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The Ecological Awareness of the Young Generation as a Factor Shaping Contemporary Business

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Abstract:

Purpose: *The aim of the article is to identify the importance of pro-environmental activities in building enterprises' competitive advantage in the opinion of young consumers. The following research hypothesis is advanced: H1 — Pro-environmental activities of enterprises are perceived by young consumers as an important factor in building competitive advantage in the market.*

Design/Methodology/Approach: *The theoretical section rests on a thorough review of the leading literature. In the empirical section, exploratory factor analysis (EFA) was applied to identify the main determinants of enterprise competitiveness relevant to Generation Z.*

Findings: *This article presents the results of research conducted in June 2024 among representatives of Generation Z. 332 correctly completed surveys were analyzed. Exploratory factor analysis demonstrated that environmental performance is a significant factor in business competitiveness in the opinion of young respondents.*

Practical implications: *The research findings can be a valuable source of information for business managers, demonstrating the importance of pro-ecological activities in shaping competitive advantage. These findings provide practical guidance on selecting and implementing competitive strategies that align with the expectations of young consumers. Considering the identified factors – particularly environmental activism – can contribute to strengthening a company's market position and building a sustainable competitive advantage.*

Originality/Value: *The article reports original research conducted on a sample of 332 Generation Z respondents, i.e., people born in 1995-2012.*

Keywords: *Competitiveness, Z generation, enterprises, ecology.*

JEL codes: *M14, P12.*

Paper type: *Research article.*

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1. Introduction

The literature increasingly underscores the role of companies' pro-environmental activity as an important tool for gaining competitive advantage and building customer loyalty. Despite growing interest, in-depth analyses are still lacking on how environmentally responsible practices affect assessments of company competitiveness from the perspective of young consumers.

The subject matter of this article focuses on the key research question: how do pro-ecological activities undertaken by enterprises influence the competitiveness of these entities in the opinion of young consumers?

In response to the identified research gap, the authors undertook to conduct empirical research to determine the impact of corporate environmental responsibility initiatives on the way young consumers perceive the competitiveness of enterprises.

The aim of the article is to identify the importance of pro-ecological activities in building the competitive advantage of enterprises in the opinion of young consumers.

Generation Z increasingly evaluates the attractiveness and market position of companies not only based on traditional criteria such as price, quality, and innovation, but also through the prism of their commitment to environmental protection initiatives. Companies that genuinely and consistently implement pro-ecological initiatives gain the trust and loyalty of young consumers, which in the long term can contribute to strengthening their competitive position in the market.

2. Literature Review

Enterprise competitiveness is the ability to compete, dependent on having an appropriate composition of resources and the skills to deploy them under given market conditions. These two variables essentially define the instruments used in the contest for customer attention.

The best-known concept of competitive advantage is Michael E. Porter's framework covering cost leadership, product/service differentiation and focus on a defined market segment. Product price, brand-signalled quality, innovation and product availability still shape customer satisfaction. In particular, innovation—product, process and organisational—remains a key source of competitive advantage in today's environment (Agazu and Kero, 2024).

In today's volatile environment, seeking the sources of competitive advantage using traditional approaches may prove insufficient. Modern concepts tie advantage to the realities of fast-changing market, technological, environmental and competitive conditions. Growing environmental awareness among societies and a sense of

empowerment, as consumers' purchasing decisions have a real impact on companies' environmentally friendly actions, play a particularly important role. Successful businesses must offer their consumers more than just high-quality products and services. In an era of growing environmental awareness, understanding the needs and adapting a strategy to meet consumer needs is becoming a key element of any brand's success.

Baca and Reshidi (2025) show that aligning brand strategy with customers' environmental attitudes is a crucial driver of market success. Green branding can be a competitive advantage by accommodating the growing preference for environmentally friendly products. Chagwesha *et al.* (2023) demonstrate that green packaging and advertising significantly strengthen competitive advantage and business performance for SMEs, indicating that green marketing strategies both meet consumer demand and provide a market edge.

The search for advantage increasingly involves creating customer value based on corporate social responsibility (CSR). Irshad, Ahmad and Mahmood (2024) indicate that CSR and high service quality reinforce customer satisfaction which, in turn, increases brand loyalty and purchase intentions—important considerations for firms that see CSR as part of their competitive strategy.

External certification plays an important role in promoting CSR activities that consumers cannot directly observe (Xia, Fan and Lou, 2021). In this context, eco-labelling matters. Eco-labelling schemes convey information on environmental performance, helping consumers make more informed and sustainable choices.

Many authors list pro-environmental activities and eco-innovations among the determinants of sustainable competitive advantage, via increased customer loyalty and enhanced reputation (Dangelico and Vocalelli, 2020; Papadas, Avlonitis and Carrigan, 2021). Hence, companies that want to attract employees, gain the loyalty and trust of Generation Z customers and build lasting relationships with stakeholders should craft competitive strategies that factor in pro-environmental actions.

Accordingly, we posit the research hypothesis H1: Pro-environmental activities of enterprises are perceived by young consumers as an important factor in building competitive advantage in the market.

3. Methods

From December 2024 to January 2025, a pilot study was conducted among Generation Z residents of Poland's Świętokrzyskie Voivodeship. A proprietary questionnaire was prepared in electronic form and distributed via Google Forms. In total, 302 correctly completed questionnaires were obtained. The demographic section captured age, gender and education level.

Participants were aged 18–29, i.e., Generation Z. The largest groups were 18–20 years (39.7%) and 21–23 years (31.5%); the least numerous were 24–26 (14.6%) and 27–29 (14.2%). Men accounted for 60.3% of the sample; 80.1% had secondary education. The survey included 120 women (39.7%), and roughly 20% of respondents held higher education degrees.

Respondents were asked to rate the importance of factors influencing enterprise competitiveness on a 1–7 scale (1 = low importance; 7 = high importance). Twenty observable variables were assessed: product brand (V.1), advertising/promotion (V.2), public relations (V.3), corporate image (V.4), product price (V.5), product/service quality (V.6), service quality (V.7), customer loyalty/trust (V.8), customer satisfaction (V.9), product innovativeness (V.10), product availability (V.11), package attractiveness (V.12), distribution channel type (V.13), active social-media presence (V.14), attractive corporate website (V.15), e-commerce distribution channel (V.16), engagement for the local community (V.17), company activities for environmental protection (V.18), product eco-labelling (V.19), CSR implementation (V.20).

Exploratory factor analysis (EFA) was used to verify the research hypotheses, one of the most common statistical methods in social science, education and psychology (Taherdoost, 2022, p. 375). The technique identifies latent structures in a set of observed variables and reduces their number while retaining as much information as possible (Tabachnick and Fidell, 2013, p. 39).

To determine the number of factors, two classic criteria were applied: (i) Cattell's scree test (1966)—inspection of the eigenvalue plot to locate the 'elbow', with factors to the left retained; and (ii) Kaiser's criterion (1960)—retain only factors with eigenvalues > 1. To improve interpretability, Varimax rotation was applied (Gorsuch, 2014).

4. Results

Based on Cattell's scree criterion, two factors were extracted, located above the elbow where the eigenvalue curve flattens. Both factors have eigenvalues greater than 1, consistent with Kaiser's rule.

The eigenvalues for the two retained factors lie in the range ⟨1.89; 11.05⟩. The accumulated eigenvalue for the two factors is 12.94, meaning the model explains 64.70% of total variance, i.e., it fits the studied reality well.

To obtain a simple factor structure, the factor loading matrix was subjected to Varimax rotation. Table 2 presents the factor loading matrix for factors describing enterprise competitiveness, i.e., the correlation between observable variables and the factors entered in the model. The minimum correlation value considered significant was assumed to be 0.7.

Table 1. *Eigenvalue matrix for factors describing enterprise competitiveness*

Factor	Characteristic value	Percentage of general variance	Accumulated characteristic value	Accumulated percentage
F1	11.05	55.26	11.05	55.26
F2	1.89	9.44	12.94	64,7

Source: *Own research.*

Table 2. *Factor loadings (normalised Varimax) for factors describing enterprise competitiveness*

Factor loads (normalised Varimax) Principal components (the loadings are greater than 0.7)		
Variable	F1	F2
V.1	0.63	0.23
V.2	0.54	0.46
V.3	0.62	0.47
V.4	0.69	0.34
V.5	**0.81**	0.15
V.6	**0.86**	0.17
V.7	**0.76**	0.35
V.8	**0.76**	0.32
V.9	**0.83**	0.22
V.10	**0.76**	0.34
V.11	**0.77**	0.35
V.12	0.46	0.57
V.13	0.55	0.54
V.14	0.39	0.67
V.15	0.49	0.62
V.16	0.54	0.51
V.17	0.27	**0.78**
V.18	0.18	**0.88**
V.19	0.12	**0.87**
V.20	0.27	**0.75**

Source: *Own research.*

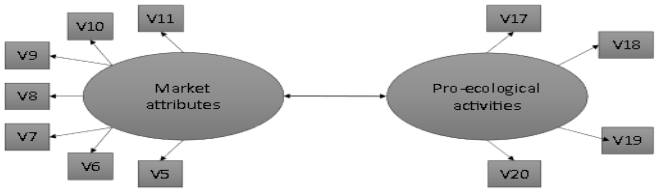
In Table 2, values ≥ 0.70 are bolded and indicate variables loading individual factors. The analysis shows that:

Factor 1 (F1) explains 55.26% of total variance and is represented by seven variables: product price (V.5), product/service quality (V.6), service quality (V.7), customer loyalty/trust (V.8), customer satisfaction (V.9), product innovativeness (V.10) and product availability (V.11). This factor is labelled market attributes.

Factor 2 (F2) explains 9.44% of total variance and is represented by four variables: engagement for the local community (V.17), company activities for environmental protection (V.18), product eco-labelling (V.19) and CSR implementation (V.20). This factor is labelled pro-environmental actions.

Using this terminology, a model of enterprise competitiveness factors in the opinion of Generation Z was developed (Figure 1).

Figure 1. *Factor model of enterprise competitiveness*



Source: *Own research.*

In Figure 1, individual observable variables (scale items) are represented by rectangles, and factors by ovals. Causal (regression) relationships are represented by single-headed arrows, and correlational relationships are represented by double-headed arrows. Based on EFA, respondents perceive two factors that influence enterprise competitiveness: market attributes and pro-environmental activity. The two-factor solution explains 64.70% of total variance, indicating that the model reflects the studied reality well.

The pro-ecological activities factor is loaded by four variables: the company's involvement in the local community, the company's activities for environmental protection, eco-labelling of the product, CSR implementation explaining 9.44% of the total variance, which proves its significant impact on the level of competitiveness of enterprises. Therefore, hypothesis H1: Pro-environmental activities of enterprises are perceived by young consumers as an important factor in building competitive advantage in the market is positively verified.

5. Discussion

The results align with Ratajczak and Hończak (2021), who showed that Generation Z (in Poland and the USA) evaluates the impact of enterprises on social and environmental issues positively, with a particular effect on brand image. Respondents were willing to change purchasing decisions in favour of socially responsible products/services and brands when price and quality were comparable with alternatives. Generation Z buyers are ready to purchase as a ‘reward’ for responsible behaviour and to refrain from buying in the case of unethical actions by a company.

Polish society exhibits relatively low levels of loyalty and trust toward responsible firms. Polish buyers limit their social engagement to purchase decisions, whereas in the USA, respondents also engage in philanthropy and volunteering.

The importance of sustainable development—including environmental, social and economic issues—and its impact on Generation Z's purchasing decisions was also evidenced by Dabija *et al.* (2020). Surveying 153 Generation Z participants in Romania (mainly university students), the authors found that respondents rated retailers' sustainability orientation positively, identified specific measures implemented and preferred retailers that contribute proactively to resource and environmental protection while caring for employee well-being and engaging local communities.

Further studies confirm the significance of environmental and social issues for Generation Z's purchasing decisions (e.g., Salam *et al.,* 2024; Wong and Chung, 2021; Huang *et al.,* 2023). Preferences and expectations of Generation Z push companies to implement pro-environmental and pro-social actions, strengthening competitive position and market image (Lew *et al.,* 2024).

Evidence on the role of market factors is provided by Fatmawati (2025), based on 120 consumers aged 17–28 in Semarang who had purchased via Shopee: price had a negative, significant effect, while promotion and product reviews had positive, significant effects on purchase decisions. The research indicate that price has a negative and significant influence, while promotion and product reviews have a positive and significant influence on purchase decisions.

In cosmetics, Natalie and Siregar (2024) show that for international products, social-media marketing, brand awareness, product quality and discounts are key predictors of purchase intention, while for local products, quality, price, online reviews and price discounts are decisive.

The results of our own research are consistent with or similar to those previously conducted by other authors. However, they provide a more detailed and contextualized look at the importance of corporate environmental responsibility as one of the key factors contributing to improving the competitive position of enterprises, from the perspective of Generation Z.

6. Conclusion

The environmental awareness of the younger generation is becoming an important factor shaping contemporary business and its trajectory. Implementing sustainability strategies and pro-environmental practices is no longer a matter of image but a prerequisite for maintaining competitiveness. Companies that understand ecology as a value for young consumers and translate it into concrete actions have a chance for lasting success and for building a strong, responsible brand in the long run.

Our analysis confirms hypothesis H1: Pro-environmental activities of enterprises are perceived by young consumers as an important factor in building competitive advantage in the market. Firms that implement solutions such as engagement for the local community, environmental protection actions, eco-labelling and CSR implementation are seen by young consumers as authentic and socially responsible. This translates into greater customer loyalty, improved corporate reputation and higher market attractiveness

Based on the conclusions obtained, several recommendations for enterprises can be formulated:

1. Strengthening the authenticity of pro-ecological activities – companies should avoid apparent greenwashing practices and focus on the real, measurable effects of their activities.
2. Integration of CSR strategy with business goals – pro-ecological initiatives should be an integral element of the development strategy, not just an element of marketing campaigns.
3. Transparent and educational communication – companies should clearly communicate their achievements in the field of sustainable development and engage young consumers in ecological activities.Współpraca z lokalnymi społecznościami – podejmowanie inicjatyw wspierających rozwój lokalny i ochronę środowiska zwiększa zaufanie oraz utożsamianie marki z odpowiedzialnością społeczną.
4. Investing in ecological innovations – implementing modern, environmentally friendly technologies can be both a source of competitive advantage and a factor in building a positive image among young recipients.

In summary, the environmental awareness of the younger generation is becoming a key factor in determining the development of contemporary business. Companies that manage to combine economic goals with social responsibility and environmental protection not only strengthen their competitive position but also build lasting relationships with young consumers. Ecology is therefore becoming not just a trend, but a necessity for long-term success and sustainable development in a dynamically changing market environment.

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