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From Digital Strategic Orientation to Sustainable Performance: Empirical Findings in Business Research

Dijital Stratejik Yönelimden Sürdürülebilir Performansa: İş Araştırmalarında Ampirik Bulgular

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ABSTRACT

Within the digital pulse of modern industry, digital strategic orientation acts as an architect of the future, laying the foundation for technological adaptability and data mastery while constructing a pathway to sustainability that transcends conventional business norms. This study aimed to uncover the extent to which digital strategic orientation shapes sustainability performance. Anchored in the resource-based view theory, this study employs a thoroughly structured methodology, utilizing multiple regression analysis to derive insights from data gathered across 115 enterprises operating within the business landscape of Bosnia and Herzegovina. The research findings underscored a strong, positive impact of digital strategic orientation on sustainable performance, manifesting across its three critical dimensions—financial outcomes, social responsibility, and environmental performance. Among the predictors, digital capabilities and digital technology scope emerged as the most influential factors for financial performance, while digital ecosystem coordination played a key role in enhancing social outcomes. For environmental performance, AI-enabled digital technology scope and digital architecture configuration—by enabling scalable, energy-efficient infrastructures—emerged as the most influential predictors, highlighting their strategic role in driving eco-innovation and operational sustainability. These findings contribute to the digital strategy literature by empirically validating the role of digital strategic orientation as a driver of multidimensional sustainability in the context of a developing economy.

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ÖZ

Modern endüstrinin dijital nabızı içerisinde, dijital stratejik yönelim geleceğin bir mimarı olarak hareket etmekte; teknolojik uyum yeteneği ve veri hakimiyeti için sağlam bir temel oluştururken, geleneksel iş normlarının ötesine geçen bir sürdürülebilirlik yolunu da inşa etmektedir. Bu çalışma, dijital stratejik yönelimin sürdürülebilirlik performansını ne ölçüde şekillendirdiğini ortaya koymayı amaçlamaktadır. Kaynak temelli görüş (RBV) teorisine dayanan bu araştırma, Bosna-Hersek iş dünyasında faaliyet gösteren 115 işletmeden toplanan veriler üzerinde çoklu regresyon analizine dayalı, titizlikle yapılandırılmış bir metodoloji kullanmaktadır. Araştırma bulguları, dijital stratejik yönelimin sürdürülebilir performans üzerinde güçlü ve olumlu bir etkisi olduğunu ortaya koymuş; bu etkinin finansal sonuçlar, sosyal sorumluluk ve çevresel performans olmak üzere üç temel boyutta kendini gösterdiği tespit edilmiştir. Öngörücüler arasında, finansal performans açısından en etkili faktörler dijital yetkinlikler ve dijital teknoloji kapsamı olurken; sosyal sonuçların artırılmasında dijital ekosistem koordinasyonu belirleyici bir rol oynamıştır. Çevresel performans açısından ise, yapay zekâ destekli dijital teknoloji kapsamı ile enerji verimliliği sağlayan ölçeklenebilir altyapılar sunan dijital mimari yapılandırması en etkili belirleyiciler olarak öne çıkmış; bu faktörlerin eko-inovasyon ve operasyonel sürdürülebilirliğin sağlanmasında stratejik öneme sahip olduğu ortaya konulmuştur. Bu bulgular, gelişmekte olan bir ekonomi bağlamında dijital stratejik yönelimin çok boyutlu sürdürülebilirliğin itici gücü olarak rolünü ampirik olarak doğrulayarak dijital strateji literatürüne önemli katkılar sunmaktadır.

Introduction

As digital technology continues to advance at an unprecedented pace, its growing influence is reshaping the very foundations of how businesses stay competitive, sustainable and generate value. Companies are breaking away from traditional methods, using digital tools, data analytics, automation, and artificial intelligence to innovate, transform customer experiences, and streamline operations, as digital technology reshapes business models, boosts efficiency, and unlocks new revenue streams, ultimately becoming a driving force behind the evolution of value creation. Strategic orientation seeks to cultivate an internal culture that promotes, supports, and drives the behaviors and actions needed to achieve organizational goals (Ardito et al., 2021). Regarding digital technologies, they are viewed as crucial strategic resources for establishing organizational uniqueness and competitive advantage (Ciasullo et al., 2022). Digital transformation involves both improving internal communication, decision-making processes and organizational performance through strategic initiatives and enhancing external aspects like product marketing, brand visibility, customer service, supply chain efficiency and stakeholder relationships. Research on digital business strategy examines the integration of IT and business strategies (Bharadwaj et al., 2013), underscoring the broad impact that digital technologies have on the way organizations operate (Drnevich & Croson, 2013).

In 2024, the digital transformation market had a value of \$911.2 billion (Markets and Markets, 2024), highlighting the profound importance of digital uptake in global industries. Global spending on digital transformation (DX) is expected to climb to 3.9 trillion U.S. dollars by 2027 (Statista, 2024b), reflecting the unrelenting momentum of technological adoption and the escalating need for businesses to reinvent themselves in the digital era. According to Kane et al. (2015), approximately 90% of companies, regardless of industry or location, anticipate that digital technologies and digitalization will significantly influence their operations, and that true competitive advantage comes not just from adopting these technologies, but from aligning them with a well-executed strategy. A striking 97% of companies reported that the COVID-19 pandemic acted as a catalyst, accelerating their digital transformation initiatives and compelling businesses to rapidly adopt technology-driven solutions to navigate the evolving landscape (Twilio, 2020). Moreover, a February 2024 survey by the Capgemini Research Institute for the European Round Table for Industry (ERT) found that European executives prioritized digital investments in AI-driven innovations, industrial automation, and data analytics, with generative AI (57%) leading at the forefront. These findings highlight an ongoing shift toward automation, data intelligence, and climate-conscious technology (39%) to enhance industrial competitiveness and sustainability (ERT, 2024).

At its core, sustainability demands a collective commitment, a forward-thinking perspective, and a fundamental shift in mindset to generate lasting value—one that simultaneously ensures financial viability, combats escalating environmental crises such as global warming and resource depletion, and addresses pressing social challenges (Ahmić, 2022a). It is no longer just an ethical imperative but a strategic priority, as Deloitte's Report reveals that climate change remains a top-three concern for global business leaders, outranking political volatility, talent competition, and regulatory shifts (Deloitte, 2024). This report also confirmed that in the 2024, 85% of C-suite executives increased sustainability investments (up from 75% in 2023), while 50% have begun implementing technology-driven solutions to achieve climate goals, reinforcing sustainability as a long-term priority on corporate agendas (Deloitte, 2024). Additionally, 71% of C-suite leaders recognize ESG investment as a competitive advantage, reinforcing the strategic shift toward sustainable business practices not just as a regulatory necessity (Thomas Reuters, 2024).

While prior studies (e.g., Bughin & Van Zeebroeck, 2017; Bendig et al., 2023) have examined individual dimensions of digital orientation in relation to either financial or environmental performance, a holistic understanding of how digital strategic orientation influences all three pillars of sustainability—financial, social, and environmental—remains underexplored, particularly within developing economies. This study aims to fill that gap by empirically investigating the multi-dimensional impact of digital strategic orientation on sustainable performance in the context of Bosnia and Herzegovina. Drawing on the resource-based view (RBV) theory, this research examines four key dimensions of digital strategic orientation—digital technology scope, digital capabilities, digital ecosystem coordination, and digital architecture configuration—and evaluates their individual influence on sustainable performance outcomes across 115 enterprises. The originality of this study lies in its integrated model that simultaneously assesses financial, social, and environmental sustainability in relation to digital strategic orientation, offering novel empirical insights in a regional context that has been largely neglected in mainstream digital transformation research.

1. Literature Review

1.1. Digital Strategic Orientation

In relation to the digital orientation concept, recent studies highlighted that companies are increasingly utilizing digital technologies to improve collaborative efficiency, elevate service quality, and gain a competitive edge (Khin & Ho, 2018). Digital orientation involves the deliberate and strategic alignment of organizations to harness the potential of digital technologies, ultimately striving for optimal performance achievement (Joesoep et al., 2023). This strategic positioning includes cultivating attitudes and behaviors that encourage the generation and application of market insights, spur proactive innovation, and foster an openness to new concepts (Quinton et al., 2018). Moreover, it promotes an enthusiastic and transparent approach to digital technologies throughout every level and department of the organization (Ardito et al., 2021). Thus, digital strategic orientation can be viewed as an organization's overarching framework that promotes the comprehensive integration and utilization of digital technologies - such as data analytics, communication tools, and online platforms - to enhance operational efficiency, foster creative problem-solving, drive innovation, and enable agile responses to evolving consumer needs and competitive landscapes.

More specifically, a digital strategic orientation represents an organizational philosophy that nurtures a dynamic environment of creativity, flexibility, and discovery through technological advancements, ultimately driving enhanced outcomes, continuous development, active participation, and strategic responsiveness. This explanation encompasses three distinct and connected elements: (1) the transformative catalyst, which represents the culture and behaviors of individuals within the organization that drive and sustain digital initiative; (2) the strategic mechanisms, which involve the comprehensive integration of emerging technologies, creative digital practices, and collaborative frameworks that together redefine traditional operational paradigms; and (3) the strategic outcome, aimed at driving a profound transformation in how the organization operates (its processes), engages stakeholders, and responds to market changes.

According to Kindermann et al. (2021), digital orientation encompasses four key dimensions: (1) the scope of digital technologies utilized, (2) the capabilities developed to leverage those technologies, (3) the coordination within digital ecosystems, and (4) the design and structuring of digital architectures. The authors defined digital technology scope as the collection of digital tools and solutions that enable a firm to achieve strategic expansion, which may encompass technologies such as “sensors, blockchain, and IoT applications”, serving as both essential components and results of the digital transformation journey (p. 648). Furthermore, Kindermann et al. (2021) characterized digital capabilities as the initiatives taken by organizations to establish and sustain practices that utilize human capital and intellectual resources to interact effectively with a defined range of digital solutions. Digital ecosystem coordination refers to the ability of companies to efficiently engage with various stakeholders within open technological networks, enabling them to gather valuable insights and benefit from advantageous network effects (Kindermann et al., 2021). Ultimately, digital architecture configuration involves organizing and defining roles within an organization to adapt to technological advancements, such as appointing a chief digital officer and enhancing internal workflows through automation driven by algorithms in the context of Industry 4.0. (Kindermann et al., 2021).

1.2. Sustainable Performance

Sustainability performance embodies a comprehensive framework for assessing an organization's capacity to integrate economic prosperity, environmental stewardship, and social responsibility, fostering enduring value for stakeholders while safeguarding the well-being of the planet. Fauzi, Svensson, and Rahman (2010) proposed that the concept of the "triple bottom line" (TBL) - comprising financial, social, and environmental factors - should be used to assess a firm's sustainability performance.

By adopting the Triple Bottom Line (TBL) framework, firms can take a more structured approach to sustainability management, effectively address business risks and societal challenges, and more readily identify emerging opportunities in business (Ahmić et al., 2016). The three pillars of the Triple Bottom Line—economic, social, and environmental—represent distinct forms of capital that every organization leverages to deliver value, with the core challenge being to simultaneously maximize financial performance, foster strong stakeholder relationships, and enhance eco-efficiency for the benefit of both the business and society (Ahmić et al., 2016).

The financial success of a company stems from the strategic and efficient allocation of financial resources, ensuring sustainable growth, optimizing returns, and creating long-term value while maintaining resilience in a dynamic business environment. According to the Chong (2008), financial performance encompasses metrics such as sales growth, return on investment (ROI), profits, revenue, profitability improvement, return on sales, and return on equity, with this paper specifically focusing on the analysis of profitability measures. In addition

to standard financial analysis, companies need to adopt advanced methods—like evaluating market added value, economic added value (EVA), and EVA momentum—to provide a comprehensive financial outlook, integrating long-term sustainability forecasts through research and development in sustainable innovations, eco-social investments and goodwill (Ahmić, 2022b).

Companies exist not solely to generate profit but to deliver value to their stakeholders, exemplified by their commitment to transparency through sustainability reports, which encompass environmental and social performance metrics (Renaldo & Augustine, 2022). By transparently showcasing their environmental and social performance, companies can cultivate a positive reputation among stakeholders, unlocking key advantages such as enhanced customer loyalty, greater market competitiveness, improved brand equity and strengthened trust from investors and creditors. Environmental performance reflects a company's commitment to safeguarding the environment by prioritizing activities that minimize ecological impacts and promote sustainable practices throughout its operations. Environmental activities encompass a range of initiatives, such as integrating low-carbon practices into operations, investing in pollution mitigation, utilizing ecological controls, adhering to global environmental standards, engaging in proactive environmental programs, and improving the ratio of recycled toxic waste compared to its generation (Nizamuddin, 2018). Social performance reflects a company's commitment to creating meaningful societal value by implementing initiatives, practices, and policies that enhance the welfare of communities, support stakeholder interests, and drive lasting positive social change. In accordance with the Thomson Reuters Eikon database's guidelines for ESG performance disclosure, there are four main social performance indicators: "community, human rights, product responsibility (responsible marketing, product quality monitoring), and workforce indicators (health and safety, working conditions, career development and training, and diversity and inclusion)". Table. 1 presents the overview of the key empirical studies on digital orientation and sustainable/organizational performance.

Table 1: Overview of Key Empirical Studies on Digital Orientation and Sustainable/Organizational Performance

Study	Context / Focus	Methodology	Key Findings
Khin & Ho (2018)	Digital capabilities and performance in SMEs	Survey, Sample 105 SME, method: PLS-SEM	Digital innovation mediates the link between digital technology and organizational performance
Bughin & Van Zeebroeck (2017)	Digital maturity and profitability	Quantitative survey across industries, Structural equation modeling (SEM)	Firms with higher digital maturity report stronger financial outcomes
Kindermann et al. (2021)	Conceptualization of digital strategic orientation	Theoretical model + survey validation	Identifies four digital strategic orientation dimensions; forms basis for its empirical modeling
Bendig et al. (2023)	Environmental performance and digital orientation in technological change	Survey, Regression analysis	Digital orientation significantly improves environmental performance, especially under high tech turbulence
Joesoep et al. (2023)	Digital orientation and firm performance in Indonesian companies	Survey, sample: financial directors, SEM	Strategic digital orientation and dynamic digital capabilities significantly impact on company readiness, digital innovation, and company financial performance
Renaldo & Augustine (2022)	Green information system and environmental/financial performance	SEM, manufacturing sector	Green information system has a significant positive impact on both environmental and financial indicators
Ahmić et al. (2016)	Manager values and SME sustainability in developing countries	Survey (SMEs), multiple regression	Top managers' innovative values significantly influence sustainability outcomes

Source: Author's Work

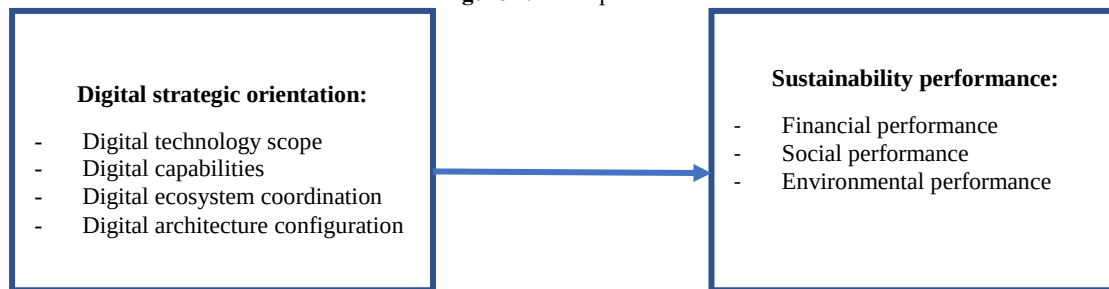
2. The Concept and the Proposed Hypotheses

This research sought to uncover the impact of digital strategic orientation elements on sustainable performance among businesses operating in Bosnia and Herzegovina. Aligned with the primary objectives, the conceptual model was crafted to underpin the empirical analysis.

Figure 1. demonstrates two sections of the proposed conceptual model: digital strategic orientation dimensions and its effect on sustainability performance components. Digital strategic orientation (DSO), as an independent variable, included four elements: "digital technology scope, digital capabilities, digital ecosystem coordination,

and digital architecture configuration” (Kindermann et al., 2021). Sustainability performance, serving as the dependent variable, was structured around three key dimensions: “financial, social and environmental performance” (Fauzi, Svensson & Rahman, 2010).

Figure 1. Conceptual Framework



Source: Author's Illustration

The research hypotheses stem from the established conceptual model, which are illustrated below:

Hypothesis 1a: Digital strategic orientation positively and significantly influences financial performance.

Hypothesis 1b: Digital strategic orientation positively and significantly influences social performance.

Hypothesis 1c: Digital strategic orientation positively and significantly influences environmental performance.

3. Methodology

3.1. Sample Description

By distributing a structured questionnaire, this study adopted a quantitative framework to systematically gather the necessary data. This research focused on enterprises operating in Bosnia and Herzegovina, categorizing them by workforce size according to the classification set by the Agency for Statistics of Bosnia and Herzegovina, which defines small firms with up to 49 workers, medium firms with 50 to 249 employees, and large firms with more than 250 employees.

More specifically, the study centered on gathering insights from top managers in Bosnian companies to explore their perspectives on strategic issues related to digitalization and sustainable performance. For this research, leaders and top managers encompassed general managers, CEOs, directors, branch managers, and other senior executives who are part of top management teams and actively contribute to strategic decision process (Ahmić, 2016). A total of 170 questionnaires were distributed via email and in-person visits, yielding 115 completed responses, resulting in a 68% response rate. The adequacy of this sample size for multiple regression analysis is supported by established methodological standards. According to Hair et al. (2019, p. 279), for regression models with up to five predictors, a sample of approximately 100–120 observations is considered sufficient and significant to detect the actual effect sizes at 80% statistical power. In this study, the regression models include four independent variables, making the 115 valid responses statistically appropriate. A thorough overview of the characteristics of the participating managers is presented in Table 2.

Table 2: Characteristics of the Sample

Items	Category	Percentage (%)
Position	Senior managers	28%
	Branch managers	35%
	Executives/CEO/Director	37%
	Total	100% (N = 115)
Gender	Female	39%
	Male	61%
	Total	100% (N = 115)
Business domain	Service companies	30%
	Commercial companies	37%
	Manufacturing companies	33%

	Total	100% (N = 115)
Number of workers	Less than 49	38%
	50-249	34%
	More than 250	28%
	Total	100% (N = 115)

Source: Author's Work

The respondent profile indicates that the majority of top managers (37%) held positions as directors, CEOs, or executives, while a significant portion (35%) served as branch managers, and the remaining 28% were senior managers who were also part of top management teams. Additionally, male top managers made up the majority of the sample at 61%, while female top managers accounted for 39% of the total.

In terms of business domains, the majority of organizations operated in the commerce sector (37%), followed by 33% in manufacturing and 30% in the service sector. When it comes to company size, the largest share of organizations were small enterprises (38%), followed by medium-sized companies at 34%, while 28% were large enterprises with over 250 workers.

3.2. Design of Questionnaire Items, Measurement Techniques and Instrument Reliability

The key elements of digital strategic orientation—namely “digital technology scope, digital capabilities, digital ecosystem coordination, and digital architecture configuration”—were identified in alignment with the study's objectives, based on the research of Kinderman et al. (2021), Bendig et al. (2023), and other relevant studies. The items were structured on a five-point Likert scale, where 1 corresponds to “entirely disagree” and 5 to “entirely agree.” The measurement of digital technology scope encompassed four elements, including: “We actively explore and adopt emerging digital technologies to drive business innovation”; “We ensure that our digital investments cover diverse operational and strategic areas”; “Digital tools and platforms in our firm are integrated across multiple business units and functions” and “Our digital technology adoption strategy is comprehensive, covering AI, cloud computing, big data, and other relevant advancements”. Three dimensions were included in the digital capabilities scale, namely: “Our organization possesses the necessary expertise and technical skills in digital technologies”; “We invest in continuous learning and development to enhance employees’ digital competencies”; and “We adapt our digital capabilities in response to technological advancements and market changes”. The digital ecosystem coordination framework consisted of three components, such as: “We effectively collaborate with external partners, suppliers and platforms to enhance digital innovation”; “Our systems integrate smoothly with cloud platforms and third parties”; and “Our digital ecosystem enables seamless data sharing and interoperability across different business functions”. At last, the scale assessing digital architecture configuration was structured around three aspects, including: “We have flexible and scalable digital architecture, supporting future technological advancements”; “Our IT infrastructure ensures efficiency, cybersecurity, and reliability”; and “We continuously optimize our digital architecture for growth”.

Sustainable performance questionnaire items, encompassing financial, social, and environmental dimensions, were structured drawing on LSEG (2024), Ahmić (2024), Garcia et al. (2017), Gavrea et al. (2011) and other similar studies. I emphasized a three-year timeframe in certain questionnaire items in order to see its effect on the sustainable performance since AI has rapidly become mainstream in many industries and its adoption has increased steeply and significantly. For example, by 2025 the generative AI market size is projected to reach \$62.72 billion, demonstrating more than five times its size in 2022 (Statista, 2024a). The questionnaire items for sustainable performance construct followed a five-point Likert scale, with 1 signifying “entirely disagree” and 5 denoting “entirely agree”. The evaluation of financial performance included three essential aspects, such as: “Our company has improved profitability over the past three years”; “The company has successfully expanded its market share, leading to higher revenue”; and “Our company has strengthened its liquidity through risk management strategies”. To measure social performance, four critical components were identified, including: “Employee job satisfaction and engagement levels have increased over the past three years”; “We have improved stakeholder trust and relationships through transparent business practices”; “We have increased diversity and inclusion in our leadership and workforce”; and “Our organization has enhanced its community contributions, including philanthropy and local development projects”. Four primary factors shaped the measurement of environmental performance, such as: “We have improved waste reduction”; “We have increased the usage of eco-friendly and healthy materials”; “The company has expanded its portfolio of eco-friendly products to meet environmental standards and customer expectations”; and “We utilize more energy-efficient technologies”.

The reliability of all scales was assessed using Cronbach's alpha, revealing that each measured dimension, including the four components of digital strategic orientation and the three facets of sustainable performance, achieved alpha values exceeding 0.7. These values indicate excellent reliability and consistency across all measurement scales (Table 3).

Table 3: Reliability of Data

Variables	Count of items	Cronbach Alpha
Digital technology scope	4	0.915
Digital capabilities	3	0.903
Digital ecosystem coordination	3	0.878
Digital architecture configuration	3	0.865
Financial performance	3	0.912
Social performance	4	0.881
Environmental performance	4	0.875

Source: Author's Work

4. Empirically Examining the Core Research Hypothesis

Before employing multiple regression analysis to evaluate the hypotheses, a preliminary correlation analysis was conducted to assess the relationships among key variables. This analysis uncovered significant interconnections between the elements of digital strategic orientation, serving as independent variables, and the key dimensions of sustainable performance, reinforcing their statistical and strategic relevance. The coefficient values, spanning from 0.285 to 0.492, exhibited statistical significance at both the 1% and 5% levels, underscoring the robustness of the relationships observed. While some predictors show significance at the 1% level and others at the 5% level, the analysis reports these levels accurately to reflect the relative statistical strength of each effect. Presenting both thresholds offers a more nuanced understanding of which digital orientation elements most strongly predict specific dimensions of sustainable performance, in line with academic reporting standards (Hair et al., 2019, p. 264).

Employing regression analysis, the study tested hypotheses H1a, H1b, and H1c to ascertain whether digital strategic orientation aligns with varying dimensions of sustainable performance. Three distinct multiple regression models were developed, incorporating four dimensions of digital strategic orientation as independent variables: "digital technology scope, digital capabilities, digital ecosystem coordination, and digital architecture configuration", whereas each model's dependent variables were: financial, social and environmental performance. The findings presented in Table 4. provide compelling evidence of the substantial influence of digital strategic orientation on sustainable performance, as reflected across all three multiple regression models.

Table 4: The Findings from the Regression Analysis on How Digital Strategic Orientation Impact Sustainable Performance

	Sustainable performance		
	Financial performance	Social performance	Environmental performance
R	0.645	0.584	0.541
R ²	0.416	0.341	0.293
df	115	115	115
Sig.	0.000	0.001	0.001
	Coef.	Coef.	Coef.
Constant	1.018	1.357	1.889
Digital technology scope	0.422**	0.341*	0.410**
Digital capabilities	0.467**	0.382**	0.312*
Digital ecosystem coordination	0.370*	0.405**	0.270*
Digital architecture configuration	0.333*	0.314*	0.349**

Notes: n = 115; * Statistically significant at 5%; ** Statistically significant at 1%

Source: Author's Work

The first multiple regression model demonstrated a significant impact of digital strategic orientation on financial performance, accounting for 41.6% of the variance ($R^2 = 0.416$), underscoring its substantial role in shaping financial outcomes. Among the key predictors, digital capabilities ($\beta = 0.46$) and digital technology scope ($\beta = 0.42$) emerged as the most influential, demonstrating significance at the 1% confidence level. These were

followed by digital ecosystem coordination ($\beta = 0.37$) and digital architecture configuration ($\beta = 0.33$), both maintaining statistical significance at the 5% confidence level, highlighting their moderate yet meaningful contributions to financial performance. These findings underscore the decisive influence of digital strategic orientation in fortifying an organization's capacity to achieve stronger financial outcomes.

The second regression model highlighted a significant influence of digital strategic orientation on social performance, accounting for 34.1% of the variance ($R^2 = 0.341$). Digital ecosystem coordination ($\beta = 0.40$) emerged as the most influential driver of social performance, closely followed by digital capabilities ($\beta = 0.38$), both demonstrating significance at the 1% level. Meanwhile, digital technology scope ($\beta = 0.34$) and digital architecture configuration ($\beta = 0.31$) also contributed meaningfully, achieving statistical significance at the 5% level, further reinforcing the multifaceted role of digital strategic orientation in fostering social impact.

To provide deeper insights, the third regression model revealed a significant impact of digital strategic orientation on environmental performance, accounting for 29.3% of the variance ($R^2 = 0.293$). Digital technology scope ($\beta = 0.41$) emerged as the most influential factor in shaping environmental performance, alongside digital architecture configuration ($\beta = 0.34$), both demonstrating statistical significance at the 1% level. Meanwhile, digital capabilities ($\beta = 0.31$) and digital ecosystem coordination ($\beta = 0.27$) also played notable roles, attaining significance at the 5% level, reinforcing the multifaceted impact of digital strategic orientation on sustainability initiatives. Although the environmental performance model in this study explains 29.3% of the variance ($R^2 = 0.293$), this value is within an acceptable range for empirical research in the social sciences, particularly in organizational behavior, strategic management, and sustainability domains. According to Hair et al. (2019, p. 312-313), R^2 values of 0.25 or higher can be considered substantial in models with high complexity and when dealing with human-centered phenomena.

Discussion and Conclusion

This research sought to determine the extent to which digital strategic orientation positively shapes sustainable performance, with regression analysis confirming its substantial and beneficial impact across financial, social, and environmental dimensions. While Bendig et al. (2023) demonstrated that a strong digital orientation significantly enhances environmental sustainability, reinforcing the multifaceted impact of digital strategies on organizational success.

Two dimensions of digital strategic orientation, digital capabilities and digital technology scope displayed the greatest impact on the financial performance. The dominant influence of digital capabilities on financial performance stems from its ability to enhance operational efficiency, data-driven decision-making, and automation, directly reducing costs and maximizing profitability. More specifically, organization will achieve greater financial performances if it possesses the necessary expertise and technical skills in digital technologies; invests in continuous learning and development in employees' digital competencies; and adapts digital capabilities in response to technological advancements and market changes. For instance, upskilled employees can use AI for predictive financial modeling, helping firms make smarter investment decisions and reduce financial risks. In addition to already mentioned example regarding digital capabilities, firms that master data analytics can optimize supply chain logistics, minimize excess inventory costs, and maximize profit margins. In light of previous studies which were focused on some individual performance, Bughin and Van Zeebroeck (2017) established a positive correlation between firms' digital capabilities and increased profitability, highlighting financial performance gains. Similarly, the dominant influence of digital capabilities on financial performance aligns with findings from Khin and Ho (2018), who confirmed that digital capabilities directly enhance firm-level innovation and performance outcomes, particularly through improved operational efficiency and decision-making. Furthermore, my study's results showed that digital technology scope fuels revenue expansion by unlocking new market opportunities, optimizing customer engagement through AI and analytics, and fostering scalable innovation, making it a critical driver of financial resilience and competitive advantage. Other two dimensions (digital ecosystem coordination and digital architecture configuration) had lower, but still significant, effect on financial performance. While digital ecosystem coordination enhances financial performance by streamlining partnerships and optimizing supply chain efficiencies, its impact is inherently collaborative and long-term, making it less immediate than direct revenue-generating digital strategies. Similarly, digital architecture configuration strengthens financial stability by ensuring scalable, secure, and efficient IT infrastructures, yet its role remains foundational rather than revenue-driving, serving as an enabler of digital transformation rather than a primary force behind financial gains.

In the realm of social performance, all four dimensions of digital strategic orientation demonstrated a distinct yet synergistic impact, collectively enhancing organizational transparency, stakeholder engagement, workforce inclusivity, and corporate social responsibility. The digital ecosystem coordination emerged as the strongest driver of social performance because it fundamentally reshapes how organizations interact, collaborate, and engage with employees, stakeholders, and communities, fostering a culture of inclusivity, transparency, and

shared value creation. For instance, digital ecosystems enable businesses to implement AI-driven diversity and inclusion strategies, ensure ethical sourcing through blockchain-powered supply chains, and amplify philanthropic outreach via social media and digital fundraising. The strong influence of digital ecosystem coordination on social performance is supported by Ardito et al. (2021), who observed that organizations that simultaneously pursue digital and environmental orientations tend to enhance their innovation and stakeholder engagement outcomes. The results also echo Ciasullo et al. (2022), who demonstrated that data-driven co-innovation and digital partnerships enhance social value creation, especially in volatile environments. While digital ecosystem coordination strengthens external social impact through partnerships, digital capabilities (as the second most influential factor on social performance) drive internal social transformation, ensuring that organizations equip their workforce with the skills, tools, and mindset needed to thrive in an increasingly digital and socially responsible business landscape. Digital technology scope and digital architecture configuration also exert a notable and positive influence on social performance, albeit to a slightly lesser extent, reinforcing the role of technological integration and structural digital frameworks in shaping socially responsible and inclusive business practices.

Concerning environmental performance, in BiH, where sustainability efforts are still evolving, digital technology scope had the greatest impact on environmental performance by enabling real-time monitoring of energy consumption, AI-driven waste reduction, smart manufacturing solutions that help firms minimize resource usage and lower emissions. It is also crucial for meeting EU environmental standards because as BiH moves toward EU accession, digital tools help firms track and comply with stricter environmental regulations. Digital architecture configuration was the second most influential factor on environmental performance, allowing firms to track waste, monitor emissions, and implement environmentally conscious production methods with greater precision and lower costs. The study by Garcia et al. (2017) confirmed that smart technologies and green infrastructure significantly enhance environmental performance indicators such as energy efficiency. Although it is generally accepted that digital ecosystem coordination is one of the most important elements for long-term environmental strategy which enables sustainable supply chain and encourages cross-industry collaboration, it had the lowest impact on environmental performance in BiH. The reason for this is that firms in BiH primarily focus on internal digital adoption rather than large-scale ecosystem coordination, and many lack established digital networks for external collaboration, which limits their ability to leverage sustainability partnerships effectively.

Study Limitations and Pathways for Future Exploration

A key limitation of this study lies in its relatively modest sample size and geographic scope, as data was gathered from 115 top managers within Bosnia and Herzegovina, potentially restricting the generalizability of findings across diverse organizational structures and industry contexts. While the insights provide valuable perspectives on digital strategic orientation and sustainability, they may not fully capture the varied strategic approaches, technological maturity levels, and sector-specific dynamics present in broader regional or global business environments.

Therefore, future research should expand the geographical and sectoral scope, incorporating a larger and more diverse sample of firms across multiple regions to capture broader strategic variations and industry-specific digital adoption patterns. Additionally, longitudinal studies could provide a dynamic perspective on how digital strategic orientation evolves over time, particularly in response to shifting technological trends, regulatory changes, and economic disruptions. Exploring the role of emerging technologies such as AI-driven sustainability analytics, blockchain for supply chain transparency, and green fintech solutions would further enhance our understanding of how digital transformation drives long-term sustainable performance in various organizational contexts.

AUTHOR STATEMENT

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