

CALL FOR PAPERS

Special Issue of *Small Business Economics: An Entrepreneurship Journal*
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“Rethinking the entrepreneurial (research) process: Opportunities and challenges of Big Data and Artificial Intelligence for entrepreneurship research”

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Guest Editors

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Overview

It is generally acknowledged that the current data revolution and the rise of new technologies creating, storing, and analyzing such data (Zomaya & Sakr 2017) are likely to have a profound, disruptive effect on empirical research disciplines such as economics (Einav & Levin, 2014), management (George, Haas, & Pentland, 2014), and psychology (Kosinski, et al., 2016).

What are the effects on *entrepreneurship research*? Arguably, such changes might bring unprecedented opportunities for entrepreneurship research and practice (e.g., education and policy), but also a number of new challenges and open questions. The central opportunity-aspect could be the promise of a new generation of insights into entrepreneurial phenomena revealed by means of new research methods, datasets, and study designs. The challenges and open questions, in turn, could range from ethical aspects and issues of privacy protection (Boyd & Crawford, 2012), new statistical thinking and computational methods (Fan, Han, & Liu, 2014), to an adaptation of the whole research process (e.g., with respect to an open research culture that would not only ensure ethical standards but also transparency and reproduction of entrepreneurship research, Nosek et al., 2015).

In view of these fundamental issues, this Special Issue aims at providing an interdisciplinary platform for conceptual and empirical papers addressing either opportunities or challenges (or both) of the data revolution, particularly Big Data and Artificial Intelligence (AI), for the diverse field of entrepreneurship research (Audretsch, 2012; Shane, 2012).

The papers could address Big Data and AI as ingredients (or outcomes) of the entrepreneurial process (e.g., the process of creating a profit-oriented or social venture or intrapreneurship). For example, it has been suggested that such new technologies may function as external enablers in

entrepreneurship (von Briel, Davidsson, & Recker, in press). Besides such papers with a focus on a “real world phenomenon” in the entrepreneurial process, we also welcome papers that address the research process itself. Such papers could introduce, discuss, and illustrate Big Data and AI methods and their relevance and potential for entrepreneurship research interested in entrepreneurial opportunities, people, teams, and emerging and growing organizations.

Topics:

Conceptual papers (e.g., reflections, comments, reviews) could address for example:

- 1) Potential for productive vs. destructive entrepreneurial use of Big Data and AI in entrepreneurship research, education, and practice (Baumol, 1990).
- 2) A practical introduction into relevant methods, technologies, and necessary hardware for conducting entrepreneurship studies utilizing Big Data and AI (e.g., computerized methods and specific software, smartphone methods, data mining, machine learning, Gosling & Mason, 2015; Kosinski, Wang, Lakkaraju, & Leskovec, 2016; Zomaya & Sakr, 2017).
- 3) Issues of prediction vs. explanation; inductive, data-driven approaches vs. deduction, theory-driven approaches; and bigness vs. representativeness (Mahmoodi, Leckelt, van Zalk, Geukes, & Back, 2017) in the specific context of entrepreneurship research.
- 4) Potential dangers and ethical dilemmas and problems associated with Big Data and AI methods in entrepreneurship research (e.g., with respect to data protection and privacy issues, generalizability of results, and the intrusiveness of data collection methods, Boyd & Crawford, 2012).
- 5) Computerized language analysis (e.g., to identify entrepreneurial personality characteristics or relevant emotional states, Boyd & Pennebaker, 2017; Eichstaedt et al. 2015).
- 6) The use of digital footprints in social networks (e.g., Twitter, Facebook, Instagram; Kosinski, Stillwell, & Graepel, 2013).
- 7) A reflection on Big Data and AI from a perspective of (non-)rationality, uncertainty, and risk (Kahneman, 2002) and how this relates to entrepreneurship (e.g., can one really train AI models that help predicting future entrepreneurial success and failure when future entrepreneurship is also shaped by cognitive bias, risk, and uncertainty?)
- 8) Will AI outperform entrepreneurial individuals and teams?
- 9) How can Big Data and AI methods improve entrepreneurship courses?
- 10) Training entrepreneurship researchers / budding entrepreneurs in Big Data and AI methods.

Empirical papers should utilize Big Data and/or AI methods to address for example:

- 1) Identifying and predicting entrepreneurial characteristics and performance outcomes of people, teams, and organizations (Chen, Chiang, & Storey, 2012).
- 2) Formal and informal institutions of entrepreneurial regions (Glaeser, Kominers, Luca, & Naik, 2016; Obschonka, 2017).
- 3) Entrepreneurship policy (Audretsch, Grilo, & Thurik, 2007).
- 4) Entrepreneurial education and training.
- 5) Entrepreneurial networks (Wang, Mack, & Maciejewski, 2017).
- 6) Entrepreneurial finance (e.g., crowdfunding, analyses of investors and investment and selection processes of high-potential startup projects).
- 7) Analyses of populations that are underrepresented in existing entrepreneurship research (e.g., populations from outside of Western, educated, industrialized, rich, and democratic countries (WEIRD) or superstar entrepreneurs or entrepreneurial personalities in political leadership, Obschonka, Fisch, & Boyd, 2017; Obschonka & Fisch, 2017).
- 8) Business model processes relevant for entrepreneurial organizations and growth (Chen, Schütz, Kazman, & Matthes, 2017; Hartmann et al., 2016).
- 9) Stress processes and social behavior of entrepreneurial people and teams (e.g., using smartphone methods, Harari, Müller, Aung, & Rentfrow, 2017; Uy, Foo, & Aguinis, 2010).
- 10) Ecological sustainable entrepreneurship (Zeng, 2017).

Paper submission procedure

Submissions for the special issue should be submitted to martin.obschonka@qut.edu.au by March 31st, 2018. All submissions will be subject to the standard review process followed by *Small Business Economics: An Entrepreneurship Journal*. All manuscripts must be original, unpublished works that are not concurrently under review for publication elsewhere. All submissions should conform to the SBEJ manuscript submission guidelines available at: <http://www.springer.com/new+%26+forthcoming+titles+%28default%29/journal/11187>

The deadline for submission of papers to the special issue is March 31st, 2018.

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