
Determinants of Corporate Entrepreneurship in the Context of Sustainable Development

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Abstract:

Purpose: This research article aims to investigate the determinants of corporate entrepreneurship in the context of sustainable development. With increasing challenges related to environmental protection, corporate social responsibility, and sustainable economic growth, understanding the factors that drive corporate entrepreneurship in sustainability becomes crucial for effective organizational management.

Design/Methodology/Approach: This study employs a comprehensive analysis of existing theory and empirical research to identify the key determinants of corporate entrepreneurship within the framework of sustainable development. The research methodology involves a systematic review of relevant literature, including academic articles, reports, and case studies. Furthermore, the article presents a detailed case analysis of Orsted, a global leader in renewable energy, as an exemplification of successful implementation of corporate entrepreneurship in the sustainability domain.

Findings: The research identifies organizational culture, leadership, and innovation as crucial determinants of corporate entrepreneurship in the context of sustainable development. A strong entrepreneurial culture that fosters creativity, risk-taking, and proactiveness provides a favorable environment for sustainable business initiatives. Effective leadership, characterized by a commitment to sustainability goals and the ability to empower employees, plays a significant role in driving corporate entrepreneurship.

Practical Implication: The findings of this study have significant practical implications for organizations aiming to integrate corporate entrepreneurship with sustainable development. Understanding the determinants highlighted in this research can assist managers and policymakers in fostering an entrepreneurial mindset within their organizations and aligning their strategies with sustainable objectives.

Originality/Value: This article contributes to the existing literature by consolidating and synthesizing the determinants of corporate entrepreneurship within the context of sustainable development. The inclusion of a detailed case analysis of Orsted adds value by offering a practical illustration of successful implementation. The comprehensive review of theory and empirical research provides a holistic understanding of the topic, enabling researchers, practitioners, and policymakers to gain valuable insights and make informed decisions in promoting corporate entrepreneurship in sustainable development endeavors.

Keywords: Dual purpose concept, CSR, ESG, organisational culture, stakeholders.

JEL Code: M14, M21, O16, Q01, L26.

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1. Introduction

Corporate entrepreneurship refers to the actions taken by corporations to innovatively create value for all stakeholders while taking care of the environment and society. In the context of sustainable development, corporate entrepreneurship becomes a key factor in achieving sustainability goals and counteracting the negative impacts of business activities on the environment and the community.

Today's society is facing sustainability challenges that require both individual commitment and activity on the part of businesses. Corporate entrepreneurship, as a complex and multifaceted phenomenon, plays a key role in promoting sustainability and achieving social, environmental and economic goals. Understanding the determinants of corporate entrepreneurship in the context of sustainability is essential for the successful implementation of business strategies that take into account sustainability requirements.

The purpose of this article is to identify and characterise the determinants of corporate entrepreneurship in the context of sustainability. First, an analysis of internal factors will be made, which focuses on the characteristics and activities of the company itself, such as organisational structure, human resource management, organisational culture and innovation, which influence the development of corporate entrepreneurship in the context of sustainable development. In addition, the group of internal factors includes the strategies and policies that are implemented to ensure sustainability and the impact of innovative practices on corporate competitiveness.

Next, external factors that have a significant impact on corporate entrepreneurship and sustainability will be identified. Elements shaping the phenomena identified include legal regulations, social norms, stakeholder expectations, competitive pressures and corporate social responsibility issues. All of these factors are relevant to understanding how companies can operate in a sustainable manner while successfully achieving business goals.

The findings of this analysis aim to contribute to a deeper understanding of the determinants of corporate entrepreneurship in the context of sustainability. The article identifies the key factors that have the greatest impact on the development of corporate entrepreneurship and outlines the barriers faced by companies, with the aim of drawing stakeholder attention to the issue of corporate entrepreneurship implementation by companies seeking to operate in line with sustainability.

2. Literature Review

Corporate entrepreneurship refers to the actions taken by corporations to manage innovation, create value and achieve business success. Sustainability principles, on the other hand, refer to an approach that takes into account the simultaneous satisfaction of social, economic and environmental needs, thus ensuring long-term

development. Analysing existing theories and research on the implementation of corporate entrepreneurship according to sustainability principles, several key areas and concepts can be identified:

- *The dual purpose concept*: The literature often emphasises that corporations should pursue economic and socio-environmental goals simultaneously. According to this concept, corporate entrepreneurship should contribute both to shareholder value creation and to solving social and environmental problems. The dual-purpose concept, also known as the 'dual-purpose concept', was introduced by Clayton M. Christensen in 1997. According to this concept, companies should strive to achieve both financial goals and social or environmental goals.

The concept refers to the idea that companies can simultaneously run a profitable business and contribute to solving social or environmental problems. The dual purpose concept addresses the need to integrate sustainability and social responsibility with business objectives. Companies that embrace this concept seek to create innovative products, services and business models that are both profitable and generate positive social or environmental impact. It is important for companies to focus on the long-term and understand that pro-social or pro-environmental activities can contribute to building sustainable business value.

The dual purpose concept encourages innovation, flexibility and risk-taking to find new ways of doing business that benefit both the company and society. The dual purpose concept aims to transcend the traditional model in which businesses focused solely on profit maximisation. This author has contributed to the development of business thinking by promoting the idea that businesses can be successful while addressing social and environmental issues.

- *CSR (Corporate Social Responsibility) and ESG (Environmental, Social, and Governance)*: CSR refers to the social responsibility of companies and their commitment to take action for the benefit of society and the environment beyond their basic economic responsibilities (Carroll, 1979).

ESG refers to three key areas that companies should consider when making investment and management decisions: environmental, social and corporate governance (Elkington, 1997). Empirical research has shown that corporations that integrate social, environmental and governance aspects into their business strategy can achieve better financial performance and competitive advantage. Both of these approaches, CSR and ESG, aim to promote responsible business and take into account the social and environmental aspects of companies' activities. CSR focuses on social responsibility, while ESG covers three areas: environmental, social and corporate governance.

- *Social and environmental innovation*: Corporate entrepreneurship can lead to social and environmental innovation that contributes to solving social and environmental

problems. Research suggests that corporations that engage in social and environmental innovation can achieve competitive advantages by creating new markets, increasing customer loyalty and enhancing operational efficiency.

- *Partnerships and collaboration*: The implementation of sustainable corporate entrepreneurship often requires collaboration with other social actors such as NGOs, local governments and communities. These partnerships can help to create synergies, increase the impact of activities and achieve greater socio-environmental impact.

It is worth noting that the above points are only basic elements of the analysis. There are many theories, models and studies that can provide more detailed information on the implementation of sustainable corporate entrepreneurship. The concept of corporate entrepreneurship (Hitt, Ireland and Hoskisson, 2018; Kuratko, 2017; Hisrich, Peters, and Shepherd, 2016; Hisrich, and Peters, 2002; Covin and Miles, 1999) is an approach that promotes innovation and creative approaches to operating within a corporation.

It is a strategy that integrates entrepreneurial principles into larger organisational structures, aiming to create new business opportunities that benefit both the corporation and its stakeholders. Under this concept, entrepreneurship is not limited to small companies or start-ups, but is also introduced and developed within large, established organisations. The components of the corporate entrepreneurship concept can be divided into three main areas: organisational culture, organisational structure and management processes.

Organisational culture plays a key role in corporate entrepreneurship. It comprises a set of values, norms and beliefs that promote openness to innovation, experimentation, creativity and risk. The key elements of organisational culture related to corporate entrepreneurship are:

- *Leadership*: supportive and inspirational leadership that promotes innovation and encourages risk-taking (Burns, 1978);
- *Employee engagement*: creating an environment where employees are encouraged to share ideas, engage in innovation and participate in entrepreneurial projects (Hitt, Ireland and Camp, 2018);
- *Accepting mistakes*: a culture where mistakes are treated as a source of learning and an opportunity for growth, rather than a reason for punishment (Edmondson, 1999);
- *Pushing the boundaries*: encouraging transgression of traditional corporate boundaries by seeking new opportunities and exploring new markets (Burgelman, 2002).

Organisational structure plays an important role in corporate entrepreneurship by providing the right environment and resources for innovation to flourish. The key

elements of organisational structure associated with corporate entrepreneurship are (Mintzberg, 1983; Galbraith, 2008; Chesbrough, 2008; Cooper, 2017):

- *Innovation units*: creating dedicated units to focus on creating new products, services or business models.
- *Project teams*: the creation of flexible teams that can be formed on a temporary basis to deliver specific innovation projects.
- *Resource allocation*: allocating appropriate resources, including budget, time and experts, to support entrepreneurial initiatives.
- *Communication and collaboration*: ensuring effective communication and cooperation between different organisational units to accelerate the flow of information and ideas.

Management processes play a key role in corporate entrepreneurship, enabling the identification, development and implementation of innovative ideas. The key elements of the governance processes involved in corporate entrepreneurship are:

- *Opportunity identification*: creating structures and mechanisms that enable the identification of new business opportunities both internally and externally to the organisation.
- *Project portfolio management*: creating a project portfolio management strategy that enables the selection, evaluation and prioritisation of innovative ventures.
- *Incubation and support*: providing an environment in which innovative ideas can be developed, tested and scaled.
- *Monitoring and evaluation*: identifying key success indicators and systematically monitoring and evaluating the progress of innovative projects.

In the context of sustainable development, corporate entrepreneurship refers to the ability of corporations to engage in creative and innovative activities, pursuing both financial returns and sustainability and corporate social responsibility goals. Corporate entrepreneurship is defined as the ability of corporations to identify and exploit business opportunities to create value, innovation and sustainability (Schaltegger and Wagner, 2011).

According to the literature, corporate entrepreneurship encompasses both profit-making activities and those that lead to sustainability goals. Corporate entrepreneurship in the context of sustainability is an area of research that focuses on analysing and examining the actions of corporations in the context of achieving a balance between economic, social and environmental goals. Corporate entrepreneurship is concerned with how corporations make decisions, manage resources, develop innovations and engage in social and environmental activities.

An important researcher in this field is John Elkington, who introduced the concept of the 'triple bottom line' (triple sustainability criteria) as a framework for assessing and reporting on the economic, social and environmental performance of corporations. Elkington notes the need to consider both financial and social and environmental performance when assessing corporate success. "Corporate entrepreneurship in the context of sustainability refers to a corporation's ability to create business value while minimising negative social and environmental impacts and maximising positive social and environmental impacts" (Elkington, 1997).

In this author's view, companies should not only be assessed in terms of profits, but also in terms of their impact on people and the planet. Elkington continued his research by focusing on the concept of the 'fourth wave' (Fourth Wave), which focuses on the role of businesses in addressing global issues such as climate change and social inequality. "Corporate entrepreneurship in the context of sustainability is about identifying and exploiting business opportunities that generate value for the corporation while contributing to solving social and environmental problems" (Andreas Scherer, Guido Palazzo and Dorothee Baumann-Pauly, 2014).

Another well-known researcher is Stuart L. Hart (2002), who developed the concept of 'base-of-the-pyramid economics' and is recognised as a pioneer in the field of sustainability and corporate entrepreneurship. His work focuses on the study of business strategies that lead to sustainable development through the implementation of a business model that achieves market success by providing products and services to the poorest groups in society. "Corporate entrepreneurship in the context of sustainability is the process by which corporations integrate economic, social and environmental goals, seeking to balance the demands of profit and growth with the needs of communities and environmental protection" (Hart, 2005).

Hart examines the business opportunities arising from corporate involvement in addressing social and environmental problems in low-income communities. His research focuses on creating innovative business models that benefit both corporations and poor communities. Another well-known researcher is C.K. Prahalad, who, along with Hart, developed the concept of social entrepreneurship, which emphasises the importance of business innovation in solving social and environmental problems.

Additionally, Michael Porter analyses the relationship between corporate competitiveness and environmental protection. His research focuses on identifying ways in which corporations can achieve competitive advantage by investing in sustainability practices (Porter and Kramer, 2006). In addition, his research draws on the concept of shared value, which suggests that companies should create value not only for their shareholders, but also for the community in which they operate, while addressing social and environmental issues (Porter, 2011).

Corporate entrepreneurship in the context of sustainability can be defined as a business strategy that aims to both achieve economic success for corporations and contribute to social and environmental sustainability. It is an approach that integrates economic, social and environmental objectives, seeking to create long-term value for the organisation and society. In this vein, we find the work of Andrew J. Hoffman, which focuses on exploring how corporations can engage in systemic transformation towards sustainability by changing their business strategies and practices.

In contrast, Ioannis Ioannou's research (2022) on the relationship between corporate entrepreneurship and financial performance suggests that corporations that focus on aspects of sustainability can perform better financially in the long term. Edward Freeman (2010), who is known for developing the concept of 'stakeholder management', looks at how corporations can manage different stakeholders, such as employees, the community, customers and suppliers, to achieve a balance between economic and social/environmental goals.

Sustainability is a concept of development that meets contemporary social and economic needs while protecting and enhancing the ecological systems on which our existence is based (Hockerts, 2017). Sustainable development is a concept that refers to the simultaneous consideration of economic, social and environmental aspects in actions taken.

According to the definition proposed by the UN World Commission on Environment and Development, sustainable development is development that meets humanity's current needs without compromising the ability of future generations to meet their own needs. Sustainable development is also seen as development that meets the needs of present generations without destroying the ability of future generations to meet their own needs (Strong, 1992; Daly, 1996; Elkington, 1997).

The concept of sustainable development is an interdisciplinary approach to socio-economic processes that aims to achieve a balance between economic, social and environmental development, both globally and locally. It addresses the challenges of social inequality, environmental degradation and dependence on limited natural resources.

The concept of sustainability can be traced to the work of many researchers who have contributed to the development of the field. One key researcher is Gro Harlem Brundtland, a Norwegian politician and researcher who was chair of the World Commission on Environment and Development. In 1987, this Commission published a report known as the 'Brundtland Report', which for the first time formulated the concept of sustainable development as 'development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs'.

Another important researcher in this field is Herman Daly, an American economist and one of the pioneers of ecological economics. Daly (1996) developed the concept of sustainable development oriented towards limiting economic growth and protecting the environment. Within the concept, he analyses the relationship between economic growth and quality of life, arguing that growth is not unlimited and should be subordinated to social and environmental goals.

However, sustainability research is not limited to economics and science. For example, Amartya Sen, the Indian economist and Nobel laureate, introduced the concept of human development, which posits that equality of access to education, health and the basic necessities of life are essential for sustainable development. In the field of natural sciences, an important contribution to sustainability research was made by Rachel Carson who focused on the problems of environmental pollution and the effects of pesticides on human and natural health. Her work has contributed to increasing public awareness of the need to protect the environment and carry out sustainable activities.

The concept of sustainability is continued by many researchers of today. For example, Jeffrey Sachs, an economist and professor at Columbia University, known for his contributions to social development and the fight against poverty, focuses on global issues and the development of strategies to achieve sustainable development on a global scale.

Other researchers, like Johan Rockström, a Swedish scientist and director of the Resilience Stockholm Centre, focus on studying the stability of ecosystems and planetary boundaries to ensure sustainable development. Their work focuses on the need to maintain a balance between human activity and the Earth's ability to regenerate. Findings from the research of these and many other researchers are key to developing strategies and policies to achieve sustainable development. Research work in the field of sustainable development provides the scientific basis for political and social decisions aimed at building more sustainable and equitable societies.

3. Determinants of Corporate Entrepreneurship in the Context of Sustainable Development

Determinants of corporate entrepreneurship are factors that influence the propensity and ability of corporations to engage in entrepreneurial activities that are compatible with both sustainability requirements and the pursuit of profit. These determinants include cultural, social, institutional, technological and economic factors that influence the formation of corporate entrepreneurial strategies in the context of sustainability. We can divide the determinants of corporate entrepreneurship related to sustainability, based on external and internal factors.

External factors are those that come from outside the organisation, but have an impact on its operation and business strategy. Internal factors, on the other hand, refer to the activities and strategies implemented within the organisation. These are factors that are directly influenced by the enterprise. Internal factors influencing the development of corporate entrepreneurship from a sustainable perspective can be divided into several groups:

- Factors related to organisational culture include the following:

Organisational culture plays a key role in shaping employees' corporate entrepreneurial attitudes and behaviour. Organisations that promote values related to sustainability, creativity and innovation tend to develop more entrepreneurial initiatives (Glynn).

Research in this area focuses on understanding the dynamics of organisational culture in the context of sustainability. It analyses how values and beliefs influence the actions of corporations in the area of sustainability. The role of corporations in society and the impact of their actions on sustainability is also analysed by Waddock, whose research focuses on identifying factors influencing the change of organisational culture to promote sustainability.

Conflict resolution in the context of sustainability is also explored (Lempereur), where it looks at how organisational culture influences a corporation's ability to solve problems and take sustainable action. Organisational culture plays a key role in corporations' sustainability efforts. It can be defined as the set of values, norms, beliefs and practices that shape behaviour and decisions within an organisation. In the context of sustainability, organisational culture reflects the degree of a corporation's commitment to promoting sustainable business practices, environmental protection, social justice and long-term responsibility.

The first important aspect of organisational culture related to sustainable development is awareness. Organisations with a strong sustainability culture are informed about current environmental, community and economic issues and challenges. They have extensive systems for monitoring, analyzing and assessing the impact of their activities on various aspects of sustainable development. This knowledge is widely available and shared within the organisation.

The second aspect is values and ethics. The organisational culture promoting sustainable development is based on values that take into account the balance between economic, environmental and social aspects. Corporations with a strong sustainability culture seek to maximize value for all stakeholders, rather than focusing solely on short-term gains. These values include honesty, accountability, transparency, social justice and respect for human rights. Strong organisational values and beliefs, such as ethics, social responsibility and environmental awareness, can stimulate the development of corporate entrepreneurship.

The third aspect is organisational structures and procedures. An organisational culture conducive to sustainable development includes structures and procedures that support decision-making and the implementation of activities consistent with the principles of sustainable development. These organisations often have separate sustainability units or departments that influence decision-making at different levels of the hierarchy. In addition, these corporations put in place appropriate reporting, monitoring and evaluation systems to measure the progress and effectiveness of their sustainability activities. Flexible and flat organisational structures are conducive to entrepreneurial initiatives within the corporation.

The fourth aspect is stakeholder engagement and participation (Sharma and Henriques, 2005). The organisational culture promoting sustainable development takes into account the active involvement of stakeholders such as employees, suppliers, customers, local communities and non-governmental organisations. Corporations try to establish a dialogue with various groups of stakeholders in order to understand their needs, expectations and concerns. This involvement is taken into account in the decision-making process and influences the organisation's priorities (Schaltegger and Lüdeke-Freund, 2013).

Finally, the fifth aspect is innovation and continuous improvement. Organisational culture conducive to sustainable development promotes innovation and continuous improvement of business practices. These corporations strive to find new solutions, technologies and business models that minimize the negative impact on the environment, contribute to the development of communities and generate sustainable economic benefits. Innovation is seen as a key factor for success and competitiveness, and organisations promoting a culture of sustainable development strive to continuously improve their practices and processes.

To sum up, organisational culture in the context of taking actions in accordance with the principles of sustainable development by corporations reflects awareness, values, organisational structures, stakeholder involvement, innovation and continuous improvement. Organisations with a strong sustainability culture engage in activities to minimize negative environmental impacts, contribute to communities and long-term economic development.

Effective management and a strategic approach to sustainable development are also key factors influencing the activities of the corporation. Researchers such as Sandra Waddock, a professor of management, are exploring the role of corporate governance and strategy in the context of sustainable development. Leadership plays an important role in shaping corporate sustainability strategies and visions (Jabbour, Santos, Nagano and Piani, 2016).

Leaders who are committed to sustainable development inspire other employees and shape an entrepreneurial organisational culture. Competent, inspiring leadership that promotes sustainable action and innovation has a huge impact on the development of

entrepreneurship in the corporation. Another factor is human resources management, where the personnel policy should be analyzed. Recruitment, remuneration, training and employee development policies can influence the development of corporate entrepreneurship, especially when they take into account the values of sustainable development. The involvement of employees and their awareness of sustainable development are important factors for the corporation.

Anne-Maree Dowd is an example of a researcher who focuses on the relationship between education and sustainable development. Her research helps to understand how corporations can educate and motivate their employees to take actions consistent with the principles of sustainable development. Motivating employees by providing attractive rewards, recognition and development opportunities can stimulate entrepreneurship within the organisation.

An important place is also occupied by the culture of innovation, because creating an atmosphere conducive to creativity, experimentation and sharing ideas stimulates the development of corporate entrepreneurship. Innovation is an important factor determining corporate entrepreneurship in the context of sustainable development (Schaltegger and Wagner, 2011). Organisations that invest in research and development and look for innovative technological solutions have a better chance of creating new products and services consistent with the principles of sustainable development (Hart and Milstein, 2003).

Researchers such as Andrew J. Hoffman (2015) and Frances Cairncross emphasize the importance of technological innovation for corporate sustainability. Innovation can contribute to increasing energy efficiency, reducing greenhouse gas emissions and optimizing natural resources. Introducing technological innovations can enable corporations to operate more sustainably (Hoffman, 2015).

Research and technological development play a key role in providing sustainable solutions. For example, Professor Marc A. Rosen from the University of Ontario Institute of Technology, who studies technological opportunities in the field of sustainable energy and the impact of these technologies on the activities of corporations, came to the conclusion that technological progress can provide corporations with new tools and solutions that enable sustainable development.

Scientists, such as Mark J. Kaiser, Professor of engineering, study technological innovations in the context of sustainable development and their impact on corporate operations. Lovins, on the other hand, is a pioneer in the field of energy efficiency and the promotion of renewable energy sources, and his research has influenced the development of technologies and strategies that enable corporations to reduce their negative impact on the environment. Organisational resources are also of key importance influencing the development of enterprises, because access to appropriate sources of financing enables investment in innovative sustainable projects. In addition, having the right skills, technical knowledge and experience is

crucial for the development of corporate entrepreneurship. A well-developed network of contacts and partnerships with other enterprises, NGOs and research institutions can provide corporations with greater access to innovative solutions and joint projects. External factors affecting the development of corporate entrepreneurship, taking into account the sustainable perspective, can be divided into the following groups:

- *Regulatory environment:*

The existence of favorable regulations and standards related to sustainable development may encourage enterprises to undertake entrepreneurial activities in this area. Legal and political regulations play a key role in shaping corporate sustainability. Legislation and policy may introduce requirements regarding environmental protection, sustainable management of natural resources, fair treatment of employees, or the obligation to report information related to sustainable development (Albareda, Lozano and Ysa, 2007).

Researchers in this area, such as Professor Marjorie Kelly from Bard College, analyze the impact of legal and political regulations on corporate sustainability activities. The existence of appropriate laws and government regulations is a key factor influencing the activities of a sustainable corporation. For example, the introduction of regulations on greenhouse gas emissions may induce corporations to invest in greener technologies (Russo and Fouts, 1997).

Researchers such as Jørgen Wettestad, a Professor of social sciences, are analyzing the impact of climate policy on corporate activities. Regulations and policies play an important role in shaping corporate sustainability. The introduction of social and environmental responsibility regulations, such as social and environmental reporting, was made possible by researchers and theorists such as Wayne Visser, whose work on sustainability management influenced the development of these regulations.

- *The Role of International Standards:*

John Ruggie and Guido Palazzo highlight the importance of international standards such as the Global Reporting Initiative (GRI) and the United Nations Global Compact (UNGC) in promoting sustainable corporate entrepreneurship. These standards define guidelines and reporting methods regarding corporate social responsibility and sustainable development.

- *Government policy:*

Government support and policies that favor corporate entrepreneurship can drive sustainable investment and innovation. Michael Porter and Mark Kramer draw attention to the role of public and government institutions in supporting sustainable development-oriented corporate entrepreneurship. They argue that appropriate regulations, public policies and financial incentives can stimulate companies to take actions consistent with the principles of sustainable development.

- *Local society:*

One of the important factors that influence the activities in line with the principles of sustainable development by corporations is the growing social pressure and the developing public awareness of environmental and social problems. People are increasingly paying attention to the activities of companies and expect them to take socially and environmentally responsible actions.

Understanding these factors can be based on scientific research in the field of social psychology, such as the research of a team led by Professor Robert B. Cialdini of Arizona State University, who studied the impact of social norms on the behavior of individuals. Growing public awareness of environmental and social issues is driving corporations to take sustainable actions. Research in this area includes the work of scientists such as Arjen Boin, a Professor of political science who analyzes the relationship between corporations and society. Corporations are under social pressure to act in accordance with the principles of sustainable development. Researchers such as Mary Bryna Sodderlund, who studied issues of corporate social responsibility, contributed to the understanding of social expectations towards corporations. Their work helps corporations identify and respond to the needs and aspirations of society.

Stakeholder expectations, i.e., demand from customers, investors and the local community for sustainable products and services, can encourage companies to innovate (Donaldson and Preston, 1995). Researchers such as Naomi Klein (2020) and Robert A. Phillips emphasize the importance of involving stakeholders such as employees, customers, the local community and NGOs in shaping sustainable corporate entrepreneurship. They argue that strong relationships and dialogue between corporations and their stakeholders can contribute to building trust and joint action for sustainable development (Orlitzky, Schmidt and Rynes, 2003). Partnering with local organisations, communities and other stakeholders can stimulate corporate entrepreneurship through the sharing of knowledge and resources.

- *Technology and market:*

Innovative technologies can create new business opportunities, especially in areas related to environmental protection and energy efficiency. The development of markets for sustainable products and services, the growth of consumers' environmental awareness and their greater interest in ethical and sustainable companies can foster corporate entrepreneurship. Sustainability does not have to conflict with the economic interests of corporations.

In fact, research shows that a sustainable approach can help improve business performance and competitiveness (Moneva and Ortas, 2010). Economists, such as Stuart L. Hart, Professor from Cornell University, analyze the relationship between sustainable development and corporate financial results, which contributes to understanding the economic aspects of sustainable development.

Increased competition in the market can lead to sustainable actions by corporations in order to increase their competitive advantage. The work of scientists such as Michael Porter and Mark Kramer focuses on the concept of "shared value" and strategies that combine business objectives with the principles of sustainable development.

It is worth noting that these internal and external factors are interrelated and interact in the process of developing corporate entrepreneurship from a sustainable development perspective.

4. Orsted² Case Study

The subject of the description is an example of a large enterprise that has effectively implemented corporate entrepreneurship in accordance with the principles of sustainable development. Corporate entrepreneurship refers to a business approach in which enterprises strive to achieve financial, social and environmental goals simultaneously.

Orsted is a global leader in renewable energy with a particular focus on offshore wind energy. The company focuses on sustainable development by investing in renewable projects and reducing CO₂ emissions. Their mission is to contribute to the energy transition by providing clean renewable energy. Orsted actively engages in partnerships with local communities, governments and NGOs to minimize environmental impact and contribute to local social development. Orsted aims to be carbon neutral by 2025.

Orsted is a world leader in the renewable energy sector and is an excellent example of a company that has successfully implemented corporate entrepreneurship in accordance with the principles of sustainable development. This company shows many elements of operation that prove the implementation of corporate entrepreneurship in the context of sustainable development. Orsted was founded in 1972 in Denmark and was initially an oil and gas company.

However, over the last two decades, the company has undergone a radical transformation, abandoning fossil fuel-based energy in favor of renewable energy. The main factor that decided to adopt the concept of corporate entrepreneurship was the awareness of climate change and the growing demand for sustainable energy sources. Orsted decided to take up the challenge and transform itself into a company based solely on renewable energy sources.

During the initial implementation phase, Orsted encountered various barriers. One was the significant investment needed to build renewable energy infrastructure, such as offshore wind farms. It seemed that the costs of these investments were much

² <https://orsted.com/> (dostęp: 20-06-2023).

higher compared to traditional energy sources. In addition, the company had to cope with the challenge of changing the organisational culture and increasing competence related to new renewable technologies. Despite these initial difficulties, Orsted takes a number of actions that prove the success of implementing corporate entrepreneurship in accordance with the principles of sustainable development. Here are some of these activities:

- *investments in renewable energy sources*: Orsted is one of the largest investors in offshore wind energy in the world. The company builds and manages wind farms that generate clean energy for millions of households. Orsted continues to develop and invest in projects based on renewable energy sources, such as offshore wind farms and solar power plants. The company is consistently increasing its production capacity from renewable energy sources, contributing to the reduction of greenhouse gas emissions. Examples of actions taken:

- *Offshore wind farms*: Orsted is a leading player in the offshore wind farm industry. An example is the Hornsea One project, the world's largest offshore wind farm, installed in UK territorial waters. The farm has a capacity of 1.2 GW and is capable of providing electricity to over a million households.
- *Solar power plants*: Orsted is also investing in the development of solar power plants. An example is the Longreach Solar Farm in Australia, with a capacity of 227 MW. This power plant is equipped with efficiency monitoring and optimization technology, which allows for efficient use of solar energy.

- *reduction of greenhouse gas emissions*: Orsted continues its efforts to reduce carbon dioxide and other greenhouse gas emissions. The company is gradually phasing out energy production from fossil fuels, which has a positive impact on global emissions reduction targets.

- *technological innovation*: Orsted conducts research and development to constantly improve technologies related to renewable energy. The company is involved in innovative projects, such as the development of new generations of wind turbines, energy storage technologies or the integration of various renewable sources into power grids. Thanks to this, Orsted contributes to the progress and efficiency of the energy sector based on renewable sources. Examples of actions taken:

- *Wind turbines*: Orsted continuously invests in research and development in the field of wind turbines. An example is the introduction of wind turbines with greater power and efficiency, which allow to increase the efficiency of wind farms.
- *Energy storage technologies*: The company is experimenting with various energy storage solutions, such as batteries, water electrolysis and gravity pump technologies.

An example is the Hornsea Two project, which will use the electrolysis of water to produce hydrogen, which can be used as an energy carrier.

- *sustainable supply chain management*: Orsted makes sure that suppliers and business partners also share the values related to sustainable development. The company urges its suppliers to apply the best environmental, social and quality management practices. Orsted monitors and evaluates its supply chains to minimize negative environmental and community impacts. Examples of actions taken:

- *Guidelines for suppliers*: Orsted has developed guidelines for its suppliers, which include principles of sustainable development, such as minimizing CO₂ emissions, environmental protection, occupational safety and business ethics. The company works with suppliers to ensure that these guidelines are followed and that the Sustainable Development Goals are met.
- *Audits and Monitoring*: Orsted audits and monitors its suppliers to ensure they meet certain sustainability standards. The company sets requirements for the environment, social responsibility and product quality, and supports suppliers in improving their practices in accordance with these standards.

- *partnerships and stakeholder engagement*: Orsted is committed to working with a variety of stakeholders such as governments, NGOs, local communities and scientists. The company conducts dialogue and consultations, taking into account the opinions and needs of local communities when planning and implementing projects.

Orsted strives to build sustainable partnerships that benefit both the company and local communities. Examples of actions taken:

- *Cooperation with local communities*: Orsted maintains an active dialogue with local communities, especially in areas where offshore wind farm projects are planned. The company engages in public consultation, providing information to communities, as well as taking into account their views and needs during the process of planning and implementing projects.
- *Partnerships with governments and NGOs*: Orsted establishes partnerships with governments and NGOs to work together to promote the development of renewable energy sources and achieve the Sustainable Development Goals. An example is the partnership with the World Wildlife Fund (WWF), which aims to protect the natural environment and promote sustainable development.

- *Sustainability Reporting*: Orsted regularly publishes Sustainability Reports detailing its sustainability goals, progress, initiatives and results. The company is transparent in the scope of its activities, and these reports serve as a tool for communication with stakeholders and as an instrument for monitoring and improving the effectiveness of sustainable development. Examples of actions taken:

- *Annual Reports and Integrated Reporting:* Orsted publishes Annual Sustainability Reports that outline its goals, operational performance, investments, progress towards sustainability commitments, and information on risk management and societal benefits.
- *Access to information:* The company provides easy access to information about its operations, sustainability strategy and results, both on its website and in reports, which allows stakeholders to monitor progress and assess the effectiveness of Orsted's activities.

These examples are a good illustration of how Orsted operates in accordance with the concept of corporate entrepreneurship and the principles of sustainable development. The company takes specific actions to minimize its negative impact on the environment, engages in partnerships and dialogue, invests in technological innovations and conducts transparent reporting, which contributes to achieving sustainable business success and positive social impact.

These activities testify to Orsted's success in implementing corporate entrepreneurship in accordance with the principles of sustainable development. The company not only makes profits, but also contributes to environmental protection and the creation of a socially responsible business model.

During its operation, Orsted encountered a number of obstacles and challenges related to the implementation of corporate entrepreneurship in accordance with the principles of sustainable development. Here are some of those obstacles and how the company overcame them:

- *High investment costs:* One of the main barriers for Orsted was that investments in renewables were initially costly. The company had to face higher costs of building and maintaining renewable infrastructure compared to traditional energy sources. However, Orsted took a risk and invested in the development of offshore wind farms, using economic scale, technological advances and innovation to reduce energy production costs. Thanks to this, the company has achieved cost efficiency and competitiveness on the market.
- *Political and Regulatory Extraction:* Orsted has also encountered obstacles related to political and regulatory considerations. Numerous regulations regarding spatial planning, environmental protection, construction permits and power grid connections could significantly delay renewable energy development projects. The company has been active in working with governments and regulators to promote legislation that favors the development of renewable energy. Orsted also engaged in dialogue and social consultations to gain acceptance of local communities and minimize possible negative effects.
- *Change of organisational culture:* The transition from traditional fossil fuel based energy to renewable energy sources required a significant change of organisational

culture within Orsted. The company had to build knowledge and competencies related to new renewable technologies and change the ways of operating and approach to business. Orsted invested in employee training and development, introduced innovative organisational structures, and promoted creativity and flexibility to create an atmosphere conducive to corporate entrepreneurship. The company also engaged its employees through incentive programs and rewards for progress in the field of sustainable development.

- *The need to build trust and partnerships:* Orsted recognized that sustainable development requires cooperation and partnerships with various stakeholders. The company had to build public trust, both locally and globally, in its activities and goals. Orsted engaged in dialogue with NGOs, local communities, scientists and other enterprises to create partnerships and jointly solve problems related to sustainable development. The company consistently provided information and reports on its activities, transparency and accountability were key elements in building trust.

Through determination, innovation and adaptability, Orsted has overcome these obstacles and succeeded in implementing sustainable corporate entrepreneurship. Corporate entrepreneurship in the context of sustainable development is based on key determinants that are visible in Orsted's activities and strategy. Organisational values are the foundation as the company has a strong commitment to protecting the environment and creating a positive social impact. Their mission is to transform the energy system towards renewable energy sources.

Orsted sets ambitious goals related to the reduction of greenhouse gas emissions and increasing the share of renewable energy in the global energy mix. This supports innovation and technological advancement, which are necessary for corporate entrepreneurship in accordance with the principles of sustainable development. The company is a pioneer in the development of new technologies, such as more efficient wind turbines and energy storage technologies.

Partnerships and stakeholder engagement play a key role. Orsted establishes partnerships with governments, NGOs and local communities. Through dialogue, consultation and partnerships, diverse perspectives are taken into account, which helps to address the challenges of sustainable development.

Accountability and transparency are also important determinants. Orsted is transparent in reporting on its activities, goals and progress towards its sustainability commitments. The company engages in dialogue with stakeholders, which builds trust and legitimizes its activities.

These determinants combine to create a holistic corporate entrepreneurship strategy in the context of sustainable development for Orsted. Through investments in renewable energy sources, technological innovation, partnerships, sustainable supply

chain management and transparent reporting, the company achieves sustainable business success, while contributing to environmental protection and creating a positive social impact.

The company has become a global leader in the renewable energy industry, creating a positive impact on the environment and communities. Corporate sustainability and climate action are now global priorities driven by social activists, committed politicians and visionary entrepreneurs. In the future, these needs will continue to influence consumer preferences and loyalty. Faced with the growing threat of the global climate crisis, companies around the world are looking for more sustainable ways of doing business. They reflect on the long-term impact they have on the local environment, society and economy.

Sustainability in business is both a moral obligation and good business practice. Being guided by the principles of ecology is also becoming a competitive differentiator and is crucial for companies that want to stay on the market. Companies that integrate carbon reduction into their strategy have a better chance of long-term profitability and sustainability.

They are also more attractive to investors, who are increasingly directing their investments towards companies with a positive impact on the climate. While there may be some cost to transforming business models to meet the demands of science, the cost of inaction is much higher. According to Mads Nipper, CEO of Orsted, there is no long-term trade-off between sustainability and financial value creation. An example of this is the Orsted strategy, which effectively combines business goals with sustainable development goals, while creating financial value and generating a positive impact on the environment.

5. Conclusions

The development of corporate entrepreneurship in the context of sustainable development is the result of the interaction of many determinants. Organisational culture, leadership and innovation are key factors that affect a corporation's ability to conduct business in a sustainable manner. Research on the determinants of corporate entrepreneurship in the context of sustainable development is important for managing organisations and striving to achieve the goals of sustainable development on a global scale.

It is concluded that corporate entrepreneurship is the result of both internal and external determinants. In the context of sustainable development, these determinants become even more important. According to Freeman's research, cultural factors such as organisational values and business ethics can be critical to the development of corporate entrepreneurship.

In addition, social factors such as stakeholder engagement and social responsibility influence the willingness of corporations to undertake entrepreneurial activities that contribute to sustainable development. Weber's research also emphasizes the importance of institutional factors. For example, regulations and standards regarding sustainable development can stimulate corporate entrepreneurship by introducing incentives and incentives for corporations to take actions consistent with the requirements of sustainable development. In addition, technological drivers such as eco-innovation can be crucial to the development of corporate entrepreneurship, enabling corporations to create new products and services with a lower environmental impact.

Finally, economic factors such as profitability and competitiveness also influence corporate entrepreneurship. Daly's research suggests that corporations will be more likely to engage in sustainable entrepreneurial activities if they identify the economic benefits of these activities, such as cost reductions and operational efficiencies.

References:

- Albareda, L., Lozano, J.M., Ysa, T. 2007. Public policies on corporate social responsibility: The role of governments in Europe. *Journal of Business Ethics*, 74(4), 391-407.
- Burgelman, R.A. 2002. *Strategy is Destiny: How Strategy-Making Shapes a Company's Future*. Free Press.
- Burns, J.M. 1978. *Leadership*. Harper and Row.
- Carroll, A.B. 1979. A Three-Dimensional Conceptual Model of Corporate Social Performance. *Academy of Management Review*, 4(4), 497-505.
- Chesbrough, H. 2003. *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Harvard Business Review Press.
- Cooper, R.G. 2018. *Winning at New Products: Accelerating the Process from Idea to Launch*. Basic Books.
- Covin, J.G., Miles, M.P. 1999. Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice*, 23(3), 47-63.
- Daly, H.E. 1996. *Beyond growth: The economics of sustainable development*. Beacon Press.
- Donaldson, T., Preston, L.E. 1995. The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65-91.
- Edmondson, A.C. 1999. Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*.
- Elkington, J. 1997. *Cannibals with forks: The triple bottom line of 21st century business*. New Society Publishers.
- Freeman, R.E. 2010. *Strategic management: A stakeholder approach*. Cambridge University Press.
- Galbraith, J.R. 2008. *Designing Complex Organisations*. Basic Books.
- Gray, R., Adams, C., Owen, D. 2014. *Accountability, social responsibility and sustainability: Accounting for society and the environment*. Pearson Education.
- Hart, S.L. 1997. Beyond greening: Strategies for a sustainable world. *Harvard Business Review*, 75(1), 66-76.
- Hart, S.L., Milstein, M.B. 2003. Creating sustainable value. *Academy of Management Perspectives*, 17(2), 56-67.
- Hisrich, R.D., Peters, M.P. 2002. *Entrepreneurship: Starting, developing, and managing a*

- new enterprise. McGraw-Hill Education.
- Hisrich, R.D., Peters, M.P., Shepherd, D.A. 2016. *Entrepreneurship*. McGraw-Hill Education.
- Hitt, M.A., Ireland, R.D., Hoskisson, R.E. 2018. *Strategic management: concepts and cases: competitiveness and globalization*. Nelson Education.
- Hitt, M.A., Ireland, R.D., Camp, S.M. 2018. *Strategic Management: Concepts and Cases*. Cengage Learning.
- Hockerts, K. 2017. Sustainable entrepreneurship: Definition, concepts, typologies, and implications. In: *Research Handbook on Sustainable Entrepreneurship*, 3-22. Edward Elgar Publishing.
- Hoffman, A.J. 2015. *How culture shapes the climate change debate*. Stanford University Press.
- <https://orsted.com/>
- Ioannou, I. 2022. *Redefining Strategy in the Age of Sustainability and Social Responsibility*. SSRN Working Paper Series, London Business School.
- Jabbour, C.J.C., Santos, F.C.A., Nagano, M.S., Piani, P.F. 2016. Management tools and corporate sustainability performance. *International Journal of Production Research*, 54(1), 152-169.
- Klein, N. 2000. *No Logo: Taking Aim at the Brand Bullies*. Picador.
- Kotler, P., Armstrong, G. 2012. *Principles of marketing*. Pearson Education.
- Kuratko, D.F. 2017. *Entrepreneurship: Theory, process, practice*. Cengage Learning.
- Mintzberg, H. 1982. *Structure in Fives: Designing Effective Organisations*. Prentice Hall.
- Moneva, J.M., Ortas, E. 2010. Corporate environmental and financial performance: A multivariate approach. *Industrial Management and Data Systems*, 110(2), 193-210.
- Orlitzky, M., Schmidt, F.L., Rynes, S.L. 2003. Corporate social and financial performance: A meta-analysis. *Organisation Studies*, 24(3), 403-441.
- Porter, M.E., Kramer, M.R. 2006. Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12), 78-92.
- Russo, M.V., Fouts, P.A. 1997. A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534-559.
- Schaltegger, S., Lüdeke-Freund, F. 2013. Business cases for sustainability: A stakeholder theory perspective. *Corporate Social Responsibility and Environmental Management*, 20(4), 227-242.
- Schaltegger, S., Wagner, M. 2011. Sustainable entrepreneurship and sustainability innovation: Categories and interactions. *Business Strategy and the Environment*, 20(4), 222-237.
- Schaltegger, S., Wagner, M. 2011. Sustainable entrepreneurship and sustainability innovation: A review and research agenda. *Journal of Business Venturing*, 26(4), 329-346.
- Van Marrewijk, M., Werre, M. 2003. Multiple levels of corporate sustainability. *Journal of Business Ethics*, 44(2-3), 107-119.
- Weber, K. 2010. *Business and society: Corporate strategy, public policy, ethics*. McGraw-Hill Education.