

Foresight of the Drivers for Enhancing and Developing Pro-Environmental Behaviors of Generation Z Human Resources in the Iranian Department of Environment

Extended Abstract

Introduction: In the contemporary era, global environmental crises and the urgent need for sustainable development have highlighted the strategic role of human resources in fostering pro-environmental behaviors. Among them, Generation Z, characterized by their innovation, environmental sensitivity, and social engagement, is increasingly shaping organizational culture in the Iranian Department of Environment. Given their individualistic yet collaborative tendencies and heightened ecological awareness, this generation can act as pivotal drivers for embedding sustainability in organizational behavior. However, managerial focus on short-term financial goals, limited environmental training, and the absence of motivational systems have hindered the effective development of pro-environmental practices. Therefore, identifying and prioritizing the most influential drivers is essential to strategically align organizational policies with sustainable development objectives.

Materials and methods: This research adopts a futures studies approach using structural cross-impact matrix analysis (MICMAC) to identify and prioritize the drivers of pro-environmental behavior among Generation Z employees in the Department of Environment of Iran. The study is developmental–applied in nature. The statistical population included 25 purposively selected experts, consisting of 14 university professors specializing in organizational behavior and environmental management, and 11 senior and middle managers from the Department of Environment. Data collection was conducted through library research, structured expert interviews, and a qualitative questionnaire based on cross-impact scoring (0–3 scale). The collected data were analyzed with MICMAC software, assessing influence and dependence relations among 10 identified drivers.

Results: The analysis revealed that four drivers demonstrated the highest influence: (1) alignment of organizational macro-strategies with environmental strategies in the HR sector, (2) implementation of financial incentives and motivational systems based on environmental values, (3) specialized environmental training and professional empowerment, and (4) institutionalization of environmental beliefs, values, and norms within organizational culture. Meanwhile, drivers such as improving environmental performance evaluation indicators, strengthening voluntary participation, utilizing smart digital tools, and promoting ethical environmental responsibility exhibited high dependence. Conversely, intra-organizational campaigns and cross-sectional collaboration were identified as independent drivers with relatively lower systemic impact. The findings also confirmed the robustness of the structural matrix with a 95% filling degree and high stability of the system under analysis.

Discussion and Conclusion: The results emphasize that the sustainability of pro-environmental behavior among Generation Z employees relies primarily on strategic alignment, motivational systems, and continuous empowerment. Embedding environmental values into organizational culture not only enhances employees' sense of purpose but also promotes organizational legitimacy and social accountability. Moreover, strengthening evaluation systems, digital communication, and voluntary initiatives ensures greater adaptability and systemic resilience. The study concludes that organizations should prioritize capacity-building strategies, design incentive-based frameworks, and institutionalize green cultural values to effectively engage Generation Z in sustainable practices. These findings are consistent with prior research highlighting the roles of social norms, ethical responsibility, and digital engagement in shaping sustainable behaviors. Overall, the foresight-driven prioritization of drivers provides policymakers and managers with a strategic roadmap to foster a green organizational culture, enhance employee commitment, and achieve long-term environmental sustainability.

Keywords: Environment, Pro-environmental behavior, Environmental culture, Generation Z, Strategic foresight, MICMAC analysis.