

tourism 4.0

**I FEEL
SLOVENIA**

ENRICHED
TOURISM
EXPERIENCE

Urška Starc-Peceny, Phd
and Tomi Ilijaš
Vienna, September 2019



Arctur

where creativity meets experience. Since 1992.

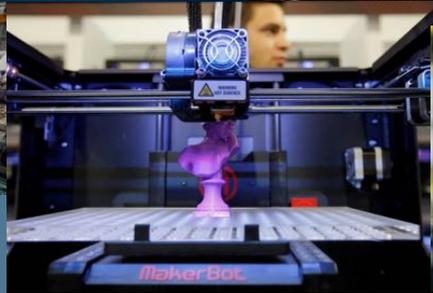
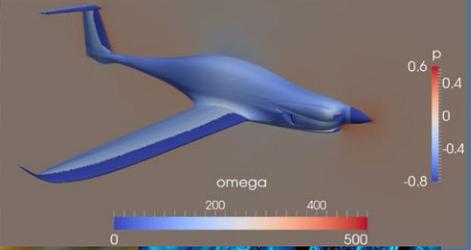
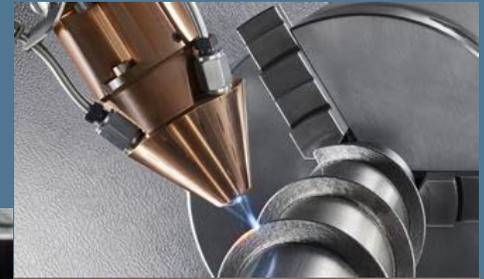
- 25+ years old enterprise with start-up energy and enthusiasm
- Hi-Tech innovation driven culture
- the largest private-owned HPC provider in CEE
- international network of research and business partners
- yearly investments in R&D exceeding 30%
- own incubator; design/art thinking approach



Industry 4.0

Key enabling technologies

High Performance Computing
Internet of Things
Big Data Analytics
Virtual Reality
Blockchain
Simulations
Aditive Manufacturing
Artificial Intelligence
3D Scanning and printing
Augmented Reality



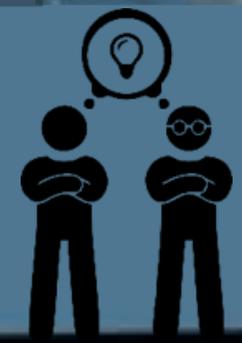
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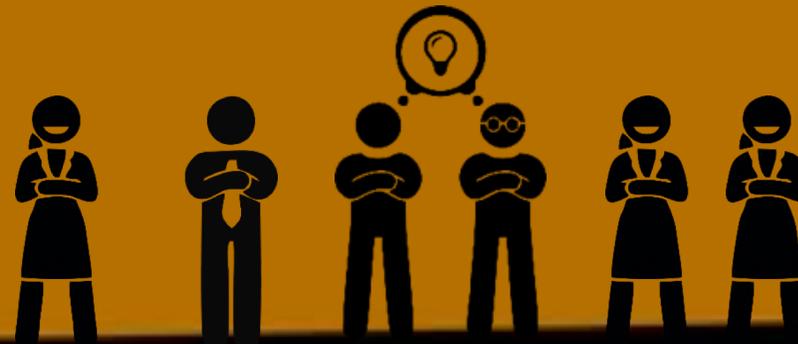
Access for SMEs



Biggest IMPACT

High Performance Computing
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Virtual Reality

Impact
Sustainable development goals
Human centred
Smart Co-creation communities
Collaboration
Sustainability



Tourism 4.0

1,3 billion persons/ year 2017*

UNWTO

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Tourism 4.0

National flagship research project

Creating collaboration ecosystem



Duration: 2018 - 2021

Budget: 2,3 M EUR

TRL: 3-6

Co-financed by



REPUBLIC OF SLOVENIA
MINISTRY OF EDUCATION,
SCIENCE AND SPORT



Consortium:

- ARCTUR d.o.o.
- University of Ljubljana, Faculty of Computer and Information Science
- University of Maribor, Faculty of Tourism
- University of Primorska, Faculty of Tourism Studies - Turistica

Associate partner: Association of Municipalities and Towns of Slovenia

Tourism 4.0

National flagship research project team

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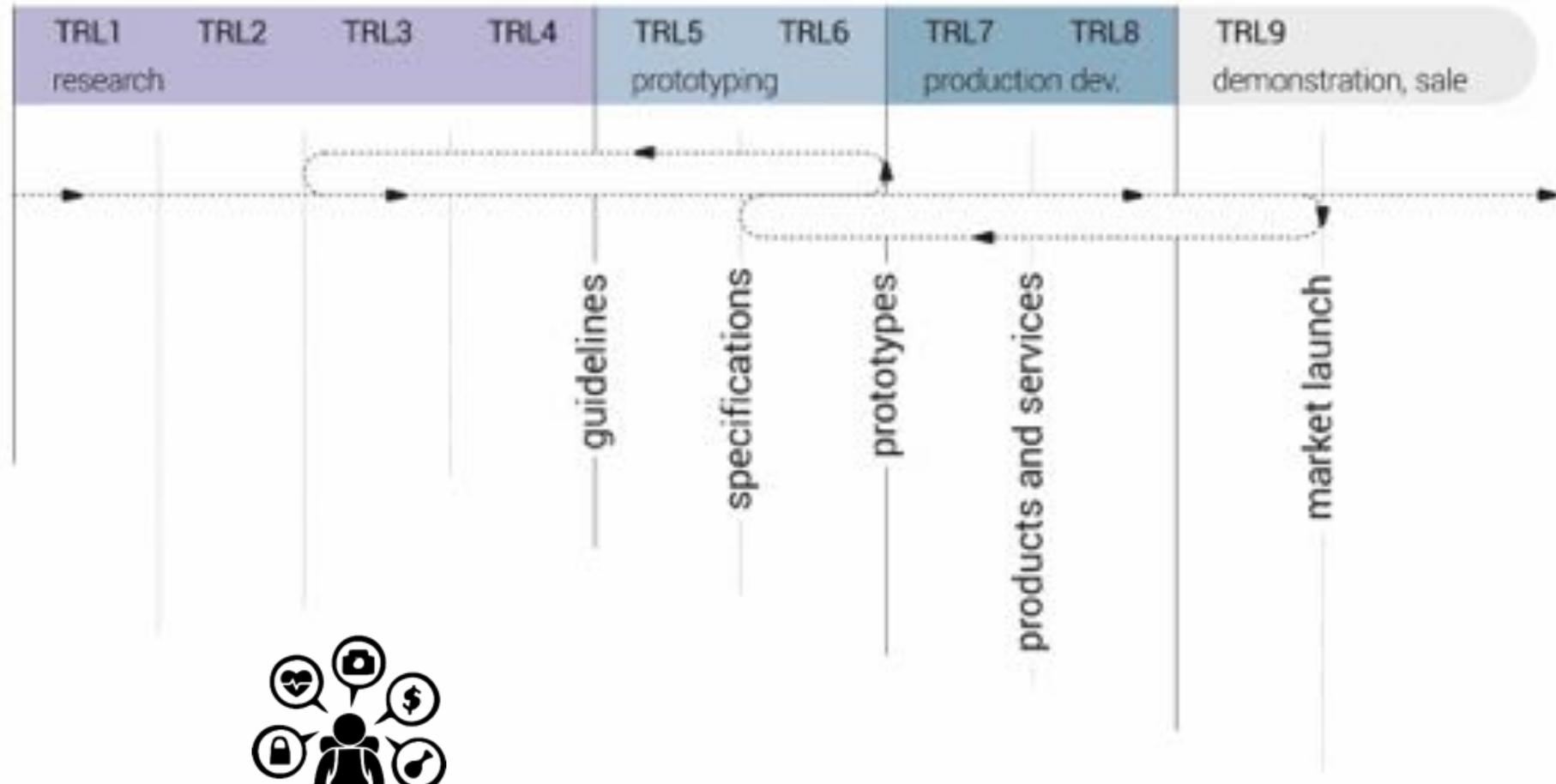
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Mateja Kuntarič

FAKULTETA ZA
turizem

Skupnost občin Slovenije
Association of Municipalities and Towns of Slovenia

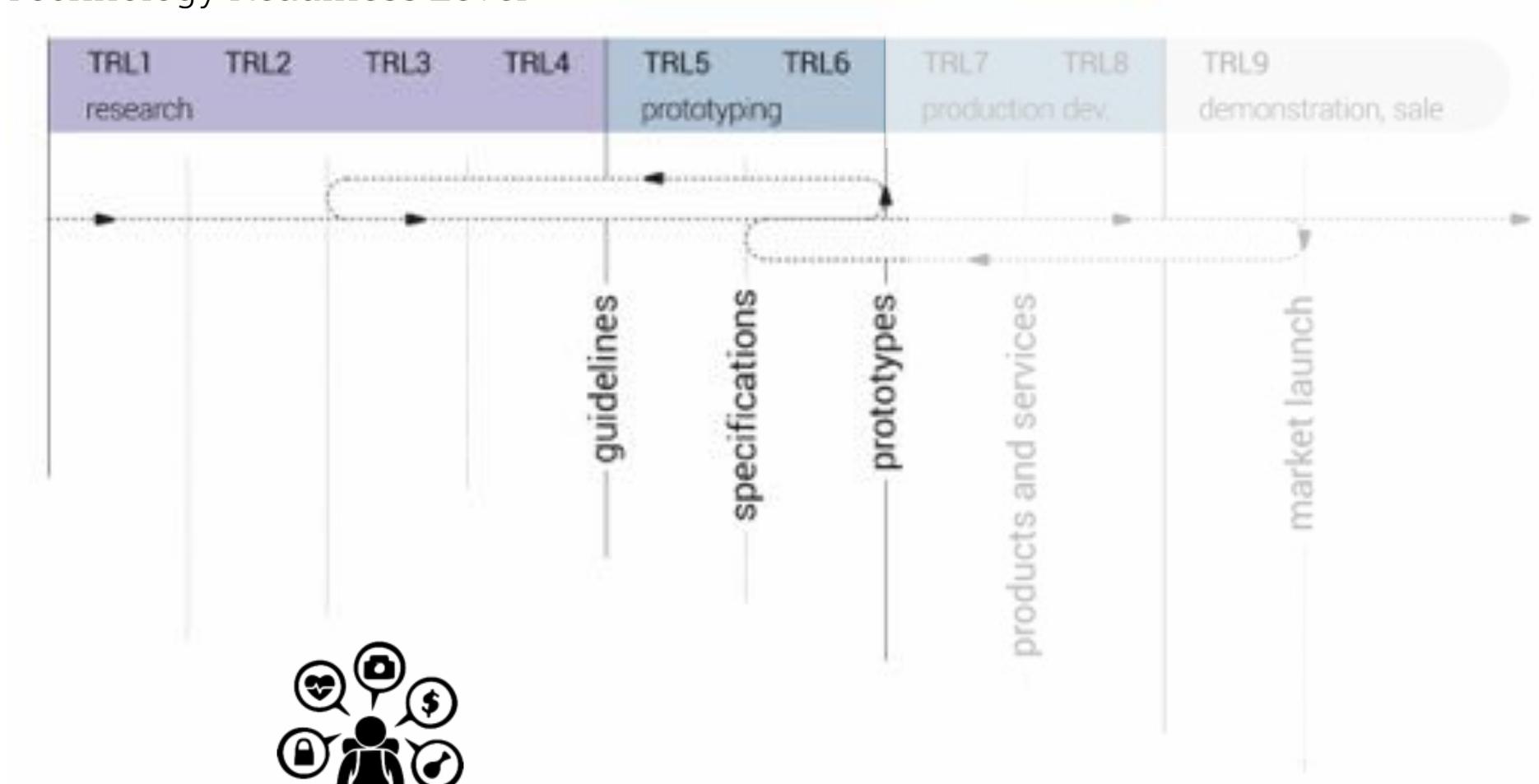
R&D into tourism

TRL = Technology Readiness Level



R&D into tourism

TRL = Technology Readiness Level





“ With innovative co-creation and technology we are **changing the perception of tourism** and business sector around it.





Tourism impact
Tourist flows
Personalised experience

- ▶ TOURISM IMPACT MODEL
- ▶ MANAGING TOURIST FLOWS
- ▶ COLLABORATION IMPACT TOKEN
- ▶ PERSONAL DIGITAL PASSPORT

LIVING LAB

applications
& solutions
from 3rd parties



your playground for testing, validation & demonstration

Assessment of the impact of tourism on different societal aspects (environment, economy, culture, health, education etc.) in order to reach the sustainable development in a specific geographical area.



TIM is a comprehensive tool for modelling and optimisation of the impact of tourism on a local ecosystem through fostering collaboration between different stakeholders.

Tourism impact model

1. Strategic planning for specific micro location:

- Defining Carrying Capacity Parameters (CCP) and their Boundary Values
- Determining relevance and impact of each Indicator on the development of tourism
- Simulation of impact of tourism by manipulating various CCP
- Recommendations and guidelines

2. Active monitoring:

- Digitalization of processes and data driven decision making
- Real time alerts and responses

3. Predictions:

- Based on AI and HPDA
- Combining datasets from different sources (public, private...)
- A vital tool for Tourist Flows Management