EIT HEI Initiative
Innovation Capacity Building for Higher Education

European Institute of Innovation & Technology
Funded by the European Union

# D3.5 Report on the 2nd Capacity Building Training Programs for HEI Staff on Start-up Programs

## June 2024

Michael Mandamadiotis, Maria Gabriella Anagnostopoulos, Agapi Kyriakopoulou, Konstantinos Kissas, Alexandros Nousias, Eirini Ozouni, Christina Skoubridou (Envolve Entrepreneurship)
Spyridon Georgoulas, Harilaos Koumaras, Dimitrios Davazoglou, Eleni Charou, Anno Hein (NCSRD)
Jana Simanova, Ales Kocourek, Jana Vitvarova, Jindrich Cyrus, (TUL)
Kateryna Skubenych, Tetiana Babuka, Inha Besehanych (UNU)
Pamela Lesser, Tiina Mäki-Petäjä, Laura Ulatowski (LU)
Carlos Palau, Alejandro Fornés (UPV)
Nikos Passas, Katerina Giannopoulou (Fogus)

KIC Urban Mobility is supported by the European Institute of Innovation and Technology (EIT), a body of the European Union..

## Document information

| D3.5 - Report on the 2nd Capacity Building Training Programs for HEI Staff on Start-up Programs | |
|---|---|
| Project/Grant Agreement number | *23609* |
| Project title | *Deep Tech Empowerment for HEIs* |
| Project acronym | *Skills2Scale* |
| Project start date | 01/05/2023 |
| Project end date | 31/07/2024 |
| Project duration | 15 months |
| Work Package | *WP3* |
| Deliverable lead | *Envolve Entrepreneurship* |
| Author(s) | Michael Mandamadiotis, Maria Gabriella Anagnostopoulos, Agapi Kyriakopoulou, Konstantinos Kissas, Alexandros Nousias, Eirini Ozouni, Christina Skoubridou, Spyridon Georgoulas, Harilaos Koumaras, Dimitrios Davazoglou, Eleni Charou, Anno Hein, Jana Simanova, Ales Kocourek, Jana Vitvarova, Jindrich Cyrus, Kateryna Skubenych, Tetiana Babuka, Inha Besehanych, Tiina Mäki-Petäjä, Laura Ulatowski, Pamela Lesser, Carlos Palau, Alejandro Fornés, Nikos Passas, Katerina Giannopoulou |
| Type of deliverable* (R, DEM, DEC, other) | *R* |
| Dissemination level** (PU, SEN, CI) | *PU* |
| Date of first submission | *28/06/2024* |
| Revision n° | *1.0* |
| Revision date | *27/06/2024* |

**Please cite this report as:** Mandamadiotis, M., (2024), Report on the 2nd Capacity Building Training Programs for HEI Staff on Start-up Programs, D3.5 of Skills2Scale project.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Institute of Innovation and Technology (EIT). Neither the European Union nor the granting authority can be held responsible for them.

* R=Document, report; DEM=Demonstrator, pilot, prototype; DEC=website, patent fillings, videos, etc.; OTHER=other
** PU=Public (fully open), SEN=Sensitive — limited under the conditions of the Project/Grant Agreement, CI=Classified (RESTREINT-UE/EU-RESTRICTED, CONFIDENTIEL-UE/EU-CONFIDENTIAL, SECRET-UE/EU-SECRET under Decision 2015/444)

# Contents

## Executive Summary

This deliverable is the report on the implementation of the 2nd Training Programs for HEIs Staff. The report will be delivered in June 2024. Its purpose is to demonstrate what happened to the Capacity Building training programme, how it targeted academic and non-academic staff of HEIs, its impact and how it is supposed to help HEIs incorporate mechanisms that support student-led startups.

## About the EIT HEI Initiative

The EIT HEI Initiative: Innovation Capacity Building for Higher Education has been designed with the aim of increasing the innovation and entrepreneurial capacity in higher education by bringing together HEIs in innovation value chains and ecosystems across Europe. A central philosophy of the EIT is the integration of the EIT Knowledge Triangle Model into all its activities. HEIs selected to participate in the HEI Initiative will also leverage and use the Knowledge Triangle Model as an enabler, facilitating the creation of systemic, institutional change. Additionally, HEIs selected to participate in the HEI Initiative will contribute to and leverage Smart Specialisation Strategies, the Regional Innovation Impact Assessment (RIIA) Framework, as well as align to the goals of the EIT Regional Innovation Scheme (EIT RIS). This will strengthen the links between HEIs and their local and regional ecosystems and provide an impetus to leverage additional funding sources beyond the HEI project funding period of the selected HEI projects.
HEIs are encouraged to prepare applications which will support the development and implementation of six Actions in their institutions, cumulatively leading to institutional transformation, an increase in entrepreneurial and innovation capacity, and integration with innovation ecosystems.

# 1. Introduction

In the second phase of the Skills2Scale project we developed a capacity building programme for HEI staff that would include continuous, multidimensional training sessions. It began in April and consisted of 4 digital webinars that were complemented by physical stakeholders' events that included mentoring. The goal of this capacity building programme was to enhance the academic, non-academic and administrative staff of HEIs in extroversion, creating partnerships, fostering innovation, not only in Deep Technologies, but also in other topics. The technical knowledge that was included in the respective webinar was focusing on AI and Beyond 5G, however the rest webinars focused on the importance of funding, creating partnerships, innovation, and being extroverted as a university. Overall, as described in more details below, this training programme has been an iterative process for HEIs' staff to explore new fields, enhance their capacity in innovation and get inspired by the success of other HEIs.

# 2. Target groups and KPIs

The target group of our capacity building programme was established by the initial Call for Proposals: Academic and non-Academic staff of HEIs. In the first category, we wanted to have as many more professors, lecturers, deans, PHD students, and people that are involved in the teaching process as possible. Regarding the second category and the non-academic staff, we targeted researchers, administrative staff, project managers, career services staff, technology transfer officers and other people who complement the academic operations, but not directly.
The KPIs that we had to achieve in this second phase of the S2S project were higher than the first phase. In the first phase we had to train 50 academic staff members and mentor 15. The same numbers are for the non-academic staff members. In the second phase, these numbers increased to 80 and 25, respectively.

# 3. Training Programme

The training programme for the academic and non-academic staff of HEIs was a continuous, multidimensional programme that consisted of 4 informative training sessions that were complemented by mentoring. These training sessions were:

- 1st Webinar - Cognitive AI Applicability in 6G Systems for trustworthiness provision. In this webinar, the goal was to discover how AI is shaping the future of 6G Systems, ensuring reliability and trustworthiness and gain valuable insights into the intersection of artificial intelligence and future communication networks.
- 2nd Webinar - Fostering Institutional Change in HEIs. In this webinar we showcased the progress of the involved HEIs regarding innovation, extroversion and building partnerships in the Deep Technologies industry.
- 3rd Webinar - Funding Opportunities for HEIs. In this webinar, we talked about the importance of funding for HEIs. We helped the audience to navigate in the complex environment of EU funds, Horizon Europe calls, Deep Tech Talent Initiative calls, and we provided tips and advice for successful proposal writing.
- 4th Webinar - Beyond Speed: Harnessing the full potential of 5G. In this final webinar, we focused on the main topic of this project, Beyond 5G technologies and connectivity. We explored the progress of the involved HEIs in this specific topic, in an effort to exchange knowledge and best practices, as well as we heard startuppers in this field and other industry experts talking about the rapid evolution of the field.

These webinars were complemented by mentoring sessions for the beneficiaries. We tried to combine some physical, stakeholders' events that were organised in each of the involved HEIs with mentoring. The initial aim of these events has been to disseminate the findings and results of this project, especially after each Peer Learning Event. However, combining them with some mentoring on these topics, explaining more the best practices in person with the people involved in the project, has been a great addition to the project, that maximises its impact.

In the application form of each webinar, the applicant was required to say whether they have participated in a previous webinar. This way we were able to distinguish who were "one-time" participants and who have followed on the entire programme and are, indeed, trained. Only these participants will be reported in the Exaptive form and the Mastering KPI excel file.

## 3.1. 1st Webinar - Cognitive AI Applicability in 6G Systems for trustworthiness provision

The first training webinar was on cognitive AI in 6G and Beyond 5G systems. It took place on the 18th of April and was facilitated by NCSRD, partner of the Skills2Scale project, where we delved into the transformative potential of cognitive AI in enhancing the trustworthiness of next-generation 6G networks. This session provided a comprehensive overview of 6G systems, highlighting their key features and use cases, and addressed the critical importance of trustworthiness encompassing security, privacy, reliability, and resilience. We, also, explored how

cognitive AI can address these challenges through advanced threat detection, privacy protection, and adaptive network management. Attendees gained a deeper understanding of specific AI technologies and techniques, such as machine learning, deep learning, and federated learning, that are pivotal in this context. Real-world case studies and industry implementations illustrated the practical applications and benefits. Additionally, the webinar covered ethical and regulatory considerations essential for deploying AI in 6G, and discussed future trends and research opportunities in this dynamic field. It was an opportunity for the attendees to engage with leading experts, participate in an interactive Q&A session, and discover how cognitive AI is set to revolutionise 6G networks to ensure a trustworthy and reliable digital future.

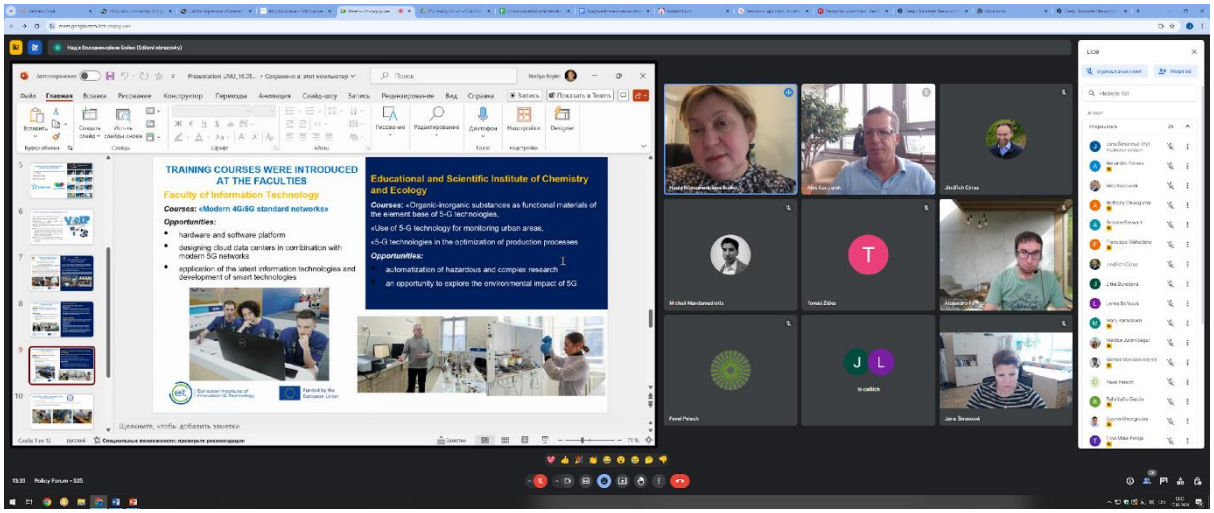
Dr Harilaos Koumaras, a research associate professor at the Institute of Informatics and Telecommunications of NCSR "Demokritos" and head of the FutuRe cOmmunication NeTworks (FRONT) Research Group, was the main speaker of the event. Spyridon Georgoulas, research associate in the FRONT Research Group, fellowed Harilaos in this effort. 107 people attended this webinar, of which 29 were declared as academic staff and 23 were non academic staff. 10 people applied as "other" and 45 as students. Even though the students cannot be reported for the KPIs, we were very satisfied to see that students were also interested and engaged in our activities.


## 3.2. 2nd Webinar - Fostering Institutional Change in HEIs

The second webinar took place on May 17th. It was facilitated by the Technical University of Liberec. All partners actively joined the event. The goal of this event was very specific. Through the experience of the 4 HEI partners of the Skills2Scale project, academic and non-academic staff from other HEIs to be inspired and learn how to tackle similar challenges. Each university made a presentation, answering to the following questions:

1. Can you describe a specific best practice that has been particularly successful in your area of work?
2. What challenges did you face while implementing this practice and how did you overcome them?
3. What metrics or indicators do you use to evaluate the success of this practice?
4. Could you share a case study or an example where this practice significantly impacted your outcomes?
5. What resources (time, budget, tools) were required to implement this best practice?
6. How did you engage and motivate your team or stakeholders to adopt this practice?
7. Have you had to adapt or modify this practice over time? If so, how?
8. What lessons have you learned through the process of implementing this practice that you could share?
9. Are there any tools, books, or resources that you would recommend to others looking to implement a similar practice?
10. What are your future plans for further developing or enhancing this practice?

By doing so, the participants got a clear image of how a HEI can make institutional changes towards innovation and extroversion.




This webinar had 27 participants, 14 members of academic staff and 13 members of non-academic staff.

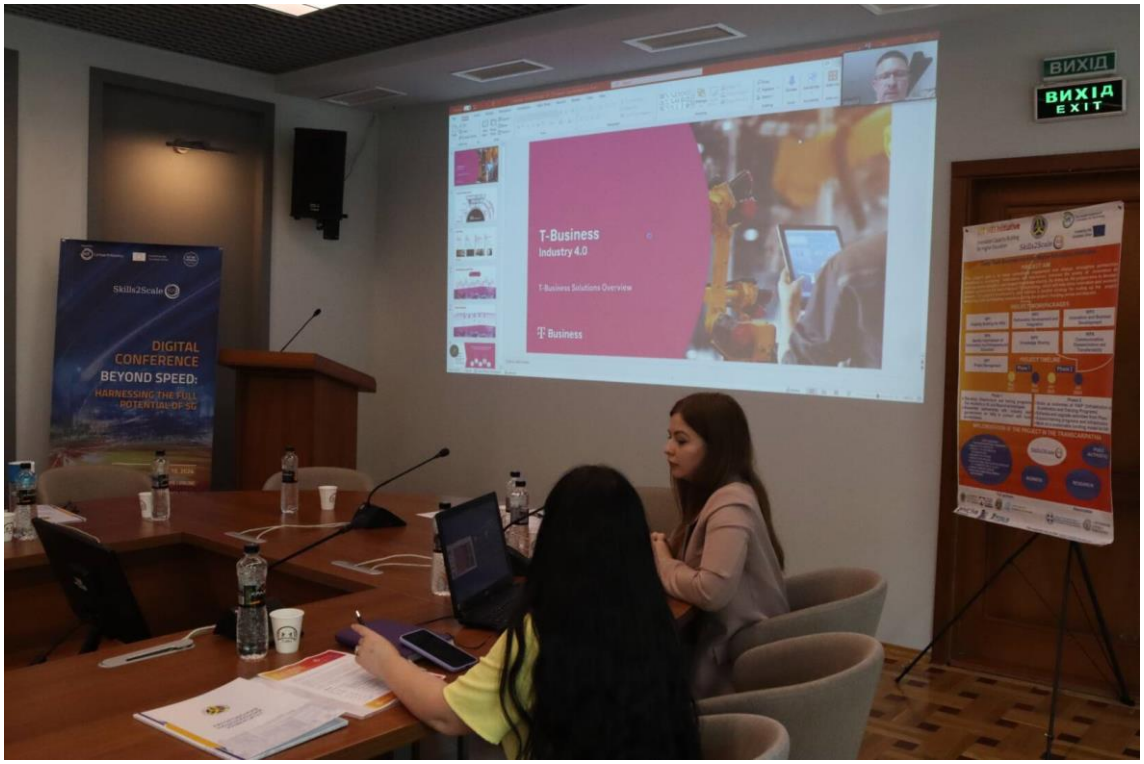
## 3.3. 3rd Webinar - Funding Opportunities for HEIs

The 3rd webinar of our training programme was about funding opportunities for HEIs. This webinar was facilitated by Envolve Entrepreneurship. The goal was to help academic and non-academic staff of HEIs to navigate in the complex ecosystem of EU programmes. EU projects are a great tool for a university and research centre to fund their research activities. Christina Skoubridou, Project Manager and Head of the EU Department of Envolve Entrepreneurship, along with Natalie Cernecka, Manager of the Deep Tech Talent Initiative, delved into the Horizon Europe Programme, as well as the Deep Tech Talent Initiative and explained the programmes' objectives, goals and tips on how to submit a proposal that fulfils the programmes' requirements.

89 people attended this webinar, 43 of which were academic staff members, 26 were non-academic staff members, 7 declared as others and 10 applied as students.

## 3.4. 4th Webinar - Digital Conference - Beyond Speed: Harnessing the full potential of 5G

The fourth and last training webinar of the project was a hybrid Digital Conference *Beyond Speed: Harnessing the full potential of 5G*. The goal of this webinar was to project best practices related to 5G and connectivity from the involved countries. All the project partners participated in this event, presenting to the audience their experience with Beyond 5G technologies and how they exploit, cultivate or use in their activities. Each partner brought together external stakeholders of the regional ecosystems to give another perspective in the webinar and provide an overall, multidimensional illustration of each ecosystem. For example, TUL invited a representative of T-Mobile, one of the biggest telecommunications companies in Central Europe. This was a hybrid event with people watching with physical attendance, as well as digitally, through zoom. This also attracted students to attend. Even though students are not accountable for the KPI, UNU wanted to bring their students closer to the topic of the project, as they measure the impact it can have. Therefore, 37 students joined the event, a number much bigger than other webinars. In total, this hybrid format was proven to be successful, since 109 people joined the event, either physically or virtually, of which 41 were academic staff, 20 were non-academic staff, 11 were declared as *other* and 37 were students.
As this was the last training session of the capacity building programme, the participants received certificates of participating in the event and completion of the programme.


ВИХІД
ВИХІД
EXIT
T-Business
Industry 4.0
T-Business Solutions Overview
T Business
DIGITAL
CONFERENCE
BEYOND SPEED:
HARNESSING THE FULL
POTENTIAL OF 5G


Below is the full agenda of the event:

| Time | Topic |
|---|---|
| 9:15 – 9:45 | **Check-in, welcome**<br>Registration of the Conference participants |
| 9:45 – 9:55 | Welcome speech |
| 9:55 - 10:10 | **B5G Innovation: Technological enablers for designing novel 5G-based services & applications**<br>Alejandro Fornés (Universitat Politècnica de València) |
| 10:10 – 10:25 | **5G and Use Cases**<br>Lukas Abazid (T-Mobile Czech republic, a.s.) |
| 10:25 – 10:40 | **The use of digitizing in the Finnish circular economy**<br>Rauno Rusko (University of Lapland) |
| 10:40 – 10:55 | **5G & Connected Robotics Platform**<br>Michal Kapinus (Brno University of Technology) |
| 10:55 – 11:10 | **5G and beyond: Technology advancements and business opportunities**<br>Katerina Giannopoulou (FOGUS) |

| | |
|---|---|
| 11:10 – 11:25 | **AI Applicability in B5G: A UAV Use Case**<br>Spyridon Georgoulas, George Makropoulos (NCSRD) |
| 11:25 – 11:40 | **Connection between 5G and Science**<br>Tetiana Babuka, Artem Pohodin, Ivan Babuka |
| 11:40 – 11:55 | **Envolve Entrepreneurship: Enhancing Deep Technologies**<br>Michael Mandamadiotis, Christina Skoubridou, Eirini Ozouni (Envolve Entrepreneurship) |
| 11:55 – 12:10 | **Study of nonlinear phenomena in core optical network by simulation software**<br>Oleksandr Gomonnai, Tetiana Babuka, Andriy Popov, Ivan Babuka, Vadym Popovuch (Uzhhorod National University) |
| 12:10 – 13:10 | **Lunch** |
| 13:10 – 13:25 | **The impact of 5G technology on economic processes**<br>Hanna Kostovyat, Viacheslav Rogov (Uzhhorod National University, Admiral Makarov National University of Shipbuilding) |
| 13:25 – 13:40 | **Advancing Scientific Frontiers: The Impact of 5G on Open Science Principles**<br>Kateryna Skubenych, Inha Besehanych (Uzhhorod National University) |
| 13:40 – 13:55 | **AI in cybersecurity: new aspects and ethical dilemmas**<br>Yevheniia Haiovych (Uzhhorod National University) |
| 13:55 – 14:10 | **Simulation of EDFA Amplifiers' Operation in Core Optical Networks for 5G**<br>Oleksandr Gomonnai, Andriy Popov (Uzhhorod National University) |
| 14:10 - 14:25 | **5G technologies and Telemedicine in Ukraine: legislation and actual tools**<br>Nadiya Boyko (Uzhhorod National University) |
| 14:25 - 14:40 | **Introduction to digital dentistry start-up projects**<br>Yevhen Kostenko (Uzhhorod National University) |
| 14:40 - 14:55 | **Start-up projects in dentistry based on modern dental technologies**<br>Myroslav Goncharuk-Khomyn (Uzhhorod National University) |

It can be concluded that this final session was very rich in content and information and was the perfect way to close this impactful training programme.

# 4. Local Stakeholders' events

The local stakeholders' events were crucial for the effectiveness of the knowledge exchange that was a priority of this project. After each Peer Learning Event, all the involved universities organised some gatherings to disseminate what they had seen and learned. The attendees of these events were the university staff, academic staff, non-academic staff and administrative staff. These physical events were used to "mentor" the trained staff on how to integrate these best practices in their respective ecosystem. Each partner had to organise 1 local event after each PLE. So, in phase 2, since we had 2 PLEs, in Liberec and in Thessaloniki, the goal was 8 local events. We exceeded this goal, since UNU organised 4 local events. The reason for this was that they made 2 follow-up sessions. So, in total we had 10 local events. The total number of participants were more than 250. However, after correlation of the participants that were present in all the local events, the number of academic staff mentored is 32 and the non-academic staff is 29. For the KPI, we counted only the ones that joined the training programme, as well as both events that complemented the PLEs.

# 5. Conclusion

The Capacity Building for HEIs staff on Startup Programmes of the second phase of the SKills2Scale project has been very successful. Its structure has been more aimful, the content has been more valuable and holistic, as well as the physical mentorings were very effective. The goal of this programme was to enhance the skills of the university staff on how to provide support to students who want to innovate and begin their own startups. The methodology that we used was a multidimensional process and this is why it was successful. The training webinars, which were the main source of "hard" knowledge were complemented by the PLEs, that initiated the best practices' exchange, which were then complemented by the local events - mentoring sessions, that helped the recipients integrate this knowledge into their own HEIs. The impact of this capacity building programme exceeded our expectations and fulfilled the KPIs that were set, training 125 academic staff (goal was 80) and 82 non-academic staff (goal was 80), while effectively mentored 32 academic staff and 29 members of non-academic staff.

European Institute of Innovation & Technology

Funded by the European Union

hei@eitrawmaterials.eu eit-hei.eu @EIT_HEI @EIT HEI Initiative