

THIRD WORLD SYMPOSIUM ON SUSTAINABILITY SCIENCE AND RESEARCH

Sustainability Futures: Challenges and Opportunities Towards a More Sustainable World



Open Eco-Innovation Research Landscape in the Industrial Sector: A Systematic Review and Future Outlook

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OBJECTIVES OF THE PAPER

- Open eco-innovation (OE) defined as firm's expansion of innovation efforts beyond its own boundaries by making use of inbound and outbound knowledge flows to enhance eco-innovation success
- Study presents a critical and systematic review of literature on external knowledge sourcing for eco-innovation through the concept of OE.
- The study highlights the existing research gaps and suggests future directions for advancement of this particular research domain.
- Research questions (RQ) are presented:
- RQ1: What is the growth trajectory of OE literature?
- RQ2: What are the key geographical and institutional contexts in which OE has been studied?
- RQ3: What are the emerging research themes from OE research domain?

APPROACH USED

- Adopts qualitative narrative (exploratory) method of analysis
- Followed the systematic review method suggested by (Tranfield et al., 2003), (Halilem, 2010) and (Pham et al., 2019).
- Aligned with the review process called PRISMA protocol (Moher et al., 2010).
- We also use bibliometric and network visualization mapping techniques
- Data processing and coding were conducted in Microsoft Excel, Mendeley and VOSviewer.

KEY RESULTS

- Scope and study period: 102 articles; 1990 to 2019
- Recognized two phases: Start and Acceleration phases:- between 1990 and 2011; 2012 till 2019
- Spatial Distribution of OE Literature: European countries led by Italy and Spain; United Kingdom; China and the United States of America
- Main sources of knowledge: analytic 39%, analytic and synthetic 55%; all the three 5%
- Theoretical framework: Stakeholder's theory, Resource-based view, Organisational learning theory, Knowledge-based view and Absorptive capacity theory.
- **Emerging trend in OE research:** Circular economy, Green absorptive Capacity, Intermediation

MAIN CONCLUSIONS

- OE research landscape is an emerging field of potential importance
- High impact journals: Research Policy, Ecological Economics, Business Strategy and the Environment and Journal of Cleaner Production.
- Under-representation of experts from the developing countries
- Philosophical and theoretical backgrounds surrounding the concept of eco-innovation is presently taking shape around stakeholder's theory, resource-based view, organisational learning theory, knowledgebased view and absorptive capacity theory.

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