

ECO-INNOVATION AS A DRIVER OF BUSINESS PERFORMANCE

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Abstract: The term eco-innovation is a relatively new term related to new products and processes that provide value to customers and businesses while significantly reducing ecological impact, demonstrating equal importance to ecological innovation. Innovation may refer to different parts of the value creation process of the business. The product or production process may be improved when current products are replaced by environmentally friendly ones or new products are designed in an eco-friendly way. Marketing activities may be eco-friendly by balancing the objectives of achieving customer satisfaction and regulations by satisfying his desires while considering the environment by avoiding its damage and maintaining environmental integrity. New business regulations may also serve as eco-innovation when internal work environment and external environment is managed in order to improve environmental performance. The goal of the study is to describe how these factors influence business performance in a selected group of small and medium-sized enterprises.

Key words: business performance, eco-innovation, environment, innovation, value creation

Introduction

The term eco-innovation is a relatively new term. The term was first used by (Fussler, James 1996) concerning new products and processes that provide value to customers and businesses while significantly reducing ecological impact, demonstrating equal importance to ecological innovation.

In 2009, the Organization for Economic Co-operation and Development defined ecological innovation as implementing new or significantly improved products in processes, marketing methods, and organizational structures that lead to ecological improvements compared to related alternatives (OECD, 2010).

Ecological innovation can be defined as the development of a new product, work method, or production process. It is less harmful and suitable for the environment. It contributes to reducing ecological burdens regarding the depletion of non-renewable natural resources or related to how to raise and manage the remnants of production and consumption processes and recycle them (Bocken et al. 2014, Al-Zaidi et al. 2016).

Because the OECD idea is not limited to the intentionality of ecological sustainability, it is crucial to ascertain the factors that motivate businesses to embrace ecological principles. It is unclear what businesses are doing or how they incorporate these principles into their actions and strategies, even though topics like innovation and sustainability have recently become hot topics in both academic and practical discourse (Oncioiu 2015).

Eco-innovation is the creation, exploitation, or absorption of a firm's new product, service, management system, or business practice. Through its lifespan, it reduces environmental risk, pollution, and other detrimental effects of resources compared to appropriate alternatives (Lee, Min, 2015).

Eco-innovation is based on a less comprehensive scope than innovation since it has restricting qualities, as the primary goal is to have a minor ecological impact. Eco-innovation can result in inevitable advantageous trade-offs between ecological qualities and crucial success aspects, such as

appearance, functionality, and design. Eco-innovations should benefit organizational and consumption patterns and include social, economic, and ecological factors in their acceptance and implementation (Bossle et al. 2016).

Companies that have made eco-innovation investments strive to be more eco-efficient than their rivals in terms of the company's overall ecological performance or the ecological effects of a specific product. Eco-innovation has also been developed for other goals aside from reducing harmful ecological effects, such as boosting economic resource productivity or deepening our understanding of global ecological change and its connection to economic and social systems (Oncioiu, 2015).

The following factors have been identified as crucial determinants of ecological innovation: (1) organization, (2) technology, (3) cross-functional cooperation, (4) supplier participation, and (5) market focus (Fernando et al., 2016).

Environmental innovation was divided into four main indications (Demirel, Kesidou 2019). The product: by introducing new products or replacing the current products to be environmentally friendly, designing products that consider the environmental requirements, friendly raw materials and avoiding chemicals, especially safe ones, and the possibility of recycling these products. Production process: by developing new processes and technologies, as well as new production techniques that do not damage the environment, able to lower the consumption of raw materials and energy. Marketing: It is through adopting new methods and applications for marketing activities and balancing the objectives of achieving customer satisfaction by satisfying his desires while considering the environment by avoiding its damage and maintaining environmental integrity. Regulation: It means the introduction of new administrative and organizational concepts and their applications. To create an internal work environment that facilitates the application of environmental standards and makes it able to reduce negative environmental impacts before they occur through continuous evaluation, to improve environmental performance.

Eco innovation and related capabilities

Green innovation or eco-innovation is considered a basis for supporting and promoting small and medium enterprises, given the development that the latter has known. After it aimed to achieve performance or economic effectiveness, it became necessary for its commitment to achieving environmental performance as a result of the emergence of what is known as the "environmental responsibility" that falls on these institutions if they do not consider the environmental performance (Bag et al. 2022).

Companies should establish and implement eco-innovation programs using a complete strategy and should be able to modify and manage their internal structures and activities. Eco-innovative businesses must have the capacity to put off satisfying their priorities—which are typically financial—in favor of resource management to maximize their usefulness to more people. When industrial processes are motivated by innovation, it leads to proactive conduct addressing environmental and social challenges (Nitkiewicz 2012)

Thus, eco-innovation in business creates or resets the relationships associated with forming and distributing environmental functions while benefiting from the relationship between them. Eco-innovation is also vital to overcoming customer, competitor, and regulatory pressures (Iranmanesh et al. 2017).

Information technology as part of industry 4.0 is the focus of technological capabilities because it provides information that allows organizations to make appropriate decisions and develop strategies. eco-capabilities have the potential to improve sustainable business performance (Rani Bhagat et al. 2022).

The technological capabilities are as follows: Firstly, research and development capabilities, i.e. the organization's technology and technical skills in technological research, which provide knowledge and information in the fields of its specialization. Secondly, the ability of networks, i.e. communication between the company units and divisions, through own network called the intranet. Thirdly, ability to

communicate technologically: The concept of cellular networks arose within the framework of efforts aimed at developing the wireless/mobile communications system.

Ecologic orientation entails understanding the natural environment and its role in the business landscape and giving equal weight to stakeholders such as local communities. Protectionism is ingrained in the culture and climate of a company. These eco-capabilities have the potential to improve sustainable business performance. Sustainability is essential for businesses because it affects performance and can aid in survival in hostile environments

Sustainability is essential for businesses because it affects performance and can aid in survival in hostile environments. However, maintaining long-term sustainability is problematic because it necessitates the ability to evaluate and modify sustainable actions whenever perceived changes in social efficiencies, economics, and the environment occur. Organizations must therefore develop the ability to continuously adapt their green technology or develop their eco-capabilities (Souza et al 2017). Fig. 1. summarizes these relationships.

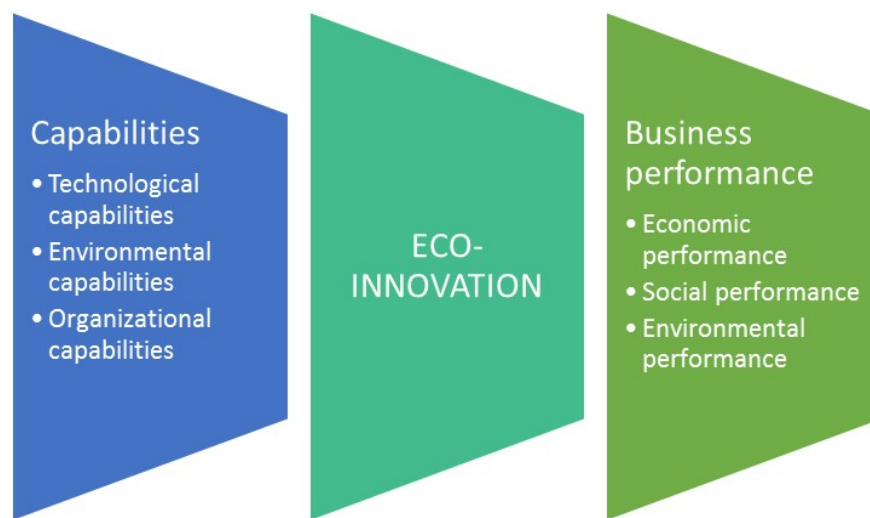


Figure 1. Relations between capabilities, eco-innovation and business performance.

Source: own figure

Eco-innovation and Business Performance

Eco – innovation & Economic performance

Maldonado-Guzmán and Pinzón-Castro (2022) state that eco-innovation is one of the critical concepts that can significantly increase a company's environmental sustainability the literature. It has been demonstrated, however, that businesses alone cannot sufficiently develop eco-innovation activities to increase the level of eco-innovation activities and significantly raise the level of sustainable performance of manufacturing organizations.

Financial resources significantly improve eco-innovation, and eco-innovation significantly improves the sustainability of business operations. Eco-innovation development influences not only economic growth but also has a positive effect on environmental performance (Hojnik et al., 2018), the findings strongly indicate that environmental sustainability and the adoption of eco-innovation must be addressed when serving foreign markets. This study emphasizes the role of eco-innovation and speaks to whether eco-innovation should be adopted and integrated into firm-level strategies to improve economic performance.

Eco – innovation & Social performance

According to Tumelero and Sbragia (2019) an eco-innovative strategy produces environmental sustainability, which positively impacts society. Moreover, eco-innovations fuel other eco-innovations by forging a route dependency on the environment since skills developed through a cleaner method will favorably impact the release of goods utilizing clean technologies. At R&D-intensive companies, the power of the knowledge flow produced through techniques and environmental management systems reduces information gaps, boosts product innovation and disruption, and lowers the technological complexity of cleaner manufacturing processes. Eco-innovations produce value for customers, society, and internal benefits at the organizational and process levels.

According to Ch'ng et al. (2021), achieving each of the three aspects of sustainable company performance (economic, social, and environmental) is possible by choosing an eco-innovation approach, such as eco-process, eco-product, or eco-organizational innovation. By adopting product, process, and organizational eco-innovation, the aspects of sustainable business performance are attainable, claim (Larbi-Siaw et al. 2022). The trinity of product, process and organizational eco-innovation can significantly boost a manufacturing firm's environmental performance. A company can then enhance its social performance by funding R&D for eco-innovations, using cutting-edge green management techniques, and raising employee awareness of eco-innovation. Product and organizational eco-innovations positive impact on sustainable performance's economic component is amplified by market turbulence (technology and environmental turbulence) in the form of technical developments, fierce market competition, and shifting household demand and taste.

Eco – innovation & Environmental performance

The two main conclusions are that corporate and policy governance strategies should be coordinated to reduce costs associated with reducing environmental pressures. First, both strategies should specifically address the goal of maximizing environmental gains that can be achieved by developing and adopting clean technologies along the supply chain.

However, the critical finding of Beltrán-Esteve and Picazo-Tadeo (2017) is that environmental performance improved in both periods, primarily due to advancements in environmental technology. As a result, environmental policies encouraging catching up are strongly advised, especially in the more recent EU members after 2004, as they tend to perform further from their respective environmental technology frontiers. To resume the rates of environmental technical advancement observed during the growth phase, it would also be very advisable to restore the pre-crisis eco-innovation investment levels.

According to Barriga Medina et al. (2022), organizational eco-innovation (OE) and process eco-innovation (PCE) are strongly and favorably correlated with a company's financial and environmental success. However, the two categories of performance outlined are not strongly correlated with product eco-innovation (PDE). The indirect effects of OE on PDE, environmental performance, and financial performance are also essential and favorable. These results imply that OE and PCE favorably impact the firm's performance.

Conclusion

Sustainable development of enterprises plays an increasingly important role in company competitiveness. Ecological thinking and ecological production is requirement of our times, which needs improvements in the typical business processes. Innovations should be planned and presented in an ecological way, in order to support economic, social and environmental sustainability. These requirements are incorporated in business performance, so innovative ideas processes should be implemented for improving economic, social and environmental performance of the firms. As the next step of the research, these performances will be surveyed among Jordanian micro, small and medium-sized enterprises SMEs working in the food industry.

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