WELCOME TO THE OMILAB DAY 2020!

AGENDA
(of this Introductory Session)

"House Rules" of the hybrid conference day
(for physical and virtual participation)

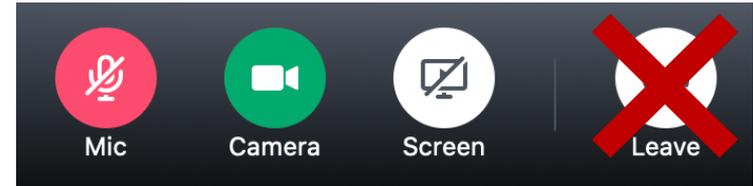Welcome of participants and introduction of hosts

Agenda of the OMILAB Day 2020

Progress Report of OMILAB Network

Meeting Platform: GoToMeeting

Content
- The conference is recorded and will be shared with you after the day.
- Presentation material/abstracts of the talks are collected and shared on the event page

Organisation
- All participants are visible to each other (please use your full name in the system to allow for interaction)

- Please mute your microphone during presentations – share of your video stream is encouraged!

- In case of questions during the presentation, please post them into the chat window (visible for all participants)
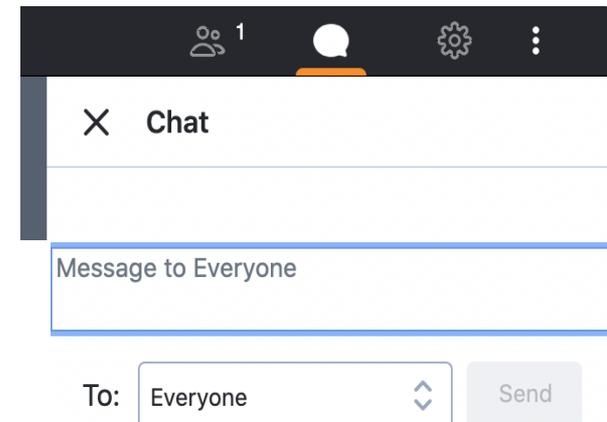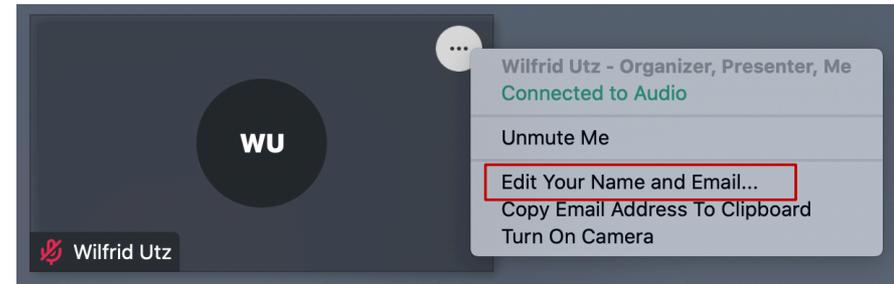
OMILAB Day 2020

- Following the traditional OMILAB Day organized as part of the NEMO Summerschool

- *NEW:* Organized in a *hybrid* manner:
  virtual and physical participation in Berlin is possible

- **Participation:** 54 registered participants from 25 organisations in 10 countries

VISION: OMILAB NPO

**An active global community
for conceptual modelling
that benefits from
open artefacts.**

OMILAB Day 2020: Objective

Provide a forum of *knowledge exchange* and *personal* interaction of exiting or soon to be/potential OMILAB nodes on …

… results and achievements,

…ideas and challenges,

… networking

Hosts of the OMILAB Day 2020

Dr. Wilfrid Utz
wilfrid.utz@omilab.org

Prof. Knut Hinkelmann
knut.hinkelmann@omilab.org

AGENDA

Agenda: Part A

9:30 - 10:00	**WELCOME AND INTRODUCTION TO THE OMILAB** Presenter: Dr. Wilfrid Utz, OMILAB NPO, Berlin, Germany Welcome of participants, introduction of the agenda, organisational issues Walkthrough the OMILAB

THE ACADEMIC OMILAB IN KOREA: A WELCOME MESSAGE Presenter: Prof. Moonkun Lee, JeonBuk National University, JeonBuk, Korea	10:00 - 10:15

10:15 - 11:00	**THE INDUSTRIAL OMILAB INNOVATION CORNER IN VIENNA: MODELLING OF INTELLIGENT BEHAVIOUR** Presenter: Dr. Robert Woitsch, BOC, Vienna, Austria

Agenda: Part B

OMILAB@WORK: THE EU PROJECT DIGIFOF
Presenter: Prof. Adrian Florea, Lucian Blaga University of Sibiu, Romania
Introduction to the project, presentation and demonstration of project results
in the context of OMILAB objectives

11:15 - 12:00

12:00 - 12:45

INNOVATION THROUGH DIGITALISATION, INTELLIGENT ENTERPRISE
Presenter: Prof. Dimitris Karagiannis, University of Vienna, Vienna, Austria

OMILAB NPO - STATUS AND PROGRESS
Presenter: Prof. Knut Hinkelmann, OMILAB NPO, Berlin, Germany
Status report from OMILAB NPO

12:45 - 13:15

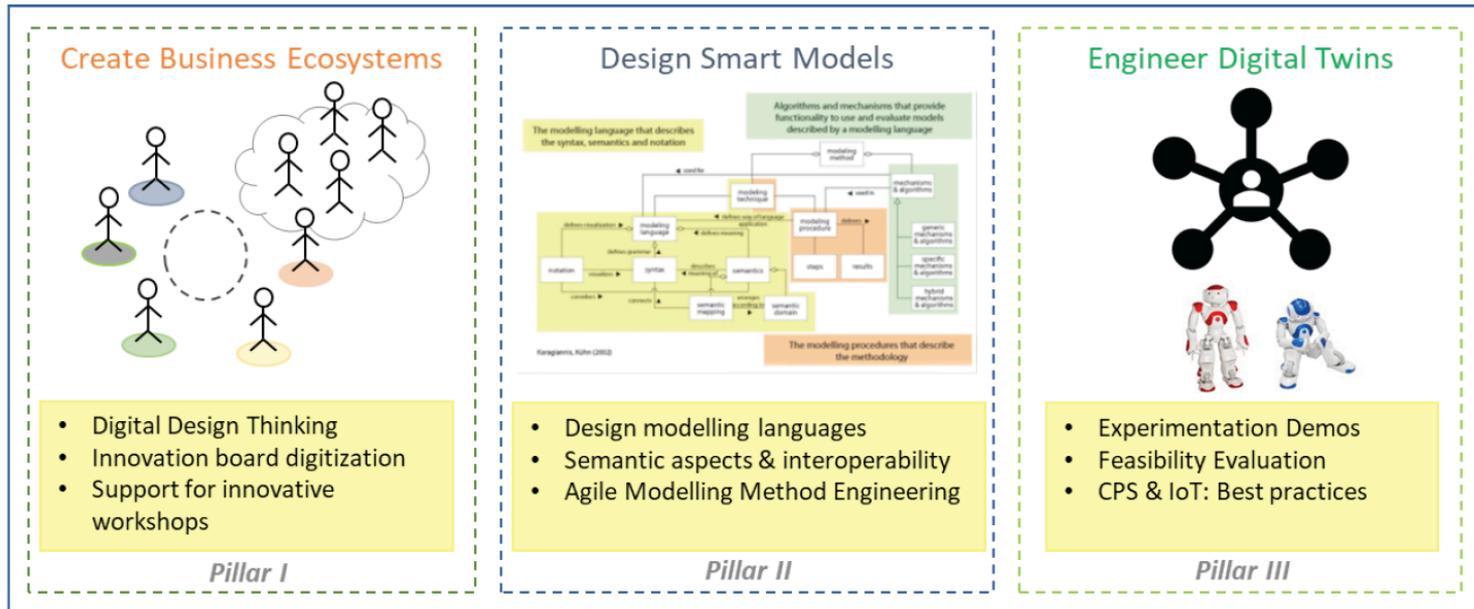13:15 - 13:30   **CLOSING**

Results and Achievements

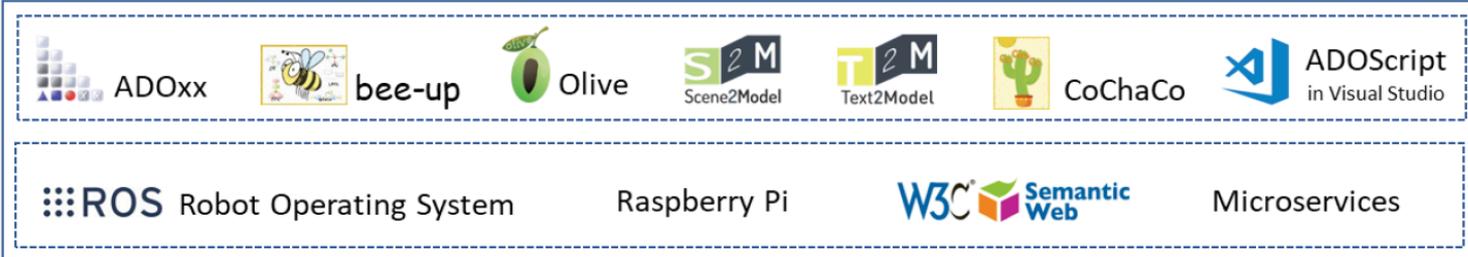# PROGRESS REPORT

A Digital Innovation Environment
powered by OMILAB

The Pillars of the Digital Innovation Environment

Create Business Ecosystems
- Digital Design Thinking
- Innovation board digitization
- Support for innovative workshops

Pillar I

Design Smart Models
- Design modelling languages
- Semantic aspects & interoperability
- Agile Modelling Method Engineering

Pillar II

Engineer Digital Twins
- Experimentation Demos
- Feasibility Evaluation
- CPS & IoT: Best practices

Pillar III

Approach

Business Ecosystems, Design Thinking, Digital Twins, Conceptual Modelling, Artificial Intelligence

Technology

ADOxx   bee-up   Olive   Scene2Model   Text2Model   CoChaCo   ADOScript in Visual Studio

ROS Robot Operating System   Raspberry Pi   W3C Semantic Web   Microservices

Instantiation: OMiLAB Innovation Corner

Academic
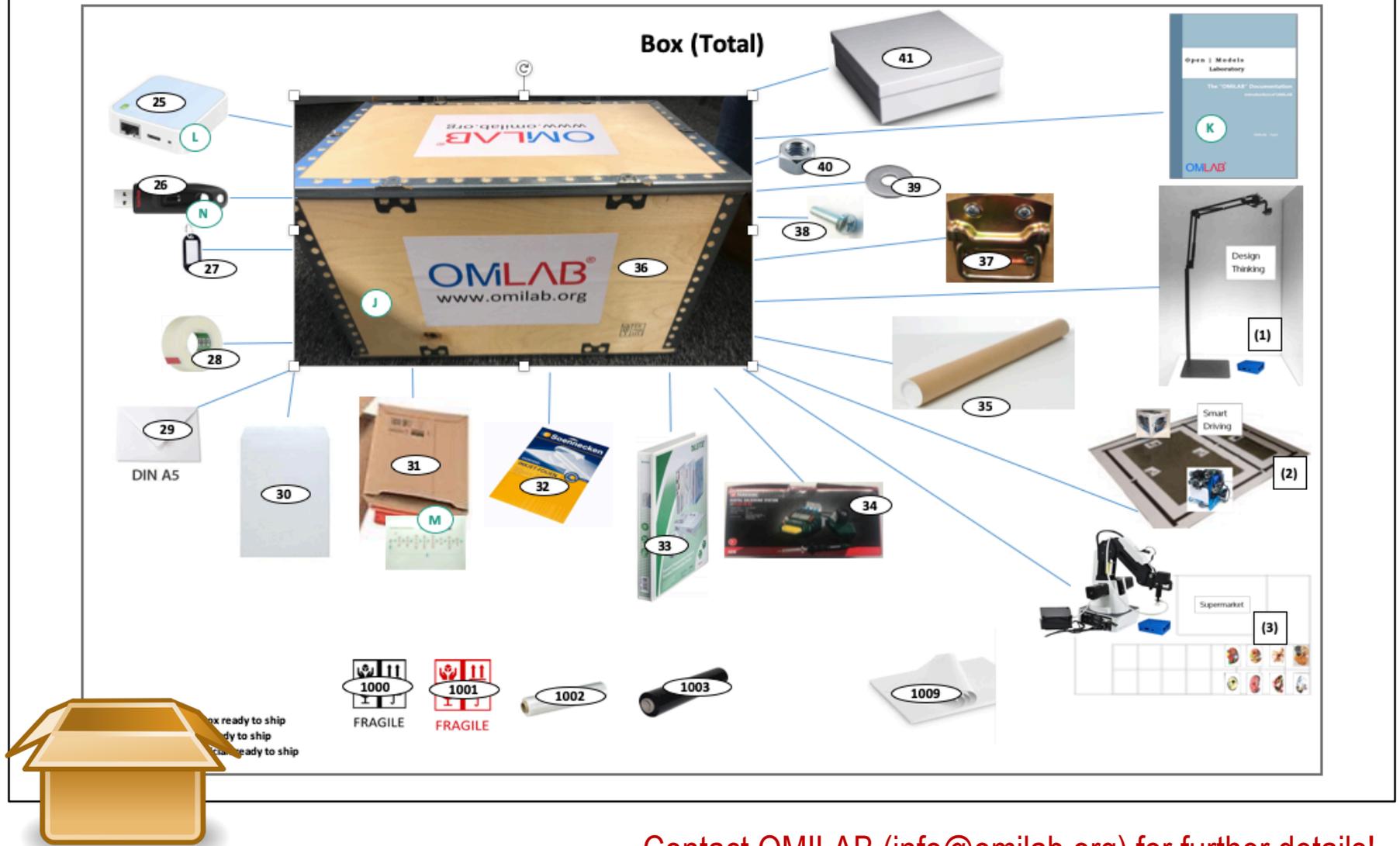
OMiLAB Innovation Corner

Industrial

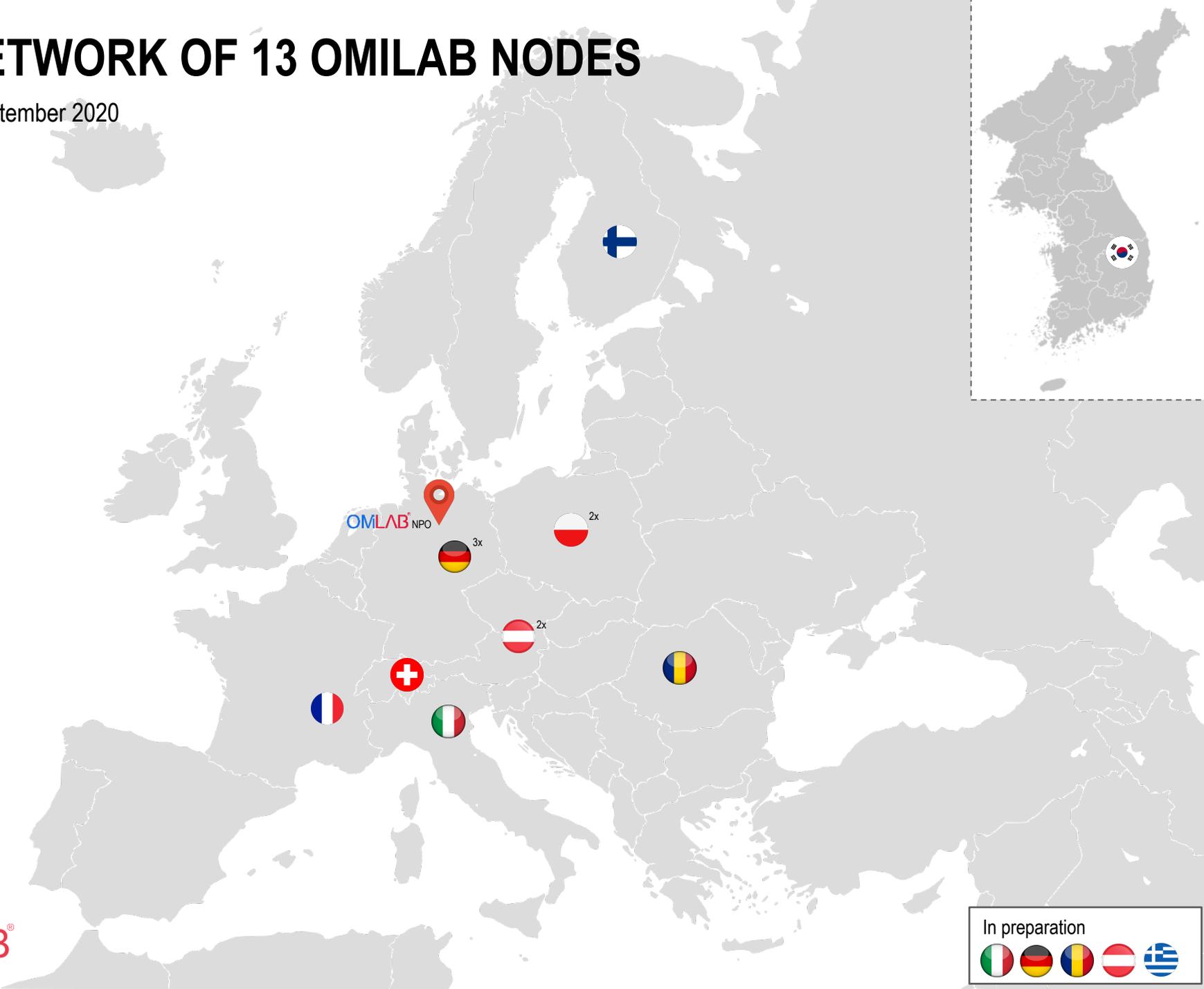**OMiLAB Innovation Corner**

INDUSTRIAL OMILAB ENVIRONMENT

OMiLAB Innovation Corner: Starter Package

Contact OMILAB (info@omilab.org) for further details!

A NETWORK OF 13 OMILAB NODES

As of September 2020

OMILAB NPO

3x

2x

2x

In preparation

OMILAB®
www.omilab.org

JOINT KNOWLEDGE TRANSFER:
EDUCATE DIGITAL ENGINEERS

OMiLAB:
a Smart Innovation Environment for Digital Engineers[*]

Dimitris Karagiannis[1], Robert Andrei Buchmann[2†], Xavier Boucher[3],
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Abstract. This position paper introduces a Smart Innovation Environment for experimentation related to digital transformation projects, for the consolidation of a proposed "Digital Engineer" skill profile (with a business-oriented facet labelled as "Digital Innovator"). In the Internet of Things era, this profile implies the ability to perform both digital design and engineering activities, to semantically bridge multiple layers of abstraction and specificity – from business analysis down to cyber-physical engineering. In the paper's proposal, this integration is enabled by conceptual modelling methods and interoperable modelling tools, tailored to support the creation of Digital Twins for innovative digital business models. The architecture of the proposed environment is guided by a Design Research perspective – i.e., it is a treatment to an education "design problem" regarding the Digital Engineer skill profile in the IoT era. The proposed environment encompasses workspaces and toolkits are currently evaluated in "innovation corners" deployed across the OMiLAB ecosystem.

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[*] *The paper was accepted at PRO-VE 2020 – the 21st IFIP/SOCOLNET Working Conference on Virtual Enterprises.*
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Curious on further achievements & outcomes?