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GREEN ENTREPRENEURSHIP: CHALLENGES AND OPPORTUNITIES OF DEVELOPMENT

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Abstract

One of the worrisome problems of the world economy is the sustainability of the environment, which is increasingly threatened by industrialization. Green entrepreneurship is one of the significant mechanisms that drives sustainability and creates innovations in entrepreneurship in an environmentally sustainable way. Green entrepreneurs identify the interconnections between innovation and sustainability in directing business processes toward cleaner and more efficient production and consumption of renewable energy. The paper aims to point out the importance and possibilities of developing green entrepreneurship and the motives that drive entrepreneurs to develop green innovations. The methods used in the paper are induction and deduction. Investments in green programs must be carefully planned with the provision of adequate financial, technological, and human resources.

Key Words: *entrepreneurship, green entrepreneurship, green innovation*
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Introduction

The global industrial transformation has disrupted the ecological and environmental cycle due to the unlimited depletion of natural resources at the expense of economic development, which has caused concern among

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policymakers, academia, government, and society (Halдар, 2019). The world economy is characterized, on the one hand, by the pressure of high economic development, which, on the other hand, leads to environmental problems caused by limited natural resources, the increase in world population, and the decline of biodiversity (Fallah & Soori, 2023).. The literature indicates that focusing on environmental understanding through a green business orientation can be useful for solving environmental problems as well as world trade problems (Fallah & Soori, 2023).

„Economists and policymakers recognize that entrepreneurship is the driving force behind economic prosperity and in the global economy acts a catalyst for the expansion and promotion of productive activities” (Abdelwahed et al., 2023, p.1352). This new direction of business, known as green entrepreneurship, is becoming one of the key drivers of the green economy and is gaining momentum as interest in sustainable business grows (Rexhepi et al., 2023). „Green entrepreneurship is one of the concepts which are aligned with the environment-friendly approach, and it helps to maintain healthy ecosystems, minimize pollution and waste, reduce greenhouse gas emissions, and provide environmental goods and services to allow more responsible consumption patterns” (Verma & Kumar, 2022, p.1300). Previous, less extensive, research shows that „supporting small businesses to become green and environmentally friendly may provide greater overall benefits than other investments targeted at larger” (Vatansever & Arun, 2016, p. 26). The concept of green entrepreneurship also finds its chances in the field of tourism and hotel industry, especially through the development of rural tourism, within which numerous opportunities for green business can be found.

Research on green entrepreneurship and the possibilities of firms to introduce business systems that support this direction and develop green innovation are quite complex, especially for developing countries where there is still no developed awareness of green business. The literature indicates that it is still not sufficiently researched what the key concepts that formulate „green entrepreneurship“ are and how to differentiate this entrepreneurship from „non-green entrepreneurship“ (Halдар, 2019). Moreover, there is an ample scope for conducting analyses on „how green entrepreneurs identify new commercial ventures, incubate ideas and acquire specialization, accumulate resources to convert their designs to commercial reality and then launch as well as nurture their business venture to make it profitable” (Halдар, 2019, p. 235). Accordingly, the paper aims to point out the importance and possibilities of developing

green entrepreneurship and the motives that drive entrepreneurs to develop green innovations.

The paper, in addition to the introduction and conclusion, contains three parts. In the second part, the concept of green entrepreneurship is described and the results of research conducted on this topic are presented. The third part describes the motives of entrepreneurs to get involved in green entrepreneurship, while the fourth part explains green innovation as an instrument through which the green entrepreneurship program is realized.

Green entrepreneurship in contemporary business conditions

Green entrepreneurship orientation „refers to a firm’s green proactive strategy to balance green business growth and reduce environmental impacts” (Makhloufi, 2023, p. 2). Driven by the desire to integrate corporate responsibility and sustainable business, entrepreneurs are discovering that running a green business is a good business proposition that creates numerous business opportunities (Braun, 2010). In the orientation towards green business, entrepreneurs are also supported by customers, since they are increasingly demanding more environmentally friendly products and services from the firm (Abdelwahed et al., 2023). With a green orientation, firms would develop profitable green business models, and anticipate customer behavior and market demands (Makhloufi, 2023). Therefore, green entrepreneurship leads to a „dynamic balance between environmental and economic goals and with environmentally friendly and sustainable architecture can provide businesses with a bright future” (Abdelwahed et al., 2023, p. 1356).

The concept of green business also takes its place in the hotel industry. As consumers increasingly realize the importance of protecting the ecosystem, many hotels are considering new green advertising strategies to attract target audiences (Gupta et al., 2023). Although the „green approach“ is still underdeveloped in the hotel industry, green hotels strive to be more environmentally friendly through the efficient use of water, energy, and environmentally friendly materials (Khalil et al., 2022). As empirical research proves that the use of green practices in hotels shows a significant impact on guests' intentions to come again and pay a premium price (Gupta et al., 2023), hotel management should include a green strategy in future business directions.

The term *green entrepreneurship* dates back to the 1960s, „when the consequences of environmental degradation and industrialization led to regulations on environmental protection in the developed countries” (Fallah & Soori, 2023, p. 468). At the base of the name of the concept *green entrepreneurship* are the words *green*, which is associated with environmental responsibility and solving old problems in better ways, as well as the word *entrepreneurship*, which is associated with the creation of new entities and innovations (Verma & Kumar, 2022). Terms *sustainable entrepreneurship*, *environmental entrepreneurship*, *ecopreneurship* and *green entrepreneurship* are often used as synonyms (Haldar, 2019; Vatansever & Arun, 2016). In a broader sense, these terms „refer to businesses and entrepreneurs that base their activities on green or environmentally sustainable principles, hence aiming to minimize the impact of their production and distribution related activities on the environment” (Haldar, 2019, p. 237-238).

There is still no consensus on the definition of green entrepreneurship and the difference from non-green entrepreneurship, given that it is a new concept. Haldar (2019) defines green entrepreneurship as the practice of conscientiously solving environmental problems through the realization of innovative and creative ideas that are economically viable, involve a high level of risk, and have a „net positive effect“ on the natural environment (Haldar, 2019). Green entrepreneurship can also be seen as a combination of the profit orientation of entrepreneurs with technological innovations that lead to the reduction of the negative impact of humans on the environment (Fallah & Soori, 2023). Green entrepreneurship can also „be defined as the act of starting a new business in response to an identified opportunity to make a profit and minimize the environmental side effects” (Fallah & Soori, 2023, p. 470).

Abdelwahed et al. (2023, p. 1355) believe that green entrepreneurship „is one of the valuable underlying mechanisms which drives sustainability, and which completes innovation in entrepreneurship in an environmentally responsible way”. Because of that, Haldar (2019) points out entrepreneurs as key people who should manage the transformation of the economy into a ‘green economy’ since they are motivated to inject new innovative solutions into the economy that will, among other things, meet environmental and social challenges. Thus, green entrepreneurs are often seen as engines of change, as they identify the interconnections between innovation and sustainability in directing business processes

toward cleaner and more efficient production and consumption of renewable energy (Haldar, 2019).

Defining green entrepreneurship implies clarifying the role of the green entrepreneur as the bearer of the green process. A ‘green entrepreneur’ aims to capitalize on green business (Verma & Kumar, 2022) by appreciating sustainable business principles through creating green values and selling green products and services (Fallah & Soori, 2023). Haldar (2019) views green entrepreneurs as individuals who start and run an entrepreneurial venture that is environmentally friendly in its outputs and production processes from the outset. Green entrepreneurs are also seen as individuals who make sustainable innovations primarily to promote the green economy (Fallah & Soori, 2023). Regardless of the type, green entrepreneurs are increasingly perceived as green change agents, driving social learning (Braun, 2010) or a sense of the need to develop societal norms towards environmental protection (Fallah & Soori, 2023).

Profiling entrepreneurs as ‘green’ is a challenging task. Verma & Kumar (2022, p. 1301) state that „the success of a green enterprise generally depends on the entrepreneurial characteristics, business ideas and infrastructure environment of a firm”. The firm's orientation towards environmental sustainability implies the presence of the entrepreneur's will to enter into such an enterprise, with all the risks it carries. On the one hand, risk-taking, internal locus of control, and the need for achievement are an entrepreneur's three most important characteristics for introducing a green business orientation (Vatansever & Arun, 2016). On the other hand, building the image of a ‘green entrepreneur’ implies following and implementing other factors, among which is a specific ecological orientation (Vatansever & Arun, 2016).

Research conducted on the topic of green entrepreneurship is mostly a recent edition. The study results indicate that green entrepreneurship is influenced by: „green entrepreneurial skills, green opportunities, entrepreneurial motivation, green incentives, availability of capital” (Abdelwahed et al., 2023, p. 1352); green products, green design, green supply chain, green production (Soomro et al., 2023); „external social capital network flows, internal human capital stocks, and strategic partnerships” (Gliedt & Parker, 2007, p. 538). The authors point to the importance and role of women in starting green entrepreneurship and their stronger environmental commitment and attitudes to the green entrepreneurship program Braun (2010) and Soomro et al. (2023).

Makhloufi (2023) concludes that green entrepreneurship influences the development of green innovation.

Motives of green entrepreneurs

Research shows that an entrepreneur's orientation toward green business has a positive effect on their organizational growth (Verma & Kumar, 2022). Green firms provide entrepreneurs with numerous opportunities, so the entrepreneurs' motives for starting a green business can be classified as organizational and financial.

Organizational motives. There is a strong belief that firms that promote the term 'green' in their product marketing create a loyal customer base, which is beneficial both now, and in the future (Soomro et al., 2023). Firms with green absorptive capacity turn knowledge into applications that are used for commercialized entrepreneurial purposes, researching market opportunities, accessing information, and predicting customer behavior and future business trends (Makhloufi 2023; Aleksić, et al., 2022). It should be added that green orientation also provides a good basis for the development of innovations, adaptation of technology, and creation of jobs (Verma & Kumar, 2022). Jovanović et al. (2023) concluded that procurement of green technologies and the development of green innovations improves firm employment. Fallah & Soori (2023, p. 470) state that „cooperation of entrepreneurs with research institutes, agencies, and universities through social networks to create and increase the market demand for green products is another motivation for them to enter green businesses areas”.

Financial motives. Entrepreneurs who have invested in green business can realize greater economic interests in the long term (Fallah & Soori, 2023). Although it initially seems that investing in green technology and processes requires high investments, the benefits resulting from them are multiple. This is also confirmed by the conducted research, which shows that the implementation of green programs does not have a negative financial impact on business operations (Fallah & Soori, 2023). This is confirmed by the results of the study by Vatansever & Arun (2016) stating that the firm's financial goals can be achieved while respecting environmental goals or by eliminating processes that are harmful to the environment through the introduction of innovative solutions. Second, Braun (2010) states that businesses can also achieve financial benefits by reducing operating costs through reducing waste and pollution, giving

entrepreneurs a new and different competitive advantage to succeed in the marketplace. Likewise, entrepreneurs reduce operating costs through the reuse of recycled raw materials and energy savings (Fallah & Soori, 2023). Third, by complying with strict environmental regulations and laws, entrepreneurs avoid high fines (Fallah & Soori, 2023).

Fallah & Soori (2023, p. 470) state that „despite the importance of green entrepreneurship, entering into this type of business can create problems for entrepreneurs, including an increase in costs and prices”. Thus, green entrepreneurs become ‘punished’ and lose their potential customers due to higher prices and compliance with environmental issues (Fallah & Soori, 2023). Some of the ways to overcome these challenges are providing different forms of support through giving tax breaks, obtaining balanced subsidies, changing economic incentives, and reforming the rules of the competitive game (Fallah & Soori, 2023).

Green innovation as a result of green entrepreneurship

The result of the green entrepreneurship program is green innovations that lead to a sustainable competitive advantage for the firms (Jovanović-Vujatović, et al. 2022; Fallah & Soori, 2023). The development of green innovations requires entrepreneurs to explore and apply valuable capabilities to improve green processes, develop environmentally friendly products, use clean energy and, in turn, create green competitive advantages and improve ecosystem performance (Makhloufi, 2023). In this sense, entrepreneurs are faced with the need to provide appropriate technological solutions in the process of creating innovations (Tian, 2023). Such activities require abilities, competencies, and sufficient financial resources to support green innovation development. Accordingly, entrepreneurs strive for green innovations to effectively achieve energy savings while promoting green transformation. (Tian, 2023).

The literature does not yet offer a generally accepted definition of green innovation. Makhloufi (2023, p. 149) states that the orientation of green entrepreneurship gives priority to „delivering environmentally friendly products, greening business operations, reducing hazardous waste, controlling CO₂ emissions, increasing resource efficiency and rationalizing the use of natural resources”. Green innovation is the „production, attraction or exploitation of a product, production process, and service, or a new management method that is implemented

throughout the product life-cycle and reduces environmental risks, pollution and other negative effects on resource use” (Fallah & Soori, 2023, p. 471). For Tian (2023), green innovation includes the process of production, management, and distribution of innovations through which it is possible to increase the share of environmentally acceptable resources and increase the consumption of recycled waste, which will lead to the improvement of environmental performance.

Compared to non-green innovations, green innovations require a higher degree of knowledge (Tian, 2023). Entering into such ventures is a rather risky and demanding business, which entrepreneurs can minimize through various forms of cooperation. R&D cooperation between different firms is one of the opportunities that open up the opportunity to acquire knowledge and advanced technology, thus sharing the uncertainty and costs of innovation at the same time (Tian, 2023). In addition, „establishing relationships with green suppliers can help to optimize the resource utilization of firms and increase the competitive advantage of green innovation” (Tian, 2023, p. 3).

Conclusion

Green entrepreneurship is becoming an increasingly topical topic among entrepreneurs, both because of limited natural resources and because of the possibility of creating innovative products and services. Research shows that such activities are increasingly appreciated by customers, which will also affect the competitive advantage of entrepreneurs. However, investing in green business programs and respecting green standards requires high financial resources, as well as the knowledge and competencies of entrepreneurs and employees. What especially worries entrepreneurs is the feasibility of this type of business. This means that investments in green programs must be carefully planned, especially when it comes to developing countries, where green business is still not sufficiently developed.

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