**Creativity and Innovation Management**
**Special Issue Call for Papers**

# Methodological advances for creativity and innovation management research


**Guest Editors**

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## Background

The development of research methods is crucial for the progress of any discipline. Advancing the methodological tenets of the field is one of the core tasks of the scholarly community operating within it (Bergh et al., 2022). The creation of better methods and tools to conduct research allows for more sophisticated research, which in turn returns better outcomes and lays the groundwork for future research.

The creativity and innovation management community is no exception. A recent editorial (Boer et al., 2023) highlighted the incredible growth that the creativity and innovation management research has experienced in the last couple of years and the importance played by methodological rigor in sustaining such growth. To serve this purpose, developing cutting-edge research methods to research is of utmost importance for ensuring rigor and relevance of our field of research. With this Special Issue, we want to turn the spotlight on the importance of tailoring research methods to the creativity and innovation management discipline.

Creativity and innovation management research has to deal with specific circumstances, namely small sample sizes, difficulty to ensure comparability, and difficulty to collect data as phenomena are occurring within real-life settings, which make the use of “traditional” quantitative methods limited and sometimes impossible to apply. To account for these limitations, creativity and innovation scholars need specific tools that can allow them to reduce the methodological uncertainty connected to such difficult settings and address the multitude of research questions they have the opportunity to investigate.

Until now, most contributions in the field of creativity and innovation management have borrowed used traditional research methods such as surveys and case studies, and some action research and field or lab experiments. Relatively recently, new methods, tools, and paradigms have been developed, which could change the scene of creativity and innovation research. The aim of this Special Issue is to enrich the current breadth of methods and tools employed in creativity and innovation management research and encourage the development of methodological contributions tailored to our discipline. This way, we aim to promote emancipation and invest in the refinement and adaptation of tools specifically tailored to creativity and innovation management research, answering the special needs of creativity and innovation management scholars. In the following sections, we propose a series of avenues to advance both research

analysis and synthesis (Denyer et al., 2008), and hint at possible research questions to be addressed in the contributions to this Special Issue.

## Advancing creativity and innovation research: New methods, tools, and paradigms

### *New methods for creativity and innovation management research*

- Design Science. Creativity and innovation management research would benefit from a finer-grained discussion of how exactly the relevance of research can be increased by means of design science (see, e.g., van Aken, 2004). Other disciplines have begun discussing how to best employ design science research to achieve rigorous and relevant results (e.g., Dimov et al., 2023). Yet, such discussions are lacking in creativity and innovation management. A priori, it is unclear whether design science guidelines developed in other disciplines (e.g., Gregor & Hevner, 2013; Stange, Schiele, & Henseler, 2022) can be transferred to creativity and innovation management straightaway. Similarly, given the lack of methodological guidance, applications of such approaches are also scant in the domain of creativity and innovation management.
- Enactive design research. A growing number of studies advocate for the opportunities provided by enactive design research methods (e.g., Nzembayie et al., 2019). Specifically, studies have supported the idea of researching prospective phenomena with a forward-oriented and real-time approach to empirical inquiry (Agogué et al., 2015), as opposed to traditional retrospective and predictive stances to data collection and analysis. Methods such as design ethnography may offer opportunities to study complex and socially embedded phenomena by borrowing from established research traditions in adjacent disciplines (e.g., anthropology) (Baldessarelli, 2024).

  In this sense, other fields have already experienced a "design shift" (e.g., entrepreneurship research; Berglund, 2021). Entrepreneurship scholars encouraging a design approach to research argue that the prospective nature of specific phenomena calls for the employment of a wider range of methodologies (Dimov, 2021; Packhard et al., 2021; Seckler et al., 2022) in understanding how these phenomena can be interpreted as the product of processes of designing reality (e.g., Berglund et al., 2020). Yet, in the creativity and innovation domain, this perspective has received scant attention (Le Masson et al., 2011). Scholars have mostly inquired about the toolkits coming from design practice that entrepreneurs can employ to create and develop entrepreneurial opportunities (Magistretti et al., 2023). In this sense, scholars still have ample opportunities to inquire how an enactive design approach to research in creativity and innovation management can provide novel and useful contributions to different areas of the creativity and innovation literature.

### *New tools for researching creativity and innovation management phenomena*

- Machine Learning. In recent years, the use of machine learning approaches in management research has been burgeoning, as machine learning techniques provide new methodological opportunities for theory building (e.g., Tidhar and Eisenhardt, 2020). Among others, the technique of topic modeling has been gaining significant momentum in

leading management journals, such as the Academy of Management Annals (Hannigan et al.. 2019) and Organizational Research Methods (Tonidandel et al., 2018; Schmiedel et al., 2019). Yet, although topic modeling has seen growing interest and applications in leading outlets in strategic management (e.g., Haans, 2019; Täuscher et al., 2022), organization studies (e.g., Croidieu and Kim, 2018; Innis, 2022), marketing and general business (e.g., Mangiò et al., 2023; Mustrak et al., 2021), and service management (e.g., Antons and Breidbach, 2018), a specific view on how topic modeling could support creativity and innovation management research is still lacking. Although research in this domain is still limited, the study of creativity and innovation management holds significant potential for machine learning methods. In this sense, creativity and innovation processes often involve numerous stakeholders, able to generate significant amounts of data (e.g., product/customer reviews, recollections of brainstorming sessions, user ratings, patents, social media data). To capitalize on such richness of data and address novel research questions, the current debate could benefit from deep diving into the existing and possible applications of machine learning methods to creativity and innovation management research.

- Generative AI. Generative AI provides new opportunities for creativity and innovation management research, widening the spectrum of methodologies that researchers can use when inquiring about creative processes and the creation and development of innovative new products and services. In this sense, generative AI tools might support researchers not just in collecting and analyzing data, but also, for example, in the administration of experiments (Bouschery et al., 2023; Durante et al., 2024). Although a growing number of studies are riding this wave, research still lacks precise guidelines on how to employ generative AI rigorously and properly as a tool for innovation management research. Given the pervasiveness of generative AI in consumers' and businesses' everyday lives, more research is needed to promote an understanding of how these tools might aid research and practice in creativity and innovation management in the future.
- Biometric data. The increasing availability of devices able to measure biometric information (e.g., eye-tracking, sweat sensors, HR measurement, EEGs) has led research leveraging biometric information to burgeon in the last decade. Taking hints from neuroscience research, other disciplines also employ the measurement of physiological signals extensively in their research designs (Suhaimi et al., 2020). A growing number of studies has been promoting the use of biometric data in business settings (Ariely and Berns, 2010; Harris et al., 2018; Hsu, 2017; Plassmann et al., 2015) to provide evidence of individual physiological responses to stimuli coming from man-made cues. Examples of applications include collecting consumers' emotional responses to visual cues and symbols when watching TV advertising (Venkatraman et al., 2015) or music videos (Mandolfo et al., 2022), measuring buyers' purchasing decisions (Ravaya et al., 2013), investors' reactions to crowdfunding campaigns (Butticè et al., 2022), or observing drivers' physiological responses to autonomous driving (Zepf et al., 2020). Considering the demonstrated potential of these techniques in adjacent domains, they could offer promising implications for the realm of creativity and innovation management research.

***Improving current methods for creativity and innovation management research***

- Necessary Condition Analysis (NCA). Most multivariate statistical techniques are built on correlations and covariances as means of quantifying linear relationships between variables. However, they do not consider that relationships between variables can be asymmetrical, in the sense that if A implies B, this does not mean that B implies A. As a remedy, Dul (2016) proposed NCA as a tool that can identify variables that are necessary for an event to occur. The first applications of NCA in the realm of creativity research are promising (Karwowski et al., 2016). However, more research is needed to better understand the strengths and weaknesses of this approach so that researchers in creativity and innovation management can benefit from it.
- Agent-based Modeling. Agent-based models (ABMs) are designed as computational models of autonomous agents interacting with each other and their environment to study emergent phenomena (Railsback and Grimm, 2019). This modeling methodology can empower researchers in the creativity and innovation management field to simulate complex systems based on the interaction of diverse stakeholders from a socio-technical perspective. In innovation management, these agents with limited knowledge and bounded rationality need to act under fundamental and probabilistic environmental uncertainties. ABMs can be used as computational laboratories to test various institutional arrangements and potential paths of development to assist firms and policymakers with their particular decision context in these complex environments.
- Qualitative Comparative Analysis (QCA). Previous studies in business and management highlighted the opportunities offered by approaches such as crisp and fuzzy set QCA (e.g., Fainshmidt et al., 2023; Kumar et al., 2022), leveraging the method's ability to systematically identify, compare, and evaluate alternative configurations of variables leading to a given outcome. In recent years, adjacent disciplines have started to advocate for more attention and rigor to be devoted to QCA in management research (Bettis et al., 2015; Greckhamer et al., 2018; Park et al., 2020). The method's versatility also allows for the application to diverse research questions in the domain of creativity and innovation management, including idea screening (Sukhov et al., 2021), the influence of culture on creativity (Yong et al., 2020), the effects of different business model configurations (Aversa et al., 2015; Leppänen et al., 2023), and entrepreneurial passion (Stroe et al., 2018). Yet, although offering a promising method for researching organizational and individual phenomena in the creativity and innovation management domain, the state-of-the-art literature still lacks specific guidelines and best practices for our discipline that can steer researchers on how to best leverage the potential offered by such an approach.

**Quality criteria**

The call for papers is open to any kind of methodological or epistemological approach. We welcome papers that make a significant contribution to the creativity and innovation management debate, and tailor their contribution to the discipline.

Our call is open to contributions of all maturity phases of scientific methods, which can mean proposing entirely new methods, suggesting improvements and advances to existing methods, critically reviewing methods in use and determining contingencies of their applicability, and providing guidelines for a better use of methods. We encourage the submission of manuscripts that are based on evidence, able to provide references and/or examples of application that can validate or support their arguments. Claims about methods' abilities, applicability, and efficacy must be supported by scientific means such as (computational) experiments, proofs, logical derivations, or citations to such work.

We especially seek manuscripts that can provide guidance for authors regarding the research methods they are reporting on (e.g., Hannigan et al., 2019), as opposed to offering pure overviews of the existing literature on a given method (Aguinis et al., 2023).

**Exemplary research questions**

The research questions authors may want to consider for their contributions include but are not limited to:

- Which machine learning techniques can help advance creativity and innovation management research?
- What types of data on creativity and innovation management can be analyzed using machine learning techniques (e.g., topic modeling)?
- How can authors employ generative AI to conduct and advance creativity and innovation management research?
- How can biometrical data be employed in creativity and innovation management research?
- How can experiments using biometric data provide insights into creativity and innovation management research?
- What can a design science approach to research offer the creativity and innovation management debate?
- What are the guidelines and best practices for applying the fsQCA method to creativity and innovation management research?
- How can agent-based modeling and similar techniques help understand stakeholder reactions to innovations?
- To what extent should research methods be customized for research in creativity and innovation management?

**Submission deadline, review process and publication**

The submission deadline for the first submission is 28 February 2025. We encourage earlier submissions though; and submissions will enter the reviewing process shortly after submission.

The submission must be made on the *Creativity and Innovation Management* website: https://onlinelibrary.wiley.com/page/journal/14678691/homepage/forauthors.html. If they pass the initial screening, the manuscripts will undergo a rigorous double-blind peer-review process, which will be handled by the guest editors and one of the journal's managing editors.

Authors should adhere to the submission guidelines provided by Creativity and Innovation Management: https://onlinelibrary.wiley.com/page/journal/14678691/homepage/forauthors.html.

We expect that the Special Issue will be published in April 2026.

### Further information

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## References


Agogué, M., Lundqvist, M. and Middleton, K.W. (2015). Mindful deviation through combining causation and effectuation: A design theory-based study of technology entrepreneurship. *Creativity and Innovation Management,* 24, 629–644.

Aguinis, H., Ramani, R. S., & Alabduljader, N. (2023). Best-practice recommendations for producers, evaluators, and users of methodological literature reviews. *Organizational Research Methods*, *26*(1), 46-76.

Antons, D., & Breidbach, C. F. (2018). Big data, big insights? Advancing service innovation and design with machine learning. *Journal of Service Research*, *21*(1), 17-39.

Ariely, D., & Berns, G. S. (2010). Neuromarketing: the hope and hype of neuroimaging in business. *Nature Reviews Neuroscience, 11*(4), 284-292.

Aversa, P., Furnari, S., & Haefliger, S. (2015). Business model configurations and performance: A qualitative comparative analysis in Formula One racing, 2005–2013. *Industrial and Corporate Change*, *24*(3), 655-676.

Baldessarelli, G. (2024). Book Review: Design Ethnography: Research, Responsibilities, and Futures.

Bergh, D. D., Boyd, B. K., Byron, K., Gove, S., & Ketchen Jr, D. J. (2022). What constitutes a methodological contribution? *Journal of Management, 48*(7), 1835-1848.

Berglund, H. (2021). Entrepreneurship as design and design science. *Journal of Business Venturing Design*, *1*(1-2), 100012.

Berglund, H., Bousfiha, M., & Mansoori, Y. (2020). Opportunities as artifacts and entrepreneurship as design. *Academy of Management Review*, *45*(4), 825-846.

Bettis, R. A., Gambardella, A., Helfat, C., & Mitchell, W. (2015). Qualitative empirical research in strategic management. *Strategic Management Journal, 36*(5)637-639.

Boer, H., Di Vincenzo, F., Björk, J., Goduscheit, R. C., Hölzle, K., Schweisfurth, T., & Visser-Groeneveld, J. (2023). Reviewing excellence. *Creativity and Innovation Management*, *32*(2), 180-197.

Bouschery, S. G., Blazevic, V., & Piller, F. T. (2023). Augmenting human innovation teams with artificial intelligence: Exploring transformer-based language models. *Journal of Product Innovation Management*, *40*(2), 139-153.

Butticè, V., Collewaert, V., Stroe, S., Vanacker, T., Vismara, S., & Walthoff-Borm, X. (2022). Equity crowdfunders' human capital and signal set formation: Evidence from eye tracking. *Entrepreneurship Theory and Practice*, *46*(5), 1317-1343.

Croidieu, G., & Kim, P. H. (2018). Labor of love: Amateurs and lay-expertise legitimation in the early US radio field. *Administrative Science Quarterly*, *63*(1), 1-42.

Denyer, D., Tranfield, D., & Van Aken, J. E. (2008). Developing design propositions through research synthesis. *Organization Studies*, *29*(3), 393-413.

Dimov, D. (2021). From "opportunity" to opportunity: The design space for entrepreneurial action. *Journal of Business Venturing Design*, *1*(1-2), 100002.

Dimov, D., Maula, M., & Romme, A. G. L. (2023). Crafting and assessing design science research for entrepreneurship. *Entrepreneurship Theory and Practice*, *47*(5), 1543-1567.

Dul, J. (2016). Necessary condition analysis (NCA) logic and methodology of "necessary but not sufficient" causality. *Organizational Research Methods, 19*(1), 10-52.

Durante, I., Dell'Era, C., Magistretti, S., & Pham, C. T. A. (2024) Predictive or imaginative futures? Experimenting with alternative future-making approaches. *Creativity and Innovation Management*.

Greckhamer, T., Furnari, S., Fiss, P. C., & Aguilera, R. V. (2018). Studying configurations with qualitative comparative analysis: Best practices in strategy and organization research. *Strategic Organization*, *16*(4), 482-495.

Gregor, S., & Hevner, A. R. (2013). Positioning and presenting design science research for maximum impact. *MIS Quarterly, 37*(2), 337-355.

Fainshmidt, S., Witt, M. A., Aguilera, R. V., & Verbeke, A. (2020). The contributions of qualitative comparative analysis (QCA) to international business research. *Journal of International Business Studies*, *51*, 455-466.

Haans, R. F. (2019). What's the value of being different when everyone is? The effects of distinctiveness on performance in homogeneous versus heterogeneous categories. *Strategic Management Journal*, *40*(1), 3-27.

Hannigan, T. R., Haans, R. F., Vakili, K., Tchalian, H., Glaser, V. L., Wang, M. S., Kaplan, S. & Jennings, P. D. (2019). Topic modeling in management research: Rendering new theory from textual data. *Academy of Management Annals*, *13*(2), 586-632.

Hsu, M. (2017). Neuromarketing: inside the mind of the consumer. *California Management Review, 59*(4), 5-22.

Innis, B. D. (2022). Category change in cultural fields: Practice deviation and the discursive maintenance of category meanings in jazz music. *Organization Studies*, *43*(11), 1745-1767.

Karwowski, M., Dul, J., Gralewski, J., Jauk, E., Jankowska, D. M., Gajda, A., ... & Benedek, M. (2016). Is creativity without intelligence possible? A necessary condition analysis. *Intelligence, 57*, 105-117.

Kumar, S., Sahoo, S., Lim, W. M., Kraus, S., & Bamel, U. (2022). Fuzzy-set qualitative comparative analysis (fsQCA) in business and management research: A contemporary overview. *Technological Forecasting and Social Change*, *178*, 121599.

Le Masson, P., Hatchuel, A., & Weil, B. (2011). The interplay between creativity issues and design theories: a new perspective for design management studies? *Creativity and Innovation management*, *20*(4), 217-237.

Leppänen, P., George, G., & Alexy, O. (2023). When do novel business models lead to high performance? A configurational approach to value drivers, competitive strategy, and firm environment. *Academy of Management Journal, 66*(1), 164-194.

Magistretti, S., Sanasi, S., Dell'Era, C., & Ghezzi, A. (2023). Entrepreneurship as design: A design process for the emergence and development of entrepreneurial opportunities. *Creativity and Innovation Management*, *32*(1), 5-21.

Mandolfo, M., Di Dalmazi, M., & Lamberti, L. (2022). Now you see me. Evaluating visual and auditory brand placement disclosures in music videos. *Journal of Marketing Communications*, 1-23.

Mangiò, F., Mismetti, M., Lissana, E., & Andreini, D. (2023). That's the Press, Baby! How journalists co-create family business brands meanings: A mixed method analysis. *Journal of Business Research*, *161*, 113842.

Mustak, M., Salminen, J., Plé, L., & Wirtz, J. (2021). Artificial intelligence in marketing: Topic modeling, scientometric analysis, and research agenda. *Journal of Business Research*, *124*, 389-404.

Nzembayie, K. F., Buckley, A. P., & Cooney, T. (2019). Researching pure digital entrepreneurship–A multimethod insider action research approach. *Journal of Business Venturing Insights*, *11*, e00103.

Packard, M. D., Bylund, P. L., & Klein, P. G. (2021). Human action and human design: An Austrian approach to design science. *Journal of Business Venturing Design*, *1*(1-2), 100003.

Park, Y., Fiss, P. C., & El Sawy, O. A. (2020). Theorizing the multiplicity of digital phenomena: The ecology of configurations, causal recipes, and guidelines for applying QCA. *MIS Quarterly*, *44*, 1493-1520.

Plassmann, H., Venkatraman, V., Huettel, S., & Yoon, C. (2015). Consumer neuroscience: applications, challenges, and possible solutions. *Journal of Marketing Research, 52*(4), 427-435.

Railsback, S. F. & Grimm, V. (2019). *Agent-based and individual-based modeling: A practical introduction* (2nd ed.). Princeton University Press.

Ravaja, N., Somervuori, O., & Salminen, M. (2013). Predicting purchase decision: The role of hemispheric asymmetry over the frontal cortex. *Journal of Neuroscience, Psychology, and Economics, 6*(1), 1.

Schmiedel, T., Müller, O., & vom Brocke, J. (2019). Topic modeling as a strategy of inquiry in organizational research: A tutorial with an application example on organizational culture. *Organizational Research Methods, 22*(4), 941-968.

Seckler, C., Mauer, R., & vom Brocke, J. (2021). Design science in entrepreneurship: conceptual foundations and guiding principles. *Journal of Business Venturing Design*, *1*(1-2), 100004.

Stange, R., Schiele, H., & Henseler, J. (2022). Advancing purchasing as a design science: Publication guidelines to shift towards more relevant purchasing research. *Journal of Purchasing and Supply Management, 28*(1), 100750.

Suhaimi, N. S., Mountstephens, J., & Teo, J. (2020). EEG-based emotion recognition: A state-of-the-art review of current trends and opportunities. *Computational Intelligence and Neuroscience*, *2020*.

Sukhov, A., Sihvonen, A., Netz, J., Magnusson, P., & Olsson, L. E. (2021). How experts screen ideas: The complex interplay of intuition, analysis and sensemaking. *Journal of Product Innovation Management*, *38*(2), 248-270.

Stroe, S., Parida, V., & Wincent, J. (2018). Effectuation or causation: An fsQCA analysis of entrepreneurial passion, risk perception, and self-efficacy. *Journal of Business Research*, *89*, 265-272.

Täuscher, K., Zhao, E. Y., & Lounsbury, M. (2022). Categories and narratives as sources of distinctiveness: Cultural entrepreneurship within and across categories. *Strategic Management Journal*, *43*(10), 2101-2134.

Tidhar, R., & Eisenhardt, K. M. (2020). Get rich or die trying… finding revenue model fit using machine learning and multiple cases. *Strategic Management Journal*, *41*(7), 1245-1273.

Tonidandel, S., King, E. B., & Cortina, J. M. (2018). Big data methods: Leveraging modern data analytic techniques to build organizational science. *Organizational Research Methods*, *21*(3), 525-547.

van Aken, J. E. (2004). Management research based on the paradigm of the design sciences: The quest for field-tested and grounded technological rules. *Journal of Management Studies, 41*(2), 219-246.

Venkatraman, V., Dimoka, A., Pavlou, P. A., Vo, K., Hampton, W., Bollinger, B., ... & Winer, R. S. (2015). Predicting advertising success beyond traditional measures: New insights from neurophysiological methods and market response modeling. *Journal of Marketing Research, 52*(4), 436-452.

Yong, K., Mannucci, P. V., & Lander, M. W. (2020). Fostering creativity across countries: The moderating effect of cultural bundles on creativity. *Organizational Behavior and Human Decision Processes*, *157*, 1-45.

Zepf, S., Hernandez, J., Schmitt, A., Minker, W., & Picard, R. W. (2020). Driver emotion recognition for intelligent vehicles: A survey. *ACM Computing Surveys (CSUR)*, *53*(3), 1-30.