

THE INFLUENCE OF BIG DATA ANALYTICS STRATEGY ON PERFORMANCE: A COMPREHENSIVE SYSTEMATIC LITERATURE REVIEW

Laila Omari ^{*}, Driss Rahli ^{**}, Malika Haoucha ^{**}

^{*} Corresponding author, Faculty of Law, Economics and Social Sciences, Hassan II University of Casablanca, Ain Sebaa, Casablanca, Morocco
Contact details: Faculty of Law, Economics and Social Sciences, Hassan II University of Casablanca,

Beausite, BP: 2634 Ain Sebaâ, Casablanca, Morocco

^{**} Faculty of Law, Economics and Social Sciences, Hassan II University of Casablanca, Ain Sebaa, Casablanca, Morocco



Abstract

How to cite this paper: Omari, L., Rahli, D., & Haoucha, M. (2025). The influence of Big Data analytics strategy on performance: A comprehensive systematic literature review. *Corporate & Business Strategy Review*, 6(3), 115–127.
<https://doi.org/10.22495/cbsrv6i3art11>

Copyright © 2025 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).
<https://creativecommons.org/licenses/by/4.0/>

ISSN Online: 2708-4965

ISSN Print: 2708-9924

Received: 22.07.2024

Revised: 04.04.2025; 27.06.2025

Accepted: 07.07.2025

JEL Classification: C83, D22, L86, M15, O32

DOI: 10.22495/cbsrv6i3art11

The emergence of Big Data (BD) has led many researchers to highlight the importance of Big Data analytics capabilities (BDAC) to enhance a firm's performance (Aker et al., 2016; Mikalef et al., 2019; Fosso Wamba et al., 2020). Nevertheless, the existing literature on this subject adopts diverse approaches, making it challenging to understand this impact. Guided by the rigorous Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol, a meticulous paper selection process was applied to identify 106 journal articles. Initially, we identified key antecedents that influence the adoption of BDAC initiatives. Subsequently, we investigated the mediators and moderators impacting the BDAC-performance relationship. Finally, we analysed the impact of BDAC on diverse dimensions of performance. Our review found that multiple factors influence BDAC development, and its impact on performance depends on various mediators and moderators in different organisational contexts. These insights can assist practitioners and theorists in understanding how firms can harness the potential of BD to create real business value and identify gaps that can lead to expanding theoretical perspectives in this area.

Keywords: Big Data, Big Data Analytics Capabilities, Digitalisation, Performance, Business Value, Mediators, Moderators

Authors' individual contribution: Conceptualization — L.O.; Methodology — L.O. and D.R.; Validation — L.O., D.R., and M.H.; Writing — Original Draft — L.O.; Writing — Review & Editing — M.H.; Visualization — L.O.; Supervision — D.R.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Digitisation has made Big Data (BD) more accessible and affordable for companies of all sizes. We mean by BD “high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight, decision-making, and process automation” (Gartner, n.d.). Exploring this raw data by humans is impossible, so advanced analytics techniques are used to handle these large and diverse BD sets using algorithmic and statistical techniques that transform BD into information that

enables decision-makers to create business value. Nevertheless, it is not enough to invest in new analytical tools; firms should combine data with other related resources and capabilities for more effective outcomes. Aker et al. (2016) categorise Big Data analytics capabilities (BDAC) into three typologies: Big Data analytics (BDA) technology capabilities, BDA management capabilities, and BDA talent capabilities. Subsequently, the challenge is to ensure that all these resources are connected to derive maximum benefit from BD. However, the drivers of BDA adoption are debated in different

ways in the literature. Moreover, BDAC's effect is not directly related to performance; various factors, depending on contexts, sectors, and outcomes, play the role of mediator and moderator variables between BDAC and performance (Huynh et al., 2023). In the same way, performance as a concept has different aspects, financial or non-financial. However, extracting actionable knowledge from data is challenging due to its heterogeneity and organisations' lack of understanding of these issues.

In this systematic review, we will clarify misunderstandings surrounding these mechanisms to help companies greatly benefit from BDAC services by addressing the following research questions:

RQ1: What key antecedents influence the adoption and effectiveness of Big Data analytics capabilities initiatives?

RQ2: What are the mediators and moderators impacting the Big Data analytics capabilities-performance relationship?

RQ3: What are the specific types of performance that Big Data analytics capabilities can impact?

To address these research inquiries, the dynamic capabilities theory (DCT) serves as a foundational theory positing that the role of BDAC as a dynamic capability allows firms to sense and seize new opportunities to improve performance. This theory emphasises the importance of acquiring and processing data while developing and integrating various capabilities and continuously adapting resources to the changing environment.

Reviewing articles across diverse organisational contexts aims to help businesses differentiate themselves from competitors by identifying the key success factors for effective BDA implementation. Understanding these factors, such as fostering a data-driven culture, encouraging innovation, and securing top management support, helps businesses allocate resources more efficiently and concentrate on the most impactful areas. Additionally, this review offers insights into the specific benefits that BDAC can provide, demonstrating how leveraging these capabilities can enhance performance across various aspects of operations.

To synthesise the research findings on BDAC and their impact on performance, we conducted a systematic review following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. This structured methodology ensures a comprehensive review that enhances the clarity and replicability of our work. The synthesis of these reviewed studies confirmed that BDAC significantly improved performance. Moreover, various contextual factors, including moderators and mediators, influenced the effectiveness of BDAC. This finding was structured into a conceptual framework for companies aiming to leverage BDA to achieve a competitive advantage.

The structure of the paper is as follows. Section 2 provides an extensive analysis of the literature about the relationship between BDAC performance. Section 3 delineates the systematic review procedure under the PRISMA protocol. Section 4 provides a synthesis of the findings from the selected papers. Section 5 discusses the results and explores the broader implications of these findings. Finally, Section 6 summarises key contributions, discusses limitations, and proposes avenues for future research.

2. LITERATURE REVIEW

2.1. Resource-based view and dynamic capabilities theory

The resource-based view (RBV), developed by Barney (1991), asserts that companies achieve a competitive advantage by strategically leveraging their unique resources and capabilities. According to this theory, resources that are valuable, rare, difficult to imitate, and non-substitutable enable companies to develop unique competencies that differentiate them from their competitors (Beske, 2012). However, in a dynamic and uncertain context, the resource-based theory can be enriched by integrating the DCT to better understand how firms can adapt to rapidly changing markets and sustain long-term competitive advantage. A company's dynamic capabilities are defined as its ability to integrate, develop, and reconfigure both internal and external competencies in response to adapt to rapid environmental change (Teece et al., 1997). DCT is especially important in today's BD era, where a company's agility and ability to adapt to rapid changes are crucial. This is unlike resource theory, which focuses on managing and optimising existing resources.

2.2. Big Data analytics capabilities

As data becomes larger and more complex, data analysis tools are also necessary to uncover hidden phenomena and seize new opportunities. BDA is defined as a complex process combining BD and business analytics to manage, process, and analyse vast sets of diverse, large, and constantly evolving data to obtain actionable insights (Russom, 2011). The use of advanced analytical tools such as machine learning, predictive algorithms, and real-time analysis allows companies to identify trends, correlations, and anomalies that would otherwise be undetectable with traditional tools. However, companies have observed that competitors could easily replicate their investment strategies in these projects (Aker et al., 2016; Gupta & George, 2016; Mikalef et al., 2020). This situation has generated increased interest in developing BDAC to enhance business performance (Chong et al., 2023). Gupta and George (2016) examined the various resources necessary for building capacity, categorising them into tangible, human, and intangible resources:

- Tangible resources encompass internal and external data, along with innovative technologies that efficiently manage large volumes of data characterised by its velocity and variety.

- Human resources encompass technical skills to identify relevant datasets for analysis (Fosso Wamba et al., 2017), as well as managerial skills to understand their organisation's business needs and align analytical initiatives with the overall strategy.

- Intangible resources are immaterial elements that increase a company's value and competitiveness. Gupta and George (2016) suggest two intangible resources that are likely to be a major source of heterogeneity among companies seeking to leverage the advantages of BD. These resources are a data-driven culture and the intensity of organisational learning.

2.3. Performance

Big Data analytics capabilities provide companies with a solid foundation for in-depth and precise analyses, positively influencing the company's performance across several aspects. The BDAC can reveal inefficiencies in operations and suggest ways to optimise processes. According to Srinivasan and Arunasalam (2013), in the healthcare sector, BDAC helps identify inefficiencies and areas for cost reduction, ultimately decreasing expenses. Furthermore, BDAC's predictive analyses and simulation models help identify potential risks and develop mitigation plans. The use of BD analysis can lead to more effective recovery and settlement strategies, thereby improving cash flow and reducing non-payment (Hagel, 2015). Moreover, BDAC allows customer data analysis, facilitating the customisation of product and service offerings to better meet individual preferences. As a result, companies developing BDAC can make more informed and precise decisions by utilising in-depth data analyses. This approach enhances their innovation capabilities, leading to a sustainable competitive advantage and an overall improvement in organisational performance.

However, studies showed that BDAC does not automatically or directly lead to improved company performance outcomes. Instead, their influence on performance is more complex, and researchers started to search for mediators and moderators that may influence this relationship. For instance, BDAC might not directly improve performance but can drive innovation (Zhang et al., 2023; Zhang & Yuan, 2023), agility (Alyahya et al., 2023), or other mediator variables, which in turn lead to improved performance. In the same way, there are moderator factors such as data-driven culture (Wong & Ngai, 2023) or leadership support (Chatterjee et al., 2022) that influence the strength or direction of the relationship between BDAC and performance. All of these factors are highly dependent on organisational context. Each company has its specific environment, structure, culture, and external conditions that shape these mediators and moderators.

3. RESEARCH METHODOLOGY

In performing a systematic review, other methodological techniques exist beyond the PRISMA framework, including scoping reviews and realist reviews. Each of these alternatives presents advantages depending on the study context. Scoping reviews, for example, map broad fields of research to discern gaps and trends (Arksey & O'Malley, 2005), whereas realist reviews concentrate on understanding how complex interventions work by examining the interactions between context, mechanisms, and outcomes (Pawson et al., 2005). Nonetheless, PRISMA continues to be the most esteemed and suitable methodology for systematic reviews aiming to synthesize evidence with considerable rigor, particularly when the objective is to address clearly specified research inquiries through comprehensive data extraction and analysis.

3.1. Search strategy

A systematic review is a transparent analysis of existing knowledge on a particular question. Employing the PRISMA method, we aimed to provide a selection of papers that specifically approached

the relationship between BDAC and performance. Therefore, we used a set of keywords for BDAC, as these are often used interchangeably, to increase the number of potentially relevant search results on BDAC issues and linked this to performance by using "AND" to form the search string as follows: TITLE-ABS-KEY ("BDAC*" OR "BDA capabilit*" OR "Big Data analytics capabilit*" OR "Big Data predictive capability*" OR "Big Data capabilit*" OR "Business intelligence capabilit*") AND "Performance".

Notably, five main databases, Scopus, Springer, Science Direct, Taylor and Francis, and Emerald, were used to collect research papers relevant to the scope of this literature.

3.2. Selection criteria

Identification step: We established some inclusion criteria to extract the relevant studies for building our database. First, we only included management-related papers within our area of interest. This means that studies focused on other fields, such as chemistry, medicine, engineering, biological science, and psychology, were not selected. Next, we have fixed the search span from 2013 to 2023, assuming that studies in the last ten years have begun to show interest in the impact of BDAC on performance rather than solely understanding BD as a new phenomenon. We also excluded from this review studies written in languages other than English. Furthermore, only journals were selected; other sources, such as conference proceedings, editors' comments, book chapters, books, book reviews, and unpublished data, were not accepted. Lastly, all duplicate articles were omitted. We notice that the search string differs from one database to another because reproducing the same query between databases is often difficult. At this stage, 487 articles were excluded from 764, and we recorded the remaining articles in Mendeley, a reference management software package, for further analysis. This initial search aims to screen the documents to check their eligibility for the next stage.

Screening step: The extracted articles were analysed in two stages based on the selection criteria. First, we assessed the papers based on their titles, abstracts, and keywords, excluding those not addressing our research questions. The primary screening sought to swiftly exclude irrelevant studies.

In the second stage, we analysed the full texts of the remaining papers to verify additional exclusion criteria:

- studies that focus on analytics technologies other than BDA;
- qualitative analyses devoid of quantitative performance metrics;
- studies measuring outcomes not directly related to performance;
- studies that do not mention mediating or moderating variables in the relationship between BDAC and performance.

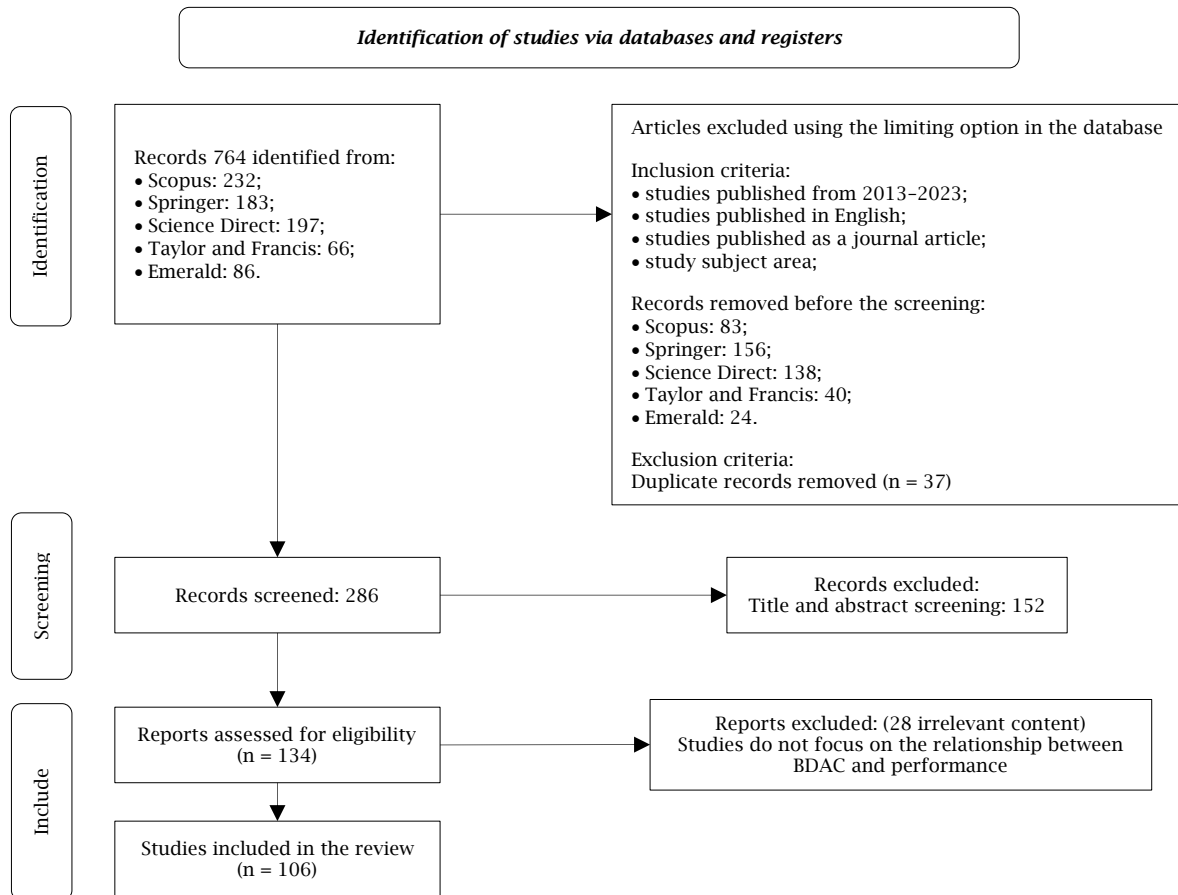
To ensure the rigor of the selection process, two independent reviewers conducted the screening and selection of studies. Discrepancies among the reviewers were addressed by discussion and consensus, guaranteeing that the final selection of included research adhered to the established qualifying criteria. This dual-reviewer methodology minimised selection bias and increased the reliability of the review process. After applying the established integration and exclusion criteria, we obtained a total of 106 articles from various databases.

3.3. Data extraction

The data extraction process for this systematic review was meticulously designed to ensure a comprehensive and systematic collection of relevant information from the included studies. Mendeley was first utilised to organise and manage

references effectively, allowing for streamlined access to full texts and citation details. Additionally, a standardised Excel spreadsheet was developed to capture essential information from each included study. Each included study was assessed for various attributes, such as study design, sample size, key findings, mediators, and moderators.

Figure 1. PRISMA protocol



4. RESULTS

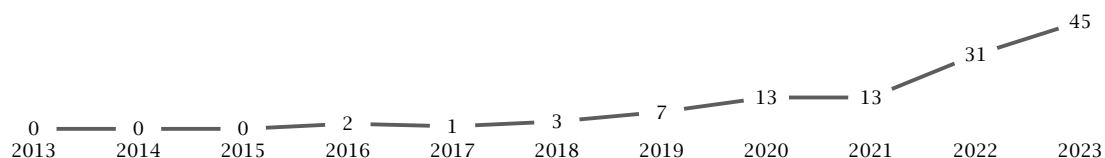
4.1. Quantitative results

4.1.1. Number of publications per year

Figure 2 shows that the number of published articles has grown from two in 2016 to 45 published articles in 2023. Nevertheless, we do not perceive any

publications before 2016, which indicates that scholarly research on our topic did not gain importance before this date. The last three years demonstrate the highest growth of articles; there were 45 articles in 2023, compared to 25 in 2022 and 11 in 2021, indicating that academics have shown recent interest in the relationship between performance and BDAC. However, it is still not enough as a corpus for scholarly research.

Figure 2. Article distribution (2013-2023)



4.1.2. Industry focus

Based on Figure 3, it is clear that the manufacturing industry has the highest percentage of publications, accounting for 40.38% of all publications. This

suggests that scholars believe that implementing BDAC is more widespread in the manufacturing industry than in other fields. Additionally, approximately 33.65% of the publications analysed were conducted across mixed industries to enhance

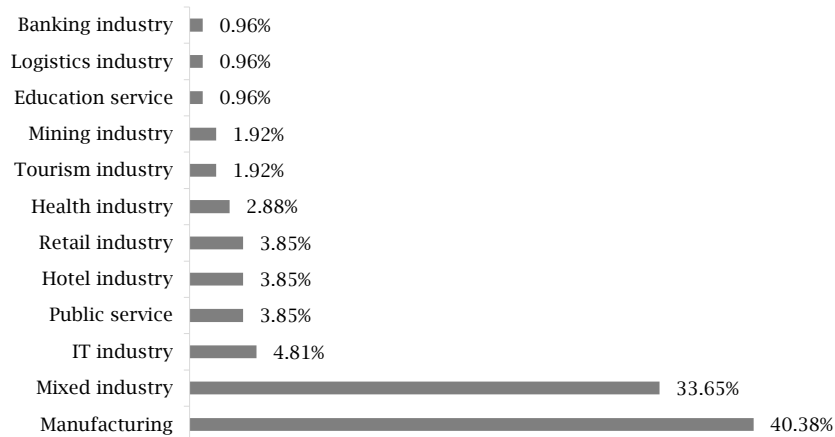
the generalisability of the results. However, research articles focusing on a specific industry were predominantly concentrated in the information technology (IT) sector, accounting for 4.81%. This indicates that IT is a key area of interest for researchers seeking to understand BDAC's latest trends and developments.

Public services, the hotel industry, and the retail industry represent 3.85% of the publications.

Meanwhile, the health industry represents 2.88%, and the mining and tourism industries represent 1.92%, which is notable but insufficient to explore the impact of BDA on performance in those industries.

At the lower level, only one article was published in logistics, banking, and education, which is considered very poor, particularly for the banking and logistics sectors, where BD is extensively used.

Figure 3. Industries' focus

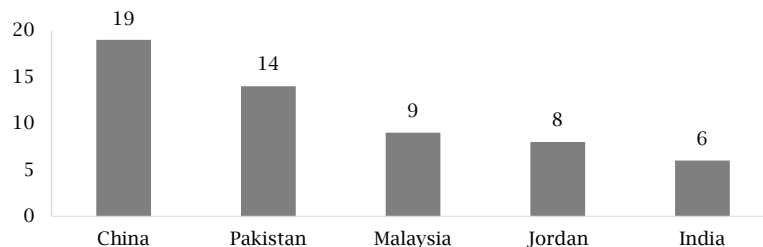


4.1.3. Countries focus

Figure 4 displays the top five countries that contributed the most to the reviewed publications. Of 106 articles, 19 are from China, 14 from Pakistan, and 9 from Malaysia. The larger number of

publications in these countries can be attributed to the widespread adoption of new technologies across various industries, which is commonly observed in developing countries. However, it is recommended that future researchers conduct similar studies in low-income countries.

Figure 4. Leading countries



4.2. Qualitative results

4.2.1. Antecedents of Big Data analytics capabilities

Organisations must identify and comprehend the factors or variables that contribute to the effective

use of BDA. This will help them derive maximum value from their data assets. In the literature, there are multiple definitions of BDAC. The most cited definitions in the reviewed articles are summarised in Table 1 below.

Table 1. Definitions of Big Data analytics capabilities

Authors	Definitions
Gupta and George (2016)	BDAC is a firm's ability to assemble, integrate, and deploy its BD-specific resources.
Akter et al. (2016)	Identifies three key building blocks of BDAC: organisational (i.e., BDA management), physical (i.e., IT infrastructure), and human (e.g., analytics skill or knowledge).
Mikalef et al. (2019)	The ability of a firm to provide insights using data management, infrastructure, and talent to transform the business into a competitive force.
Garmaki et al. (2023)	The BDAC entails a firm's ability to mobilise and deploy BDA resources effectively, utilise BDA resources, and align BDA planning with firm strategy to gain a competitive advantage and enhance firm performance.
Srinivasan and Swink (2018)	Organisational facility with tools, techniques, and processes that enable a firm to process, organise, visualise, and analyse data, thereby producing insights that enable data-driven operational planning, decision-making, and execution.

The area of research on BDACs is rapidly growing, but there is limited understanding of how firms develop their capabilities through BDA due to differences in opinions on what constitutes BDAC (Gupta & George, 2016). The reviewed papers have explored various frameworks related to BDAC. The most relevant frameworks identified are as follows: Fosso Wamba et al. (2017) framework, used by 14 papers, which consists of infrastructure, management, and expertise capabilities, then Akter et al. (2016) framework, cited by 13 papers, which defines BDAC as comprising management, technology, and talent capabilities. Furthermore, the Gupta and George (2016) framework, examined by 14 papers, which is slightly different, conceptualises BDAC as a third-order formative construct comprising tangible capabilities, human skills, and intangible capabilities.

4.2.2. Mediating factors

This systematic review identifies and quantifies various factors that facilitate mechanisms leading to improved performance across different dimensions in today's rapidly evolving business world. The most frequently cited drivers of performance, as shown in Table 2, are:

- Supply chain (SC) management: Organisations can optimise their SC operations by leveraging data-driven insights, thus enhancing their performance.
- Innovation: It helps organisations stay ahead of the competition and adapt to market trends.
- Green outcomes: It encompasses environmentally sustainable practices and initiatives.

Table 2. Most cited mediators' factors

Mediators	Mechanisms of influence	References
SC management	Investments in BDAC can lead to the development of SC capabilities, which in turn influence firm performance.	Riggs et al. (2023)
	SC resilience improves innovative capacities and information quality, allowing businesses to build more robust and agile SC, ultimately leading to improved firm performance.	Bahrami et al. (2022), Alsmairat (2023)
	SC flexibility is a crucial mediator influenced by BDAC and circular economy practices, leading firms to adapt and optimise their operations to align with sustainability objectives, customer requirements, and market conditions.	Edwin Cheng et al. (2022)
	SC internal integration significantly mediates BDAC's impact on operational performance by promoting collaboration among various departments and individuals to reach shared goals.	Chen and Chen (2022)
	External SC management involves enhancing interactions with external partners in the SC network, which can affect the relationship between BDA and outcomes such as trust and collaborative performance.	Kerdpitak et al. (2019)
	SC's internal and external integration acts as a mediator in influencing various aspects of firm performance.	Razaghi and Shokouhyar (2021)
Innovation	Developing BDAC can play a significant role in boosting a company's innovation and performance by implementing new and unique strategies to drive growth and competitive advantage.	Zhang et al. (2023), Zhang and Yuan (2023)
	Dual innovations, namely, exploitative and explorative innovations, enhance organisational effectiveness and competitiveness.	Su et al. (2022)
	In SC, innovative use of BDA can improve performance by providing high-quality information for alternative procedures and effective disruption management.	Bahrami et al. (2022), Jum'a et al. (2023), AL-Khatib and Ramayah (2023)
Green outcomes	BDAC enhances operational and environmental performance by using appropriate monitoring, visualisation, and analysis techniques throughout the entire lifecycle in a manufacturing environment.	Belhadi et al. (2020)
	Adopting green technological innovations allows firms to gain a green competitive advantage, which in turn enhances a company's overall performance.	Waqas and Tan (2023)
	BDA is crucial for fostering green innovation in SCs, leading to a competitive advantage by implementing environmentally friendly products, services, processes, and technologies that reduce environmental impact.	AL-Khatib (2022b)
	In the healthcare sector, green innovation acts as a mediator between green SC management and environmental performance.	Benzidia et al. (2023)

4.2.3. Moderating factors

Understanding the contextual factors that moderate the relationship between BDAC and performance is essential for organisations leveraging data to drive innovation, efficiency, and competitiveness. As shown in Table 3, a data-driven culture is the most frequently mentioned factor in the reviewed articles. Such a culture promotes data-driven insights and practices, moderating BDAC and

organisational performance. Then comes SC innovativeness, which was found to have no impact on company performance for Behl (2022) and moderated the relationship between talent and personnel management capabilities' effect on competitive performance for Bag et al. (2020). The remaining moderators are mentioned once per article, including leadership support (Chatterjee et al., 2022), the business value of BD, and resource commitment.

Table 3. Most cited moderators' factors

<i>Moderators</i>	<i>Mechanisms of influence</i>	<i>References</i>
Data-driven culture	It moderates the effect of sensing capabilities, in an SC context, on operational performance.	Wong and Ngai (2023)
	It moderates the relationship between BDAC and innovation performance in a negative manner.	Khan and Tao (2022)
	The relationship between BDA capabilities and decision-making performance is not moderated by culture.	Shamim et al. (2020)
SC innovativeness	Innovation does not moderate the relationship between DAC and firm performance in Indian and Chinese startups.	Behl (2022)
	SC innovativeness moderates the relationship between talent and personnel management capabilities' effect on competitive performance.	Bag et al. (2020)

4.2.4. Typology of performance as an outcome

The literature suggests that insights obtained through BDA positively impact firm performance. However, there are various definitions of firm performance, and conceptualising it has not been

easy. Organisational researchers hold different opinions and definitions of performance, making it a controversial topic. To ensure impartiality in our descriptive analysis, we will keep the performance types as originally reported in the articles without any classifications.

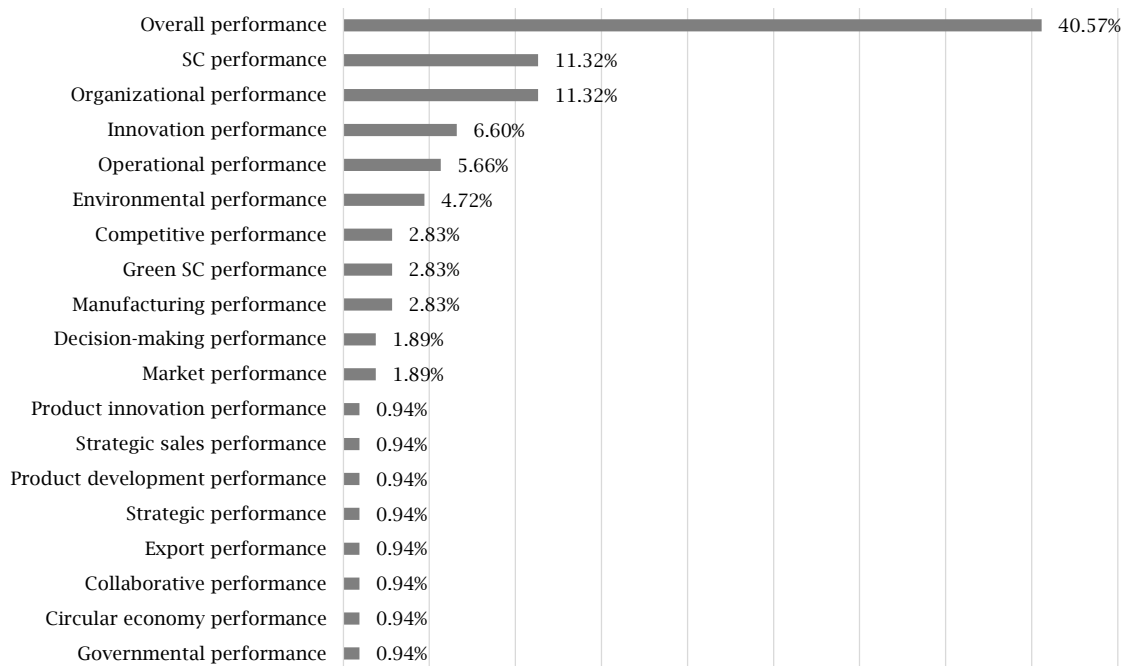
Figure 5. Performance typology

Figure 5 illustrates various types of performance typologies that can be employed to evaluate a company's success. For our analysis, we will focus on the three most commonly referenced typologies, demonstrating how each has been addressed in the reviewed articles:

- **Firm performance:** Of all the articles reviewed, 40.57% approached performance as a multifaceted construct encompassing various dimensions. It is often analysed through financial and market performance, focusing on profitability, growth, and competitiveness (Razaghi & Shokouhyar, 2021; Saeed et al., 2023; Fosso Wamba et al., 2017). Beyond these tangible measures, non-financial performance highlights aspects such as customer satisfaction, employee engagement, and social responsibility, emphasising the broader impact of organisational activities. Additionally, environmental performance has become increasingly important as companies strive for sustainability (Feng & Sheng, 2023).

- **Organisational performance:** It is common for authors and researchers to use the terms "organisational performance" and "firm's performance" interchangeably. However, our review

distinguishes between the two concepts to provide a more comprehensive understanding. In our analysis, 11.32% of the reviewed articles focused on organisational performance metrics that companies can use to achieve their goals and objectives. Some of the articles associated organisational performance with financial metrics, such as sales growth, cash flow, and return on investment (Su et al., 2022). Other articles covered a wide range of factors that affect organisational performance, including innovation enhancement, service quality improvement, operational agility (Mikalef et al., 2023), on-time delivery of client objectives, stakeholder satisfaction (Turi et al., 2023), strategic planning, process improvement, and long-term success positioning (Elia et al., 2022). Additionally, some articles defined organisational performance as the effectiveness and efficiency of an organisation's activities in achieving its objectives while minimising its environmental impact (Shahzad et al., 2022; Zhu et al., 2022).

- **SC performance:** 11.32% of the reviewed papers evaluate SC operations' efficiency, effectiveness, and overall success. The most frequently used metrics can be categorised into five dimensions.

1) Cost control: Consists of the ability to lower the overall cost of the company's products to end customers (Bahrami et al., 2022), reduce transportation costs (AL-Khatib & Ramayah, 2023), decrease the cost of material purchased and energy consumption (Tipu & Fantazy, 2023), and reduce inventory holding costs (Edwin Cheng et al., 2022).

2) Delivery metrics: Include the capacity to provide end customers with complete orders (Bag et al., 2020), focusing on on-time delivery rates (AL-Khatib & Ramayah, 2023).

3) Quality metrics: Include measures such as providing highly reliable and extremely robust products and high-quality customer service. These indicators are widespread and all-encompassing, but measuring them based on specific features can be challenging (Thekkootte, 2022).

4) Flexibility metrics: Include the ability to rapidly adapt in a rapidly changing environment, handle various types of orders, adjust products to fulfil customer needs, and rapidly introduce new products (Thekkootte, 2022), and react more quickly than rivals in an unpredictable business climate (Bag et al., 2020).

5) Environmental metrics: Assessing the performance of a green SC involves providing continuous support and training to suppliers regarding environmental aspects and considerations, enhancing communication with primary customers (AL-Khatib & Shuhaiber, 2022), and investing in environmentally friendly transportation (AL-Khatib, 2022a).

5. DISCUSSION

The existence of multiple frameworks for measuring BDAC highlights the diverse factors involved in assessing an organisation's readiness for leveraging BDA. Most reviewed studies use similar but not identical typologies, and the identified antecedents reflect a varying emphasis on necessary resources in different contexts. BDAC measurement frameworks may differ, but they all aim to evaluate organisational capabilities, identify areas for improvement, and drive continuous enhancement in BDA. This statement is in line with the DCT, which proposes that organisations must be able to detect changes in the market environment and adapt their internal and external competencies to establish a sustainable competitive advantage (Teece et al., 1997). Additionally, organisations should thoroughly evaluate and select a framework corresponding to their strategic objectives, organisational context, and desired outcomes, which is coherent with Mikalef et al. (2018), who show that the significance of BDA resources varies depending on their context, particularly when considering performance gains. Moreover, organisations must remain adaptable and responsive while using BDA to ensure their investments align with their overall business goals and produce measurable outcomes.

The level of maturity of the company's overall BDAC significantly influences the quality of decisions made by top managers and their dependence on BD-generated insight. Therefore, our analysis can assist managers in identifying underdeveloped or underfunded resources, allowing them to benchmark organisational strengths and weaknesses. This can help them define their BDAC maturity model to progress towards more effective utilisation of BD (Comuzzi & Patel, 2016).

Our analysis shows that mediators and moderators are diverse, interconnected, and dynamic, requiring a holistic approach that addresses technological, human, organisational, and external dimensions. Every mediator and moderator plays a vital role in shaping BDA's capabilities and firm performance. Therefore, by recognising and proactively managing these factors, organisations can unlock the full potential of their data assets. This, in turn, helps them drive innovation, competitiveness, and sustainable growth in today's data-driven economy.

Determining which mediators or moderators a firm should focus on for BDA depends on several factors:

- The firm's strategic focus can determine which intermediaries are relevant. Therefore, an emphasis on innovation may lead to examining innovation-related mediators. For instance, Zhang and Yuan (2023) examine how BDAC can enhance a firm's innovation performance through the mediating role of strategic innovation.

- The industry's specific requirements and challenges necessitate specialised mediators. For example, in the IT industry, organisations should quickly adjust to evolving market circumstances and technology trends. Actually, Turi et al. (2023) explore the mediating role of operational and strategic agility on the organisational performance of business processing software houses.

- The internal structure of an organisation, such as its size, hierarchy, and localisation, can influence which mediators are most effective in translating BDAC into performance outcomes. For example, Behl's (2022) study shows that in start-up firms (with low resources and a high risk of failure), the internal culture of employees and owners plays a significant role when adopting BD and predictive analytics tools. It enhances learning and improvement in terms of technology and helps moderate the relationship between BDAC and firm performance.

- Organisational culture significantly influences management practices, leading to varied mediators reflecting these cultural values. In a corporate culture that values innovation and technology adoption, Chatterjee et al. (2022) examined leadership in multinational firms as a moderator to assess its role in integrating BDA into management practices.

During our research, we noticed relatively few studies examining moderators instead of mediators. This may be because mediators offer insights into causal mechanisms, explaining how and why analytics capabilities lead to changes in performance outcomes. While moderators provide valuable insights into contextual influences, they may not always reveal causal relationships, which can lead to a perceived emphasis on mediators.

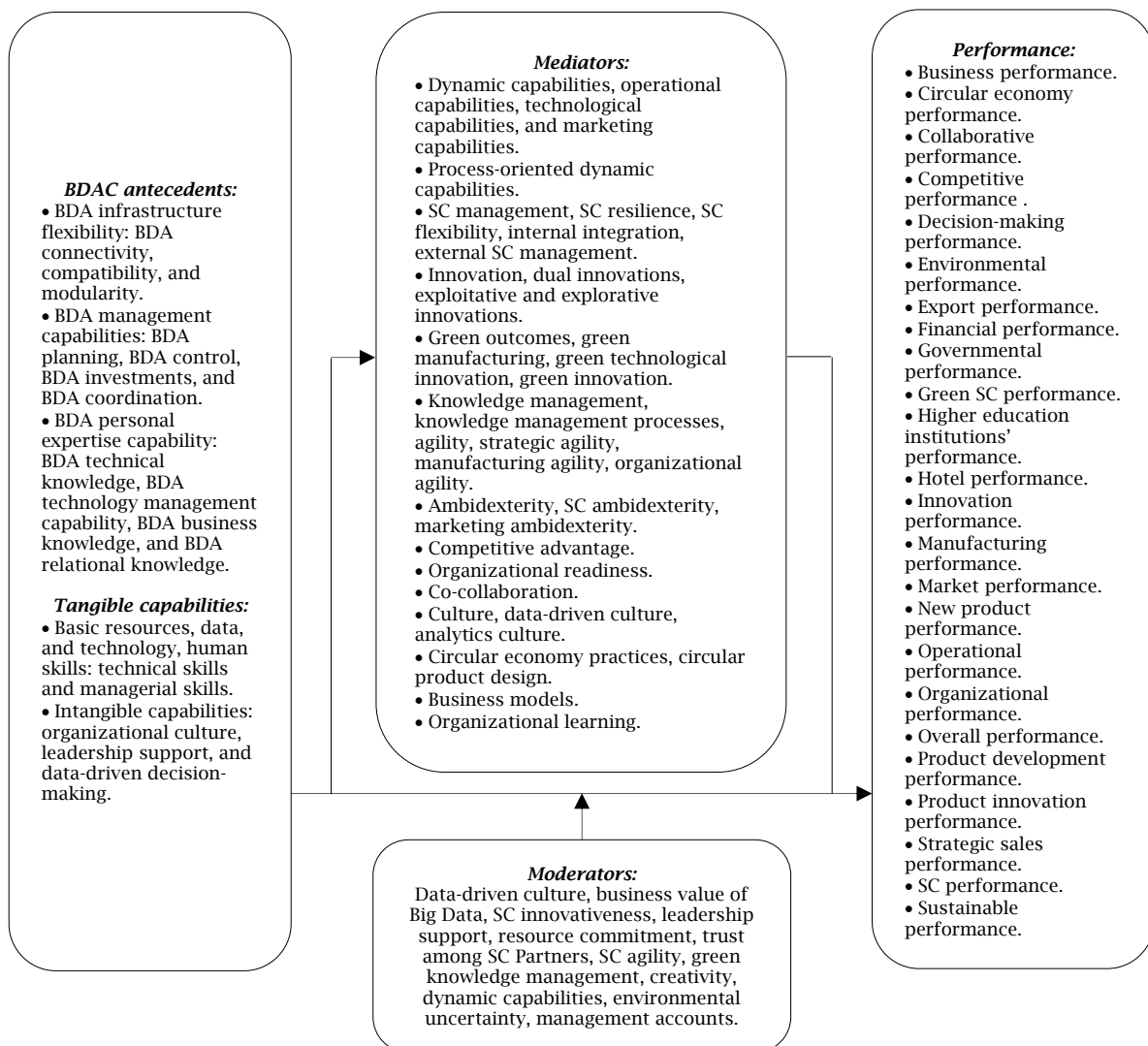
The identified factors are supposed to aid the successful implementation, adoption, and integration of analytics initiatives into performance outcomes. However, as some studies have shown, some of these factors may not significantly or effectively impact how BDAC translates into improved performance. The absence of a moderating effect could be attributed to contextual factors. Context plays a crucial role in shaping how BDAC is implemented and ultimately impacts performance outcomes. Additionally, we conclude that some variables (such as innovation, culture, and dynamic capabilities) act as moderators in certain contexts

(Behl, 2022; Khan & Tao, 2022; Gupta et al., 2024) but function as mediators in other contexts or under different conditions (Zhang et al., 2023; Zhang & Yuan, 2023; Mikalef et al., 2020; Karaboga et al., 2023). This highlights the complexity and interdependence of variables within a system and emphasises the importance of considering the dynamic nature of relationships in statistical analyses and theoretical frameworks.

Approximately half of the reviewed research articles have explored performance as a multidimensional construct (overall performance and organisational performance) to comprehend the impact of BDA. The remaining half of the literature focuses on analysing the effect of BDA on specific performance areas, such as operational,

financial, environmental, innovation, and market performance. Both approaches are essential in providing a comprehensive view of how BDA initiatives shape organisational outcomes. By examining these multiple performance dimensions, organisations can better understand the mechanisms underlying BDA's impact. This understanding empowers organisations to optimise their analytics strategies to address specific performance goals and challenges effectively. Therefore, organisations need to understand the multidimensional nature of performance when implementing BDA initiatives. Doing so can help them identify and prioritise their performance goals and challenges, leading to a more successful implementation of BDA initiatives.

Figure 6. Big Data analytics capabilities and performance framework



Source: Authors' elaboration.

Integrating BDAC into an organisation's operations can provide significant value. Companies can start by identifying specific areas where data can deliver immediate benefits, such as analysing customer feedback or tracking sales performance. Gradually expanding their analytics capabilities can lead to even greater advantages over time. By transforming raw data into actionable insights, companies can make more informed decisions.

Analysing data allows them to tailor their products, services, and marketing strategies, ultimately enhancing customer satisfaction and gaining a competitive edge over rivals. Furthermore, data analysis can help organisations reduce waste, increase productivity, and identify potential threats, enabling them to develop effective strategies for mitigation and enhancing overall resilience.

While our systematic review offers a comprehensive examination of the relationship between BDAC and performance, it has certain limitations, particularly regarding potential biases in article selection. The quality of the included studies varies, which may affect the reliability of our conclusions. Although we implemented double-blinding in the selection process to ensure methodological rigor, we did not use a formal tool to assess the risk of bias in the included studies. Employing such a tool would allow for a more comprehensive evaluation of potential biases. Additionally, the scope of our review, which is limited to specific BDAC frameworks or contexts, may have excluded valuable insights from other relevant research areas such as artificial intelligence, machine learning applications, and digital transformation strategies. Similarly, our choice of databases and differing exclusion criteria may have led to the omission of certain potential mediators or moderators, resulting in a skewed representation of the available literature.

Several reviewed papers have reported interesting results but also acknowledged limitations, indicating the need for further research. Firstly, researchers usually test hypotheses using cross-sectional data using a quantitative approach. However, retesting them using other data types is recommended to ensure the findings' reliability. A qualitative, longitudinal, and mixed approach incorporating surveys and semi-structured interviews can provide better insight and understanding. Secondly, studies suggest that large companies require more advanced BDAC tools due to their complex operations. However, small businesses can adopt low-cost BDA resources. Therefore, it is important to investigate whether the relationship between BDAC and performance differs between small and large organisations. Thirdly, researchers should examine different models in other countries and industries to test the external validity of their findings. Conducting a comparative study between developed and emerging economies could be a useful future direction. Fourthly, not all crucial variables have been studied yet. However, other mediators and moderators should also be considered to increase the understanding of the mechanisms driving value creation from BDAC. Fourthly, many reviewed articles analyse BDAC's performance based on subjective perception measures. Objective data should be used instead to provide a more concrete understanding of BDAC's impact on financial performance. Alternatively, combining objective and subjective measures can help identify any differential effects. Finally, while the RBV is the most commonly used theory in reviewed articles, future studies can also explore other theories, such as contingency theory, sociomaterialism theory, or organisational information processing perspective theory, to determine how internal and external conditions influence manufacturing performance, and discuss the factors that form BDAC based on different theories.

REFERENCES

- Akter, S., Fosso Wamba, S., Gunasekaran, A., Dubey, R., & Childe, S. J. (2016). How to improve firm performance using Big Data analytics capability and business strategy alignment? *International Journal of Production Economics*, 182, 113–131. <https://doi.org/10.1016/j.ijpe.2016.08.018>
- AL-Khatib, A. W. (2022a). Big Data analytics capabilities and green supply chain performance: Investigating the moderated mediation model for green innovation and technological intensity. *Business Process Management Journal*, 28(5–6), 1446–1471. <https://doi.org/10.1108/BPMJ-07-2022-0332>

6. CONCLUSION

This systematic review aims to synthesise recent contributions beyond the direct effect of BDAC on performance across different contexts, demonstrating that researchers are beginning to explore intangible resources such as organisational culture, leadership support, and data-driven decision-making assets, in addition to tangible resources, to uncover hidden opportunities for value creation. However, results showed that some moderator variables, such as green knowledge management (Cheng et al., 2023), resource commitment (Sahoo et al., 2023), management accounts (Munir et al., 2023), and SC innovativeness (Behl, 2022) were not able to moderate the relationship between BDAC and performance. Furthermore, managing BDAC has shown different performance assessments that help understand its benefits and challenges in greater detail and highlight areas for improvement.

This finding enhances current theoretical frameworks, such as the RBV, by emphasising tangible and intangible resources to achieve long-term competitive advantage. Additionally, it contributes to the DCT by deepening our comprehension of how organisations develop adaptive and responsive abilities to capitalise on opportunities and minimise risks in the digital age. From a practical perspective, this systematic review provides a comprehensive framework for organisations to assess and implement BDAC effectively. By outlining key mediators and moderators, firms can tailor their strategies to maximise the impact of BDAC on performance and prioritise investments in critical areas where they are likely to yield the highest returns.

However, our systematic review presents certain limitations. First, the selection of databases and varying exclusion criteria may have excluded certain potential mediators or moderators referenced in the literature. Furthermore, while we implemented double-blinding in the selection process to maintain methodological rigor, a formal instrument was not utilised to evaluate the risk of bias in the studies included.

Future research should delve into the intangible mechanisms behind value creation from BDAC by exploring the roles of organisational culture and data-driven decision-making rather than focusing solely on technical capabilities. Moreover, it would be valuable to investigate the influence of ethical considerations in data management and the regulatory framework. Understanding how ethical practices and compliance with regulations affect data collection, storage, and analysis is crucial for organisations aiming to leverage BDAC responsibly. Researchers could also employ a meta-analysis to statistically synthesise effect sizes, providing a more accurate comprehension of the identified relationships, or use bibliometric analysis to map the intellectual structure of the BDAC field by examining citation patterns and co-authorship networks.

- AL-Khatib, A. W. (2022b). Can Big Data analytics capabilities promote a competitive advantage? Green radical innovation, green incremental innovation, and data-driven culture in a moderated mediation model. *Business Process Management Journal*, 28(4), 1025–1046. <https://doi.org/10.1108/BPMJ-05-2022-0212>
- AL-Khatib, A. W., & Ramayah, T. (2023). Big Data analytics capabilities and supply chain performance: Testing a moderated mediation model using partial least squares approach. *Business Process Management Journal*, 29(2), 393–412. <https://doi.org/10.1108/BPMJ-04-2022-0179>
- AL-Khatib, A. W., & Shuhaiber, A. (2022). Green intellectual capital and green supply chain performance: Does Big Data analytics capabilities matter? *Sustainability*, 14(16), Article 10054. <https://doi.org/10.3390/su141610054>
- Alyahya, M., Aliedan, M., Agag, G., & Abdelmoety, Z. H. (2023). Understanding the relationship between Big Data analytics capabilities and sustainable performance: The role of strategic agility and firm creativity. *Sustainability*, 15(9), Article 7623. <https://doi.org/10.3390/su15097623>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Bag, S., Wood, L. C., Xu, L., Dhamija, P., & Kayikci, Y. (2020). Big Data analytics as an operational excellence approach to enhance sustainable supply chain performance. *Resources, Conservation and Recycling*, 153, Article 104559. <https://doi.org/10.1016/j.resconrec.2019.104559>
- Bahrami, M., Shokouhyar, S., & Seifian, A. (2022). Big Data analytics capability and supply chain performance: The mediating roles of supply chain resilience and innovation. *Modern Supply Chain Research and Applications*, 4(1), 62–84. <https://doi.org/10.1108/MSRA-11-2021-0021>
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. [https://josephmahoney.web.illinois.edu/BA545_Fall%202022/Barney%20\(1991\).pdf](https://josephmahoney.web.illinois.edu/BA545_Fall%202022/Barney%20(1991).pdf)
- Behl, A. (2022). Antecedents to firm performance and competitiveness using the lens of Big Data analytics: A cross-cultural study. *Management Decision*, 60(2), 368–398. <https://doi.org/10.1108/MD-01-2020-0121>
- Belhadi, A., Kamble, S. S., Zkik, K., Cherrafi, A., & Touriki, F. E. (2020). The integrated effect of Big Data analytics, lean six sigma and green manufacturing on the environmental performance of manufacturing companies: The case of North Africa. *Journal of Cleaner Production*, 252, Article 119903. <https://doi.org/10.1016/j.jclepro.2019.119903>
- Benzidia, S., Bentahar, O., Husson, J., & Makaoui, N. (2023). Big Data analytics capability in healthcare operations and supply chain management: The role of green process innovation. *Annals of Operations Research*, 333, 1077–1101. <https://doi.org/10.1007/S10479-022-05157-6>
- Beske, P. (2012). Dynamic capabilities and sustainable supply chain management. *International Journal of Physical Distribution & Logistics Management*, 42(4), 372–387. <https://doi.org/10.1108/09600031211231344>
- Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2022). Big Data analytics in strategic sales performance: Mediating role of CRM capability and moderating role of leadership support. *EuroMed Journal of Business*, 17(3), 295–311. <https://doi.org/10.1108/EMJB-07-2021-0105>
- Chen, C.-H. V., & Chen, Y.-C. (2022). Influence of intellectual capital and integration on operational performance: Big Data analytical capability perspectives. *Chinese Management Studies*, 16(3), 551–570. <https://doi.org/10.1108/CMS-02-2021-0037>
- Cheng, J., Mahinder Singh, H. S., Zhang, Y.-C., & Wang, S.-Y. (2023). The impact of business intelligence, Big Data analytics capability, and green knowledge management on sustainability performance. *Journal of Cleaner Production*, 429, Article 139410. <https://doi.org/10.1016/j.jclepro.2023.139410>
- Chong, C.-L., Abdul Rasid, S. Z., Khalid, H., & Ramayah, T. (2023). Big Data analytics capability for competitive advantage and firm performance in Malaysian manufacturing firms. *International Journal of Productivity and Performance Management*, 73(7), 2305–2328. <https://doi.org/10.1108/IJPPM-11-2022-0567>
- Comuzzi, M., & Patel, A. (2016). How organisations leverage Big Data: A maturity model. *Industrial Management & Data Systems*, 116(8), 1468–1492. <https://doi.org/10.1108/IMDS-12-2015-0495>
- Edwin Cheng, T. C., Kamble, S. S., Belhadi, A., Ndubisi, N. O., Lai, K.-h., & Kharat, M. G. (2022). Linkages between Big Data analytics, circular economy, sustainable supply chain flexibility, and sustainable performance in manufacturing firms. *International Journal of Production Research*, 60(22), 6908–6922. <https://doi.org/10.1080/00207543.2021.1906971>
- Elia, G., Raguseo, E., Solazzo, G., & Pigni, F. (2022). Strategic business value from Big Data analytics: An empirical analysis of the mediating effects of value creation mechanisms. *Information & Management*, 59(8), Article 103701. <https://doi.org/10.1016/j.im.2022.103701>
- Feng, T., & Sheng, H. (2023). Identifying the equifinal configurations of prompting green supply chain integration and subsequent performance outcome. *Business Strategy and the Environment*, 32(8), 5234–5251. <https://doi.org/10.1002/bse.3414>
- Fosso Wamba, S. F., Akter, S., & Guthrie, C. (2020). Making Big Data analytics perform: The mediating effect of Big Data analytics dependent organizational agility. *Systemes d'Information & Management*, 25(2), 7–31. <https://doi.org/10.3917/SIM.202.0007>
- Fosso Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J.-f., Dubey, R., & Childe, S. J. (2017). Big Data analytics and firm performance: Effects of dynamic capabilities. *Journal of Business Research*, 70, 356–365. <https://doi.org/10.1016/j.jbusres.2016.08.009>
- Fosso Wamba, S., Queiroz, M. M., Wu, L., & Sivarajah, U. (2020). Big Data analytics-enabled sensing capability and organizational outcomes: Assessing the mediating effects of business analytics culture. *Annals of Operations Research*, 333, 559–578. <https://doi.org/10.1007/S10479-020-03812-4>
- Garmaki, M., Gharib, R. K., & Boughzala, I. (2023). Big Data analytics capability and contribution to firm performance: The mediating effect of organizational learning on firm performance. *Journal of Enterprise Information Management*, 36(5), 1161–1184. <https://doi.org/10.1108/JEIM-06-2021-0247>
- Gartner. (n.d.). *Big Data*. <https://www.gartner.com/en/information-technology/glossary/big-data>
- Gupta, M., & George, J. F. (2016). Toward the development of a Big Data analytics capability. *Information & Management*, 53(8), 1049–1064. <https://doi.org/10.1016/j.im.2016.07.004>
- Gupta, Y., Khan, F. M., Kumar, A., Luthra, S., & Queiroz, M. M. (2024). Mobilising Big Data analytics capabilities to improve performance of tourism supply chains: The moderating role of dynamic capabilities. *The International Journal of Logistics Management*, 35(2), 649–679. <https://doi.org/10.1108/IJLM-03-2022-0125>

- Hagel, J. (2015). Bringing analytics to life. *Journal of Accountancy*, 219(2). <https://go.gale.com/ps/i.do?p=AONE&u=anon~45c2ac9f&id=GALE%7CA400529124&v=2.1&it=r&sid=sitemap&asid=d5a33f60>
- Huynh, M.-T., Nippa, M., & Aichner, T. (2023). Big Data analytics capabilities: Patchwork or progress? A systematic review of the status quo and implications for future research. *Technological Forecasting and Social Change*, 197, Article 122884. <https://doi.org/10.1016/j.techfore.2023.122884>
- Jum'a, L., Zimon, D., & Madzik, P. (2023). Impact of Big Data technological and personal capabilities on sustainable performance on Jordanian manufacturing companies: The mediating role of innovation. *Journal of Enterprise Information Management*, 37(2), 329–354. <https://doi.org/10.1108/JEIM-09-2022-0323>
- Karaboga, T., Zehir, C., Tatoglu, E., Karaboga, H. A., & Bouguerra, A. (2023). Big Data analytics management capability and firm performance: The mediating role of data-driven culture. *Review of Managerial Science*, 17, 2655–2684. <https://doi.org/10.1007/s11846-022-00596-8>
- Kerdpitak, C., Somjai, S., Aeknarajindawat, N., & Thongrawd, C. (2019). Collaborative performance and swift trust in tourism industry of Thailand: Role of Big Data analytics capability and external supply chain management. *International Journal of Supply Chain Management*, 8(5), 610–621. <https://core.ac.uk/download/pdf/237015981.pdf>
- Khan, A., & Tao, M. (2022). Knowledge absorption capacity's efficacy to enhance innovation performance through Big Data analytics and digital platform capability. *Journal of Innovation & Knowledge*, 7(3), Article 100201. <https://doi.org/10.1016/j.jik.2022.100201>
- Maroufkhani, P., Tseng, M.-L., Iranmanesh, M., Wan Ismail, W. K., & Khalid, H. (2020). Big Data analytics adoption: Determinants and performances among small to medium-sized enterprises. *International Journal of Information Management*, 54, Article 102190. <https://doi.org/10.1016/j.ijinfomgt.2020.102190>
- Mikalef, P., Boura, M., Lekakos, G., & Krogstie, J. (2019). Big Data analytics and firm performance: Findings from a mixed-method approach. *Journal of Business Research*, 98, 261–276. <https://doi.org/10.1016/j.jbusres.2019.01.044>
- Mikalef, P., Krogstie, J., Pappas, I. O., & Pavlou, P. (2020). Exploring the relationship between Big Data analytics capability and competitive performance: The mediating roles of dynamic and operational capabilities. *Information & Management*, 57(2), Article 103169. <https://doi.org/10.1016/j.im.2019.05.004>
- Mikalef, P., Lemmer, K., Schaefer, C., Ylinen, M., Fjortoft, S. O., Torvatn, H. Y., Gupta, M., & Niehaves, B. (2023). Examining how AI capabilities can foster organizational performance in public organizations. *Government Information Quarterly*, 40(2), Article 101797. <https://doi.org/10.1016/j.giq.2022.101797>
- Mikalef, P., Pappas, I. O., Krogstie, J., & Giannakos, M. (2018). Big Data analytics capabilities: A systematic literature review and research agenda. *Information Systems and e-Business Management*, 16, 547–578. <https://doi.org/10.1007/s10257-017-0362-y>
- Munir, S., Abdul Rasid, S. Z., Aamir, M., Jamil, F., & Ahmed, I. (2023). Big Data analytics capabilities and innovation effect of dynamic capabilities, organizational culture and role of management accountants. *Foresight*, 25(1), 41–66. <https://doi.org/10.1108/FS-08-2021-0161>
- Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review — A new method of systematic review designed for complex policy interventions. *Journal of Health Services Research & Policy*, 10(1), 21–34. <https://doi.org/10.1258/1355819054308530>
- Qaffas, A. A., Ilmudeen, A., Almazmomi, N. K., & Alharbi, I. M. (2023). The impact of Big Data analytics talent capability on business intelligence infrastructure to achieve firm performance. *Foresight*, 25(3), 448–464. <https://doi.org/10.1108/FS-01-2021-0002>
- Razaghi, S., & Shokouhyar, S. (2021). Impacts of Big Data analytics management capabilities and supply chain integration on global sourcing: A survey on firm performance. *The Bottom Line*, 34(2), 198–223. <https://doi.org/10.1108/BL-11-2020-0071>
- Riggs, R., Roldán, J. L., Real, J. C., & Felipe, C. M. (2023). Opening the black box of Big Data sustainable value creation: The mediating role of supply chain management capabilities and circular economy practices. *International Journal of Physical Distribution & Logistics Management*, 53(7–8), 762–788. <https://doi.org/10.1108/IJPDLM-03-2022-0098>
- Russom, P. (2011). *Big Data analytics*. The Data Warehousing Institute (TDWI). https://download.101com.com/pub/tdwi/Files/TDWI_BPReport_Q411_Big_Data_Analytics_Web.pdf
- Saeed, M., Adiguzel, Z., Shafique, I., Kalyar, M. N., & Abrudan, D. B. (2023). Big Data analytics-enabled dynamic capabilities and firm performance: Examining the roles of marketing ambidexterity and environmental dynamism. *Business Process Management Journal*, 29(4), 1204–1226. <https://doi.org/10.1108/BPMJ-01-2023-0015>
- Sahoo, S., Upadhyay, A., & Kumar, A. (2023). Circular economy practices and environmental performance: Analysing the role of Big Data analytics capability and responsible research and innovation. *Business Strategy and the Environment*, 32(8), 6029–6046. <https://doi.org/10.1002/bse.3471>
- Shahzad, F., Du, J., Khan, I., & Wang, J. (2022). Decoupling institutional pressure on green supply chain management efforts to boost organizational performance: Moderating impact of Big Data analytics capabilities. *Frontiers in Environmental Science*, 10, Article 911392. <https://doi.org/10.3389/fenvs.2022.911392>
- Shamim, S., Zeng, J., Khan, Z., & Zia, N. U. (2020). Big Data analytics capability and decision making performance in emerging market firms: The role of contractual and relational governance mechanisms. *Technological Forecasting and Social Change*, 161, Article 120315. <https://doi.org/10.1016/j.techfore.2020.120315>
- Srinivasan, R., & Swink, M. (2018). An investigation of visibility and flexibility as complements to supply chain analytics: An organizational information processing theory perspective. *Production and Operations Management*, 27(10), 1849–1867. <https://doi.org/10.1111/poms.12746>
- Srinivasan, U., & Arunasalam, B. (2013). Leveraging Big Data analytics to reduce healthcare costs. *IT Professional*, 15(6), 21–28. <https://doi.org/10.1109/MITP.2013.55>
- Su, X., Zeng, W., Zheng, M., Jiang, X., Lin, W., & Xu, A. (2022). Big Data analytics capabilities and organizational performance: The mediating effect of dual innovations. *European Journal of Innovation Management*, 25(4), 1142–1160. <https://doi.org/10.1108/EJIM-10-2020-0431>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)

- Thekkoote, R. (2022). Understanding Big Data-driven supply chain and performance measures for customer satisfaction. *Benchmarking: An International Journal*, 29(8), 2359-2377. <https://doi.org/10.1108/BIJ-01-2021-0034>
- Tipu, S. A. A., & Fantazy, K. (2023). Examining the relationships between Big Data analytics capability, entrepreneurial orientation and sustainable supply chain performance: Moderating role of trust. *Benchmarking: An International Journal*, 31(10), 3909-3935. <https://doi.org/10.1108/BIJ-04-2023-0206>
- Turi, J. A., Khwaja, M. G., Tariq, F., & Hameed, A. (2023). The role of Big Data analytics and organizational agility in improving organizational performance of business processing organizations. *Business Process Management Journal*, 29(7), 2081-2106. <https://doi.org/10.1108/BPMJ-01-2023-0058>
- Waqas, M., & Tan, L. (2023). Big Data analytics capabilities for reinforcing green production and sustainable firm performance: The moderating role of corporate reputation and supply chain innovativeness. *Environmental Science and Pollution Research*, 30, 14318-14336. <https://doi.org/10.1007/s11356-022-23082-w>
- Wong, D. T. W., & Ngai, E. W. T. (2023). The effects of analytics capability and sensing capability on operations performance: The moderating role of data-driven culture. *Annals of Operations Research*. <https://doi.org/10.1007/S10479-023-05241-5>
- Zhang, H., & Yuan, S. (2023). How and when does Big Data analytics capability boost innovation performance? *Sustainability*, 15(5), Article 4036. <https://doi.org/10.3390/su15054036>
- Zhang, H., Wang, L., Yang, H., Yu, C., Xia, F., & Xue, X. (2023). Effects of Big Data analytics capability on performance of internet enterprises: Chain mediating effects of strategic flexibility and strategic innovation. *International Journal of Computer Applications in Technology*, 71(1), 52-63. <https://doi.org/10.1504/IJCAT.2023.131062>
- Zhu, C., Du, J., Shahzad, F., & Wattoo, M. U. (2022). Environment sustainability is a corporate social responsibility: Measuring the nexus between sustainable supply chain management, Big Data analytics capabilities, and organizational performance. *Sustainability*, 14(6), Article 3379. <https://doi.org/10.3390/su14063379>