



Digital Technologies and Green Consumer Behavior: Leveraging Disruptive Innovations for Sustainable Consumption

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Abstract. In the context of increasing environmental concerns and the growing urgency for sustainable consumption, digital technologies have emerged as transformative tools influencing green consumer behavior. This study investigates how disruptive digital technologies—such as artificial intelligence (AI), blockchain, the Internet of Things (IoT), and big data analytics—affect consumers' attitudes, decision-making processes, and behaviors toward environmentally responsible consumption. Grounded in theoretical foundations including Disruptive Innovation Theory, the Technology Adoption Life Cycle, and Dynamic Capabilities Theory, this research develops a conceptual framework that explains the mechanisms through which digital technologies shape sustainable consumer behaviors. The study explores the role of technology engagement, the personalization of green value propositions, and the dynamic interaction between digital nudges and consumer attitudes. Through a case study of a digital-enabled green retail enterprise, the research highlights how digital interventions can encourage eco-conscious choices and foster long-term behavioral change. This paper contributes to both the theoretical understanding of consumer digital engagement in the context of sustainability and the practical application of technology-driven strategies for promoting green lifestyles. The findings offer strategic insights for businesses and policymakers seeking to leverage digital transformation to accelerate the transition toward sustainable consumption.

Keywords: Digital technology, green consumer behavior, Sustainability, Technology adoption, Disruptive innovation, Behavioral change, Digital engagement, Smart consumption, Sustainable lifestyles, Technology-driven nudging.

1 Introduction

In the face of escalating environmental crises and shifting consumer expectations, sustainable consumption has become an increasingly important objective for both busi-

nesses and policymakers. Green consumer behavior—referring to environmentally responsible choices in purchasing, usage, and disposal—is now recognized as a vital component in mitigating climate change and promoting sustainable development. Simultaneously, digital technologies have rapidly advanced and become deeply embedded in consumers' everyday lives, offering novel tools to influence behavioral patterns, enable sustainable lifestyles, and facilitate informed decision-making. Technologies such as artificial intelligence (AI), blockchain, big data analytics, and the Internet of Things (IoT) are reshaping the way consumers access information, interact with products, and evaluate environmental impacts. These technologies create unprecedented opportunities to guide consumers toward more eco-conscious behavior while also presenting challenges in adoption, ethical usage, and trust.

Digital technologies, particularly those categorized as disruptive innovations, possess the ability to fundamentally transform consumption practices. As argued by Kostoff, Boylan, and Simons (2004), disruptive technologies do not merely improve existing systems—they redefine consumer expectations, behaviors, and decision-making criteria. In the context of green consumption, such technologies allow for real-time feedback on carbon footprints, provide product traceability through blockchain, and offer personalized sustainability recommendations using AI (White et al., 2019). As consumer concern for the environment grows, these digital innovations are increasingly positioned not only as tools for convenience but also as catalysts for behavioral transformation.

Despite a growing body of literature on sustainable consumption and digital transformation, the interplay between disruptive digital technologies and green consumer behavior remains underexplored. While prior studies have highlighted the influence of personal values, environmental awareness, and social norms on sustainable behavior, limited attention has been paid to how technology mediates or amplifies these factors. Moreover, there is a lack of integrative frameworks that explain the pathways through which consumers engage with digital platforms and how such engagement translates into sustained green practices. This gap is particularly salient given the rise of digital-first generations and the increasing digitization of markets.

The present study seeks to address this gap by investigating how disruptive digital technologies affect green consumer behavior, with a particular focus on the mechanisms of technology engagement, information processing, and behavioral change. Drawing on foundational theories such as Disruptive Innovation Theory, the Technology Adoption Life Cycle, and Dynamic Capabilities Theory, the study proposes a conceptual model that links digital technology integration with green consumer response. The model is empirically explored through a case study of a green retail enterprise that leverages blockchain and AI-driven applications to promote sustainable purchasing behavior.

The central research question guiding this study is: How do digital technologies influence green consumer behavior, and what are the key mechanisms that facilitate the adoption of sustainable consumption practices?

By addressing this question, the research contributes to a more comprehensive understanding of the digital drivers of green consumption and provides actionable insights for businesses, technology developers, and policymakers. In doing so, it highlights the

dual role of digital technologies as both enablers of eco-conscious lifestyles and strategic levers for promoting sustainable development goals (SDGs) in a digitally connected economy.

2 Literature review

2.1 Relevant Theories in Innovation and Disruptive Technologies in Green Consumer Behavior

To examine how digital technologies influence green consumer behavior, several theoretical frameworks offer valuable insights. These theories not only elucidate the dynamics of innovation but also explain how disruptive technologies affect consumer decision-making, shape sustainable preferences, and transform market structures. While originally developed in the context of green consumer behavior and organizational change, these frameworks can be meaningfully extended to the study of eco-conscious consumer behavior. The key theories relevant to this paper are Disruptive Innovation Theory, Open Innovation Theory, Technology Adoption Life Cycle, and Dynamic Capabilities Theory. Each of these frameworks contributes to understanding the multifaceted relationship between digital transformation and behavioral change toward sustainability.

2.1.1 Disruptive Innovation Theory

The Disruptive Innovation Theory, introduced by Clayton Christensen, is a foundational framework for understanding how radical technologies reshape industries and user behavior. Disruptive innovations often begin by serving overlooked or niche segments with simpler, low-cost solutions (Gössling & Buckley, 2016). Over time, these innovations improve and displace existing practices or products.

In the context of green consumer behavior, disruptive technologies can serve as catalysts for changing how consumers approach sustainability. For example, mobile applications that provide carbon footprint tracking or AI-based dietary recommendations for plant-based eating exemplify low-cost, accessible solutions that initially appeal to environmentally conscious users. Over time, such technologies can influence mainstream consumption norms and reduce dependence on high-impact lifestyle choices.

Companies that adopt a disruptive innovation mindset can introduce digital tools that not only fulfill consumer needs but also shape future green expectations and preferences. These tools enable the delivery of new value propositions—such as transparency, traceability, and personalization—that align with environmental values and further encourage eco-friendly behaviors.

2.1.2 Open Innovation Theory

The Open Innovation Theory, proposed by Henry Chesbrough, posits that innovation is no longer a closed, internal process but instead benefits from collaborations across

organizational boundaries. Open innovation facilitates access to diverse sources of knowledge, expertise, and technologies.

For green consumption, this theory is highly relevant as the development and dissemination of sustainable digital tools often rely on partnerships among businesses, startups, academic researchers, and environmental NGOs. For instance, traceability platforms using blockchain to certify organic or fair-trade products often emerge from cross-sector collaborations (Hopster, 2021). These digital ecosystems make it easier for consumers to access reliable sustainability information, thereby reinforcing green choices.

Open innovation thus supports the creation of digital infrastructures—such as online carbon calculators, eco-labeling apps, and interactive nudging tools—that empower green consumers and expand the impact of sustainability innovations across market segments.

2.1.3 Technology Adoption Life Cycle

The Technology Adoption Life Cycle categorizes consumers into segments—innovators, early adopters, early majority, late majority, and laggards—based on their readiness to accept new technologies. This framework is widely used to understand the diffusion of innovation and the tipping points of mass adoption.

In the realm of green consumer behavior, the adoption cycle explains how certain consumer groups embrace digital technologies that promote sustainability. Early adopters of eco-apps, such as zero-waste lifestyle platforms or apps offering sustainable shopping guides, often drive visibility and credibility, paving the way for wider market acceptance (Kostoff et al., 2004). Companies targeting these early adopters can collect feedback and iterate their green technology offerings before scaling to a broader audience.

Moreover, understanding consumer readiness helps organizations design targeted campaigns that emphasize value propositions like health benefits, social responsibility, or economic savings—each of which may appeal differently depending on the stage of the adoption cycle.

2.1.4 Dynamic Capabilities Theory

The Dynamic Capabilities Theory traditionally focuses on a firm's ability to integrate, build, and reconfigure internal and external competencies in response to environmental changes. In the context of green consumer behavior, this theory can also offer valuable conceptual insights at the individual and community levels—particularly when analyzing how consumers adapt their behaviors in response to digital sustainability technologies.

In this study, we apply the notion of dynamic capabilities metaphorically to highlight the adaptive learning processes that consumers undergo when engaging with digital platforms aimed at promoting sustainable consumption (Li et al., 2018). This framing is intended to emphasize the behavioral flexibility and intentionality required for individuals and communities to integrate eco-friendly practices into their daily routines through digital means.

On the organizational side, firms that cultivate strong dynamic capabilities are better positioned to align their digital solutions with evolving consumer expectations regarding sustainability (Majumdar et al., 2018). This includes rapid prototyping, iterative testing, and the scaling of green digital interventions—such as eco-feedback mechanisms or gamified applications—that fit seamlessly into consumers' lifestyles.

2.1.5 The Interplay of Theories in Digital Technologies and Green Consumer Behavior

These four theoretical frameworks—although originating from distinct disciplinary backgrounds—together offer a holistic perspective on the dynamic relationship between digital technologies and green consumer behavior (Vermeir & Verbeke, 2006). Disruptive Innovation Theory underscores the transformative potential of novel digital tools; Open Innovation Theory highlights the necessity of cross-sector collaboration in co-developing accessible green solutions; the Technology Adoption Life Cycle explains the differentiated consumer responses toward sustainability technologies; and Dynamic Capabilities Theory provides a lens for understanding how both firms and consumers adapt to digital-driven environmental shifts (Millar et al., 2018).

Rather than treating these frameworks in isolation, this study adopts an integrative conceptual approach that positions them as complementary lenses. The combination of these perspectives enables a richer understanding of how digital transformation not only supports but also accelerates sustainable consumption transitions (Nagy et al., 2016). This synthesis emphasizes the interplay between technological capabilities, collaborative networks, adoption dynamics, and adaptive behaviors—an emerging area in need of further theoretical and empirical attention, particularly in the context of global sustainability imperatives.

2.2 Disruptive Technologies in Green Consumer Behavior

The concept of disruptive technology has garnered significant attention in recent years, especially as digital innovation reshapes not only business models and industrial operations but also individual consumption behaviors. Disruptive technologies are often characterized by their capacity to transform market dynamics and redefine how value is created, delivered, and perceived by end-users (Nguyen et al., 2024). In the context of green consumer behavior, these technologies can facilitate more sustainable lifestyles by empowering individuals with better access to environmental information, personalized recommendations, and new modes of eco-conscious decision-making.

Disruptive technologies differ from incremental innovations in that they do not simply enhance existing products or services; rather, they fundamentally alter the consumer's experience and expectations. As Kostoff, Boylan, and Simons (2004) highlight, disruptive technologies typically enter the market as low-performance or niche solutions but gradually improve and challenge dominant consumption models. Within sustainability contexts, these technologies provide the foundation for green transitions—for instance, by offering traceability via blockchain for ethically sourced goods, AI-powered carbon footprint calculators, or IoT-enabled appliances that optimize energy

use in real-time. Such innovations can initiate behavioral shifts toward lower-impact consumption, even among mainstream consumers who may not have previously prioritized sustainability.

The integration of disruptive digital technologies into everyday consumer behavior creates both opportunities and challenges. As Millar, Lockett, and Ladd (2018) discuss, such technologies offer alternative solutions that may be more efficient, transparent, or aligned with emerging environmental values. For example, artificial intelligence can now deliver real-time suggestions for environmentally friendly transportation or dietary choices based on user data. Blockchain allows consumers to verify the origins of organic or fair-trade products. Similarly, digital nudges embedded in mobile applications—such as eco-scores, feedback loops, or gamification—encourage users to make more sustainable choices in domains ranging from food to fashion.

However, the adoption of these technologies by consumers is not always straightforward. Challenges include privacy concerns, digital literacy gaps, lack of trust in green claims, and the complexity of sustainability metrics (Nguyen et al., 2024). Firms developing green technology platforms must overcome these barriers while ensuring that the technologies remain accessible, inclusive, and user centric. As Majumdar, Banerji, and Chakrabarti (2018) suggest, organizations need to balance the disruptive potential of innovation with the behavioral inertia of mainstream consumers, ensuring that the adoption of new tools does not alienate or overwhelm users. This balance requires clear communication, evidence-based value propositions, and user-friendly interfaces that build both credibility and usability.

To accelerate behavioral change, companies and public institutions must also engage in proactive strategies that support technology adoption. According to Garcia (2005), agent-based modeling in consumer research can simulate how individuals or communities respond to new eco-technologies under various conditions, offering valuable insights for intervention design. Moreover, open innovation approaches are critical for scaling the impact of disruptive technologies in sustainable consumption. Collaborations between green startups, academic institutions, environmental NGOs, and tech firms enable the co-creation of solutions tailored to local contexts and behavioral drivers. As Arakji and Lang (2007) emphasize, producer-consumer collaboration is particularly powerful when consumers are invited to co-design digital experiences that reflect their values and lifestyles.

The maturity of disruptive technologies also plays a crucial role in determining their behavioral influence. Emerging technologies such as AI and blockchain often begin as complex, high-cost systems but gradually evolve into user-friendly platforms with intuitive interfaces and broad market reach. As Li, Porter, and Suominen (2018) point out, the intersection between emerging and disruptive technologies generates critical tipping points where new capabilities can meaningfully influence consumer decision-making. In the context of green behavior, this means leveraging digital transformation not just for operational efficiency but for fostering environmentally aligned identities and routines.

Building on these theoretical insights, a conceptual framework for understanding the influence of disruptive technologies on green consumer behavior can be outlined. At its core, this framework links three primary dimensions: Technology Engagement: how

consumers interact with digital platforms and eco-technologies, including frequency, depth, and motivation for use; Sustainability Influence Mechanisms: how features such as personalization, real-time feedback, gamification, or social norms influence consumers' environmental attitudes and perceived behavioral control; Behavioral Response: how technology-driven interventions translate into measurable green behaviors, such as eco-shopping, energy conservation, plant-based eating, or sustainable mobility choices.

The first component—Technology Engagement—focuses on how consumers discover and adopt green-oriented technologies. This includes digital tools such as apps that track sustainable consumption, platforms that rate environmental impact of products, or online marketplaces that verify green certifications. Factors such as digital literacy, perceived usefulness, and trust in information strongly shape the degree of engagement.

The second component—Sustainability Influence Mechanisms—captures how design features of disruptive technologies shape behavioral intentions and attitudes. For instance, apps that reward users for choosing eco-friendly products or reduce cognitive effort in sustainability decision-making can increase green behavior by leveraging behavioral economics principles.

The final component—Behavioral Response—reflects actual or intended behavior changes driven by technology use. Examples include switching to low-emission transport, reducing plastic consumption, or participating in product recycling schemes. The success of digital interventions is often contingent on perceived ease-of-use, alignment with personal values, and visibility of social or environmental impact.

In summary, the integration of disruptive digital technologies into sustainable consumption presents a powerful opportunity to guide consumer behavior toward greener outcomes. This process is complex and multi-dimensional, involving a careful orchestration of technological design, behavioral science, and stakeholder collaboration. By understanding and leveraging this dynamic, firms and policymakers can co-create digital experiences that not only support sustainable lifestyles but also drive long-term transformation in consumer markets.

3 Disruptive Technologies in Green Consumer Behavior: A Case Study

3.1 Case Background

Company G is a pioneering green retail enterprise operating in Vietnam's sustainable food sector. It initially started as a conventional organic grocery store in the early 2010s but has since evolved into a digitally enabled platform catering to eco-conscious consumers. This company was purposefully selected as a representative case given its distinctive position at the intersection of digital innovation and sustainable retailing within an emerging economy context.

Company G has been among the early adopters of disruptive technologies such as blockchain for supply chain transparency and artificial intelligence (AI) for personalized green recommendations. Moreover, it has actively incorporated gamified digital applications to foster environmentally responsible behaviors among its customer base. By integrating these technologies, the company not only provides high-quality, sustainably sourced products but also strategically engages consumers through interactive digital touchpoints that promote green consumption.

This case exemplifies the practical application of digital interventions in shaping consumer behavior toward sustainability. Rather than aiming for statistical generalization, the study leverages this case for analytical depth, providing nuanced insights into the mechanisms through which digital platforms can facilitate behavioral change in sustainability-oriented consumption.

3.2 Findings: Application of the Conceptual Framework

3.2.1 Technology Engagement

The first component of the framework—technology engagement—was evident in how Company G facilitated consumer interaction with digital sustainability tools. The firm's mobile application offered a personalized dashboard where users could track their environmental impact based on past purchases. For example, users who chose plant-based items or products with low-emission supply chains were awarded eco-points, which could be exchanged for discounts or donations to environmental causes.

To enhance adoption, Company G partnered with local universities and app developers to refine the user interface and incorporate AI algorithms that recommended greener product alternatives based on individual consumption patterns. The company also conducted digital literacy workshops for older consumers to reduce barriers to technology use.

The success of this engagement was reflected in high app retention rates, increased repeat purchases of low-impact products, and greater consumer awareness of sustainability metrics. Consumers reported feeling more empowered and informed when making purchasing decisions, especially when supported by real-time feedback and community benchmarks.

3.2.2 Sustainability Influence Mechanisms

Company G's digital interventions were designed using evidence-based behavioral nudges to guide consumer choices. For example, the app displayed "eco-scores" next to each product, summarizing its environmental footprint in categories such as CO₂ emissions, packaging sustainability, and local sourcing. Users could view weekly progress reports, compare their behaviors with community averages, and receive notifications about how small changes—like switching from imported to local vegetables—contributed to emissions reduction.

The AI engine used in the platform offered recommendations not only for products but also for lifestyle actions, such as reducing single-use plastic or cooking with seasonal ingredients. By tailoring messages to individual values (e.g., health, environmental concern, or savings), the technology enhanced relevance and personal motivation—two key drivers of sustained behavioral change.

Moreover, gamification elements, such as environmental challenges and team-based impact goals, were effective in building user engagement. For instance, one monthly challenge invited users to eliminate meat consumption for three days; participants who completed the challenge received public recognition in the app and bonus points. This design fostered a sense of social commitment and identity-building around green consumption.

3.2.3 Behavioral Response

Company G's strategic application of disruptive technologies resulted in measurable behavioral shifts. Sales data showed a steady increase in the proportion of eco-labeled products sold, along with greater customer retention among app users compared to traditional in-store shoppers. The mobile app became not only a sales tool but a behavior-change platform.

Customer surveys revealed that users of the app were more likely to compare product eco-scores before purchasing, consciously choose locally sourced items, and avoid over-packaged goods. The company's emphasis on transparency—particularly through blockchain-based product traceability—was a decisive factor in strengthening trust and brand loyalty. Consumers could scan QR codes to view each item's full supply chain history, from farm to shelf, including information on production practices and carbon emissions.

Nevertheless, Company G also encountered barriers. Some users expressed skepticism about the accuracy of eco-scores or found the information overwhelming. To address this, the company simplified data visualizations, enhanced in-app tutorials, and allowed users to choose their preferred level of detail. These adjustments helped reduce cognitive overload and made the platform more inclusive.

In sum, the case of Company G illustrates the successful application of digital technologies in guiding and reinforcing green consumer behavior. By aligning technological capabilities with behavioral science and sustainability objectives, the firm created a digital ecosystem that not only facilitated eco-friendly choices but actively shaped consumption norms in the community. The integration of open innovation, personalization, and gamification proved crucial in driving technology adoption and encouraging long-term sustainable habits.

4 Final remarks

This study offers a comprehensive examination of how disruptive digital technologies influence green consumer behavior. By developing and applying a conceptual framework based on technology engagement, influence mechanisms, and behavioral

response, the research reveals the pathways through which digital transformation enables more sustainable consumption patterns. Drawing from a case study of a digitally driven green retail enterprise, the study highlights how technologies such as AI, blockchain, and gamified mobile platforms can empower individuals to adopt environmentally responsible behaviors. These findings contribute to both academic theory and practical strategy for advancing the sustainability agenda in consumer markets.

4.1 Theoretical Contributions

This study contributes to the theoretical discourse at the intersection of digital innovation and sustainable consumption by extending established frameworks into the behavioral domain. Building on Disruptive Innovation Theory (Garcia, 2005), the research demonstrates how disruptive digital tools—initially designed to enhance convenience or transparency—can evolve into mechanisms that redefine consumers' environmental expectations and value systems.

In addition, the study enriches Open Innovation Theory by illustrating how the development of sustainability-oriented digital platforms is often the result of collaborative ecosystems involving NGOs, startups, consumers, and research institutions (Calantone et al., 2010). These partnerships play a key role in ensuring that green technologies are context-sensitive, user-friendly, and behaviorally effective.

The research also deepens the application of the Technology Adoption Life Cycle by mapping the psychological and social processes that influence green technology adoption across different consumer segments. By identifying key touchpoints—such as trust in environmental claims, perceived usefulness, and social influence—the study contributes nuanced insights into how digital nudges can support mainstreaming of eco-friendly behavior (Dangelico & Vocalelli, 2017).

Finally, the application of Dynamic Capabilities Theory is extended beyond firms to examine how consumers themselves demonstrate adaptive capacity in response to digital disruption. The study suggests that sustainable behavior can be framed as a dynamic capability, wherein consumers must reconfigure routines, build environmental knowledge, and adapt preferences in light of new digital stimuli.

4.2 Practical Contributions

From a practical standpoint, this research offers actionable insights for businesses, technology designers, and policymakers aiming to promote sustainable consumer behavior through digital means. One key implication is the importance of integrating sustainability into the core design of consumer-facing technologies—not as an add-on, but as a primary value proposition. Firms should prioritize eco-functionalities such as traceability, impact feedback, and real-time recommendations when developing digital platforms.

Moreover, the findings reinforce the strategic value of gamification and behavioral personalization in promoting user engagement. Applications that reward green actions, visualize individual impact, or enable community comparison are more likely to

influence long-term behavioral change. Companies can leverage these insights to develop more emotionally resonant and motivating digital experiences.

The study also provides guidance on overcoming key adoption barriers such as information overload, lack of trust, or usability gaps. Designers should employ simplified interfaces, transparent scoring systems, and opt-in complexity, allowing users to engage at their own pace. Furthermore, investment in digital literacy—especially in developing markets—is crucial to ensure equitable access to green digital tools.

Finally, the research highlights the role of cross-sector collaboration. By forming alliances with universities, environmental organizations, and tech incubators, companies can accelerate innovation, co-create meaningful solutions, and share risk in green technology deployment. This aligns with broader Sustainable Development Goals (SDGs) calling for inclusive and cooperative approaches to climate action and sustainable consumption.

5 Conclusion

While this study highlights the enabling role of digital technologies in promoting sustainable consumption, it is important to acknowledge their potential limitations and ethical concerns. Issues such as data privacy, algorithmic biases, and the risk of overreliance on digital nudges warrant careful consideration. Furthermore, unintended consequences—such as greenwashing, digital overconsumption, or consumer fatigue—may arise in certain contexts. These challenges suggest that future research should not only explore the effectiveness of digital interventions but also critically examine their broader societal and behavioral implications.

In conclusion, this study advances the understanding of how digital technologies can be leveraged to influence green consumer behavior. Through an integrated theoretical framework and a real-world case study, the research illustrates how technology engagement, behavioral design, and market responsiveness interact to support sustainable consumption practices.

By shifting the lens of disruptive innovation from firms to consumers, the study opens new avenues for exploring how digital tools can empower everyday environmental action. It emphasizes that the future of sustainability lies not only in cleaner technologies or greener supply chains, but also in digitally mediated behavior change at the individual level.

The findings underscore the need for technology developers and sustainability advocates to work together in designing digital solutions that are not only effective but also ethical, inclusive, and aligned with environmental goals. As digital ecosystems continue to evolve, their capacity to drive large-scale behavioral transformation presents both a challenge and an unprecedented opportunity in the pursuit of global sustainability.

Beyond business and technology applications, these insights also carry significant implications for public policy and community-level initiatives. Policymakers and sustainability advocates can leverage digital platforms not only for promoting green lifestyles but also for enhancing digital literacy, regulating eco-labeling standards, and fostering responsible data use in behavioral interventions. Strengthening public-private partnerships and investing in education initiatives are essential steps toward embedding sustainable behaviors within broader societal structures.

References

1. Arakji, R. Y., & Lang, K. R. (2007). Digital consumer networks and producer-consumer collaboration: Innovation and product development in the video game industry. *Journal of Management Information Systems*, 24(2), 195-219.
2. Calantone, R. J., Harmancioglu, N., & Droge, C. (2010). Inconclusive innovation “returns”: A meta-analysis of research on innovation in new product development. *Journal of Product Innovation Management*, 27(7), 1065-1081.
3. Dangelico, R. M., & Vocalelli, D. (2017). “Green Marketing”: An analysis of definitions, dimensions, and relationships with stakeholders. *Business Strategy and the Environment*, 26(4), 457-475.
4. Garcia, R. (2005). Uses of agent-based modeling in innovation/new product development research. *Journal of product innovation management*, 22(5), 380-398.
5. Gössling, S., & Buckley, R. (2016). Carbon management in tourism: Mitigating the impact of climate change. *Journal of Sustainable Tourism*, 24(3), 345-363.
6. Hopster, J. (2021). What are socially disruptive technologies?. *Technology in Society*, 67, 101750.
7. Kostoff, R. N., Boylan, R., & Simons, G. R. (2004). Disruptive technology roadmaps. *Technological Forecasting and Social Change*, 71(1-2), 141-159.
8. Li, M., Porter, A. L., & Suominen, A. (2018). Insights into relationships between disruptive technology/innovation and emerging technology: A bibliometric perspective. *Technological Forecasting and Social Change*, 129, 285-296.
9. Majumdar, D., Banerji, P. K., & Chakrabarti, S. (2018). Disruptive technology and disruptive innovation: ignore at your peril!. *Technology Analysis & Strategic Management*, 30(11), 1247-1255.
10. Millar, C., Lockett, M., & Ladd, T. (2018). Disruption: Technology, innovation and society. *Technological Forecasting and Social Change*, 129(4), 254-260.
11. Nagy, D., Schuessler, J., & Dubinsky, A. (2016). Defining and identifying disruptive innovations. *Industrial Marketing Management*, 57, 119-126.
12. Nguyen, A. H., Hoang, T. G., Nguyen, L. Q. T., & Thi Pham, H. M. (2024). Design thinking-based Data Analytic Lifecycle for improving management control in banks. *Technology Analysis & Strategic Management*, 36(7), 1508-1523.
13. Nguyen, H. T., Hoang, T. G., Nguyen, L. Q. T., Le, H. P., & Mai, H. X. V. (2022). Green technology transfer in a developing country: Mainstream practitioner views. *International Journal of Organizational Analysis*, 30(3), 699-720.
14. Nguyen, L. T., Hoang, T. G., Do, L. H., Ngo, X. T., Nguyen, P. H., Nguyen, G. D., & Nguyen, G. N. (2021). The role of blockchain technology-based social crowdfunding in advancing social value creation. *Technological Forecasting and Social Change*, 170, 120898.

15. Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer “attitude–behavioral intention” gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169–194.
18. White, K., Habib, R., & Hardisty, D. J. (2019). How to shift consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22–49

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