Track: Data Science and Entrepreneurship (DSE)

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Track Co-Chairs:
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Description of the track
This track synthesizes two fields of research that – not by coincidence – increasingly gain attention, i.e. the fields of data science and entrepreneurship. Data science aims at deriving actionable insights from large amounts of data, such as theories and methods for data cleaning, data mining, and business analytics. Entrepreneurship involves the exploration and exploitation of opportunities to create future goods and services. Nowadays, vast amounts of data become available due to further digitalization and technological development. This opens up ample opportunities for entrepreneurs to develop new business models and to start new ventures.

The synergy means that entrepreneurship topics are studied from a data science point of view. Research on data science and entrepreneurship entails the fundamental question on how to create business and societal value based on (big) data insights. For example, the track welcomes research on entrepreneurs who create, develop and market new data technologies. Data-driven entrepreneurship is about exploiting the data revolution to develop innovative, sustainable and value-adding business activities, both by start-ups and inside established organizations. What are the antecedents of such business activities, and how will they impact industry and society?

While considerable effort has been devoted towards the technical advancement of statistical approaches to analyze the wealth of available data, our understanding of the added value of data science in practical entrepreneurial contexts lags behind. This is particularly surprising considering the large investments in data science, the modest success rate of data science projects, and several examples of analytics use gone wrong. This track therefore encourages research on data-driven entrepreneurship as to fill this gap.

Key topics and research questions of the track
- Amongst others, we aim to understand in which areas of the data value chain new value is created or destroyed. Does the potential of data science reside in the uniqueness of the data, in the algorithms applied to the data, in the visualization and the products or services created, or in the uniqueness of the business model?
- Creating new business and/or societal value with data is rather difficult. How to transform organizations from brick-and-mortar companies with steep hierarchies to data-driven organizations with self-directing data science teams?
- Another relevant topic concerns the innovation processes of data-driven ideas. How to translate such ideas into concrete project requirements? How to develop technological solutions, launch new data-driven business activities, and how to assess their effectiveness?
Data science methods offer many potential benefits to the firms that use them. Yet, relatively little is known about how these benefits can be brought about in practice. What organizational practices and structures facilitate value creation with data science methods and/or outputs?

It remains unclear to what degree data science has the capacity to bring about gains in productivity and economic growth. To what extent does data science yield “better” information? What is the relative importance of data science as compared to other inputs of decision-making by entrepreneurs?

How can data science methods – observing physical and virtual network structures in organizations – estimate (team) dynamics and success patterns of entrepreneurial projects?

We particularly encourage conceptual and empirical papers that advance our understanding of data-driven entrepreneurship (e.g., case studies and participant observations), and that have both scientific and societal relevance (including extensive practical and policy implications). Submission of work in progress is also gladly welcomed.

References


The deadline for submissions is 15th June 2019.

All submissions must use the submission template and use the submission procedure on the webpage otherwise they will not be considered for review.

Download the submission template here
Submit your paper here

The registration for the conference is open until 31st August 2019.
Register here