




A Green Transformation: Designing Sustainable Innovation Indicators in the Home Appliance Industry

Mohammad. Abedi¹, Zahra. Aabedi^{2*}, Nazanin. Pilehvari³


¹ PhD Student in Technology Management - Research and Development Management, Faculty of Management and Economics, Science and Research Branch, Islamic Azad University, Tehran, Iran

² Assistant Professor, Department of Environmental Economics, Faculty of Agriculture, Water, Food, and Biodiversity, Science and Research Branch, Islamic Azad University, Tehran, Iran

³ Professor, Department of Industrial Management, Faculty of Management, West Tehran Branch, Islamic Azad University, Tehran, Iran

* Corresponding author email address: z.abedi@srbiau.ac.ir


Editor

Aliakbar Aminbeidokhti¹
Educational Administration, Faculty
of Psychology and Educational
Sciences, Semnan University,
Semnan, Iran
kafashpor@um.ac.ir

Reviewers

Reviewer 1: Ali Sargolzaie¹
Assistant Professor, Department of Management, Zahedan Branch, Islamic Azad
University, Zahedan, Iran.

Email: a.sargolzaie@iauzah.ac.ir

Reviewer 2: Alireza Rajabipoor Meybodi¹
Associate Professor, Department of Business Administration, Yazd University,
Yazd, Iran

Email: Rajabipoor@yazd.ac.ir

1. Round 1

1.1. Reviewer 1

Reviewer:

"Green research and development (R&D) has emerged as a key strategy..." lacks a specific tie to the home appliance industry. Provide an example or statistic directly relating to green R&D in this sector.

The method for selecting the 15 experts lacks specifics. Were they chosen based on industry experience, academic qualifications, or both?

The statement "indicators with a defuzzified average above 0.682 were considered important" raises the question of how this threshold was determined. Provide a rationale or reference.

Tables showing fuzzy averages and defuzzification would benefit from accompanying visual graphs to illustrate trends and significance.

The conclusion's assertion about the "Improving product design" criterion could be bolstered by specific implications for future industry practices.

Authors revised the manuscript and uploaded the new document.

1.2. Reviewer 2

Reviewer:

The mention of challenges such as "uncertainty regarding returns on investment" is broad. Include citations or specific examples to contextualize these challenges.

The sentence "Green R&D can help mitigate these effects by designing energy-efficient products..." would benefit from comparing past and recent data trends to strengthen the argument.

Expand on "green innovation capabilities" by linking it explicitly to the indicators used in this study, ensuring consistency.

The choice of the fuzzy Delphi technique is justified but not explained in depth. Clarify why this method is superior for consensus-building in green R&D studies.

The phrase "manager's commitment to green actions..." is repeated without additional depth. Include examples of managerial actions from your dataset to contextualize this commitment.

The conclusion states, "Green R&D can bring environmental concerns to the forefront..." without addressing its impact on regulatory compliance. Expand on this for a comprehensive view.

The study mentions previous works like "Tseng et al. (2018)" but does not critically compare the findings. Highlight differences or similarities in key indicators.

Authors revised the manuscript and uploaded the new document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.