

PAPER DEVELOPMENT WORKSHOP:

DEEP TECH: EMERGING OPPORTUNITIES IN INNOVATION AND ENTREPRENEURSHIP held in ICIS 2021, Austin (Texas)

Overview

Deep technologies, usually referred to as technologies based on cutting-edge science with long research and development processes, are receiving increasing attention from investors and policy as a means to solve the most pressing societal challenges, leverage new business opportunities, and increase global economic growth. In January 2021, EU President Ursula von der Leyen proclaimed: "This year, the whole world has set its eyes upon a small European 'deep tech' company, BioNTech. BioNTech developed the first widely authorized vaccine against COVID-19... Europe's deep tech companies are worth a combined €700 billion today, and they are growing at incredible speed." (Leyen, 2021) The term deep tech has recently exploded in the popular media worldwide.

Despite its potential and the recent rise of the term, deep tech remains a 'black box' for both practitioners (i.e. traditional investors who associate deep tech with high risks, long gestation periods, and uncertainty of their development paths), but also for IS and management scholars who have lagged in assimilating *what* deep tech is and the innovation processes producing deep tech. Scholarly literature defining deep tech and exploring its challenges and opportunities is scant, at best.

To respond to the increasing need to fundamentally understand deep tech, this PDW sets out to establish a shared understanding of the unique nature of deep technologies and to shed light on its implications to innovation and entrepreneurship. The goal of the PDW is to help to build strong research in such topics within IS, which inspires and informs other related management disciplines.

The PDW brings together IS-leading faculty and serves primarily as a venue for emerging scholars and early career researchers (late-stage Ph.D. students, Post Docs, new faculty) to develop their research projects into papers within a friendly and collegial environment. The PDW also encourages established and senior scholars working on digital innovation, entrepreneurship, systems development, technology design, and other related fields to participate in the workshop and help us shape a research direction for deep tech.

Format

The PDW will be dynamic and developmental: The PDW will start with a panel discussion among IS scholars with interests in deep tech from different perspectives in IS and an accomplished deep tech entrepreneur and startup advisor. It will be followed by semi-structured roundtable discussions with participants to shape emerging research opportunities for future deep tech research. All participants will give and receive feedback on their ongoing research from senior scholars and peers. The results of the workshop will be integrated into a joint statement that spells out the conceptual background of the topic and sheds light on future research directions

Panel presentations:

- **Michel Avital** -Professor at the Department of Digitalization in Copenhaguen Business School.
- **Richard Baskerville** Regents' Professor and Board of Advisors Professor in the Department of Computer Information Systems, J. Mack Robinson College of Business at



Georgia State University, and Professor (partial appointment) in the School of Management, Curtin Business School, at Curtin University, Perth, Western Australia.

- **Samir Chatterjee** is the Fletcher Jones Chair of Technology Design & Management at CGU's Center for Information Systems & Technology (CISAT).
- **Meltem Ballan** digital technology corporate executive, entrepreneur, and startup advisor with a doctorate in complex systems

Submission Details

To participate in the Professional Development Workshop interested participants are requested to submit a short paper draft describing their research projects, which should include:

- title
- an abstract of their research idea of (max. 150 words)
- up to five keywords
- an extended introduction including a short theoretical part
- the status of their data collection and current project phase
- potential contributions
- two concrete questions for the round table discussions.

All applications **should not exceed 5 pages in total** (including references, tables, etc.).

Applications have to be submitted in one file (.doc; .docx; or .pdf format) to **lpujolp@iese.edu** before <u>October 31st 2021 (Application deadline)</u>. Submitted short paper drafts will be peer-reviewed by the PDW organizers and decisions about acceptance will be communicated until November 15th.

Authors of accepted papers agree to perform two peer reviews of other participants' papers. Accepted participants will be notified about their allocation in the roundtables and will receive the two short papers of their roundtable-group members for review and preparation. These reviews need to be submitted to the organizers by December 6th. In addition, participants will have access to all other short papers allocated to different groups.

Date and Location: The PDW will take place in the week of December 12-15, 2021. Given the pandemic, this year ICIS 2021 – and thus this PDW- will be delivered in a **hybrid format**. Please indicate your intent to attend the conference virtually or in-person in your mail when submitting your application (this information is critical for planning the PDW)

Timeline:

- Submissions of extended abstracts due: October 31st, 2021
- Notification of acceptance: November 15th, 2021
- Accepted participants peer reviews to the organizers: December 6th
- Please send submissions and questions to lpujolp@iese.edu.

The Workshop Organizers are looking forward to your submission

Angelo Romasanta, Ramon Llull University, ESADE Business School Laia Pujol Priego, IESE Business School, University of Navarra Jonathan Wareham, Ramon Llull University, ESADE Business School Hannes Rothe, ICN Business School