Data driven innovation and ecosystems

As AI-based innovations depend on having access not just to the underlying invention (e.g., algorithm), but also to large and granular datasets from activities and behaviors of interest, AI puts data into innovation equation, next to invention and exploitation. Thus, instead of Innovation = Invention + Exploitation (Roberts, 1988), in data-driven context innovation should be defined as: Innovation = Invention + Data + Exploitation.

Starting from this change, we are interested in understanding how innovation and technology management, are changing with the increasing implementation of data-driven practices, and how companies should staff, organize, and strategize to profit from that change. Many research perspectives and questions are open. For example:

- What is the role of data in AI-based innovation? And how does it change innovation management and understanding of innovation?
- Who owns the data and how the need for data access / ownership influences patterns of collaboration? What is the role of open innovation and ecosystems in that change? What are the relevant ecosystems for designing data-driven innovation?
- Which organizational forms do support value creation from data in a better way? How do organizations transform with data-informed decision-making?
- What are the different strategies to create value from data? And how do different organizations have to approach them to leverage data efficiently?

For full overview of relevant questions please see, for example, the latest call for papers in Technovation: <u>www.journals.elsevier.com/technovation/call-for-papers/beyond-the-data-fads-consequences-of-big-data-to-contemporar</u>

Project leader: Associate Professor Zeljko Tekic, in collaboration with **Prof. Dr. Johann Füller** (University of Innsbruck and HYVE AG). Opportunities for research visits to Munich / Innsbruck (Professor Johann Füller).

Candidates are expected to have interest in innovation management and strong background in business and management. Ideal candidate should have strong background in quantitative or qualitative research methods. Knowledge in programming, ideally, in Python and/or R is an advantage.

Organization and Set-Up:

Expected duration: 3 years including coursework. Expected outcome: at least 3 publications, of which at least 2 in Q1/Q2 journals, and at least one in the leading role, all covering topic of the PhD research

Place of work is Graduate School of Business, HSE University, Moscow.

In all cases students will work as a part of a team, within specific project.

Those accepted into HSE's PhD program will conduct research in challenging environment, under the supervision of international faculty in brand new facility at Shabolovka.

Next to available state and competitive stipends (from the HSE Graduate School of Business), students are eligible for (additional) project stipend up to 30k RUB per month, subject to

performance and results. Working language is English.

To apply, visit: <u>https://aspirantura.hse.ru/management/about</u>

For all questions mail to Associate Professor Zeljko Tekic, <u>ztekic@hse.ru</u> (it is highly recommended to contact the project leader **BEFORE** applying for the position).