

## A Theoretical Literature Review and Conceptual Framework of the Data-Driven Organization\*

Ivana GABRIŠOVÁ<sup>1</sup>, Gabriel KOMAN<sup>2</sup> and Rudolf KAMPF<sup>3</sup>

<sup>1,2</sup>Department of Management Theories, Faculty of Management  
Science and Informatics, University of Žilina  
Žilina, Slovak Republic

<sup>3</sup>VŠTE, Okružní 10, České Budějovice, Czech Republic

Correspondence should be addressed to: Ivana GABRIŠOVÁ, [ivana.gabrisova@fri.uniza.sk](mailto:ivana.gabrisova@fri.uniza.sk)

\* Presented at the 46<sup>th</sup> IBIMA International Conference, 26-27 November 2025, Ronda, Spain

### Abstract

This paper aims to clarify the concept of data-driven organizations by synthesizing diverse definitions and conceptualizations in the literature and proposing a unified conceptual framework grounded in technology, culture, management, and human capability. A theoretical literature review is conducted using a structured search in the Web of Science database, applying strict inclusion criteria: (1) open access; (2) English language; (3) Business & Management category; (4) published since 2014. After filtering and PRISMA-style screening, eight key publications were selected for in-depth interpretive analysis. The analysis reveals four interdependent dimensions critical for becoming data-driven: (1) cultural transformation; (2) technological infrastructure; (3) managerial practices; (4) human capabilities. Cultural change emerges as the most fundamental driver, enabling effective knowledge sharing, experimentation, and trust in data. Technological systems (e.g. cloud, analytics, IoT) provide infrastructure, but their value depends on alignment with organizational strategy. Managerial roles must interpret and embed insights into business models, while human skills (both analytical and interpretative) bridge data and decision-making. Multiple configurations of these dimensions may yield successful outcomes depending on context. This study contributes by integrating fragmented definitions of data-driven organizations. It highlights that data-driven transformation is not primarily a technological challenge, but a holistic organizational shift.

**Keywords:** Data-driven organization; Data-driven culture; Organizational transformation; Big data analytics

### Introduction

The rapid digitization of the global economy and the growing efforts of private and public organizations to make better use of their data have led to exponential growth in data processing. Organizations aim to capitalize on this growth, streamline processes, innovate, and deliver new products and services, which has revealed the need to address the challenges of proper and effective information management. Data management and governance have thus become key elements due to their fundamental role in planning, organizing organizational activities, and decision-making (Caballero and Piattini, 2024). Data have always been at the core of information systems, but in the past decade digital transformation, the spread of technologies such as Big Data, analytics, and artificial

intelligence, the growth of regulatory frameworks, and the pressure to personalize services have made data management a matter of critical importance for organizational survival and profitability (Caballero and Piattini, 2024).

The amount and diversity of data available to companies have grown rapidly, from social media to internet clicks, while the cycle of collection, analysis, and response has accelerated (Athamena and Houhamdi, 2018). Data have become a strategic asset and a source of innovation; they are increasingly regarded as a product to be managed and controlled (e.g., in data markets), leading to the emergence of data ecosystems. This paper therefore addresses the issue of the transformation of organizations into data-driven organizations (DDOs). An organization can be classified as data-driven when it uses data and analysis to support action, including deliberate inaction (Halper and Stodder, 2017). This is an area of high research and practical relevance: examining the organizational, technological, and cultural factors that support or hinder transformation offers direct benefits for businesses seeking to improve processes and decision-making.

Relatively few organizations successfully complete the transition to becoming DDOs. In two surveys only about 30% of respondents reported a successful transformation. In the Big Data and AI Executive Survey, the proportion of companies that described themselves as data-driven declined for three consecutive years (2017: 37.1% to 2019: 31.0%) (Bean and Davenport, 2019; Halper and Stodder, 2017).

There are many definitions of DDO in the literature, ranging from simple to complex. The aim of this publication is to identify, analyze, and synthesize knowledge on the issue of data-driven organizations.

## **Theoretical background**

### ***Data-driven organization***

Most definitions of a data-driven organization (DDO) agree that data are a strategic asset and that data-driven decision-making becomes part of organizational culture and practices (Barbala et al., 2024). Schüritz et al. (2017) define a DDO as an organization that uses data and analytics to manage its activities.

In an attempt to synthesize various conceptualizations of DDO, Fischer et al. (2022) propose a framework according to which an ideal-typical DDO has an integrated perspective both from the outside in and from the inside out. The authors suggest that for an organization to be defined as data-driven, it must complement the use of acquired and analyzed data, applied to create new data products and to support data-driven administrative changes within the organization, with the external creation of data-driven value. Such organizations seek to leverage their data capabilities and to exploit the innovative opportunities these provide in order to achieve effective results that transcend organizational boundaries.

A first outline of how organizations might approach the goal of becoming data-driven is provided by Anderson (2015), whose book offers practical advice and valuable insights on how organizations can transition effectively. It provides guidance based on professional practice and examines various aspects of creating a data-driven organization, including data infrastructure, data governance, fostering a data-driven culture, leveraging analytics, and making informed, evidence-based decisions. Anderson emphasizes the importance of aligning individuals, work processes, and technological resources to maximize the potential of data in improving business outcomes.

### ***Data-driven culture***

In relation to the specific capabilities of organizations striving for data orientation, Kremser and Brunauer (2019) argue that the concept of data culture is too general to capture the necessary cultural factors. A particular quality of data culture, namely data-driven culture (DDC), sometimes referred to as DDC (Cao and Duan, 2014; Chatterjee et al., 2021), is considered more appropriate to describe this situation.

When a data-driven culture is adopted, it becomes possible to alter the traditional phases of business processes, as it requires the integration and synergistic combination of decision-making and data analysis. The goal is to promote a new way of thinking in which data are used as a means of improving business processes through the continuous

development of knowledge about stakeholder behavior, company performance, service evaluations, and related aspects (Troisi et al., 2019).

Leadership plays a critical role in promoting a data-driven culture, as the support, commitment, and active participation of managers in data-driven initiatives set the tone for organizational practices (McAfee and Brynjolfsson, 2012). A data-driven culture also requires employees to possess data literacy skills, including the ability to collect, analyze, interpret, and communicate data effectively (Chen, 2020).

Data availability and infrastructure are further essential to support DDC. Organizations must establish a reliable infrastructure, including storage, integration, and analysis capabilities, to facilitate access to relevant data across the organization (Raghupathi and Raghupathi, 2021). Importantly, full data availability can only be achieved if the organizational culture fosters collaboration through cross-functional integration (Yu et al., 2021). An integral part of this is the ability to perceive the entire data supply chain across administrative boundaries. Berndtsson et al. (2018) state that “a data-driven culture will help organizations gain a holistic view of their intentions to expand the use of advanced analytics.”

Anderson (2015) further highlights related factors in his outline of what DDC entails. He emphasizes the importance of creating a curious culture of questioning, characterized by an atmosphere of healthy debate in which it is possible to request additional information, challenge assumptions, and discuss recommendations or further tests.

## **Methodology**

A theoretical literature review was conducted to synthesize existing knowledge about data-driven organizations, with the aim of developing a conceptual framework for the topic. This type of research is particularly suitable for new or underexplored areas where it is necessary to establish theoretical foundations. It has a broad scope, draws on both conceptual and empirical sources, and typically employs content analysis or interpretive methods (Paré et al., 2015).

The first step involved defining parameters for the selection of publications in the chosen database, Web of Science (WoS). Clear inclusion criteria were established: only studies that were open access, available in full text, written in English, categorized under Business and Management, and published no earlier than 2014 were included in the review sample.

The final search parameters in the database were as follows: (1) availability: open access; (2) language: English; (3) article category: Business and Management; and (4) year of publication: 2014 or later. The search was conducted using the following string of keywords: “data-driven organization” OR “data-driven organisation” OR “data-driven company” OR “data-driven enterprise” OR “data-driven culture.” The keyword “data-driven culture” was included because, in many cases, it is used interchangeably or synonymously with “data-driven organization.”

In the first search step, without applying filters, 87 publications were identified. In the second step, after applying the inclusion filters, 19 publications remained. A subsequent detailed review of the publications, involving the screening of article titles, abstracts, and full texts in line with the PRISMA methodology, resulted in the identification of eight suitable publications for further analysis.

## **Results**

Esteller-Cucala et al. (2020) highlight that a central feature of data-driven organizations is their capacity to generate value through the transformation of data into knowledge, which supports innovative insights and idea generation. However, the shift from intuition-based to data-driven decision-making entails significant organizational transformation. Such processes often create knowledge gaps, requiring employees to acquire new abilities, adapt to revised positions and roles, and engage in continuous learning. This underscores the necessity of constant and effective communication, as well as teamwork, to manage the uncertainties and disruptions associated with change. The authors emphasize the importance of cultivating a data-driven culture that fosters organizational learning, knowledge sharing, and the establishment of new habits. This cultural shift is not only technical but also behavioral, as employees must embrace experimentation and accept that failure is an inherent part of innovation. The study suggests that transformation toward a data-driven decision-making model should be understood as an incremental change, enabling structured and sustainable adaptation to the digital environment.

In this context, organizational readiness for change emerges as a decisive factor influencing how effectively companies can implement and sustain the transition to a data-driven orientation.

Visvizi et al. (2021) argue that research on data-driven orientation has shifted from a purely technological focus to a broader managerial perspective. While big data analytics, digital platforms, and smart technologies form the foundation, innovation arises when infrastructures are strategically integrated with managerial practices and human capabilities. Technological systems such as cloud platforms, decision support systems, and agile methods provide accessibility and efficiency, but they must be aligned with organizational objectives through strategic data management. The managerial dimension emphasizes flexibility, proactive interpretation, and linking data insights to organizational learning and business model redefinition. The human dimension is equally critical: beyond analytical and technical skills, interpretative, creative, and communicative competencies support knowledge sharing, collaboration, and distributed leadership. Education and training initiatives, including mentorship and digital literacy programs, further enable adaptability. Overall, Visvizi et al. highlight that a strategic data-driven orientation depends on the synergy of technological, managerial, and human dimensions, fostering continuous innovation, cultural change, and sustainable competitiveness.

Anton et al. (2023) examine data-driven organizations through the concept of business data analytics capability, closely tied to data-driven culture. They argue that analytics function not only as technological tools but also as cultural resources embedded in decision-making. Data are framed as the raw material for fact-based decisions, supported by governance policies and structured models ensuring quality and accessibility. Building such capabilities requires more than technology: it demands a supportive environment where analytics are integrated into strategic and everyday practices. Adoption reshapes organizational culture by fostering transparency, independent data use, and new patterns of collaboration and learning. Key mechanisms sustaining this culture include toolkits (technologies and structures that enable use), frames (mental models guiding interpretation), categories (shared meanings), values (collective beliefs about data), and stories (narratives embedding data into organizational identity). These encourage experimentation, critical thinking, and an analytical mindset. Ultimately, Anton et al. highlight that evolving toward a data-driven culture is an ongoing process requiring readiness for change, investment in skills, and open communication between IT and business functions. Through this integration of technical, organizational, and cultural elements, data become the central resource for innovation, optimization, and long-term transformation.

Van de Waerdt (2020) examines data-driven organizations through the lens of information asymmetries between companies and consumers. Data-driven companies (DDCs) base their models on large-scale collection, analysis, and monetization of personal data. Beyond user-provided information, they gather observed behavioral traces, such as interactions, searches, or geolocation, and derive inferred data through advanced analytics, often without user awareness. This creates significant asymmetries: consumers cannot oversee the extent of collection and analysis, while companies possess superior technical capacity to generate opaque profiles and automated decisions. As algorithms advance, these gaps widen. Regulatory frameworks such as the General Data Protection Regulation (GDPR) provide only partial safeguards, as privacy policies remain inaccessible to most consumers. Consequently, the data-driven business model itself establishes structural barriers to transparency, leaving consumers vulnerable and with limited ability to challenge automated decision-making.

Grimaldi et al. (2019) analyze the data conditions that support business performance, focusing on customer management and provider efficiency. They define a data-driven profile as a preference for decisions based on evidence rather than intuition and operationalize it through a maturity model with four conditions: consistency, completeness, usage, and protection. These ensure standardized, complete, accessible, and secure data, forming the basis for reliable decision-making. Their findings show that different combinations of these conditions, combined with a strong data-driven profile, can improve both customer experiences and provider operations. The study also highlights the human dimension: recruitment of staff with analytical skills, training in visualization, and cultural change are essential for embedding data-driven practices. Overall, the results suggest that no single pathway guarantees improved performance, but multiple configurations of data conditions can drive innovation and efficiency.

Troisi et al. (2023) explore how data-driven orientation reshapes business models in hospitality, introducing data-driven business models (DDBMs) as a foundation for innovation. They identify five enabling dimensions: culture, technological infrastructure, data skills, process management, and continuous improvement. From a technological perspective, centralized systems, cloud platforms, APIs, and dashboards enhance data accessibility and transparency, while managerial alignment ensures strategies are guided by systematic collection and interpretation.

The human dimension emphasizes both technical expertise and soft skills such as creativity and empathy, supported by training and knowledge sharing. Together, these elements foster a culture of learning and experimentation. Data-driven orientation also drives business model innovation by renewing value propositions, enhancing customer experience, and enabling value co-creation across economic, social, and cultural domains. Ultimately, Troisi et al. argue that embedding data into culture, strategy, and processes allows organizations to balance incremental improvements with radical innovation, sustaining competitiveness in dynamic environments.

Trabucchi and Buganza (2019) emphasize the role of digital technologies and interoperable ICTs in enabling data-driven innovation. They argue that data are not a by-product but the primary asset around which entire business models can be built. Their concept of data orientation management outlines strategies for capturing value from data, requiring a clear understanding of which data are needed for innovation and how they can be transformed into knowledge. In this perspective, the need for data itself becomes the trigger for innovation, with digital services often designed to generate data as much as to provide value to users. This shift positions end users as active contributors of data, enabling personalization and efficiency gains. Ultimately, the authors highlight that the central challenge lies in transforming raw data into knowledge to unlock continuous innovation and differentiated value.

Hannila et al. (2019) examine how company data assets support fact-based decision-making in product portfolio management (PPM). They classify assets into master, transactional, and interactional data, which together enable real-time intelligence across the product lifecycle. Effective use requires a corporate-wide data model, consistent governance, and integration across silos. While IT infrastructures such as ERP, CRM, and cloud systems are essential, the authors argue that data must come first, with technology serving as support. Building trust in data, fostering a culture of evidence-based decision-making, and applying the DIKW hierarchy are central to this transformation. IoT and smart products further expand opportunities, enabling predictive services, new revenue models, and market creation. Success, however, depends on organizational readiness for change and systematic efforts to manage data as a strategic asset.

To synthesize the findings of the reviewed publications, Table 1 provides a comparative overview of their main focus and emphasized dimensions of DDO based on the key results. While the studies differ in scope, from explicit analyses of data-driven organizations and cultures to sector-specific applications and critical perspectives on data-driven markets, they collectively highlight the multifaceted nature of becoming data-driven. The analysis shows that technological infrastructures, managerial practices, cultural shifts, human capabilities, and regulatory considerations are recurrent themes, though each study places emphasis on different combinations of these dimensions. This comparative perspective underscores the importance of a holistic approach, in which the transformation toward data-driven organizations depends on the alignment of cultural, technological, managerial, and human factors.

**Table 1. Publication overview**

<b>Author</b>	<b>Focus of the publication</b>	<b>Dimensions emphasized</b>
Esteller-Cucala et al. (2020)	Explicit focus on DDO and DDC	Cultural, human, organizational readiness
Visvizi et al. (2021)	Explicit focus on DDO	Technological, managerial, human, cultural
Anton et al. (2023)	Explicit focus on DDC	Cultural, technological, organizational
Van de Waerd (2020)	Data-driven market	Legal/regulatory, technological, ethical
Grimaldi et al. (2019)	Improving business performance with data	Technological, procedural, human
Troisi et al. (2023)	Data-driven innovation	Technological, managerial, cultural, human
Trabucchi and Buganza (2019)	Data-driven innovation	Technological, strategic, cultural
Hannila et al. (2019)	Data-driven and fact-based decision-making	Technological, cultural, organizational change

## Discussion and Conclusion

The findings of this review highlight several central dimensions of data-driven organizations (DDOs). Most importantly, the results underscore that cultural transformation is decisive. Across the reviewed studies, data-driven culture emerges as the foundation for embedding data into everyday practices, fostering organizational learning, and supporting evidence-based decision-making (Esteller-Cucala et al., 2020; Anton et al., 2023). Without cultural change, reflected in values, norms, and behaviors, technological investments alone are insufficient to achieve sustainable transformation. The second major finding is the interplay of technology and managerial practices. Studies emphasize that while advanced infrastructures such as cloud platforms, decision support systems, and IoT provide the technical basis for data integration and accessibility, their impact depends on strategic alignment with business objectives (Visvizi et al., 2021; Troisi et al., 2023; Hannila et al., 2019). Managerial responsibility lies in fostering proactive interpretation of data, ensuring its relevance to organizational goals, and supporting continuous renewal of business models. The human dimension constitutes the third key theme. The literature stresses that data-driven orientation requires not only analytical and technical skills, but also interpretative, creative, and communicative competencies to translate data into actionable knowledge (Visvizi et al., 2021; Grimaldi et al., 2019). Investments in training, digital literacy, and mentorship are therefore essential to support knowledge sharing, cross-functional collaboration, and distributed leadership. A further important contribution of the reviewed studies is the recognition of risks and asymmetries. Van de Waerd (2020) demonstrates that data-driven business models often deepen information imbalances between companies and consumers, raising ethical and regulatory concerns that cannot be fully mitigated by existing frameworks such as the GDPR. This finding highlights the need to consider transparency, accountability, and fairness as integral components of data-driven transformation. Finally, the review illustrates that no single pathway guarantees successful outcomes. Multiple configurations of cultural, technological, managerial, and human factors can lead to improvements in efficiency, innovation, and competitiveness (Grimaldi et al., 2019). This suggests that flexibility and context sensitivity are essential for organizations pursuing data-driven strategies.

This study is based on a theoretical literature review of a limited number of publications identified under strict inclusion criteria. The sample, although focused and systematic, may not fully capture the diversity of empirical evidence or sector-specific applications of DDOs. Furthermore, the reliance on English-language and open-access publications introduces potential selection bias.

For researchers in business and management, the results highlight the need to study DDOs as multi-dimensional constructs, integrating culture, technology, human skills, and governance. For scholars in other fields, such as public administration, education, or healthcare, the findings suggest that lessons from the corporate context may inform sector-specific approaches to digital transformation. For practitioners and the wider public, the review points to both opportunities and risks: organizations can enhance innovation, efficiency, and value creation by becoming data-driven, but must also address issues of transparency and consumer trust.

Further studies should employ empirical methods to test the interplay of the identified dimensions across industries and organizational contexts. Longitudinal analyses would be valuable to understand how cultural and structural changes unfold over time. In addition, interdisciplinary research is needed to explore the ethical, regulatory, and societal implications of data-driven practices, particularly regarding consumer rights, algorithmic transparency, and responsible innovation.

This review concludes that the successful transformation into a data-driven organization depends on the alignment of four interdependent dimensions: cultural change, technological infrastructure, managerial practices, and human capabilities. Cultural transformation is the most critical driver, ensuring that data are embedded into organizational routines and decision-making. Technology, while essential, yields value only when strategically managed. Human skills and managerial leadership enable data to be transformed into actionable knowledge. Finally, organizations must remain alert to ethical and regulatory challenges. Taken together, these findings demonstrate that data-driven transformation is not merely a technical endeavor, but a holistic organizational shift that requires readiness for change, investment in skills, and sustained cultural adaptation.

## Acknowledgements

This publication was realized with support of Operational Program Integrated Infrastructure 2014 - 2020 of the project: Intelligent operating and processing systems for UAVs, code ITMS 313011V422, co-financed by the European Regional Development Fund.

## References

- Anderson, C. (2015). *Creating a data-driven organization : practical advice from the trenches*. Sebastopol, Calif.: O'reilly.
- Anton, E., Oesterreich, T.D., Aptyka, M. and Teuteberg, F. (2023). *Beyond Digital Data and Information Technology: Conceptualizing Data-Driven Culture*. [online] AIS Electronic Library (AISeL). Available at: <http://dx.doi.org/10.17705/1pais.15301>.
- Athamena, B., and Houhamdi, Z. (2018). *Model for decision-making process with big data*. Journal of Theoretical and Applied Information Technology. 96. 5951-5961.
- Barbala, A.M., Hanssen, G.K. and Sporsem, T. (2024). Towards a common data-driven culture: A longitudinal study of the tensions and emerging solutions involved in becoming data-driven in a large public sector organization. *Journal of Systems and Software*, 218, p.112185. doi:<https://doi.org/10.1016/j.jss.2024.112185>.
- Bean, R. and Davenport, T. (2019). *Companies Are Failing in Their Efforts to Become Data-Driven*. [online] Harvard Business Review. Available at: <https://hbr.org/2019/02/companies-are-failing-in-their-efforts-to-become-data-driven>.
- Berndtsson, M., Forsberg, D., Stein, D. and Svahn, T. (2018). *Becoming a data-driven organisation*.
- Caballero, I. and Piattini, M. (2024). *Data Governance*. Springer Nature.
- Cao, G. and Duan, Y. (2014). *A path model linking business analytics, data-driven culture, and competitive advantage*. 22nd European Conference on Information Systems (ECIS) 2014, 8-11, June 2014, Tel Aviv, Israel.
- Chatterjee, S., Chaudhuri, R. and Vrontis, D. (2021). Does data-driven culture impact innovation and performance of a firm? An empirical examination. *Annals of Operations Research*, [online] 333. Available at: [https://www.researchgate.net/publication/348176781\\_Does\\_data-driven\\_culture\\_impact\\_innovation\\_and\\_performance\\_of\\_a\\_firm\\_An\\_empirical\\_examination](https://www.researchgate.net/publication/348176781_Does_data-driven_culture_impact_innovation_and_performance_of_a_firm_An_empirical_examination).
- Chen, Y. (2019). Data-Driven Decision Making Literacy among Rural Community College Leaders in Iowa: The Role of Leadership Competencies. *Community College Journal of Research and Practice*, 1–16. <https://doi.org/10.1080/10668926.2019.1592032>
- Esteller-Cucala, M., Fernandez, V. and Villuendas, D. (2020). Towards data-driven culture in a Spanish automobile manufacturer: A case study. *Journal of Industrial Engineering and Management*, [online] 13(2), pp.228–245. doi:<https://doi.org/10.3926/jiem.3042>.
- Fischer, H., Wiener, M., Strahinger, S., Kotlarsky, J., & Bley, K. (2022). *From Knowing to Data-Driven Organizations: Review and Conceptual Framework*. AIS Electronic Library (AISeL). <https://aisel.aisnet.org/acis2022/42>
- Grimaldi, D., Fernandez, V. and Carrasco, C. (2019). Exploring data conditions to improve business performance. *Journal of the Operational Research Society*, pp.1–11. doi:<https://doi.org/10.1080/01605682.2019.1590136>.
- Halper, F., and Stodder, D. (2017). *What It Takes to Be Data-Driven*. BEST PRACTICES REPORT. TDWI.
- Hannila, H., Silvola, R., Harkonen, J. and Haapasalo, H. (2019). Data-driven Begins with DATA; Potential of Data Assets. *Journal of Computer Information Systems*, 62(1), pp.1–10. doi:<https://doi.org/10.1080/08874417.2019.1683782>.
- Kremser, W. and Brunauer, R. (2019). Do we have a Data Culture? *Data Science – Analytics and Applications*, pp.83–87. doi:[https://doi.org/10.1007/978-3-658-27495-5\\_11](https://doi.org/10.1007/978-3-658-27495-5_11).
- McAfee, A. and Brynjolfsson, E. (2012). *Big Data: The Management Revolution*. [online] Harvard Business Review. Available at: <https://hbr.org/2012/10/big-data-the-management-revolution>.
- Paré, G., Trudel, M.-C., Jaana, M. and Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management*, 52(2), pp.183–199.
- Raghupathi, W. and Raghupathi, V. (2021). Contemporary Business Analytics: An Overview. *Data*, [online] 6(8), p.86. doi:<https://doi.org/10.3390/data6080086>.

- Schüritz, R., Brand, E., Gerhard Satzger and Johannes Bischhoffshausen (2017). HOW TO CULTIVATE ANALYTICS CAPABILITIES WITHIN AN ORGANIZATION? – DESIGN AND TYPES OF ANALYTICS COMPETENCY CENTERS. [online] AIS Electronic Library (AISeL). Available at: [http://aisel.aisnet.org/ecis2017\\_rp/26?utm\\_source=aisel.aisnet.org%2Fecis2017\\_rp%2F26&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](http://aisel.aisnet.org/ecis2017_rp/26?utm_source=aisel.aisnet.org%2Fecis2017_rp%2F26&utm_medium=PDF&utm_campaign=PDFCoverPages) [Accessed 23 Oct. 2025].
- Trabucchi, D. and Buganza, T. (2019). Data-driven innovation: switching the perspective on Big Data. *European Journal of Innovation Management*, 22(1), pp.23–40. doi:<https://doi.org/10.1108/ejim-01-2018-0017>.
- Troisi, O. (2020). Growth hacking: Insights on data-driven decision-making from Three Firms. *Industrial Marketing Management*, [online] 90(1). doi:<https://doi.org/10.1016/j.indmarman.2019.08.005>.
- Troisi, O., Visvizi, A. and Grimaldi, M. (2023). Digitalizing business models in hospitality ecosystems: toward data-driven innovation. *European Journal of Innovation Management*, [online] 26(7), pp.242–277. doi:<https://doi.org/10.1108/ejim-09-2022-0540>.
- van de Waerd, P.J. (2020). Information asymmetries: Recognizing the Limits of the GDPR on the Data-Driven Market. *Computer Law & Security Review*, 38. doi:<https://doi.org/10.1016/j.clsr.2020.105436>.
- Visvizi, A., Troisi, O., Grimaldi, M. and Loia, F. (2021). Think human, act digital: activating data-driven orientation in innovative start-ups. *European Journal of Innovation Management*, 25(6). doi:<https://doi.org/10.1108/ejim-04-2021-0206>.
- Yu, W., Wong, C.Y., Chavez, R. and Jacobs, M.A. (2021). Integrating big data analytics into supply chain finance: The roles of information processing and data-driven culture. *International Journal of Production Economics*, 236(1), p.108135. doi:<https://doi.org/10.1016/j.ijpe.2021.108135>.