

Digital leadership: A new management and entrepreneurship development roadmap

Original

Digital leadership: A new management and entrepreneurship development roadmap / Margherita, Alessandro; Raguseo, Elisabetta; Ndou, Valentina; Secundo, Giustina; Marasco, Alessandra. - In: BUSINESS HORIZONS. - ISSN 0007-6813. - 67:4(2024), pp. 313-316. [10.1016/j.bushor.2024.04.007]

Availability:

This version is available at: 11583/2990330 since: 2024-07-03T16:06:30Z

Publisher:

Elsevier

Published

DOI:10.1016/j.bushor.2024.04.007

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Elsevier preprint/submitted version

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<http://doi.org/10.1016/j.bushor.2024.04.007>

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Business Horizons

Guest Editor's Perspective on the Special Issue:

Digital Leadership: A New Management and Entrepreneurship Development Roadmap

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1. Context and Relevance

In the last decade, Digital Transformation (DT) has attracted an increasing academic and practitioner interest due to its unprecedented impact on most industries and aspects of human life (e.g. Chatterjee et al., 2023; Hanelt et al., 2021; Ramesh and Delen, 2021; Lanzolla et al., 2020; Saarikko, Westergren and Blomquist, 2020). Greater adoption of digital technology is increasingly crucial for the strategic renewal of organizations (van Zeebroeck et al., 2021) and the creation of new organizations as well.

However, realizing a DT is not just a matter of technology implementation. The rise of a new managerial archetype and entrepreneurial opportunities amplifies the need to build new skills, attitudes and capabilities into business leaders (Mele et al., 2023; Schlegel and Kraus, 2023; Schneider et al., 2023; Ellström et al., 2021). The workforce and human capital impact of DT is a major theme to address. In particular, a new breed of digital leaders is today required to create socio-economic value by leveraging digital-driven innovation and by creating exponential organisations able to scale quickly and lead industries and markets (Tigre et al., 2023; Bresciani et al., 2021; Elia, Margherita, Ciavolino, Moustaghfir, 2021; Elia, Margherita and Passiante, 2020; Kane et al., 2019).

Entailing a disruption of organizational structures as well, processes, business strategy, and DT poses considerable challenges in terms of competencies needed to exploit the advantages of technologies for business renewal (Bughin et al., 2021; Jackson and Dunn-Jensen, 2021; Bharadwaj et al., 2013). Scholars and practitioners are today increasingly interested in digital transformation leadership. However, the extant literature is fragmented and we lack knowledge of competencies required by business leaders to facilitate digital transformation (Müller, Konzag, Nielsen, Sandholt, 2024). In such view, it is thus crucial today to contribute by bringing together thought leaders and scholars providing complementary views on digital leadership and the deriving implications in terms of managerial and entrepreneurial skills and attitudes required to be successful in the current business scenario.

2. Articles in the Special Issue

This Special Issue “**Digital Leadership: A New Management and Entrepreneurship Development Roadmap**” contributes to the aforementioned call for discussion and knowledge development, with an impactful offset of research and practitioner-focused

articles (Laufer, 2021; Fisher, 2020). The Issue provides multiple perspectives on the strategic and operational impact of digital exponential technologies and the deriving implications in terms of leadership, managerial and entrepreneurial capabilities. To achieve these objectives, a variety of approaches and methodologies (conceptual development, systematic review, case studies, expert interviews) is gathered to ensure a comprehensive exploration of the subject matter. The Special Issue includes 10 research articles providing a rich and nuanced understanding of the intricate relationships between digital advancements and leadership dynamics, considering diverse business and service sectors (i.e., automotive, sport wearable and equipment, fashion and luxury, electronics and informatics, banking and financial services, retail, healthcare, hospitality), also with a global geographical coverage.

Article 1, authored by de Paula Pereira, Fleith de Medeiros, Koling, Duarte Ribeiro, Morea and Iazzolino (Pereira et al., 2024), titled "*Using dynamic capabilities to cope with digital transformation and boost innovation in traditional banks*" makes a significant contribution by offering a strategic management perspective on the capabilities required to foster DT within the finance industry. Utilizing a case study methodology, the authors conducted a thorough analysis of both external and internal contextual factors. Their findings culminated in the development of a comprehensive framework that encapsulates how dynamic capabilities empower traditional banks to navigate the challenges posed by DT.

Article 2, authored by Mancuso, Messeni Petruzzelli, Urbinati and Matzler, titled "*Being leaders in the metaverse: capability building, capability integration, and strategic factors to advancing towards a digital business in the metaverse*" provides a novel view of how the Metaverse can drive the creation of innovative business models. Through an in-depth analysis of multiple case studies, the authors reveal that capabilities focused on handling digital assets and those geared towards managing organizational factors are cultivated and integrated via two distinct mechanisms—organizational change and the innovation ecosystem. Moreover, the paper outlines a three-stage roadmap and delineates a leadership profile as an essential strategic element for assuming a novel leadership role in the metaverse.

Article 3, authored by Bach, titled "*A phenomenological learning approach to leading digitalization*" contributes with a pedagogical and learning view of what digital leadership entails. By delving into established theories and qualitatively interacting with leaders in real-world scenarios, this paper exposes a disparity between the skills that theoretical frameworks advocate for leaders and the skills demonstrated by leaders in actual practice. In practical terms, the multitude of skills needed and the intricate nature of digital leadership lead leaders to perceive the attainment of the requisite skill set as overwhelming.

Article 4, authored by Tursunbayeva and Chalutz-Ben Gal, titled "*Adoption of Artificial Intelligence: Technology, Organization, and People Framework-based checklist for digital leaders*" contributes with a focus on DT in human resource practices, and particularly the individual implications of Artificial Intelligence (AI) adoption. Grounded in extensive research and industry knowledge the paper introduces a checklist derived from the Technology, Organization, and People (TOP) framework, aiming to aid digital leaders in effectively managing challenges related to the adoption of AI.

Article 5, authored by Bellis, Cunial and Trabucchi, titled "*Mastering hybrid worlds through Digital Leadership: the role of agility in fostering innovation*" brings a digital-enabled agility view of digital innovation. Using the case of xFarm, a scale-up, the paper explores the intersection of the digital and physical realms in our complex world, highlighting the increasing fusion of managerial practices into more agile approaches. The paper identifies key drivers and practices supporting this hybrid model. The study offers three main takeaways for digital leaders in managing hybrid environments, providing reference points for direction-setting, while emphasizing the importance of tailoring specific behaviors to each field, in alignment with agile principles.

Article 6, authored by Elia, Solazzo, Lerro, Pigni and Tucci, titled "*The Digital Transformation Canvas: a conceptual framework for leading the digital transformation process*" provides a relevant tool for business leaders aiming to plan and operationalize DT. Drawing from a comprehensive yet disparate body of literature and incorporating input from

different domain experts, this article constructs a conceptual map, represented as a Canvas, designed to guide successful DT initiatives. Additionally, the article identifies crucial elements that play a pivotal role in steering the implementation of digital initiatives, including roles, competencies, behaviors, and enablers.

Article 7, authored by Ertiö, Eriksson, Rowan and McCarthy, titled “*The role of digital leaders’ emotional intelligence in mitigating employee technostress*” contributes with a study of emotional dimensions concerned with exponential technology adoption. The article explores how digital leaders can address challenges in the era of digital transformation, emphasizing the importance of emotional intelligence (EI) in mitigating technostress among employees. It offers new EI strategies for digital leaders, focusing on communication, transparency, and trust to navigate the complexities of DT successfully.

Article 8, authored by McCarthy, Sammon and Alhassan, titled “*The characteristics of digital transformation leadership: Theorising the practitioner voice*” provides a practitioner-oriented view of digital leaders and their distinctive traits. The article discusses the multifaceted nature of DT leadership, going beyond technology integration. Through a grounded approach involving practitioner insights, it identifies ten essential DT leadership characteristics, connecting actions and enabling strategies. The evaluation of these characteristics by thirty DT leaders enhances practical relevance, urging leaders to assess their initiatives and address organizational gaps through reflective conversations.

Article 9, authored by Schiuma, Santarsiero, Carlucci and Jarrar, titled “*Transformative leadership competencies for organizational digital transformation*” contributes with a competence model to identify and assess digital leadership skills and attitudes. The paper addresses the underexplored human side of DT leadership, focusing on the competencies required by leaders to drive organizational transformation in the digital age. By combining a literature review on leadership styles with insights from interviews with 64 SME leaders undergoing DT, the study introduces the concept of transformative leadership and defines six competencies that distinguish transformative leaders in navigating organizational DT.

Article 10, authored by Rialti and Filieri, titled “*Leaders, let’s get agile! Observing agile leadership and its relevance in successful digital transformation projects*” through the use of the Practice-Based View (PBV) finds out how Agile Leaders drive successful DT through fast decision loops, continuous participation in DT activities, and evolutionary and revolutionary practices, making the organization leaner, and more efficient.

3. Follow-up and Research Trajectories

In addition to technical skills as a basis for dealing with digital technologies, digitalization demands that relevant decision-makers have a digital mindset so that they can recognize and correctly assess the opportunities and challenges associated with digitalization (Schneider et al., 2023; Hensellek, 2020). Senior leaders must create the conditions that enable digital maturity, and transform their organizations by digital capabilities that improve processes, engage talent across the organization, and drive new value-generating business models (Kane et al., 2019).

A changing education and capability development paradigm is thus needed as digital leadership becomes crucial for organizations to survive in the new digital era (de Araujo, Priadana, Paramarta, and Sunarsi, 2021). According to a recent global survey by McKinsey (Williams, Galvin and LaBerge, 2021), top-performing companies not only possess stronger digital-technology capabilities, but also are nearly twice as likely to have technology leaders who shape overall strategy.

New academic and practitioner contributions are today needed to advance the understanding of what type of human capital is required to undertake digital transformation, and to build resilient digital-enhanced organizations and socio-technical systems. The papers included in the Special Issue raise crucial topics and provide also avenues for future investigation and new research trajectories. Possible research questions include:

- How will exponential digital innovation (e.g. AI, AR, cognitive systems) impact the meaning and application of leadership abilities within organizations?
- How to virtuously develop and integrate the capabilities required for coping with the “human side” of digital transformation?
- Which are the relationships between digital transformation and leadership characteristics by a practitioner perspective?
- Which are the competencies of transformative leaders in organizations and what new learning mechanisms can be activated to develop them?
- Which are the regional, organizational, and cultural variables that may influence digital leadership in different industries and institutional scenarios?

Future research on these topics is supposed to inspire academic and practitioner conversation by bringing together complementary views on digital leadership and the managerial and entrepreneurial competencies able to support digital transformation. The development of digital maturity within organizations (Chirumalla, 2021) is strongly associated with the presence of digital leaders and new forms of managerial skills and competencies (Ostmeier and Strobel, 2022; Neumeier and Liu, 2021), with the ultimate goal to create value for business organizations and the society at large.

References

- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., Venkatraman, N. V. (2013). “Digital business strategy: toward a next generation of insights”, *MIS Quarterly*, 471-482.
- Bresciani, S., Ferraris, A., Romano, M., Santoro, G. (2021). *Digital Leadership. In Digital Transformation Management for Agile Organizations: A Compass to Sail the Digital World*, Emerald Publishing Limited.
- Bughin, J., Kretschmer T., van Zeebroeck, N. (2021) “Digital technology adoption drives strategic renewal for successful digital transformation”, *IEEE Engineering Management Review*, **49**(3), 103-108.
- Chatterjee, S., Chaudhuri, R., Vrontis, D., Giovando, G. (2023). “Digital workplace and organization performance: Moderating role of digital leadership capability”, *Journal of Innovation & Knowledge*, **8**(1), 100334.
- Chirumalla, K. (2021) “Building digitally-enabled process innovation in the process industries: A dynamic capabilities approach”, *Technovation*, 102256.
- de Araujo, L. M., Priadana, S., Paramarta, V., Sunarsi, D. (2021) “Digital leadership in business organizations”, *International Journal of Educational Administration, Management, and Leadership*, 45-56.
- Elia, G., Margherita, A., Ciavolino, E., & Moustaghfir, K. (2021). “Digital society incubator: Combining exponential technology and human potential to build resilient entrepreneurial ecosystems”, *Administrative Sciences*, **11**(3), 96.
- Elia, G., Margherita, A., Passiante, G. (2020). “Digital entrepreneurship ecosystem: How digital technologies and collective intelligence are reshaping the entrepreneurial process”, *Technological Forecasting and Social Change*, **150**, 119791.
- Ellström, D., Holtström, J., Berg, E., Josefsson, C. (2021). “Dynamic capabilities for digital transformation”, *Journal of Strategy and Management*, **15**(2), 272-286.
- Fisher, G. (2020). “Why every business professor should write practitioner-focused articles”, *Business Horizons*, **63**(4), 417-419.
- Hanelt, A., Bohnsack, R., Marz, D., Antunes Marante, C. (2021) “A systematic review of the literature on digital transformation: insights and implications for strategy and organizational change”, *Journal of Management Studies*, **58**(5), 1159-1197.
- Hensellek, S. (2020) “Digital leadership: A framework for successful leadership in the digital age”, *Journal of Media Management and Entrepreneurship (JMME)*, **2**(1), 55-69.

- Jackson, N.C., Dunn-Jensen, L.M. (2021) "Leadership succession planning for today's digital transformation economy: Key factors to build for competency and innovation", *Business Horizons*, **64**(2), 273-284.
- Kane, G.C., Phillips, A.N., Copulsky, J., Andrus, G. (2019) "How digital leadership is(n't) different", *MIT Sloan Management Review*, **60**(3), 34-39.
- Lanzolla, G., Lorenz, A., Miron-Spektor, E., Schilling, M., Solinas, G., Tucci, C.L. (2020) "Digital transformation: What is new if anything? Emerging patterns and management research", *Academy of Management Discoveries*, **6**(3), 341-350.
- Laufer, D. (2021). "What makes a special issue impactful in Business Horizons?", *Business Horizons*, **64**(1), 3.
- Mele, G., Capaldo, G., Secundo, G., Corvello, V. (2023). "Revisiting the idea of knowledge-based dynamic capabilities for digital transformation", *Journal of Knowledge Management* (in press).
- Müller, S. D., Konzag, H., Nielsen, J. A., Sandholt, H. B. (2024). "Digital transformation leadership competencies: A contingency approach", *International Journal of Information Management*, **75**, 102734.
- Neumeyer X., Liu, M (2021) "Managerial competencies and development in the digital age", *IEEE Engineering Management Review*, **49**(3), 49-55.
- Ostmeier, E., Strobel, M. (2022) "Building skills in the context of digital transformation: How industry digital maturity drives proactive skill development", *Journal of Business Research*, **139**, 718-730.
- Ramesh N., Delen, D (2021) "Digital transformation: How to beat the failure rate?", *IEEE Engineering Management Review*, **49**(3), 22-25.
- Saarikko, T., Westergren, U. H., Blomquist, T. (2020). "Digital transformation: Five recommendations for the digitally conscious firm", *Business Horizons*, **63**(6), 825-839.
- Schlegel, D., Kraus, P. (2023). "Skills and competencies for digital transformation—a critical analysis in the context of robotic process automation", *International Journal of Organizational Analysis*, **31**(3), 804-822.
- Schneider, M. H., Kanbach, D. K., Kraus, S., Dabić, M. (2023). "Transform me if you can: Leveraging dynamic capabilities to manage digital transformation", *IEEE Transactions on Engineering Management* (in press).
- Tigre, F. B., Curado, C., Henriques, P. L. (2023). "Digital leadership: A bibliometric analysis", *Journal of Leadership & Organizational Studies*, **30**(1), 40-70.
- van Zeebroeck, N., Kretschmer, T., Bughin, J. (2021) "Digital is strategy: The role of digital technology adoption in strategy renewal", *IEEE Transactions on Engineering Management*, 1-15.
- Williams, E., Galvin, J., LaBerge, L. (2021). *The New Digital Edge: Rethinking Strategy for the Postpandemic Era*, McKinsey Global Publishing, <https://www.mckinsey.com>.