# THE ROLE OF DIGITAL PERSONALITY IN PROMOTING SUSTAINABLE BEHAVIOR

Natalia Alexandrova, Elena Arbuzova

Dostoevsky Omsk State University, RUSSIA natalie v al@inbox.ru

#### Abstract

In the context of rapid technological advancement and global environmental challenges, digital identity emerges as a crucial tool for promoting sustainable behavior. Digital identity refers to the way individuals express themselves and interact within the online space, influencing their actions and choices in the real world. This paper explores various aspects of digital identity, including its impact on the formation of sustainable habits and practices, the enhancement of environmental awareness, and the development of social responsibility. It analyzes how social media platforms and digital technologies can be utilized to create communities that foster the exchange of sustainable practices and ideas. Additionally, the challenges related to data security and privacy that may affect the use of digital identity in achieving environmental goals are discussed. In conclusion, the necessity of integrating digital identity into strategies for promoting sustainable behavior is emphasized, as it can contribute to a more conscious and responsible relationship with the environment.

Keywords: digital identity, sustainable behavior, environmental awareness, social media

## I. Introduction

In an era defined by rapid technological advancement and escalating environmental challenges, the urgency to promote sustainable behavior has become paramount. The world faces a myriad of pressing issues, including climate change, resource depletion, pollution, and biodiversity loss. These challenges necessitate innovative and effective approaches to inspire individuals and communities to adopt more sustainable practices. One promising avenue is the integration of digital identity into sustainability efforts. As societies become increasingly digitized, understanding how digital identity can shape behaviors and attitudes toward the environment is essential.

Digital identity refers to the online persona that individuals cultivate through their interactions on various digital platforms, including social media, forums, and other online communities. This identity encompasses not only personal information but also the values, beliefs, and behaviors individuals express in the digital realm. With the advent of social networks and online communication, people are no longer passive consumers of information; they actively engage, share, and influence one another's behaviors. This engagement provides fertile ground for promoting sustainable practices, as individuals can leverage their digital identities to advocate for environmental issues and inspire change.

Digital identity can significantly impact sustainable behavior in several ways. First, it influences how individuals perceive themselves in relation to sustainability. When people align their digital identity with eco-friendly values—such as reducing waste, conserving energy, and supporting local businesses—they are more likely to adopt these behaviors in real life. For instance, individuals who showcase their sustainable practices online may feel a heightened sense of accountability to continue these actions, as their peers reinforce these behaviors through likes, shares, and comments.

Additionally, digital identity fosters community building around shared sustainability goals. Online platforms enable individuals to connect with like-minded people, forming communities that support and encourage sustainable practices. These communities can facilitate the exchange of ideas, resources, and information about sustainable living, creating a sense of belonging that motivates individuals to engage in environmentally friendly behaviors. As these digital communities grow, they can amplify their collective influence, driving broader societal change.

Another critical aspect of digital identity's role in promoting sustainable behavior is its capacity to raise awareness about environmental issues. Digital platforms serve as powerful channels for disseminating information about sustainability, from climate science to local conservation efforts. Influencers, activists, and organizations can use their digital identities to share compelling narratives, engage followers, and mobilize action. This can include campaigns to reduce plastic use, promote renewable energy, or support wildlife conservation initiatives.

Moreover, digital identity enables the sharing of educational resources, helping individuals understand the impact of their choices on the environment. Online tutorials, webinars, and interactive content can provide valuable insights into sustainable practices, making it easier for individuals to incorporate eco-friendly habits into their daily lives. By harnessing the power of digital identity, individuals can become informed advocates for sustainability, influencing others and contributing to a larger movement toward environmental responsibility.

Despite its potential, the integration of digital identity into sustainability initiatives is not without challenges. Privacy concerns are paramount, as individuals may hesitate to share personal information or engage in online discussions about their eco-friendly choices due to fears of data misuse or surveillance. The need for robust data protection measures is essential to ensure that individuals feel safe in expressing their digital identities.

Furthermore, the phenomenon of "greenwashing" poses a significant challenge. As businesses and organizations increasingly adopt sustainability messaging, discerning authentic commitments from superficial marketing tactics can be difficult for consumers. Digital identity can inadvertently contribute to this issue, as individuals may align their online personas with sustainable practices that do not reflect their real-world behaviors. This disconnect can undermine the credibility of sustainability efforts and diminish trust in digital advocacy.

## II. Methods

To explore the role of digital identity in promoting sustainable behavior, three distinct methods were employed: survey analysis, interviews and focus groups, and case study analysis. Each method contributed unique insights into the relationship between digital identity and sustainable practices.

1. Survey Analysis

A comprehensive survey was distributed across various demographic groups to gather quantitative data. The survey included questions on digital identity usage (e.g., social media, digital platforms) and sustainable behaviors (e.g., recycling, energy conservation, ethical consumption). Respondents were asked about:

How often they engaged with digital platforms that focus on sustainability.

Whether their online identity influenced their real-world sustainable actions.

Perceived barriers to adopting eco-friendly behaviors through digital means.

Analysis: The data was statistically analyzed to find correlations between digital engagement and sustainable behavior, using regression models and cross-tabulation to identify trends across different age groups, education levels, and regions.

2. Interviews and Focus Groups

Semi-structured interviews and focus group discussions were conducted with key participants, including sustainability advocates, environmental researchers, and digital platform developers. These qualitative methods provided a deeper understanding of:

Personal experiences with how digital identity influences their commitment to sustainable practices.

Motivations for engaging in online sustainability communities and how digital identities shape those motivations.

Challenges and opportunities faced in promoting eco-consciousness through digital identities.

Analysis: Thematic analysis was employed to identify common themes such as social accountability, digital peer influence, and the impact of digital rewards systems on promoting environmentally responsible behavior.

3. Case Study Analysis

Several case studies of digital platforms that successfully promote sustainability (e.g., apps or websites dedicated to green living, carbon footprint tracking, or ethical shopping) were analyzed. The focus was on:

How these platforms construct and maintain user digital identities that align with environmental values.

The mechanisms used to encourage sustainable actions, such as gamification, social sharing, or incentives.

The long-term impact of these platforms on user behavior and environmental outcomes.

Analysis: Comparative analysis was conducted across case studies to evaluate which strategies most effectively integrate digital identity with sustainable behavior. Specific factors such as user engagement levels and measurable environmental impact were compared.

By combining these three methods, the study offers a comprehensive understanding of how digital identity can drive sustainable behavior and what strategies can further enhance this connection.

#### III. Results

Although discussions on sustainability and its relevance began to surface prominently towards the end of the last century, particularly with the 1972 Stockholm Conference organized by the United Nations (UN) (Rodrigues, 2009), concerns regarding this issue actually date back to the first (1760-1840) and second (1850-1945) industrial revolutions. The industrial revolution led to a dramatic increase in the production of goods and wealth, raising people's purchasing power. However, it also resulted in negative outcomes, including increased economic inequalities and significant environmental impacts due to heightened production. During this time, economists like John Stuart Mill (1848) and Thomas Malthus (1878) warned of the adverse effects that unchecked economic and population growth could have on both the environment and human well-being. Furthermore, the industrial revolution introduced a surge in consumption, making it a central aspect of economic development and shaping human relations. Mass production created an environment where consumerism-driven by the need to quickly dispose of goods-became normalized and encouraged. Over time, the satisfaction of personal desires began to take precedence over the fulfillment of genuine needs. This "consumerism," the ever-increasing production and acquisition of non-essential goods in pursuit of well-being, has since become a critical consideration within the sustainability discourse, as it places tremendous pressure on natural resources and the environment. Growing concerns over long-term environmental degradation sparked global events and environmental movements in the late 1960s and 1970s, which initiated widespread debates on the limits of growth and how environmental issues could be integrated into mainstream development goals. One significant milestone in this sustainability debate was the UN World Commission on Environment and Development's (WCED) 1987 "Our Common Future" report. It was one of the first comprehensive efforts to establish a global agenda for rethinking the human development model. The report defined sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs". It highlighted poverty in developing nations and rampant consumerism in developed countries as key factors preventing equitable development and causing serious environmental crises, which in turn sparked extensive academic and political discussions worldwide. This evolving sustainability discourse eventually found its way into business practices, with the introduction of the "Triple Bottom Line" concept. This framework expanded corporate objectives beyond just economic factors, proposing that sustainability involves the pursuit of economic prosperity, environmental protection, and social equity in an interconnected manner. In environmental terms, this approach urged businesses to preserve natural capital and maintain the planet's life support systems by balancing resource generation, consumption, and waste management.

### IV. Discussion

Scientific and academic advancements in sustainability, alongside technological innovations and the rise of an eco-friendly culture, have fostered an environment where brands are increasingly motivated to address environmental issues and contribute to their resolution. Consequently, numerous online brand campaigns have emerged, wherein companies raise awareness about environmental challenges and strive to encourage sustainable behaviors among consumers. Many brands are now implementing pro-environmental initiatives, such as creating digital re-commerce platforms that promote conscious consumption.

However, while some brands successfully influence consumers' pro-sustainability behaviors through these actions, others fall into the trap of greenwashing, which can have detrimental effects not only on the brands themselves but also on consumers' willingness to engage in environmentally friendly practices. To ensure the success of their online environmental campaigns and effectively inspire pro-sustainability in their consumers, brands must establish a well-defined and authentic environmental purpose. This means aligning their communications with their actual practices to avoid inconsistencies. Specifically, brands must ensure that their environmental stance is congruent with their corporate identity, values, business operations, and overall mission. Additionally, brands must engage authentically and actively with the causes they advocate.

Lin emphasizes that companies should invest their resources and expertise in areas where they possess knowledge and a competitive advantage. They should also ensure that their internal policies align with the environmental purpose they wish to project in their campaigns. Collaborating with activists is crucial for understanding and fulfilling their collective moral responsibilities toward communities and the environment.

For brands to effect meaningful changes in consumers' pro-sustainable behavior, their environmental positions must be perceived as genuine and sincere. Authentic environmental activism requires maintaining a continuous alignment between a brand's stated intentions—reflected in its communication messages—and the actions it takes, such as implementing pro-environmental corporate practices, forming partnerships with environmental organizations, and supporting environmental initiatives.

Beyond establishing a coherent environmental purpose and maintaining authenticity, companies must communicate their environmental stances and actions effectively to ensure they resonate with the target audience and catalyze positive environmental changes. According to Key et al. (2021) and Taylor et al. (2001), brand activist communications should prioritize dialogic communication, facilitating ongoing interactions and providing relevant information to the target audience. Companies must understand how their audience receives and interprets their messaging, creating campaigns that align with consumers' expectations, experiences, and comprehension of the environmental issues at hand.

To encourage consumers to adopt pro-sustainable behaviors and commit to conscious consumption, brands should not only inform consumers about their environmental policies and the importance of the advocated environmental issues but also educate them on how to act and consume more sustainably. This could involve providing guidance on the responsible use and disposal of products. Additionally, brands must consistently convey their perspective across all online and offline communications, capturing and reinforcing the essence of their environmental stance with transparency and credibility. This includes highlighting their environmental strengths while also acknowledging areas for improvement.

In summary, companies need to be intentional in communicating their environmental positions and causes, grounding their messages in tangible evidence of their environmental performance. This could include third-party audits or ecolabels to reduce the risk of consumer alienation and enhance their capacity to drive pro-environmental behaviors. Given the significance of environmental communication within the realm of new digital platforms, particularly in market contexts, further investigation into how these platforms can facilitate or hinder pro-environmental change is essential. Future research could explore how brands' online environmental communications to greenwashing on social media, and examine whether such campaigns hinder conscious consumption by fostering skepticism. Additionally, studying how brands can make environmental issues more appealing to consumers through immersive technologies like augmented and virtual reality could prove valuable. Internally, it would be insightful to investigate how brands leverage digital technologies to reduce their ecological footprints, for instance, by enhancing internal communication regarding sustainability, improving supplier product breakage management, or optimizing distribution routes.

### References

[1] Podkolzina I.M., Taranova I.V., Paytaeva K.T., Revunov S.V., Abrosimova T.F. Innovative approaches in financial support for regional economic security// The Challenge of Sustainability in Agricultural Systems. Heidelberg, 2021. C. 549-558.

[2] Faka A. Assessing Quality of Life Inequalities. A Geographical Approach // International Journal of Geo-Information. 2020. Vol. 9. 600 p.

[3] Caeiro, S., Sandoval Hamón, L.A., Martins, R., Bayas Aldaz, C.E. (2020). Sustainability Assessment and Benchmarking in Higher Education Institutions: A Critical Reflection. Sustainability 2020, 12, 543.

[4] Zahra SA (2021) The resource-based view, resourcefulness, and resource management in startup firms: a proposed research agenda. J. Manag 47(7):1841–1860

[5] Tsui, J. (2020). How the Grocery Industry Is Responding to New Consumer Behavior. Retrieved October 31, 2021, from: https://www.supplychainbrain.com/blogs/1-think-tank/post/31659-how-thegrocery-industry-is-responding-to-new-consumer-behavior.

[6] Taranova I.V., Podkolzina I.M., Uzdenova F.M., Dubskaya O.S., Temirkanova A.V. Methodology for assessing bankruptcy risks and financial sustainability management in regional agricultural organizations// The Challenge of Sustainability in Agricultural Systems. Cep. "Lecture Notes in Networks and Systems, Volume 206" Heidelberg, 2021. C. 239-245.

[7] Rao M, Vasa L, Xu Y, Chen P (2023) Spatial and heterogeneity analysis of environmental taxes' impact on China's green economy development: a sustainable development perspective. Sustainability 15(12):9332

[8] Taranova I.V., Podkolzina I.M., Uzdenova F.M., Dubskaya O.S., Temirkanova A.V. Methodology for assessing bankruptcy risks and financial sustainability management in regional agricultural // Organization. 2021. № 206. C. 239.

[9] Allcott, H., & Rogers, T. (2014). The Short-Run and Long-Run Effects of Behavioural Interventions: Experimental Evidence from Energy Conservation. American Economic Review, 104(10), 3003–3037

[10] Jagtap, S., Trollman, H., Trollman, F., Garcia-Garcia, G., Parra-López, C., Duong, L., . . . Afy-Shararah, M. (2022). The Russia-Ukraine conflict: Its implications for the Global Food Supply Chains. Foods. Retrieved August 15, 2022, from https://www.mdpi.com/2304-8158/11/14/2098