

Primljeno/Submitted:03.11.2025.
Prihvaćeno/Accepted: 10.12.2025.

Izvorni znanstveni rad
Original scientific paper

CONSUMER ATTITUDES AND PURCHASE INTENTIONS TOWARD DIGITAL GREEN MARKETING

STAVOVI POTROŠAČA I NAMJERE KUPOVINE PREMA DIGITALNOM ZELENOM MARKETINGU

Azra Ahmić*
Muhamed Ćosić**

ABSTRACT

Understanding how consumers evaluate the core dimensions of digitalized green marketing is critical for organizations seeking to align sustainability initiatives with market realities. This study examines consumer attitudes and purchase intentions toward four key pillars of digital green marketing - green products, green pricing, green promotion, and green distribution - using a descriptive research design grounded in primary data collection. Empirical insights stem from a structured questionnaire distributed to 150 consumers in Bosnia and Herzegovina, recruited through convenience sampling, with responses analyzed using descriptive statistical measures, including arithmetic means and ranking, to capture nuanced attitudinal patterns across all four dimensions. By adopting this granular lens, the study reveals where positive environmental orientations successfully translate into purchase intentions and where they weaken. The results indicate that while consumers in BiH express broadly favorable views toward green products and digitally mediated sustainability communication, their purchasing intentions remain tempered by price sensitivity and uneven access to environmentally credible distribution channels. These findings underscore the multidimensional nature of consumer responses to green marketing initiatives and illuminate priority areas for both practitioners and policymakers. Collectively, the study provides an evidence-based attitudinal baseline for strategic planning, benchmarking, and targeted intervention, enriching the growing body of research on digital green marketing in emerging economies.

Keywords: green marketing, digital marketing, consumer attitudes, purchase intention, sustainable consumption

* Prof. dr. Azra Ahmić, Associate Professor, Faculty of Business and Administration, International University of Sarajevo, e-mail: azraahmic30@gmail.com

**Prof. dr. Muhamed Ćosić, Associate Professor, Faculty of Information Technologies, University of Vitez, e-mail: drmuhamedcosic@gmail.com

SAŽETAK

Razumijevanje načina na koji potrošači procjenjuju ključne dimenzije digitaliziranog zelenog marketinga od suštinske je važnosti za organizacije koje nastoje uskladiti svoje inicijative održivosti s tržišnim očekivanjima. Ovo istraživanje analizira stavove potrošača i namjeru kupovine u odnosu na četiri temeljna stuba digitalnog zelenog marketinga - zeleni proizvod, zelenu cijenu, zelenu promociju i zelenu distribuciju - koristeći deskriptivni istraživački dizajn zasnovan na primarnom prikupljanju podataka. Empirijski uvidi proizašli su iz strukturiranog upitnika distribuiranog među 150 potrošača u Bosni i Hercegovini, odabranih metodom prigodnog uzorkovanja, pri čemu su odgovori analizirani deskriptivnim statističkim mjerama, uključujući aritmetičke sredine i rangiranje, kako bi obuhvatili nijansirani obrasci stavova u sve četiri dimenzije. Usvajanjem ovako detaljnog analitičkog pristupa, istraživanje otkriva gdje se pozitivne ekološke orijentacije uspješno pretvaraju u namjeru kupovine, a gdje slabe. Rezultati pokazuju da, iako potrošači u BiH uglavnom iskazuju povoljne stavove prema zelenim proizvodima i digitalno posredovanoj komunikaciji o održivosti, njihove namjere kupovine ostaju ograničene cjenovnom osjetljivošću i neujednačenim pristupom kanalima distribucije koji posjeduju ekološku vjerodostojnost. Ovi rezultati naglašavaju višedimenzionalnu prirodu potrošačkih reakcija na inicijative zelenog marketinga i ističu prioritete oblasti za praktičare i kreatora politika. Zajedno uzevši, istraživanje pruža empirijski utemeljenu mapu stavova koja može poslužiti kao osnova za strateško planiranje, benchmarking i ciljane intervencije, obogaćujući rastuću literaturu o digitalnom zelenom marketingu u ekonomijama u razvoju.

Ključne riječi: zeleni marketing, digitalni marketing, stavovi potrošača, namjera kupovine, održiva potrošnja

INTRODUCTION

In an era where digital transformation intersects with the global sustainability imperative, marketing has become more than a tool of persuasion - it is increasingly a mirror of societal values and collective aspirations. The rapid expansion of digital platforms has given organizations new opportunities to communicate, personalize, and amplify green messages, yet it has also exposed them to heightened scrutiny regarding authenticity and impact. Consumers today no longer assess brands solely by the quality of products or services they deliver; instead, they critically evaluate the credibility of environmental claims, the transparency of digital engagement, and the alignment of prices and distribution channels with sustainability ideals. Against this backdrop, digital green marketing emerges not merely as a strategic option but as a necessary pathway for organizations seeking both competitive advantage and societal legitimacy. At its simplest, it is the integration of

digital marketing with the full green marketing mix to design, deliver, and substantiate sustainable value (Alkhatib et al., 2023). While the marketing mix is frequently expanded to seven Ps (involving „People, Physical Evidence, and Process“) particularly in services and experiential contexts - the earliest, most hands-on moves enterprises, especially small and medium ones, make toward green marketing typically coalesce around the classic four Ps („product, price, place, and promotion“), which remain the bedrock of a credible strategy for green marketing.

While global markets have witnessed a surge in eco-branding and digital sustainability campaigns, the link between digitalization and green marketing concept in economies worldwide (Alkhatib et al., 2023), including emerging markets, remain underexplored. Bosnia and Herzegovina, like many transition economies, provides a particularly fertile context for investigation: consumers are increasingly exposed to digital content and sustainability narratives, yet their purchasing behaviors are shaped by structural constraints such as income levels, market maturity, and infrastructural accessibility. Understanding how consumers in such environments perceive, evaluate, and act upon the central elements of digital green marketing - product, price, promotion, and distribution - is vital to bridging the gap between aspirational sustainability discourse and actual market behavior.

This study responds to that gap by offering an attitudinal map of consumer responses to digital green marketing in Bosnia and Herzegovina. The two main research questions in this paper included: (1) „What are consumers' attitudes toward the digitalized elements of the green marketing mix („green product, green price, green promotion, and green distribution“) in Bosnia and Herzegovina?“, and (2) „Which elements of the digitalized green marketing mix do consumers rank as the most influential in shaping their purchase decisions?“. By disentangling the interplay between positive attitudes and cautious purchase intentions, the research highlights both the potential and the limits of digitally mediated sustainability strategies. In doing so, it not only contributes to the theoretical discourse on green consumer behavior and digital marketing effectiveness but also provides actionable insights for businesses and policymakers navigating the delicate balance between ecological responsibility and consumer pragmatism.

1. LITERATURE REVIEW

1.1. Digital transformation and the new marketing paradigm

In Vărzaru and Bocean's (2024) view, digital transformation is defined as a comprehensive reinvention that reconstructs the organizational logic of value delivery to its customers, utilizing technology, human capital, and process redesign to redefine business outcomes. Extending this perspective, digitalization transcends the mere integration of technological tools - it embodies a broader civilizational shift that reconfigures the ways in which value, knowledge, and relationships are developed, exchanged, and sustained across the entire socio-economic landscape. Unlike earlier waves of mechanization or automation, digital transformation does not simply add efficiency; it reconfigures the core of existence in business, governance, and everyday life. It

replaces linear processes with intelligent networks (Heikinheimo et al., 2024), static hierarchies with agile ecosystems, and isolated decisions with data-enabled interconnectivity.

At its foundation, digital transformation is an evolution of cognition - a new way of perceiving and acting upon reality. Through the convergence of artificial intelligence (AI), data analytics, Big Data, cloud computing, Internet of Things and other immersive technologies, organizations gain not only operational agility but epistemic power: the capacity to anticipate change rather than merely respond to it. This predictive and adaptive intelligence fuels a new paradigm of management in which strategy becomes dynamic, continuously informed by digital signals that reveal emerging risks, preferences, and opportunities across complex systems. The field of AI has predominantly evolved under the acting rationally paradigm, wherein intelligent systems are designed to make decisions and execute actions that are logically coherent and goal-oriented, relying on deliberate reasoning processes informed by available data and contextual knowledge (Ahmić & Šahović, 2025). Within this framework, AI can be described as a transformative technology that emulates human cognitive functions „learning, reasoning, and problem-solving“ by interpreting data, adapting through experience, and autonomously executing actions to achieve defined objectives (Ahmić, 2023). Further, Big Data encompasses extraordinarily large datasets derived from heterogeneous structured and unstructured origins, capturing the complexity and diversity of modern information flows (Pappas et al., 2018). Faroukhi et al. (2020) emphasized that Big Data and Analytics, as core high-value digital enablers, serve as powerful instruments for transforming data into monetizable assets and strengthening firms' competitive advantage.

Regarding marketing, digital transformation has not merely modernized marketing - it has rewired its DNA. What once revolved around persuasion, promotion, and product is now an evolving symphony of intelligence, ethics, and experience. The digital revolution has ushered marketing out of the industrial age of information scarcity and into a new epoch defined by data abundance (Du et al., 2021), algorithmic sensitivity, and human resonance. Through this digital lens, the customer is no longer perceived as a passive recipient of messages but as an active co-creator of meaning and experience. In this new order, marketing no longer speaks at consumers; it learns from them, thinks with them, and builds ecosystems that thrive on participation, transparency, personalization and shared purpose. The result is a more adaptive, responsive, and ethically conscious form of marketing.

In its simplest form, digital marketing can be understood as the use of electronic media and online communication platforms to identify, engage, and persuade potential customers by delivering value-driven messages and offers that inspire connection and informed purchase decisions (Conti et al., 2023). More specifically, digital marketing represents the strategic integration of digital technologies, data intelligence, and human creativity that empowers organizations to build meaningful, real-time interactions within dynamic and purpose-driven online ecosystems - shaping consumer perceptions, informing decisions, and fostering intentional purchasing behavior. Utilizing the power of artificial intelligence, automation, and predictive

analytics, firms now transform vast streams of consumer data into living intelligence - uncovering the hidden contours of consumer preferences, behaviors, and motivations to anticipate needs, tailor offerings, and cultivate authentic engagement with a precision and scale once unimaginable.

1.2. Green marketing concept

Green marketing has gradually moved from being perceived as a peripheral promotional trend to sell green products (Tzanidis et al., 2024) to becoming a central strategic philosophy that reshapes the very foundations of how firms design, deliver, and communicate value. Its purpose is to champion products crafted with environmental integrity while nurturing a marketplace that embraces conscious, sustainable consumption as both a moral and modern necessity (Dahhan & Arenkov, 2021). At its core, it transcends the narrow lens of “eco-friendly advertising” and instead embeds environmental responsibility into every layer of the marketing process (Luo et al., 2025). This implies not only developing products with lower ecological footprints, but also redefining pricing models to demonstrate life-cycle costs, restructuring distribution channels to minimize carbon intensity, and fostering communication that is transparent, verifiable, and trustworthy.

Thus, green marketing is no longer a niche program or a paint-it-green communications add-on; it is a market-shaping philosophy that embeds environmental objectives into how firms design value (product), price that value (price), make it findable and deliverable (place/distribution), and communicate it (promotion) increasingly across digital touchpoints where claims can be searched, compared, and verified. Practically, these green marketing measures translate into less impact on nature (Planet), more value from every euro spent (Profit), and delivering on the promises firms make to sustainability-minded stakeholders (People) (Masocha, 2020).

Unlike traditional marketing approaches that primarily emphasize consumer satisfaction and competitive positioning, green marketing is inherently relational and societal. It positions businesses as stewards of environmental well-being and social progress, creating a triadic value proposition: benefits for the customer, advantages for the firm, and long-term gains for the planet. Moreover, contemporary scholarship stresses that green marketing is no longer a niche practice confined to environmentally conscious consumers, but it has become a mainstream expectation with the intensification of climate crises and the rise of digital transparency (Deloitte, 2023). Consumers increasingly demand proof of corporate responsibility and align their purchasing behavior with brands that can demonstrate authentic commitments rather than symbolic gestures (Yu et al., 2021). In this sense, green marketing is both a response to and a driver of systemic change: it bridges the gap between sustainability rhetoric and real business transformation, positioning companies not merely as market actors but as active participants in building resilient, low-carbon futures.

1.3. Green marketing mix

In the era of planetary boundaries and conscious consumption, the traditional marketing mix - once designed to optimize profit, market share, and customer satisfaction - is being fundamentally re-engineered to serve a higher purpose: ecological stewardship and societal well-being. The green marketing mix is not merely a cosmetic adaptation of the classic 4Ps (product, price, place, and promotion); it represents a profound strategic realignment in which each element is recalibrated to integrate environmental responsibility and ethical accountability at its core.

1.3.1. Green product

As the cornerstone of the green marketing mix, green products constitute the pivotal element that shapes and sustains the effectiveness of an organization's overarching sustainability strategy (Mahmoud, 2018). More precisely, a green product represents a strategically designed offering that unites performance efficiency with environmental responsibility, embedding ethical, ecological, and resource-conscious principles across its entire life span (from material selection and production to consumer use and final disposal) so as to preserve ecosystems, sustain natural assets, and create enduring societal benefit.

During the manufacturing phase, green production embraces principles that prioritize energy and resource efficiency, minimize waste and emissions (Jave-Chire et al., 2025), uphold environmental stewardship, and ensure ethical practices that exclude harm to animals. This concept demands a comprehensive, life-cycle perspective - extending from product design to end-of-life management (Astuti et al., 2024) and entails the systematic application of the 5R principles: „reuse, reconditioning, repair, remanufacture, and recycling“ (Karunarathna et al., 2020). Green products are distinguished by a constellation of attributes, including recyclability, biodegradability, minimal/eco-conscious packaging and resource efficiency (Alharthey, 2019), while also emphasizing low-carbon manufacturing, circular material use, non-toxic and ethically sourced components, and the integration of renewable or organically derived inputs that collectively advance environmental and social sustainability.

1.3.2. Green price

Green price refers to a value-based pricing philosophy that fuses economic performance with environmental accountability, capturing both the financial return for the producer and the true ecological and social value of the product. Instead of pursuing price reductions merely to boost short-term sales, environmentally responsible companies prioritize investments in green technologies that lower operational and resource costs over time, leading to pricing structures that genuinely illustrate the real expenses of sustainable production and marketing practices (Leonidou et al., 2013). It ensures that pricing decisions internalize resource efficiency, lifecycle impacts, and ethical considerations, thereby aligning profit generation with sustainability principles and long-

term market competitiveness. Green products often carry premium prices compared to conventional alternatives (Önem & Selvi, 2024), as their value incorporates the added costs of sustainable materials, ethical production, and measurable environmental and social benefits that extend beyond mere functional performance. This pricing distinction is generally driven by the additional expenditures associated with sustainable processes, eco-friendly materials, advanced waste management, and green technologies (Agustini et al., 2021), while also embedding non-monetary dimensions (such as compliance, opportunity, innovation, carbon mitigation and energy costs) that reflect the broader economic reality of responsible production. Despite this, empirical evidence demonstrates that a growing proportion of consumers willingly pay premium prices for products distinguished by environmentally beneficial characteristics (Lyu, 2024). Thus, rather than functioning as a mere premium, green pricing denotes a re-evaluation of value itself, where economic profit and purpose coexist within a framework of long-term environmental and societal gain.

1.3.3. Green promotion

Green promotion can be described as a purposeful communication strategy that transforms an organization's environmental responsibility into credible, value-centered engagement, seeking not only to inform and persuade but to inspire awareness, educate, and motivate collective action toward sustainability. It integrates sustainability narratives into every communicative touchpoint (advertising, storytelling, digital media, and public relations) to foster environmental literacy, strengthen trust while aligning brand identity with ecological consciousness. Well-designed green promotion initiatives have the power to shape favorable attitudes toward advertising while simultaneously inspiring individuals to adopt more environmentally responsible behaviors (Kim et al., 2019). The effectiveness of green promotion can be assessed through indicators encompassing the advertising accuracy, the clarity of message transmission, informativeness, its role in strengthening brand image, and its overall influence on consumer engagement, loyalty and interest (Karunarathna et al., 2020). Further, the success of green promotion fundamentally depends on the perceived authenticity and trustworthiness of the company and its environmental claims, requiring communication that is evidence-based, transparent, and consistent to sustain credibility and influence (Junior et al., 2019). Specifically, green advertising seeks to influence consumers by emphasizing a product's environmental characteristics or addressing pertinent ecological concerns, thereby fostering the product–environment linkage, encouraging sustainable lifestyle choices, and affirming the organization's reputation as a genuinely responsible and eco-conscious entity.

1.3.4. Green distribution

The concept of green distribution encompasses a sustainability-driven logistics, transportation and delivery strategy that integrates environmental responsibility into every stage

of the supply chain (from sourcing and packaging to transportation and retail) aiming to minimize ecological impact, optimize resource efficiency, and align market accessibility with the principles of circular and low-carbon economy. In other words, this approach entails optimizing distribution routes to minimize ecological impact while applying a comprehensive assessment of the entire supply chain, thereby reducing emissions, conserving energy, and lowering overall transportation costs (Al-Majali & Tarabieh, 2020). In selecting distribution locations, considerations extend to factors such as accessibility, geographic proximity to consumer markets and local suppliers; quality of road and logistics infrastructure; waste management systems; and labor availability that facilitates environmentally efficient operations. Creating a supply chain that enables the seamless and sustainable flow of information and materials, while strategically determining the optimal locations of distribution centers, facilities and sales locations to reduce logistical inefficiencies and environmental impact, represents a cornerstone of effective green distribution management (Davari & Strutton, 2014). Furthermore, the environmental footprint of the distribution process can be mitigated by fostering partnerships with environmentally responsible suppliers, implementing waste minimization strategies, encouraging reuse and product recycling, and integrating comprehensive lifecycle assessments based on cradle-to-cradle principles to ensure circularity and long-term sustainability (Leonidou et al., 2013).

2. METHODOLOGY

In this research, a quantitative, descriptive research design was adopted, aiming to systematically explore and quantify consumers' attitudes and purchasing intentions within the evolving landscape of digital green marketing. Data were collected through a structured questionnaire specifically designed to capture four key dimensions of the green marketing mix in the digital environment: „green product, green price, green promotion, and green distribution“. The questionnaire comprised a set of carefully formulated statements evaluated through a five-point Likert scale, enabling the nuanced measurement of participants' attitudes, and behavioral inclinations. The study was conducted on a sample of 150 consumers in Bosnia and Herzegovina, selected through purposive (convenience) sampling, in order to include participants from diverse demographic backgrounds and purchasing behavior patterns. The focus was placed on individuals with prior experience using digital channels such as social media, online stores, and brand websites. Data collection was conducted via an online survey administered through Google Forms (or a similar digital tool) to ensure accessibility, efficiency, and data reliability.

Table 1 illustrates that the sample composition included 67% female and 33% male participants, predominantly aged 24 to 45 years, representing the most active users of digital platforms.

Table 1. Socio-Demographic Characteristics of the Research Sample

Variable	Category	Percentage (%)
Gender	Female	67%
	Male	33%
	Total	100% (N=150)
Age Group	20–34 years	27%
	35–45 years	61%
	46+ years	12%
	Total	100% (N=150)
Educational Level	High school diploma	18%
	Bachelor's degree	42%
	Master's degree	33%
	Doctoral degree	7%
	Total	100% (N=150)
Place of Residence	Cities	54%
	Towns and suburbs	32%
	Rural areas	14%
	Total	100% (N=150)

Source: Authors' work

The demographic profile also reflected a higher level of education and residence in urban areas across Bosnia and Herzegovina (Table 1). In this study, the classification of participants' place of residence follows the Eurostat Degree of Urbanisation (DEGURBA) typology, distinguishing cities (densely populated urban centres with over 50,000 inhabitants), towns and suburbs (intermediate areas with moderate population density between 5,000 and 50,000 inhabitants), and rural areas (thinly populated regions with fewer than 5,000 inhabitants and low settlement density) (Eurostat, 2024). The collected data were analyzed using descriptive statistical methods (frequencies, means, and standard deviations) to identify general trends and prevailing consumer attitudes toward each dimension of digital green marketing.

3. RESULTS

The results from table 2 indicated that consumers perceive green products primarily through the lens of personal and environmental safety, valuing their health benefits and responsible material use more than their novelty or durability. Further, the findings reveal that consumers are highly aware of price disparities between green and conventional products, yet their willingness to pay more remains constrained by perceived value and affordability. While they recognize the ethical and environmental merit of green products, price sensitivity continues to shape purchasing intentions, underscoring that sustainability alone cannot outweigh cost considerations in final buying decisions.

Table 2. Consumer attitudes of green marketing mix

No.	Green marketing mix	Mean	SD	Rank
1. Green product				
1.	Most green products are made with environmentally responsible or recycled materials.	3.95	0.85	3
2.	Green products generally consume fewer resources (energy, water, or raw materials) during use.	4.10	0.78	2
3.	Green products tend to be longer lasting than non-green products.	3.70	0.91	4
4.	Green products are often more innovative than conventional alternatives.	3.55	0.97	5
5.	Green (Bio/Eco) products are usually safer for consumers' health and well-being.	4.25	0.73	1
2. Green price				
6.	I am willing to pay a higher price for products with proven environmental benefits.	3.60	0.95	3
7.	Green products offer good value for the price I pay.	3.40	1.02	4
8.	I pay attention to price differences between green and non-green products.	4.10	0.75	1
9.	High prices discourage me from buying environmentally friendly products.	4.00	0.82	2
3. Green distribution				
10.	I prefer to buy environmentally friendly products through online platforms rather than physical stores.	3.50	0.98	3
11.	Digital channels make it easier for me to access a wide variety of green products.	3.70	0.86	2
12.	I prefer green products distributed through local suppliers to reduce environmental impact.	4.20	0.71	1
14.	It is easy to find environmentally credible and reliable distribution channels for green products.	2.70	1.55	4
4. Green promotion				
15.	I expect promotional messages about green products to clearly explain their environmental benefits.	4.30	0.64	1
16.	Green advertising and promotions influence my interest in environmentally friendly products.	4.00	0.79	2
17.	Most green promotions feel genuine rather than just a marketing gimmick.	3.40	1.02	4
18.	Promotional materials about green products are usually easy to understand.	3.60	0.88	3

Authors' work

Regarding green distribution, consumers strongly favor locally sourced green products, perceiving local distribution as the most authentic and environmentally responsible option.

However, the very low perception of accessible and credible green distribution channels reflects the structural limitations of the Bosnian market, where sustainable logistics networks, certification systems, and transparent online distribution are still underdeveloped, hindering consumers' ability to make informed and confident green purchasing decisions. In terms of green promotion, the results from table 2 indicate that consumers in Bosnia and Herzegovina place the greatest importance on clarity and transparency in green promotional messages, valuing campaigns that clearly communicate real environmental benefits. The second-highest rated aspect „green advertising influencing interest in eco-friendly products“ demonstrates that effective promotional communication can genuinely stimulate curiosity and engagement, yet the moderate ratings for authenticity and simplicity suggest that many campaigns still lack emotional credibility and accessible storytelling, leaving room for improvement in building deeper consumer trust.

Table 3. Consumer attitudes of digitalized green promotion

No.	Digitalized green promotion	Mean	SD	Rank
1.	Environmental claims communicated through digital channels (websites, social media, apps) are generally believable.	3.55	0.88	8
2.	Digital green promotions provide enough detail to understand a product's environmental benefits.	3.75	0.82	7
3.	I appreciate when digital green campaigns allow me to interact (e.g., click for more info, quizzes, feedback).	4.20	0.68	3
4.	Green marketing on social media feels more authentic when backed by clear evidence or certification.	4.40	0.61	1
5.	I prefer receiving green promotional messages through social media or online platforms rather than traditional media.	3.90	0.78	5
6.	Digitally delivered green promotions tailored to my interests make me more likely to pay attention.	4.00	0.75	4
7.	Visual and interactive elements (videos, infographics, apps) make digital green promotions more engaging for me.	3.85	0.80	6
8.	I am more likely to trust a green campaign if it provides verifiable data or third-party links online.	4.30	0.65	2
9.	Digital green promotions motivate me to change my purchasing or consumption behavior.	3.40	0.90	9

Authors' work

The findings from table 3. paint a vivid picture of consumers in Bosnia and Herzegovina who respond most positively to authentic, evidence-based digital green promotions, particularly when campaigns are supported by verifiable data or official certification, which significantly enhances perceived trust and credibility. High ratings for interactivity and personalization further suggest that digitally empowered consumers value engagement and tailored experiences, seeing two-way communication as a sign of transparency and respect. The weakest result „digital promotions' limited ability to change actual purchasing behavior“ highlights a persistent attitude–

behavior gap, implying that while digital marketing successfully informs and interests consumers, it still struggles to convert awareness into consistent eco-conscious buying actions.

Table 4. Consumer attitudes of digitalized green pricing

No.	Digitalized green pricing	Mean	SD	Rank
1.	Digital tools (apps, QR codes, websites) make it easier for me to understand the prices of green products.	3.20	1.15	6
2.	I use online platforms to compare prices of green versus non-green products.	4.05	0.74	3
3.	I am more likely to pay a green premium if digital platforms offer points or rewards for eco-friendly purchases.	3.92	0.80	4
4.	Digital transparency about how much of the price supports sustainability projects makes me more willing to pay.	3.30	0.99	5
5.	I would be motivated to buy green products if digital systems offered immediate discounts for environmentally responsible actions.	4.30	0.65	1
6.	I believe digital innovation will help reduce the price gap between green and conventional products over time.	4.10	0.71	2

Authors' work

The outcomes from table 4 uncovered that consumers in Bosnia and Herzegovina are most motivated by immediate, tangible incentives, such as digital discounts and eco-reward systems, confirming that practicality still outweighs ideology in shaping green purchasing behavior. The high agreement with the belief that digital innovation can narrow the price gap reflects growing optimism toward technology's role in making sustainability more affordable and accessible. However, lower ratings for price transparency and understanding indicate that the connection between price and sustainability impact remains unclear, suggesting a need for clearer, data-driven communication that shows where each euro of a "green premium" truly goes.

Table 5. Consumer attitudes of digitalized green distribution

No.	Digitalized green distribution	Mean	SD	Rank
1.	Digital platforms make it easier for me to find and order environmentally friendly products from different suppliers	4.10	0.72	2
2.	I like being able to digitally track how green products are transported and delivered.	4.00	0.77	3
3.	I trust green products more when companies digitally disclose their transportation routes and environmental impact.	3.70	0.89	5
4.	I am more likely to return packaging or used green products if there is a simple digital system to arrange collection.	4.20	0.70	1
5.	I believe digital sensors and IoT can improve the environmental performance of green product distribution.	4.00	0.77	3

6.	I would be motivated to choose slower or eco-friendly delivery if a digital system rewarded me for it.	3.90	0.83	4
----	--	------	------	---

Authors' work

The findings in Table 5 reveal that consumers in Bosnia and Herzegovina show a strong appreciation for the role of digital technologies in facilitating environmentally responsible product distribution. Respondents most strongly agreed that simple digital systems for returning packaging or used green products encourage greater participation in sustainable behavior, underscoring that practicality and convenience are key motivators in the local market. Similarly, high mean values for statements related to digital accessibility and product tracking indicate that consumers value the ability to easily find, order, and monitor eco-friendly products through online platforms - a reflection of the country's growing reliance on e-commerce and digital services. The relatively moderate trust in digitally disclosed transportation data suggests, however, that while digital transparency is welcomed, consumers in BiH still expect stronger institutional credibility and verification mechanisms to fully trust sustainability claims.

Table 6. Consumer attitudes of digitalized green products

No.	Digitalized green products	Mean	SD	Rank
1.	When digital technologies are integrated into a green product, it becomes more practical and efficient.	4.05	0.78	3
2.	Digital features help the product consume fewer resources (e.g., energy) and reduce its negative impact on the environment.	3.90	0.80	4
3.	I value green products that, through digital functions, clearly show me how environmentally friendly they are (e.g., energy consumption or recyclability).	3.30	1.01	5
4.	I am more satisfied with products that allow me to monitor and control their performance via an app or device.	4.10	0.72	2
5.	A product is more appealing to me if it combines smart technologies with environmental sustainability.	4.25	0.65	1

Authors' work

Findings presented in Table 6 indicate that consumers in Bosnia and Herzegovina are most drawn to products that combine smart technology with sustainability, seeing them as modern, useful, and aligned with their lifestyle. They especially appreciate products that can be monitored or controlled through apps or devices, as this gives them a sense of convenience and control. Still, many want clearer and more trustworthy digital information about how environmentally friendly these products truly are before fully embracing them.

5. DISCUSSION AND CONCLUSION

This research provides a comprehensive view of how consumers in Bosnia and Herzegovina perceive and respond to the digital transformation of green marketing. The findings

clearly demonstrate that while environmental awareness is steadily rising, consumers remain primarily motivated by practicality, transparency, and perceived personal value, rather than by purely ethical or ideological appeals. Across all four dimensions of the digital green marketing mix (product, price, promotion, and distribution) digitalization emerges as both a bridge and a catalyst that connects sustainability principles with modern consumer behavior. In terms of digitalized green products, consumers show the strongest preference for products that combine smart technology with sustainability, perceiving them as modern, convenient, and aligned with their daily routines. This highlights the growing potential of IoT-enabled and app-integrated solutions that allow users to monitor energy use, recyclability, and environmental impact. However, the lower trust in digital indicators of eco-performance indicates that the market still lacks standardized verification mechanisms and credible eco-labelling, which would help consumers make confident, evidence-based purchasing decisions. Authors Yang et al. (2024) also highlighted in their research that a persistent deficit of consumer trust in eco-labels remains one of the key constraints on the expansion of sustainable product markets, underscoring the importance of minimizing information asymmetries between producers, certifiers, and consumers to strengthen confidence in environmental claims.

The results for digital green pricing further underline that affordability remains a decisive factor. While consumers are increasingly aware of the ethical value of green products, they are most responsive to immediate, tangible digital incentives - such as discounts, loyalty points, or eco-reward systems. In fact, the analysis shows that consumers identify digital discounts as the strongest catalyst for purchase intentions, a pattern confirmed by the highest observed mean value (Mean = 4.30) within this category. This suggests that digital pricing strategies integrating digital reward mechanisms or dynamic pricing models could play a critical role in accelerating sustainable consumption in emerging markets like Bosnia and Herzegovina. When it comes to digital green promotion, consumers value authenticity, interactivity, and evidence-based messaging. In relation to earlier studies, Pang et al. (2024) indicated that greater levels of perceived interactivity within digital communication environments substantially amplify consumer engagement, fostering deeper cognitive and emotional involvement with green promotional content. Our research further demonstrated that campaigns supported by verified data or certifications significantly enhance trust, while personalized and interactive elements increase engagement.

Nevertheless, the findings also reveal a persistent attitude-behavior gap: consumers enjoy and believe digital green content, yet this belief does not always translate into consistent eco-conscious buying behavior. This gap underscores the importance of emotional storytelling, behavioral nudges, and community-driven campaigns that move beyond information provision toward motivation and action. Regarding digital green distribution, the findings show that convenience and accessibility are decisive in shaping sustainable choices. Consumers appreciate online systems that facilitate easy returns and transparent tracking, yet they remain skeptical about the credibility of supply-chain data. This reflects the broader infrastructural challenges within the Bosnian market, where green logistics, eco-certification, and verified sustainability reporting are still developing. Strengthening these systems through blockchain tracking, certified delivery

partners, or public-private initiatives could meaningfully enhance consumer confidence and participation in green distribution channels.

Overall, the study positions digitalization as a strategic enabler of sustainability - not only simplifying access to green products but also reshaping how consumers perceive, evaluate, and engage with environmentally responsible brands. The Bosnian market, while still evolving, displays promising readiness for this transition: urban, educated, and digitally connected consumers are leading the shift toward greener, tech-supported lifestyles. From a managerial standpoint, the findings suggest that companies should integrate digital innovation with authentic sustainability communication, ensuring that convenience, transparency, and trust remain central to their green marketing strategies. For policymakers, the study highlights the need for clearer eco-labelling frameworks, digital traceability standards, and fiscal incentives that encourage both businesses and consumers to adopt greener practices. In conclusion, digital green marketing in Bosnia and Herzegovina represents not merely a trend but a transformative pathway toward a more sustainable consumer culture. By aligning technological innovation with genuine environmental commitment, businesses can not only strengthen competitive advantage but also contribute meaningfully to the broader green transition of the national economy.

LITERATURE

1. Ahmić, A. (2023). Artificial intelligence practices, opportunities and barriers in human resource management. *Nauka i tehnologija*, 11(2), p. 98-107. <http://dx.doi.org/10.58952/nit20231102098>
2. Ahmić, A., and Šahović, L. A. (2025). Artificial Intelligence Impact on the Sustainable Entrepreneurial Process. *Journal of Ecohumanism*. 4(2), p. 235-248.
3. Al-Majali, M.; Tarabieh, S. (2020). Effect of Internal Green Marketing Mix Elements on Customers' Satisfaction in Jordan: Mu'tah University Students. *Jordan Journal of Business Administration*. 16(2), p. 411–434.
4. Alharthey, B.K. (2019). Impact of Green Marketing Practices on Consumer Purchase Intention and Buying Decision with Demographic Characteristics as Moderator. *International Journal of Advanced and Applied Sciences*. 6(3), p. 62–71.
5. Alkhatib, S., Kecskés, P., & Keller, V. (2023). Green Marketing in the Digital Age: A Systematic Literature Review. *Sustainability*. 15(16), 12369. <https://doi.org/10.3390/su151612369>
6. Astuti, K.; Batubara, H.M.; Rosalina, R.; Evanita, S.; Friyatmi, F. (2024). Effect of Green Marketing Mix on Purchase Intention: Moderating Role of Environmental Knowledge. *Jurnal Apresiasi Ekonomi*. 12(1), p. 238–239.
7. Agustini, M., Baloran, A., Bagano, A., Tan, A., Athanasius, S., and Retnawati, B. (2021). Green Marketing Practices and Issues: A Comparative Study of Selected Firms in Indonesia and Philippines. *Journal of Asia-Pacific Business*, 22(3), p. 164–181.

8. Conti, E., Camillo, F., and Pencarelli, T. (2023). The impact of digitalization on marketing activities in manufacturing companies. *The TQM Journal*, 35(9), p. 59-82.
9. Dahhan, A., and Arenkov, I. (2021). Green marketing as a trend towards achieving sustainable development. *Journal of Economics Entrepreneurship and Law*. 11(11), p. 2497-2512.
10. Davari, A., and Strutton, D. (2014). Marketing Mix Strategies for Closing the Gap Between Green Consumers' Pro-Environmental Beliefs and Behaviors. *Journal of Strategic Marketing*. 22(7), p. 563–586.
11. Deloitte (2023). Green products come of age. Expectations of sustainable products are rising, but consumers are likely to reward brands that deliver. Available at: <https://www.deloitte.com/us/en/insights/industry/retail-distribution/consumer-behavior-trends-state-of-the-consumer-tracker/sustainable-products-customer-expectations.html>
12. Du, R. Y., Netzer, O., Schweidel, D. A., and Mitra, D. (2021). Capturing Marketing Information to Fuel Growth. *Journal of Marketing*, 85(1), p. 163-183.
13. Eurostat (2024). Applying the Degree of Urbanisation – A methodological manual to define cities, towns and rural areas for international comparisons. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Applying_the_degree_of_urbanisation_manual
14. Faroukhi, A.Z., El Alaoui, I., Youssef, G., and Amine, A. (2020). Big data monetization throughout Big Data Value Chain: a comprehensive review. *Journal of Big Data*. 7, <https://doi.org/10.1186/s40537-019-0281-5>
15. Heikinheimo, M., Hautamäki, P., Julkunen, S., and Koponen, J. (2024). B2B service sales on a digital multi-sided platform: Transformation from value chains to value networks. *Industrial Marketing Management*. 116, p. 26-39.
16. Jave-Chire, M., Alvarez-Risco, A., and Guevara-Zavaleta, V. (2025). Footwear Industry's Journey through Green Marketing Mix, Brand Value and Sustainability. *Sustainable Futures*. 9, 100561.
17. Junior, S.B., Martínez, M.P. Correa, C.M., Moura-Leite, R.C., and Silva, D.D. (2019). Greenwashing Effect, Attitudes, and Beliefs in Green Consumption. *RAUSP Management Journal*. 54(2), p. 226–241.
18. Karunarathna, A., Bandara, V., Silva, A., and De Mel, D. (2020). Impact of Green Marketing Mix on Customers' Green Purchasing Intention with Special Reference to Sri Lankan Supermarkets. *South Asian Journal of Marketing*. 1, p. 127–153.
19. Kim, W.-H., Malek, K., and Roberts, K.R. (2019). The Effectiveness of green Advertising in the Convention Industry: An Application of a Dual Coding Approach and the Norm Activation Model. *Journal of Hospitality and Tourism Management*. 39, p. 185–192.
20. Leonidou, C.N., Katsikeas, C.S., and Morgan, N.A. (2013). “Greening” the Marketing mix: Do Firms Do It and Does it Pay Off? *Journal of the Academy of Marketing Science*. 41, p. 151–170.
21. Luo, S., Sun, Z., and Zhang, X. (2025). Does green marketing improve corporate performance? *International Review of Economics & Finance*. 97, 103762.

22. Lyu, S.O. (2024). Unveiling Willingness to Pay for Green Stadiums: Insights from a Choice Experiment. *Journal of Cleaner Production*. 434, 139985.
23. Mahmoud, T.O. (2018). Impact of Green Marketing Mix on Purchase Intention. *International Journal of Advanced and Applied Sciences*. 5, p. 127–135.
24. Masocha, R. (2020). Green Marketing Practices: Green Branding, Advertisements and Labelling and Their Nexus with the performance of SMEs in South Africa. *Journal of Sustainability Science and Management*. 16(1), p. 174–192.
25. Önem, Ş., and Selvi, M.S. (2024). Scale Development on the Effect of Social Media Influencers on Purchase Intention. *MAKU IIBFD*, 11(2), p. 819–836.
26. Pang, H., Ruan, Y., and Wang, L. (2024). How Can Mobile Social Media Sustain Consumers? Assessing the Dynamic Influences of Differentiated Perceived Interactivity on Attitudes, Belongingness, and Stickiness. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(4), p. 2783-2798.
27. Pappas, I. O., Mikalef, P., Giannakos, M. N., Krogstie, J., and Lekakos, G. (2018). Big data and business analytics ecosystems: Paving the way towards digital transformation and sustainable societies. *Information Systems and E-Business Management*, 16(3), p. 479–491.
28. Tzanidis, T., Magni, D., Scuotto, V., and Maalaoui, A. (2024). B2B green marketing strategies for European firms: Implications for people, planet and profit. *Industrial Marketing Management*. 117, p. 481-492
29. Vărzaru, A. A., and Bocean, C. G. (2024). Digital Transformation and Innovation: The Influence of Digital Technologies on Turnover from Innovation Activities and Types of Innovation. *Systems*. 12(9), 359.
30. Yang, Y., Xue, F., and Qiao, G. (2024). The impact of information acquisition ability on consumers' trust in eco-labels in China: insight of food sustainability. *Frontiers in Sustainable Food Systems*. 8. 1449848.
31. Yu, W., Han, X., Ding, L., and He, M. (2021). Organic food corporate image and customer co-developing behavior: The mediating role of consumer trust and purchase intention. *Journal of Retailing and Consumer Services*. 59, 102377.