

R&D MANAGEMENT

INNOVATION & BIODIVERSITY

P I S A  2 0 2 5

Managing Generative AI:

Organisational Theories and Practices to Maximize Value and Mitigate Risks

TRACK CHAIRS



**Filippo
Chiarello**

University of Pisa



**Costanze
Leeb**

University of
Cambridge



**Jan
Auernhammer**

Stanford
University



**Giacomo
Marzi**

IMT Lucca

ABSTRACT DEADLINE: FEBRUARY 1, 2025

Managing Generative AI: Organisational Theories and Practices to Maximize Value and Mitigate Risks

Filippo Chiarello, University of Pisa, Italy
Costanze Leeb, University of Cambridge, UK
Jan Auernhammer, Stanford University, US
Giacomo Marzi, IMT Lucca, Italy

Abstract

The rapid emergence of Generative Artificial Intelligence (GenAI) has transformed management, introducing both opportunities and risks. GenAI has the potential to increase efficiency (Noy and Zhang, 2023) and to outperform humans in specific tasks (Gilardi et al., 2023). It can drive internal integration and streamline operational processes, enabling organisations to make data-driven decisions and optimise their resources efficiently (Liu & Wang, 2024). Additionally, GenAI extends beyond traditional problem-solving capabilities by automating and enhancing ideation processes. It has the potential to expand solution (and eventually the problem) space in product innovation (Bouschery et al. 2023), and the incorporation of GenAI in early innovation phases can result in higher quality solutions than crowd-generated results (Boussioux et al. 2024). It facilitates new forms of idea generation, enabling a more granular approach to innovation (Verganti et al., 2020). However, GenAI can only enhance artificial creativity (Runco, 2023). Despite these created values in organisations, GenAI introduces complex risks that organisations navigate. Ethical concerns arise, including algorithmic discrimination, biases, and the risk of diminishing human agency (Spanjol, 2023), affecting the feeling of ownership and control or even challenging work identity. The first effects on higher-income tasks (Eloundou et al. 2023) and tasks that require cognitive work, such as knowledge work, have been observed. Additionally, Gama & Magistretti (2023) suggest that GenAI's adoption can lead to fragmentation in innovation processes, potentially replacing human cognitive functions and creating resistance among managers. The evolving regulatory landscape around AI also presents challenges concerning data privacy, AI accountability, and transparency. Even more, many harmful applications of GenAI are emerging, such as the creation and spread of fake news, deepfakes, frauds, privacy invasion, and the manipulation of public opinion. Mitigating these risks requires understanding the interrelations between individuals and society (Auernhammer, 2020). Additionally, "AI washing"—the misleading use of AI claims—further exacerbates ethical concerns, as companies may overstate AI's capabilities to gain a competitive edge, thereby increasing distrust and the potential for misuse. Organisations must balance harnessing GenAI's benefits while mitigating its risks in a rapidly changing environment (Spanjol et al., 2024). To produce value for organisations and mitigate the risks associated with GenAI, it is necessary to understand and explain GenAI developments and inform managers of the introduction, design, and development of these technologies (Chiarello et al., 2024). Also, we see promising advances in the literature. Understanding the full spectrum of GenAI's impact on innovation remains an ongoing challenge, requiring theoretical, empirical, and practical explorations. This track seeks case studies, design science, and conceptual papers that explore strategies for managing GenAI and its use and guide present and future innovation managers in properly introducing GenAI in organisations. We are particularly interested in frameworks for human-AI collaboration, strategies for explainable and responsible AI, the interplay between machine capabilities and human creativity, and design research and practices that drive responsible AI developments in organisations. The aim is to provide comprehensive insights for researchers, practitioners, and policymakers engaged with this transformative technological landscape of GenAI.

References

- Auernhammer, J. (2020) Human-centered AI: The role of Human-centered Design Research in the development of AI, in Boess, S., Cheung, M. and Cain, R. (eds.), Synergy - DRS International Conference 2020, 11-14 August, Held online. <https://doi.org/10.21606/drs.2020.282>
- Bouschery, S. G., Blazeovic, V., & Piller, F. T. (2023). Augmenting human innovation teams with artificial intelligence: Exploring transformer-based language models. *Journal of Product Innovation Management*, 40(2). <https://doi.org/10.1111/jpim.12656>
- Boussioux, L., Lane, J. N., Zhang, M., Jacimovic, V., & Lakhani, K. R. (2024). The crowdless future? Generative AI and creative problem-solving. *Organization Science*, 35(5), 1589–1607.
- Chiarello, F., Giordano, V., Spada, I., Barandoni, S., & Fantoni, S. (2024). Future applications of generative large language models: A data-driven case study on ChatGPT. *Technovation*, 133, 103002.
- Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2024). GPTs are GPTs: Labor market impact potential of LLMs. *Science*, 384(6702), 1306–1308.
- Gama, F., & Magistretti, S. (2023). Artificial intelligence in innovation management: A review of innovation capabilities and a taxonomy of AI applications. *Journal of Product Innovation Management*. <https://doi.org/10.1111/jpim.12698>
- Gilardi, F., Alizadeh, M., & Kubli, M. (2023). ChatGPT outperforms crowd workers for text-annotation tasks. *Proceedings of the National Academy of Sciences*. <https://doi.org/10.1073/pnas.2305016120>
- Liu, A., & Wang, S. (2024). Generative artificial intelligence and entrepreneurial performance: Implications for entrepreneurs. *The Journal of Technology Transfer*. <https://doi.org/10.1007/s10961-024-10132-3>
- Runco, M. A. (2023). AI can only produce artificial creativity. *Journal of Creativity*, 33(3), 100063.
- Spanjol, J. (2023). From the Editors: Engaging with generative artificial intelligence technologies in innovation management research—Some answers and more questions. *Journal of Product Innovation Management*, 40, 383–390. <https://doi.org/10.1111/jpim.12689>
- Spanjol, J., Noble, C. H., Baer, M., Bogers, M. L., Bohlmann, J., Bouncken, R. B., ... & Wetzels, M. (2024). Fueling innovation management research: Future directions and five forward-looking paths. *Journal of Product Innovation Management*, 41(5), 893–948.
- Verganti, R., Vendraminelli, L., & Iansiti, M. (2020). Innovation and design in the age of artificial intelligence. *Journal of Product Innovation Management*, 37(3), 212–227. <https://doi.org/10.1111/jpim.12523>