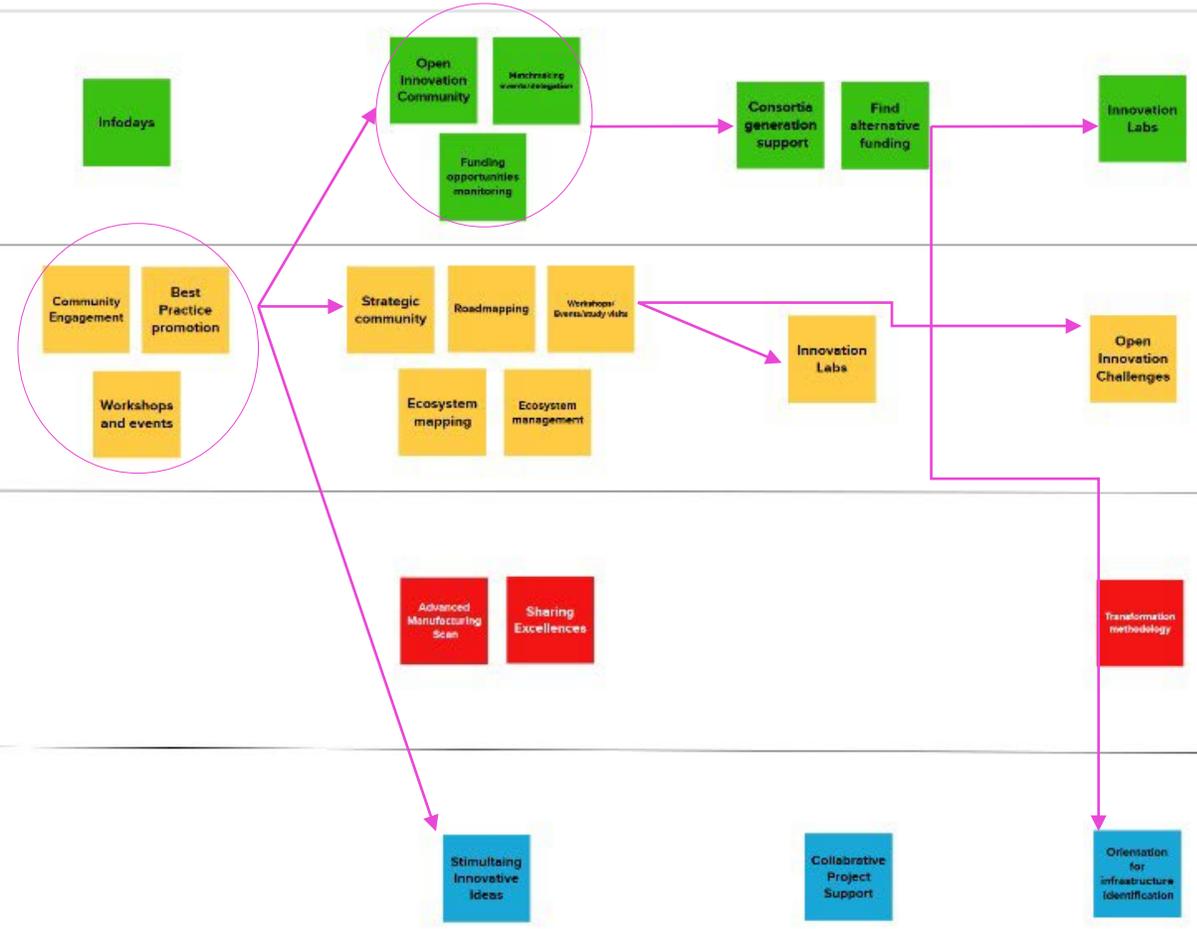
S **Skills**

- PROCESS & ORGANIZATIONAL MATURITY
- HUMAN CAPABILITY MATURITY
- SKILLS IMPROVEMENT

T **Technology**

- IDEAS MANAGEMENT & MATERIALIZATION
- CONTRACT RESEARCH
- PROVISION OF INFRASTRUCTURE
- TECHNICAL SUPPORT ON SCALE UP
- VERIFICATION AND VALIDATION

Service pipeline for a user looking for business partnerships and market access



Business and Governance Model:

- To guide the DIH in the definition of a model to describe its business, that considers the complexity of a its customer-base and a multistakeholder network, including sustainability for cross-regional activities. One specific dimension is the Governance, that considers the complexity of the collaborative DIH's activities.

DIH Network Benefits:

- Self-awareness
- Understand the offering of similar DIHs
- Collaboration opportunities
- Create synergies

Use Cases

AI@TI

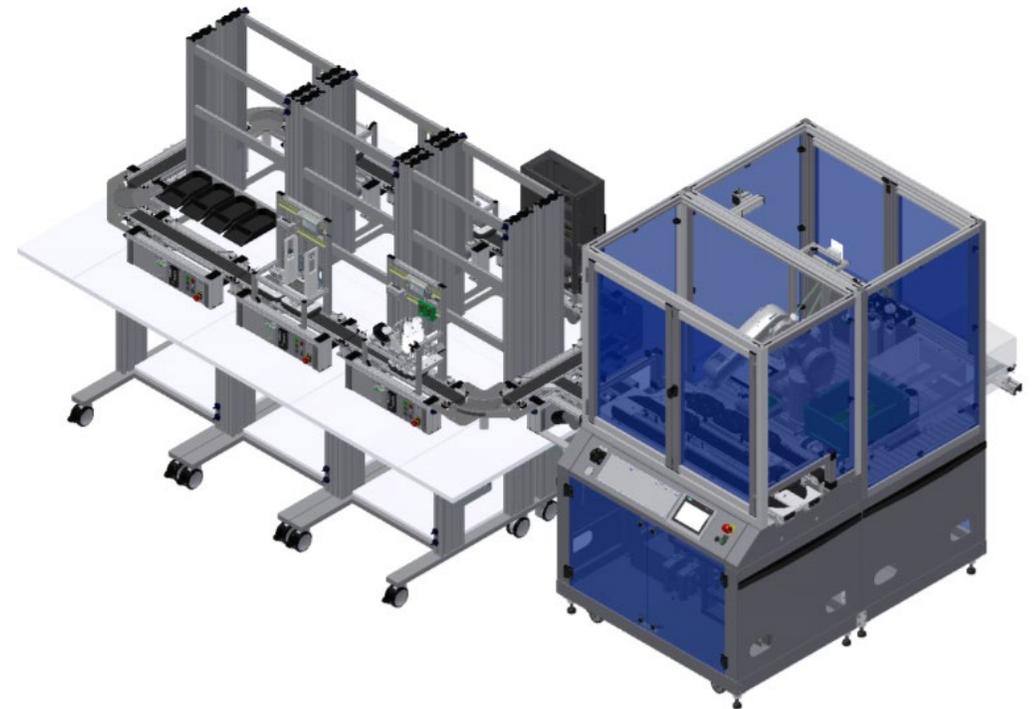
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INDUSTRY4.0Lab

Industry4.0lab @ SOM is implementing a tangible physical entity where the research activity in the innovative manufacturing management and planning approaches can be carried out in conjunction with a practical implementation in a “real-like” environment.

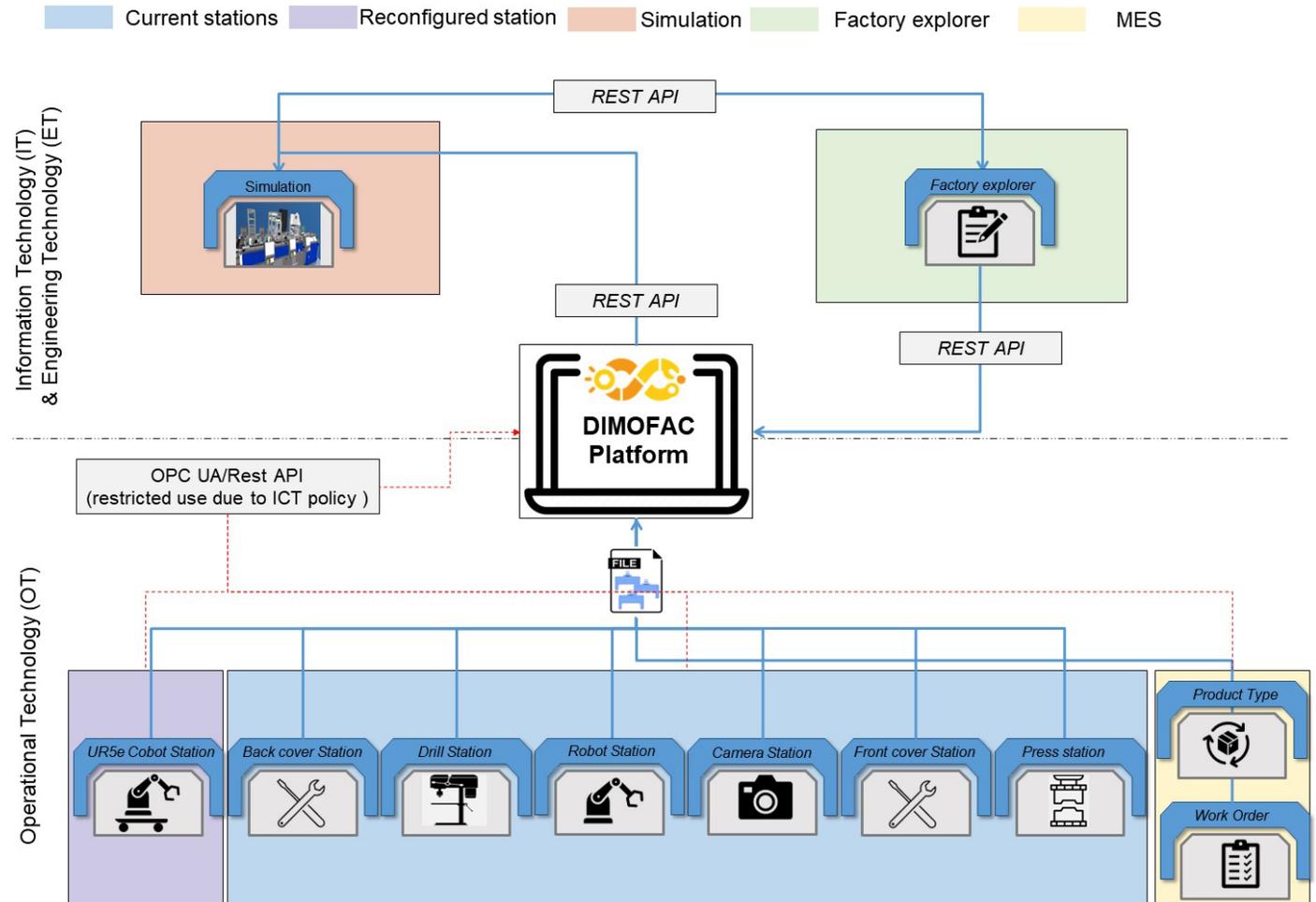
- Assembly line with a robot station
- Cobots
- AGV



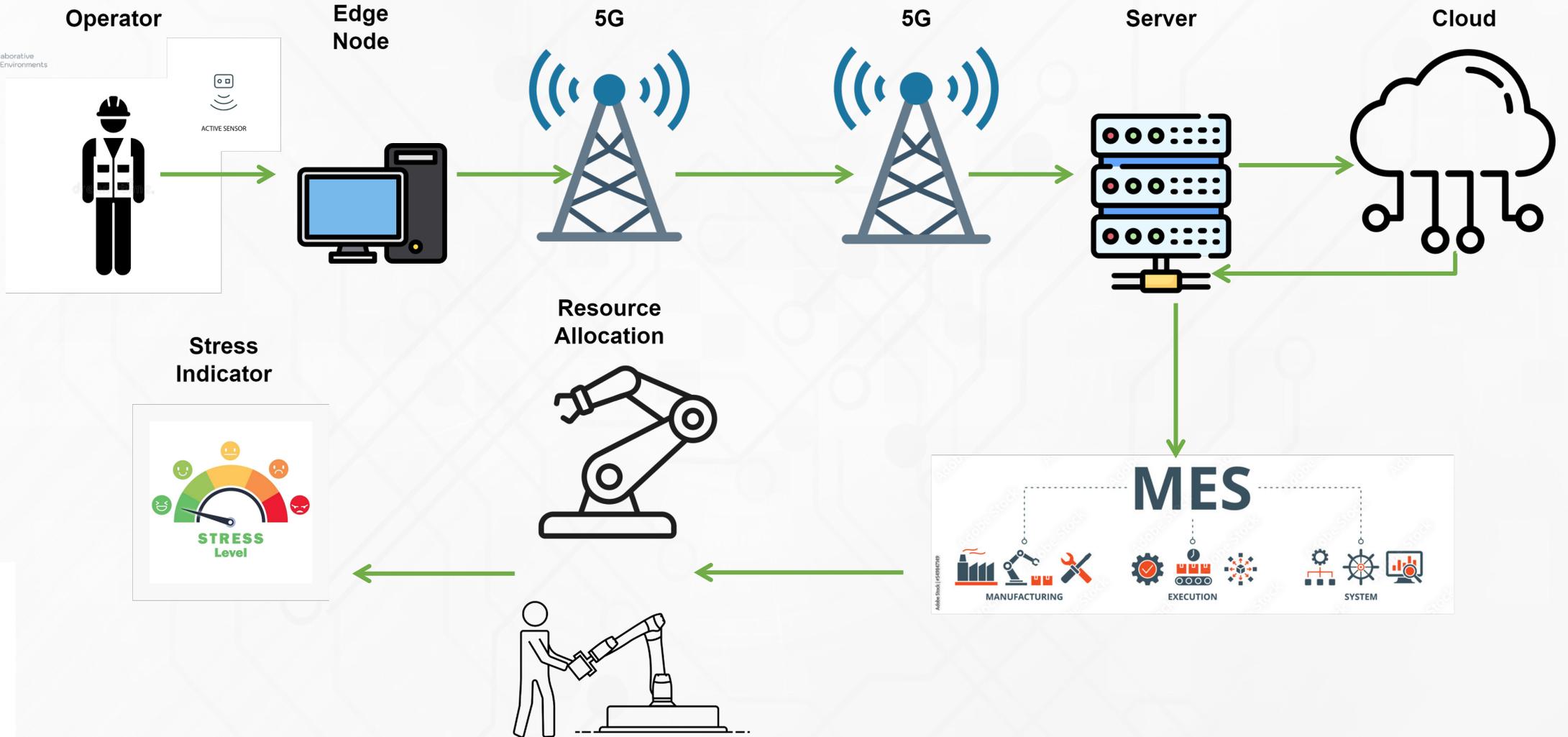
POLITECNICO
MILANO 1863

Polimi Industry4.0Lab as DIMOFAC Open Pilot Line

- AAS representation of each station, product type and work order based on CIM
- AAS-based resource configuration
- Simulation analysis of AAS resources
- Reconfiguration of POLIMI assembly line relying on DIMOFAC
- Replacing Manual station with UR5e co-bot using DIMOFAC



INCODE USE-CASE



DIH4INDUSTRY Platform-demo

DIH4INDUSTRY
The EU Network of DIHs in the Manufacturing domain

Home Ecosystem About Private Area

SCoDIHNet

Home
INTERNET of THINGS DIHs

DIHs
20
VIEW

D BEST Services
28
VIEW

Services Benchmark

Category	Percentage
Data	11%
Business	29%
Ecosystem	7%
Skill	7%
Technology	46%



Thank you for listening

Any questions?

You can email us at Nima.rahmani@polimi.it

<https://aioti.eu/scodihnet/>

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