

01 innoLabs

ASEF HIGHER EDUCATION

UNIVERSITIES' ROLE IN DATA SCIENCE AND ARTIFICIAL INTELLIGENCE (AI) INNOVATION ECOSYSTEMS

December 2020

OVERVIEW

BACKGROUND ON THE #ASEFInnoLab SERIES

In line with the Asia-Europe Foundation's mission, we create opportunities for higher education managers from Asia and Europe to meet, learn from each other, and build capacity to address common global challenges together. We believe managers of higher education are in a unique position to transform and modernise their higher education institutions by introducing tech savvy, inclusive and sustainable policies. Therefore, we provide platforms where they can exchange good practices and co-create new ideas to move away from business as usual and develop something extraordinary.

What are the key objectives of the series?
The ASEF Innovation Laboratory series aims to



STIMULATE INNOVATIVE IDEAS

Develop knowledge and skills of higher education managers to come up with innovate and actionable ideas on how to change innovation strategies and practices in their institutions.



BUILD PEER SUPPORT NETWORKS

Create an Asia-Europe platform of practitioners to exchange good practices and promote collaboration in innovation for sustainable development in Asia and Europe.



CONTRIBUTE TO POLICY DIALOGUE

Contribute with content and ideas to the ASEM Education Process, the Bologna Process, and to actions advancing the SDGs.

TOPIC OF THE UPCOMING #ASEFInnoLab

What will be discussed?

Strategies and tools for university managers to enhance the role of their institutions in innovation ecosystems and initiate Asia-Europe collaboration in innovation.

Tertiary education institutions are at the intersection of education, research and innovation. Their performance is crucial in contributing to well-performing economies and sustainable societies. With the impact of demographic changes, socio-economic developments and

KEY FACTS

WHEN

December 2020

WHERE

Online, in partnership with Fudan University, Shanghai, People's Republic of China

PARTICIPANTS

25 higher education managers selected from 51 ASEM countries selected by an Open Call for applications.

METHODOLOGY

ASEFInnoLab is an experiential design laboratory, where interactive sessions ensure peer learning and actionable outcomes.

LEARNING OUTCOMES

- ◆ Enhanced understanding of Data and AI Innovation ecosystems
- ◆ Skills and knowledge to advance innovation ecosystems at home
- ◆ Action plan to get ahead of change
- ◆ Professional peer support network in Asia and Europe

technological disruptions of the 4th Industrial Revolution on the labour market, tertiary education providers have to adapt quickly to new skills and technology transfer demands.¹

The world is increasingly reliant on Artificial Intelligence (AI) across all societal sectors, harnessing its potential in industry, economics, healthcare, information security, communication and education, amongst others. Growing investments in research and development of AI technologies confirm this trend: over the past 3 years, EU funding for AI research has increased with 70% compared to the previous period.² However, the digital- and AI-based portion of Europe's ICT sector accounts for around 1.7% of GDP only, a rather low share compared to leading tech nations like China (2.2 %) or the United States (3.3 %).³ Two-thirds of global investment in artificial intelligence is pouring in to China, which helped the AI industry grow by 67% in 2018 alone.⁴

Higher education institutions (HEIs) are instrumental in the development of national and regional innovation ecosystems. They are in the perfect position to orchestrate the dialogue among stakeholders, engaging students, company managers & policy makers likewise, and co-create knowledge and driving strategic development.⁵ HEIs are the seedbed for AI ecosystems. In France and the UK, many AI start-ups originated at universities. In India and South Korea, large companies sponsor AI research projects and fellowships at universities and research institutions. In China, government spending on university scientific research has grown by double digits annually for the past decade, spurring AI progress.⁶

ASEFInnoLabs will explore university strategies in their national and regional ecosystems, how they create multi-stakeholder partnerships with businesses, policy makers and international partners to boost AI innovation ecosystems.

ASEFInnoLabs will engage participants in **further enhancing the innovation strategies and practices at their universities** in the following areas:

- 1 | Teaching and Entrepreneurship for AI Innovation Ecosystems
- 2 | Research and Technology Transfer in AI Innovation Ecosystems
- 3 | National, Regional and International Collaboration for Ecosystems

TARGET GROUP

Who should apply? This Innovation Laboratory is designed for higher education leaders and managers, who spearhead innovation initiatives in their institutions.

We envision about 25 higher education managers from the pool of 51 ASEM countries to join the ASEF Innovation Laboratory, who meet the following criteria:

- ◆ Leaders, managers and administrators of tertiary higher education institutions in charge of innovation and research; *for example: Vice-Rectors for Research and Innovation, Heads of Industry Relations, Heads of International Science and Research Cooperation, Heads of Incubators, etc*
- ◆ Senior managers of non-governmental organisations and governmental organisations working with HEIs on digital initiatives
- ◆ Policy makers (applications will be considered in order to ensure diversity of perspectives at the labs)
- ◆ Citizens of any of the 51 ASEM partner countries
- ◆ Excellent command of English (written and verbal)

Participants will be selected by an Open Call for Application. The screening process will ensure a non-discriminative approach assuring a balanced geographic representation, gender balance and fair access to the opportunity for all. When assessing the applications, ASEF will look for applicants who meet the eligibility criteria, express strong motivation, and are committed to transform the knowledge and skills gained during the laboratory into action.

Participation does not require technical or coding abilities. The laboratory will focus on the managerial and organizational aspects of data science and AI innovation ecosystems.

**PROGRAMME
STRUCTURE****What elements does ASEFInnoLab consists of?**

It is a multi-phase engagement virtual design thinking laboratory.

Phase 1 | Learning and Networking

The lab will be organised entirely virtual, with the use of online collaboration tools and platforms. It is an 8-week engagement with 0,5-day long sessions each week. This phase is dedicated to expand knowledge, exchange good practices, and build networks among participants.

The phase will include:

- ◆ **Webinars** featuring leading universities and companies in the field of data science and innovation ecosystems
- ◆ **Readings** and online resources to enable participants to develop knowledge in the area
- ◆ **Facilitated interactive training sessions** led by design-thinking experts on the following topics
 - Topic 1: Teaching and Entrepreneurship for AI Innovation Ecosystems
 - Topic 2: Research and Technology Transfer in AI Innovation Ecosystems
 - Topic 3: National, Regional and International Collaboration in AI Ecosystems
- ◆ **Networking** virtually via different group assignments during the training

Participants will be required to identify one of their local challenges to work on during this phase of the lab. The lab will assist participants to come up with a concrete action plan by the end of this phase to address the chosen challenge. Participants will be required to present their cases (including the action plan) in form of a case study, which will be shared with ASEM Education policy makers.

Phase 2 | Building a Community of Practice

After the 8-week long virtual learning and networking phase has been completed, there will be opportunities for participants to continue to engage with each other and form an Asia-Europe community of innovators passionate about solving innovation challenges. The case studies, action plans and outputs of the lab will be published on ASEF's & Fudan University's website, open for the next generation of "ASEFInnoLabers" to explore and reach out to project owners, too.

To facilitate the implementation of joint projects between participants and their organisations, 4 participants will receive seed funding to kick off joint projects with Fudan University. The financial support will enable partner institution visits and coordination meetings to set the project forth and secure further funding from other donors.

**LEARNING
OUTCOMES****What do participants get out of the ASEF Innovation Laboratory?**

In short: knowledge, skills and networks to kick-start their own project at home.

Participants will complete the training with a key combination of knowledge, practical solutions and new networks which can advance their work in driving innovation. Participants will walk away with:

- ◆ **Enhanced understanding of Data and AI innovation ecosystem**
The lab will help participants to understand the role of higher education in leveraging data science and AI in higher education; expand knowledge on different strategies related to the traditional missions of universities (education, research, partnership) and learn about good practices in ASEM countries.
- ◆ **Action plans to get ahead of change**
Participants will develop their own action plans to enhance existing strategies and practices, which they can implement in their home institution to unlock the full

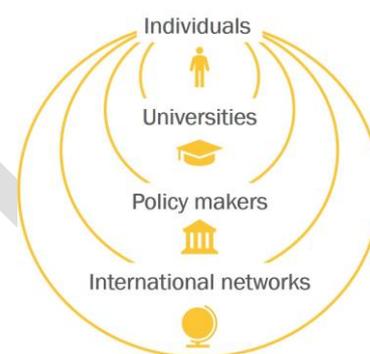
potential of their organisations and to contribute to national and regional ecosystems.

- ◆ **Personal network in Asia and Europe**
The lab will provide diverse opportunities for interaction and cooperation for 25 participants from different countries across Asia and Europe. Therefore, we fully expect new bi-lateral and multi-lateral partnerships to emerge. Furthermore, ASEF will provide seed funding for 4 selected participants to kick-start their collaboration with the host, Fudan University.
- ◆ **Opportunity to inform and influence policy makers**
Participants' ideas and recommendations will inform the ASEM Education Process and provide evidence-based input into their policy dialogues.

IMPACT

In the long term, the impact of ASEFInnoLab is expected to realise in four levels.

- ◆ Individual level: Inspire **ASEM higher education managers** to take action and improve institutional strategies and practices in innovation
- ◆ University level: Strengthen **ASEM universities'** role in innovation ecosystems
- ◆ Policy level: Inform the **ASEM education policy makers** with case studies on ASEM universities' roles and strategies in innovation ecosystems
- ◆ International level: Create an **Asia-Europe peer network** to support exchange on innovation and find opportunities for collaboration



ECOSYSTEM & SYNERGIES

The outputs of the 1st ASEF Innovation Laboratory will contribute to the policy discussions at the following forums:

- ASEM Education Ministers' Meeting (and other ASEM Ministerial Meetings)
- ASEM Meeting of Senior Officials in Education (SOM) and the Digitalisation Taskforce
- European Higher Education Area Ministerial Meetings and the Bologna Policy Forum Meetings

ORGANISED BY



Asia-Europe Foundation (ASEF)

ASEF is an intergovernmental not-for-profit organisation located in Singapore. Founded in 1997, it is the only institution of the Asia-Europe Meeting (ASEM). ASEF promotes understanding, strengthens relationships and facilitates cooperation among the people, institutions and organisations of Asia and Europe. ASEF enhances dialogue, enables exchanges and encourages collaboration across the thematic areas of culture, education, governance, sustainable development, economy, public health and media.

For more information, please visit the www.ASEF.org.

IN PARTNERSHIP WITH



Ministry of Education, The People's Republic of China

The Ministry of Education (MoE) of the People's Republic of China is responsible for the overall planning, coordination and management of education at various levels, and supervises the implementation of education policies, laws and regulations.

For more information, please visit <http://en.moe.gov.cn/>



Fudan University

Fudan University is a major public research university in Shanghai, China. It is widely considered as one of the most prestigious and selective universities in China.

[Description to be elaborated]

For more information, please visit <https://www.fudan.edu.cn/en/>

ENDNOTES

¹ World Economic Forum. The Future of Jobs, Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution. Accessed on 17/04/2018. http://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf

² Excellence and Trust in Artificial Intelligence. ISBN 978-92-76-15957-5 February 2020. European Union. Accessed on 26/02/2020: https://ec.europa.eu/commission/presscorner/detail/en/fs_20_282

³ Tackling Europe's Gap in Digital and AI. McKinsey Global Institute. February 2019. Accessed on 26/02/2020: <https://www.mckinsey.com/~media/mckinsey/featured%20insights/artificial%20intelligence/tackling%20europes%20gap%20in%20digital%20and%20ai/mgi-tackling-europes-gap-in-digital-and-ai-feb-2019-vf.ashx>

⁴ Meet China's 5 biggest AI companies. World Economic Forum. 20 September 2018. Accessed on 26/02/2020: <https://www.weforum.org/agenda/2018/09/the-top-5-chinese-ai-companies/>

⁵ Dr Sybille Reichert. The Role of Universities in Regional Innovation Ecosystems. EUA 2019. Accessed on 22/04/2020. https://www.eua.eu/downloads/publications/eua%20innovation%20ecosystem%20report_final_digital.pdf

⁶ Embracing Artificial Intelligence: Enabling Strong and Inclusive AI Driven Economic Growth. Accenture. 2017. Accessed on 22/04/2020. https://www.accenture.com/_acnmedia/accenture/next-gen-5/event-g20-yea-summit/pdfs/accelture-intelligent-economy.pdf