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Sustainable Business Model Implementation in Polish Enterprises

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Abstract: In recent years, there has been a growing interest in sustainable business models. Through their development, companies can increase their presence in the global market, contributing to a more responsible use of its resources. Sustainable business model development plays a significant role in motivating companies to innovate towards sustainability and is a powerful driver of market competitiveness. This article aims to present the concepts and elements of sustainable business models in the context of literature research and to analyze their implementation in Polish companies by defining the scope of activities for the economy, environment, and society. The research included a comparative analysis of the academic literature on sustainable business models and an analysis of empirical research conducted on a nationwide sample of 231 Polish small, medium, and large enterprises operating across the country. A diagnostic survey method using a survey questionnaire was used. They were most concerned with the 'green economy' area, followed by the social area and those related to staff personal development. Companies of different sizes have integrated the dimensions of TBL differently, depending on their perception and interpretation of economic, social, and environmental activities. This integration level determines the strategies that companies adopt, appropriate to the objectives set and the resources available.

Keywords: sustainable business model; sustainable development; TBL; Polish enterprises

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1. Introduction

Sustainable business models are increasingly recognized as a crucial component of business management in the global marketplace [1]. These models have gained considerable popularity in theory and practice given the increasing competitive pressures, the rapidly changing situation in many industries and, accordingly, the need to find new ways to be present in the global marketplace [2]. Sustainable business models are not only important for enterprises, but also for not-for-profit organizations and social enterprises, as they can guarantee their survival. According to R. McGrath [3], the business model concept offers strategists an innovative way to consider the available options for action in an uncertain and rapidly changing environment. It has also been recognized that to remain competitive in the long term, companies should use multiple business models, as using just one may not ensure their future survival [4].

Although environmental and social issues have been of interest to researchers since the 1960s, there is no established theoretical basis in economics and management science, and there is a lack of clarity, conceptual consensus, and consistency in the use of the term "sustainable business models" [5]. There is also no agreement on the definition, categorization and boundaries of this concept [6]. However, the necessity to develop sustainable models is recognized because of their vital importance to businesses' sustainability. Research conducted by S. Schaltegger, G. Hansen, and F. Lüdek-Freund [7] has indicated that companies

that have implemented sustainable practices tended to perform better financially than companies that did not [7]. In addition, a literature review by M. D. T. De Jong, K.M. Harkink, and S. Barths [8] found that companies with sustainable practices had a lower capital cost and were characterized by a greater ability to attract and retain customers and employees. The literature also emphasized that the development of sustainable business models can have a positive impact on the competitiveness of international companies [9]. Research indicates that there are numerous business models, each of which may be sustainable or not. This is determined by the extent to which companies incorporate TBL activities into the strategy adopted [10].

The issue of sustainable business models has appeared many times in research conducted in recent years. The concept of Sustainable Development is gaining importance in the business world and its implementation in enterprise strategies is becoming more and more common, taking the form of sustainable business models. However, their research so far is limited in scope. The selection criterion for research is usually the territory in which the surveyed enterprises operate, the sector or industry in which they operate, the form of ownership, or the processes specific to the surveyed enterprises. An example of research determined by territorial scope is research on international enterprises [11]. An example of research limited to one sector or industry may be research on enterprises operating in the construction [12], energy [13], or telecommunications [14] industries. An example of research conducted using the form of enterprise ownership criterion is research on family enterprises [15]. Researchers of sustainable business models sometimes limit their research interests to selected processes specific to the studied enterprises. The aim of such research is to identify and categorize practices that fall within the area of a given process. An example of this may be the study of activities in supply chains in terms of their environmental, economic, and social sustainability in small- and medium-sized enterprises in Jordan [16].

A review of the research on sustainable business models shows a somewhat fragmented picture, serving as an inspiration for the authors to undertake more comprehensive research. The research conducted on a nationwide sample of enterprises operating in various sectors (production, trade, services) aims to create a more complete and holistic picture of the application of sustainable business models in one country. This perspective allows for the possibility of broader implications for education and business practice.

The research problem addressed in this paper is the analysis of sustainable development measures in 231 large, medium, and small Polish enterprises operating in the industrial, commercial, and service sectors, which will allow for the extent to which sustainable business models are used by the companies surveyed to be determined.

The article aims to present the concepts and elements of sustainable business models in the context of literature research and to analyze the development of sustainable business models in small, medium, and large enterprises operating throughout the country.

The article is structured in six parts. The first part is an introduction to the article. Part two presents the theoretical framework of the research, including sustainable business models with their dimensions—economic, social, and environmental. The TBL concept is also discussed. The third part describes the methodology, including the aim of the research and the research questions, the research tool, the research group, and the statistical methods used in the analysis of the results obtained. The fourth part presents and analyzes the research results. The fifth section presents a discussion of the results and their implications as well as research limitations. The sixth and last section presents conclusions and directions for future research.

2. Theoretical Framework

2.1. Sustainable Business Models in the Light of Theoretical and Empirical Research

There are numerous definitions of a sustainable business model in the literature on the subject. One of the first studies in this field was an article by Stubbs and Cocklin from 2008. According to these authors, an organization that implements a sustainable business model achieves its goal by generating social, environmental, and economic results [17].

Other authors [18,19] draw attention to the values that constitute the essence of a sustainable business model. In such an approach, a business model for sustainability helps in describing, analyzing, managing, and communicating (1) a company's sustainable value proposition to its customers, and all other stakeholders, (2) how it creates and delivers this value, (3) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries [7].

According to M. Geissdoerfer et al. [20], sustainable business models can be defined as models that, in the long term, include proactive management of generating value, both financial and non-financial, for various stakeholder groups.

In summary, a sustainable business model determines the long-term manner in which an enterprise operates and how it creates and captures value, expanding traditional business models by incorporating social and ecological aspects [7,21].

The concept of sustainable business models is increasingly popular and is now one of the main research topics undertaken in the academic literature on the sustainable organizations issue. Publications in this field appear at the intersection of various thematic areas, such as business models, innovations, sustainable development or digitalization [22]. The list of researchers addressing this issue includes P. Rana et al. [23], G. Jones [24], S. Schaltegger et al. [7], M. Wagner [25], M. Massaro et al. [26], B. Purvis, Y. Mao, and D. Robinson [27], A. Di Vaio et al. [28], J. Kneipp et al. [29], J. Gomes et al. [30], S. Schroedel [31], K. Kajtazi et al. [32], and S. Bafas et al. [33].

The importance of this can be observed by several journals that are entirely or largely devoted to it and analyze it in various contexts. Examples include journals such as Sustainability, Businesses, Journal of Business Research, Journal of Intellectual Capital, Meditari Accountancy Research, and Maritime Policy and Management.

A new business model requires work and time, and its introduction often involves high risk-taking and the need to use various tools, including the Internet of Things [34] and artificial intelligence (AI) [35]. This results from the desire to achieve a balance between the needs and aspirations of different generations, while considering the various social, environmental, and economic barriers and constraints [36]. Every business needs strategic resilience to survive. To survive, companies must develop sustainable organizational models encompassing business processes, operations, and competences. It is recognized that companies pursuing a sustainable business model must have strategic resilience to adapt to a constantly changing environment [37].

D. Olusola-Christwealth and I. Kiaušienė [1] conducted a meta-analysis of research that confirmed the importance of sustainable business models for enterprises. The research analyzed by them was mostly abstract and theoretical. Nevertheless, in the literature reviewed, the authors found concepts of sustainable business models, an examination of the elements of these models and presentations of empirical case studies. In turn, the results of empirical research by A. Rudnicka [38], allowed for the interpretation of sustainable business models as a systemic concept that offers the possibility to meet the current and future needs of all market participants. In her opinion, sustainable business models need to improve and adapt to the changing environment to fulfil their core function, i.e., making money for businesses while considering the necessary environmental and social needs. According to Z. Adiguzel [39], the sustainability management of an international company considers the impact of the cultural and social environment and the impact of the economy. Other authors, such as N. Bocken [40], outline the elements of a profit-making business model in their research and show how to achieve a competitive advantage by applying a specific business model. The concept of networks also appeared in articles, emphasizing the need to reassess the results of sustainable business model research [41,42]. According to this concept, analyses limited to the business model of individual companies fail to recognize this important feature, as many sustainability breakthroughs are the result of collaboration between different players and organizations [1].

N. Bocken [40] in her research on sustainable business models, focused on clarifying the role of cooperation and practical interaction between multiple stakeholder groups, in

which business plays a crucial role, and on empirically investigating the interrelationships between micro and macro entities. B. Ramdani et al. [43] also found that changing business models involves modifying a single element, changing multiple elements simultaneously, and/or changing the interaction between elements in four areas of innovation, namely value proposition, operational value, human capital, and financial value. The assessment of existing business models can increase creativity in the process of business model innovation, leading to a sustainable model that brings better economic, social, and environmental results [31].

2.2. Sustainable Business Model

Traditional businesses are created to produce profits, create value, meet stakeholder expectations, and satisfy customer needs. However, new environmental issues are currently emerging, such as climate change, human rights issues, income inequality, depletion of natural resources, and the like. Sustainable business models have the potential to act as drivers of innovation, resilience, and technological progress, as a sustainable business model perspective enables a holistic view of how business is conducted. As ideal types, these models should meet the following requirements [37]:

- In defining the organization's purpose, it should derive from the economic, environmental, and social aspects of sustainability;
- apply the Triple Bottom Line approach when measuring the results of actions taken;
- consider the needs of all stakeholders without giving priority to the expectations of shareholders;
- treat nature as a stakeholder;
- and promote environmental management from a company-wide perspective.

Adopting sustainable business models facilitates business survival, competitive advantage, and the achievement of business objectives. To fulfil their fundamental function of increasing wealth and creating value, sustainable business models need to be continuously improved and adapted to the company's changing environment.

To define the term sustainable business models, many researchers use the most recognized approach to sustainable development called the three-pillar concept—Triple Bottom Line (TBL) [44–46]. The concept was first used by J. Elkington (1994) in an article published in the California Management Review [46]. The idea of TBL is to assess an organization's commitment to economic, environmental, and social responsibility. A graphical representation of the three-pillar concept of sustainability is presented in Figure 1.

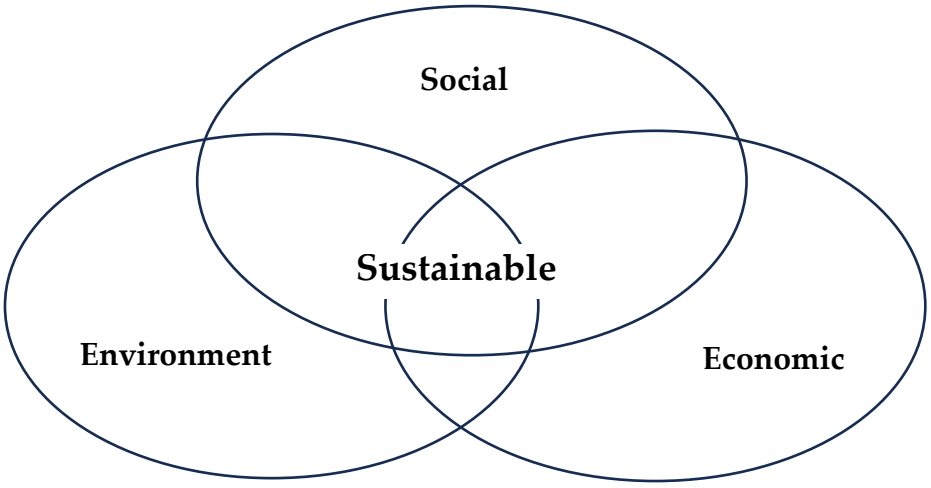

Figure 1. The three pillars of sustainable development: in search of conceptual origins. Source: [1].

The three-pillar concept of sustainability is commonly presented by three intersecting circles, with the concept of sustainability at its center. D. Dunphy [47] stated that for

companies to develop sustainable business models, they must engage in developing and protecting the society, environment, and economy in which they operate.

External pressure on companies to reduce their negative impact on the environment and contribute to sustainable value creation (i.e., value that benefits the environment and the company's external stakeholders) is increasing [48]. A fundamental principle of business sustainability is that companies should be concerned with value creation not only from an economic perspective but also from a social and environmental perspective [49]. Each dimension of TBL is a prerequisite for achieving sustainable development. However, if a company does not implement activities in the area of all three dimensions, it is not operating in a sustainable way [50]. As a result, the three dimensions of TBL interact, overlap and sometimes conflict with each other when a company conducts a variety of business activities [51].

2.2.1. Economic Dimension

A sustainable company should maximize its results and the economic dimension of TBL considers these [52,53]. In other words, the economic dimension encompasses the company's ability to grow sustainably through high financial results [46,54]. As indicated by H. Alhaddi [55], this dimension links the company's economic development to its contribution to the economy overall, as it focuses on the economic value provided by the organization to the surrounding system in a way that develops it and promotes its ability to meet the needs of future generations.

2.2.2. Social Dimension

A socially sustainable enterprise means one that adopts fair business practices concerning labor, human capital, and community, and considers the principles of social justice [56]. The social dimension relates to people and means that companies addressing issues of public good or social justice in their business practices [57] properly implement it [58]. Therefore, companies that consider human and social issues in their decision-making or strategic development contribute to more sustainable development. S. Nursimloo et al. [59], argued that this dimension 'concerns the implementation of activities that would benefit human capital and society'. By engaging in fair business and social practices, sustainability-oriented companies provide value to the local community in which they operate, to their employees, and society as a whole [55,60].

2.2.3. Environmental Dimension

This dimension includes the environmental footprint of business activities and refers to sustainable business practices that do not endanger environmental resources for future generations [52,53,58]. The main objective of this dimension is environmental protection [59], which means that to achieve sustainability in daily operations, companies have to face issues such as climate change, environmental degradation, resource conservation, and their ecological footprint [61].

TBL integrates these three dimensions into the company's principles and policies [43,62] by assigning equal weight to them [9,55]. The TBL concept can be understood as a framework for managing sustainability [61,63,64] by integrating economic, social, and environmental dimensions [65,66]. Furthermore, through a multidimensional approach, TBL integrates [67] the three key dimensions of business sustainability.

3. Materials and Research Methods

3.1. Research Issues

The research issue addressed in this article is to examine sustainability measures in small, medium, and large Polish enterprises operating in the industrial, commercial, and service sectors. It will allow us to determine the extent of sustainable business models used by companies.

The conceptualization of sustainable business models was based on the assertion that, in the long term, they involve proactively managing value creation, both financial and non-financial, for the different stakeholder groups and providing opportunities to meet the current and future needs of all market participants. The dimensions of sustainable development expressed by the TBL concept—economic, social, and environmental—were taken as the research frames. The following questions were posed in the research:

- Do the surveyed companies use sustainable business models?
- Does the size of the company influence the perception of the correlates of sustainable business models?

3.2. Research Tool

The survey used a diagnostic survey method with an online questionnaire. This methodology allowed for a representative sample of enterprises, increasing the reliability and generalizability of the results. In preparing the survey questionnaire, inspiration was drawn from the tool constructed by M. Fryczyńska, H. Kinowska, and A. Lulewicz-Sas [68]. The questionnaire consisted of four parts:

1. A set of questions related to the economic aspect of sustainable development—7 questions
2. A set of questions related to the environmental aspect of sustainable development—7 questions
3. A set of questions related to the social aspect of sustainable development—7 questions
4. A set of questions about the company and the demographic characteristics of the respondents (company size, industry, respondent's position).

Table 1 presents, in summary form, the content of the individual items that relate to the activities undertaken in the company.

Table 1. The company's areas of activity included in the questionnaire.

Item Number	Contents
1	Having sufficient financial resources and human capital at the company's disposal to initiate and promote actions for sustainability
2	Financial rewards for employees' environmental behavior
3	Using environmentally friendly technologies when undertaking new investments
4	Caring for the employee to increase employee loyalty and productivity and company profit
5	Linking employee rewards and incentives to sustainability achievements
6	Encouraging employees to seek innovative solutions to make the company more sustainable and environmentally friendly
7	Company's willingness to bear the cost of additional environmental training requested by employees
8	Willingness to take action on behalf of employees with disabilities
9	Providing opportunities for employees to develop their potential to fulfil the need for achievement
10	Encouraging employees to participate in decision-making by sharing knowledge, experience and creativity
11	Providing employees, regardless of gender, age, religion and nationality, with fair salaries and opportunities for additional benefits
12	Applying recruitment practices that give equal opportunities to all qualified candidates
13	Providing employees with a working environment conducive to their well-being and development
14	Promoting employee diversity
15	Candidates' pro-environmental attitude as one of the criteria for staff recruitment
16	Pro-environmental attitude as one of the criteria for evaluating employees
17	Setting employees goals related to environmental protection
18	Subsidies for employees using public transport to commute to work
19	Replacing withdrawn cars with more ecological ones (hybrid, electric)
20	Addressing issues that promote environmental values during employee training
21	Monitoring of employees' pro-environmental behavior in the workplace

Source: Author's own compilation based on [67].

The questionnaire used a seven-point Likert scale, the extremes of the scale being "definitely no" (1) and "definitely yes" (7). The internal consistency of the questionnaire was assessed using Cronbach's alpha coefficient, which was 0.97.

3.3. Research Sample

The questionnaire was concerned with sustainable business models used by enterprises (researched objects). Therefore, it was assumed that the respondents should be people occupying positions within the company structure that provide access to such information. The following individuals were considered: chairman, board member, director, manager, and HR manager. The research was conducted on a sample of 231 different-sized enterprises (Table 2). The sample was obtained commercially, by the specialist research agency Nationwide Research Panel Ariadna, which surveyed a nationwide sample of businesses in late 2022/2023.

Table 2. Sample characteristics.

Company Size	Number	Percentage
small	84	36.36
medium	87	37.66
large	60	25.98

Source: Author's own compilation.

3.4. Analysis Procedure

An exploratory factor analysis was used to answer the research questions formulated, which identified latent variables representing hidden patterns and relationships in the data. Exploratory factor analysis using the maximum-likelihood method with varimax rotation and imposed number of factors was conducted on 21 items. It was preceded by the Kaiser–Meyer–Olkin (KMO) test. Based on this, the overall measure of sampling adequacy (MSA) was found to be 0.94 and the KMO for individual items to be between 0.89 and 0.97. Based on Bartlett's test, the correlation matrix was determined not to be an identity matrix ($p < 0.05$), making the data suitable for factor analysis.

In the first step, the factor analysis was conducted with an imposed number of one factor, assuming that there was a univariate model that would allow a high level of all items, which would be equivalent to achieving an equilibrium between them.

The analysis conducted on the univariate model showed that the percentage of explained variance was far too low to consider the model adequate for the relationship under study. The percentage of explained variance by a single factor in each business category is presented in Table 3.

Table 3. Percentage of variance explained by a single factor and chi-square test value for a single-factor solution.

Companies	Var_p	Var_c
	Single Factor	
all companies	50	50
small	43	43
medium	54	54
large	54	54

Var_p—percentage of total variance explained by individual factors. Var_c—cumulative percentage of explained variance. Source: Author's own compilation.

As the percentage of explained variance for the entire surveyed group of companies and for each of the subgroups mentioned appeared to be small, a scatter plot analysis was conducted in the next step, and the Kaiser criterion was used for the entire surveyed group. They indicated the validity of a two- or three-factor solution (Table 4). Also, the chi-squared test value (Table 5) indicates a better fit of such models to the data.

Table 4. Percentage of explained variance by individual factors for the two- and three-factor solution in all companies.

Percentage of Explained Variance	Two-Factor Solution		Three-Factor Solution		
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 3
Var_p	37	26	37	21	8
Var_c	37	63	37	58	66

Source: Author's own compilation.

Table 5. The chi-squared test value for the one-, two- and three-factor solution.

Factors Number	Chi-Square
1	1238.3619
2	498.7057
3	407.6640

Source: Author's own compilation.

As the three-factor solution was characterized by a higher percentage of explained variance and a lower chi-squared test value (*p*-value statistically significant), therefore the three-factor solution was also used in further analyses relating to individual company categories. Depending on the company size, it allowed for 64 to 71% of the total variance to be explained (Table 6).

Table 6. Percentage of explained variance by individual factors for the three-factor solution in different-sized companies.

Company Size	Var_p			Var_c		
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
small	37	24	3	37	61	64
medium	38	17	15	38	55	71
large	36	22	12	36	58	70

Source: Author's own compilation.

All analyses were conducted using the psych package.

4. Research Results

The factors distinguished throughout the surveyed group of companies are presented in Table 7.

Factor 1 comprised 11 items that were used to diagnose the companies' activities in the economic (items 2; 3; 4; 6; 7) and environmental (16; 17; 18; 19; 20 and 21) dimensions. Factor 2 consisted of 8 items classified in the questionnaire as economic (1; 5), social (10; 11; 12; 13; 14), and environmental (15) dimensions. Factor 3 consisted of two items (8; 9) originally assigned to the social dimension.

Also, concerning the different categories of companies (small, medium, large), three factors were identified. However, after analyzing them, it became apparent that item 8 was not classified under any of the factors in small companies due to its very low loading. Therefore, further analysis was already conducted without this item, which further increased the percentage of explained variance to 0.65, 0.72, and 0.71, respectively. Moreover, each variable was strongly correlated with only one factor. The factor loads for the three factors after the removal of item 8 are presented in Table 8.

Table 7. Factor loadings in exploratory factor analysis with three factors, after applying varimax rotation for the entire study group.

Item	Factor 1	Factor 2	Factor 3
1		0.44	
2	0.81		
3	0.86		
4	0.73		
5		0.57	
6	0.76		
7	0.75		
8			0.52
9			0.72
10		0.55	
11		0.83	
12		0.79	
13		0.72	
14		0.59	
15		0.60	
16	0.86		
17	0.88		
18	0.70		
19	0.75		
20	0.80		
21	0.77		

Source: Author's own compilation.

Table 8. Factor loadings in exploratory factor analysis with a three-factor approach, after applying varimax rotation, for individual groups of companies.

Item	Factor 1			Factor 2			Factor 3		
	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
1				0.48	0.49				0.62
2	0.89	0.69	0.84						
3	0.87	0.88	0.82						
4	0.68	0.79	0.72						
5		0.69		0.67		0.50			
6	0.74	0.78	0.76						
7	0.74	0.76	0.76						
9				0.76		0.61		0.89	
10				0.79				0.59	0.68
11				0.73	0.98	0.67			
12				0.69	0.81	0.85			
13				0.90	0.62	0.73			
14				0.50	0.53				0.65
15		0.58		0.56		0.73			
16	0.87	0.88	0.81						
17	0.90	0.90	0.83						
18	0.65	0.70	0.63						
19	0.82	0.63	0.78						
20	0.87	0.78	0.76						
21	0.85	0.64	0.83						

Source: Author's own compilation.

After removing item 8 in the small business group, factor 1 combined 11 items from the economic (2; 3; 4; 6; 7) and environmental (16–21) dimensions. Factor 2 consisted of nine items, including six from the social dimension (9–14), two from the economic dimension (1; 5), and one from the environmental dimension (15). Factor 3 was not identified in this group.

In the group of medium-sized enterprises, thirteen items from the economic (2–7) and environmental (15–21) dimensions were classified under the first factor. Factor 2 included five items, four from the social dimension (11–14), and one from the economic dimension (1), while factor 3 consisted of two items from the social dimension (9–10).

Factor 1 for large companies combined eleven items, including five from the economic (2–4; 6–7) and six from the environmental dimension (16–21). Factor 2 combined six items, four from the social dimension (9; 11–13; 15), and one each from the economic (5) and environmental (15) dimensions. Factor 3 contained three items including two from the social dimension (10; 14) and one from the economic dimension (1).

5. Discussion and Implications

5.1. Results Discussion

The surveyed companies integrated TBL dimensions in varying manners, depending on the perception and interpretation of economic, social, and environmental activities. In small businesses, activities with an economic and environmental dimension are seen as one large activity category. The second can be described as social in a broad sense. In medium-sized and large companies, alongside the social dimension, there is also an aspect that is more oriented towards the employee as a human being, with his or her specific needs. This aspect can be described as psychological. It is present in both categories of companies, although partly differently perceived.

One of the elements of sustainable business models is sustainable human resource management. Research on this topic was conducted by M. Fryczyńska et al. [68], who focused on connecting individual dimensions (economic, social, environmental, ethical) of sustainable human resources management. The authors found that the economic, social, and ethical dimensions form a whole, while the environmental one is perceived as separate. This is partially inconsistent with the results of the presented research, in which individual dimensions co-occurred within the identified factors. However, the comparison of results has a limited scope due to the differences in the research sample and the distinguished dimensions of sustainability.

The results of the conducted research indicate that all surveyed enterprises use sustainable business models, but those models are slightly differently structured. Similar conclusions with regard to two categories of enterprises (small- and medium-sized enterprises) were reached by the authors of other studies, conducted on a sample of 100 small- and medium-sized enterprises operating in the Silesian Voivodeship in Poland [69]. However, different research methodology applied in the research did not allow for a direct comparison of the importance of individual dimensions of sustainable development. The research presented in this article focused on the (inter-)connections and ways of integrating individual dimensions, while the mentioned authors focused on determining the degree of their implementation in enterprises.

With regard to large enterprises, the presented research can be compared with research conducted on a sample of the 30 largest companies from the Warsaw Stock Exchange—the WIG 30 index [70]. Using the content analysis method and the Likert scale, the scope and quality of the information provided in the reports were examined. These studies also revealed the application of sustainable business models by companies. The reporting methods reflect the differences in practiced sustainable business models. Also, in the case of this study, due to the different methodologies, a more detailed comparison of the results was not possible.

Other research in Poland has also indicated only partial sustainability of companies' activities. According to research conducted in 2022 on a nationwide sample of large companies, there is a gap between declarations (90% of researched companies) to conduct Environment, Social, and Governance (ESG) activities and their actual implementation (67%). Only 48% of companies have translated the objectives of the sustainability strategy into individual company areas. The survey results also indicate a disproportion in companies' approaches to various aspects of ESG. During the period covered by the survey,

27% of companies did not include objectives related to tackling environmental change in their strategy for the next 2–3 years, compared to only 13% for financial objectives and 16% for corporate governance. This may indicate a partial lack of consistency and coherence in planned activities [71]. This is also confirmed by research conducted on a sample of companies of different sizes operating in the Podlaskie Voivodeship (Poland) [72].

The results obtained in the presented research are partially consistent with the results of other studies related to sustainable business models applied in Polish enterprises. However, unlike most of them, this research focused on the structure of the business models used and not the degree of implementation of their individual dimensions. Thus, examining the structure of sustainable business models fills the existing research gap in the Polish literature on the subject. The study of sustainable business models has implications both for education and for business.

5.2. Academic Implications

Knowledge about sustainable development and business ethics is important for a student's future professional career, which proves the importance of education for sustainable development. Meanwhile, there is a lack of effective implementation of the principles of sustainable development in teaching processes [73]. Therefore, higher education institutions should be expected to systematize the existing knowledge about sustainable development and include its elements in their educational processes. The first step is to realize that there exists a natural hierarchy between nature, society, and the economy. As such, it requires an appropriate hierarchy of moral, social, and economic values in the management of sustainable organizations. This indicated the necessity to include axiological content in educational programs. The next step is to select appropriate teaching methods. This is what constructivist pedagogy offers, referring to activating methods that shape the ability to apply knowledge in practice [74]. For this purpose, the educational potential of business games and learning via online platforms can be used [75,76]; hence, taking advantage of the role of digitalization in creating future managers' attitudes towards sustainable development.

5.3. Managerial Implications

Effective performance of managerial roles in organizations using sustainable business models requires knowledge of the level of advancement in sustainable development practices and the ability to implement and monitor them. This means the need to develop appropriate methods, tools, and procedures to continuously obtain information on the maturity of the model used. One such tool may be the questionnaire used in the present research.

Running a business based on a sustainable model requires specific intellectual capital from managers. This applies, in particular, to green intellectual capital, which has a positive impact on sustainable business results [77].

5.4. Corporate Policy Recommendations

Since the application of sustainable business models offers companies a competitive advantage, it is necessary to introduce the principles of sustainable development into the company's strategy. This requires that the company sets the principles leading to achieving the goal of a sustainable organization. The research conducted among small, medium, and large enterprises offers guidance on what direction to pursue, what goals to set and what tools to use to achieve them. Digital transformation has turned out to be helpful in this respect, as it has a positive impact on the innovation capabilities of enterprises thus indirectly contributing to their sustainable development [78].

5.5. Research Limitations

The research conducted has certain limitations. Firstly, there is the geographical scope limitation as the survey focuses on enterprises operating in Poland. Secondly, the survey

method is based on the subjective responses of respondents. Despite efforts to ensure the sample is representative, not all sectors of the economy were equally represented in the survey, which may affect the picture of the implementation of sustainable development principles in Polish enterprises. Another limitation is the size of the research sample. This limits the possibility of generalizing the results to all small, medium, and large enterprises operating in Poland and other countries with different economic and social conditions.

6. Conclusions and Directions for Future Research

The TBL model turned out to be useful for the empirical verification of the type and effectiveness of enterprise activities undertaken for sustainable development. It allowed for both the diagnosis of the level of implementation of individual practices in the area of each TBL dimension and the creation of business models on its basis that facilitate the implementation of sustainable development goals.

The TBL model that was applied to Polish enterprises allowed for the distinguishing of the three factors into which their activities were grouped. Factor 1 could generally be called "green economy", because all activities concerned, to a greater or lesser extent, environmental issues while often considering economic calculation in their pursuit. Factor 2 had a mainly social dimension, while considering the financial aspect of such activities. Factor 3 concerned the employee's ability to support personal development of the employee.

Differences were found in the implementation of sustainable business models in small, medium, and large Polish enterprises. Those differences concerned the methods of integrating the individual dimensions of sustainable development. In small enterprises, there were two factors, and in medium-sized and large enterprises—three. Moreover, in the group of large enterprises, the presence of an economic dimension was observed in each of the three factors, unlike in medium-sized enterprises, where it occurred in two factors. This indicates greater integration of this dimension in large enterprises compared to medium-sized enterprises.

Sustainable business models are researched in different contexts [79]. The predominant trend in this research relates to the environmental aspect of sustainable development [7,80]. However, there is a notable lack of in-depth research on other aspects of TBL. There have also been no attempts to integrate the sustainable business model with the sphere of social innovation, which remains largely separate [81,82]. Combining these fields can lead to the emergence of new conceptualizations of business models for sustainability and the discovery of unique ways to innovate business model components. This creates the prospect of further research in this area. There is also a growing recognition that new forms of business are needed, moving away from the paradigm that assumes infinite growth [83,84]. Responsible managers are challenged to create more innovative business models with greater social and environmental sustainability benefits. Analysis of companies that are leaders in the introduction of innovative sustainability practices and with high social performance would help find ways to implement sustainable business models and, as such, should be an area for further research.

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References

1. Olusola-Christwealth, D.; Kiaušienė, I. The Development of Sustainable Business Models: Concept, Elements and Importance. *Vilnius Univ. Proc.* **2023**, *37*, 75–81. [CrossRef]
2. Massa, L.; Tucci, C.L.; Afuah, A. A Critical Assessment of Business Model Research. *Acad. Manag. Ann.* **2017**, *11*, 73–104. [CrossRef]
3. McGrath, R.G. Business Models: A Discovery Driven Approach. *Long Range Plan.* **2010**, *43*, 247–261. [CrossRef]
4. Andries, P.; Debackere, K.; van Looy, B. Simultaneous Experimentation as a Learning Strategy: Business Model Development Under Uncertainty. *Strateg. Entrep.* **2013**, *7*, 288–310. [CrossRef]
5. Bocken, N.; Short, S.W. Unsustainable business models—Recognising and resolving institutionalised social and environmental harm. *J. Clean. Prod.* **2021**, *312*, 127828. [CrossRef]
6. Nosratabadi, S.; Mosavi, A.; Shamshirband, S.; Kazimieras Zavadskas, E.; Rakotonirainy, A.; Chau, K.W. Sustainable Business Models: A Review. *Sustainability* **2019**, *11*, 1663. [CrossRef]
7. Schaltegger, S.; Hansen, E.G.; Lüdeke-Freund, F. Business Models for Sustainability. *Organ. Environ.* **2016**, *29*, 3–10. [CrossRef]
8. De Jong, M.D.T.; Harkink, K.M.; Barth, S. Making Green Stuff? Effects of Corporate Greenwashing on Consumers. *J. Bus. Technol. Commun.* **2018**, *32*, 77–112. [CrossRef] [PubMed]
9. Jolink, A.; Niesten, E. Sustainable Development and Business Models of Entrepreneurs in the Organic Food Industry. *Bus. Strat. Environ.* **2015**, *24*, 386–401. [CrossRef]
10. Zioło, M.; Bąk, I.; Spoz, A. Incorporating ESG Risk in Companies' Business Models: State of Research and Energy Sector Case Studies. *Energies* **2023**, *16*, 1809. [CrossRef]
11. Ciulli, F.; Kolk, A. International Business, digital technologies and sustainable development: Connecting the dots. *J. World Bus.* **2023**, *58*, 101445. [CrossRef]
12. Del Rosario, P.; Traverso, M. Towards Sustainable Roads: A Systematic Review of Triple-Bottom-Line-Based Assessment Methods. *Sustainability* **2023**, *15*, 15654. [CrossRef]
13. Effendi, P.L.; Wirjodirdjo, B.; Rosdaniah, S.I. A Strategic Framework for Sustainable Business Model of Renewable Energy Services. *Rev. De Gest. Soc. E Ambient.* **2024**, *18*, e06219. [CrossRef]
14. Ochuba, N.A.; Olutimehin, D.O.; Odunaiya, O.G.; Soyombo, O.T. Sustainable Business Models in Satellite Telecommunications. *Eng. Sci. Technol. J.* **2024**, *5*, 1047–1059. [CrossRef]
15. Borre, J.R.; Romero, G.C.; Padilla, D.M. Family business: A systematic review framed in the Sustainable Development Model. *Procedia Comput. Sci.* **2022**, *210*, 345–350. [CrossRef]
16. Yosef, F.A.; Jum'a, L.; Alatoom, M. Identifying and Categorizing Sustainable Supply Chain Practices Based on Triple Bottom Line Dimensions: Evaluation of Practice Implementation in the Cement Industry. *Sustainability* **2023**, *15*, 7323. [CrossRef]
17. Stubbs, W.; Cocklin, C. Conceptualizing a "Sustainability Business Model". *Organ. Environ.* **2008**, *21*, 103–127. [CrossRef]
18. Boons, F.; Lüdeke-Freund, F. Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *J. Clean. Prod.* **2013**, *45*, 9–19. [CrossRef]
19. Lüdeke-Freund, F.; Carroux, S.; Joyce, A.; Massa, L.; Breuer, H. The sustainable business model pattern taxonomy—45 patterns to support sustainability-oriented business model innovation. *Sustain. Prod. Consum.* **2018**, *15*, 145–162. [CrossRef]
20. Geissdoerfer, M.; Vladimirova, D.; Evans, S. Sustainable business model innovation: A review. *J. Clean. Prod.* **2018**, *198*, 401–416. [CrossRef]
21. Chesbrough, H. Business Model Innovation: Opportunities and Barriers. *Long Range Plan.* **2010**, *43*, 354–363. [CrossRef]
22. Szumniak-Samolej, J. Zrównoważone modele biznesowe-charakterystyka, kryteria, innowacje. *e-Mentor* **2022**, *93*, 37–45. [CrossRef]
23. Rana, P.; Short, S.W.; Evans, S. Practice Review of Business Models for Sustainability. In *Value Networks in Manufacturing: Sustainability and Performance Excellence*; Liyanage, J.P., Uusitalo, T., Eds.; Springer: Cham, Switzerland, 2017; pp. 111–122.
24. Jones, G. *Organizational Theory, Design, and Change, Global Edition*, 7th ed.; Pearson: Harlow, UK, 2012; ISBN 9780273765615.
25. Wagner, M. Determinants of acquisition value: The role of target and acquirer characteristics. *Int. J. Technol. Manag.* **2013**, *62*, 56–74. [CrossRef]
26. Massaro, M.; Dumay, J.; Garlatti, A.; Dal Mas, F. Practitioners' views on intellectual capital and sustainability. *J. Intellect. Cap.* **2018**, *19*, 367–386. [CrossRef]
27. Purvis, B.; Mao, Y.; Robinson, D. Three pillars of sustainability: In search of conceptual origins. *Sustain. Sci.* **2019**, *14*, 681–695. [CrossRef]
28. Di Vaio, A.; Syriopoulos, T.; Alvino, F.; Palladino, R. "Integrated thinking and reporting" towards sustainable business models: A concise bibliometric analysis. *Meditari Account. Res.* **2021**, *29*, 691–719. [CrossRef]
29. Kneipp, J.M.; Gomes, C.M.; Kruglianskas, I.; Motke, F.D.; Frizzo, K. Sustainable innovation practices and the degree of innovation of business models in Brazilian industrial companies. *World J. Sci. Technol. Sustain. Dev.* **2021**, *18*, 221–238. [CrossRef]
30. Gomes, J.G.C.; Okano, M.T.; Guerra, R.S.; Cordeiro, D.d.S.; Santos, H.C.L.d.; Fernandes, M.E. Analysis of Sustainable Business Models: Exploratory Study in Two Brazilian Logistics Companies. *Sustainability* **2022**, *14*, 694. [CrossRef]
31. Schroedel, S. The Sustainable Business Model Database: 92 Patterns That Enable Sustainability in Business Model Innovation. *Sustainability* **2023**, *15*, 8081. [CrossRef]

32. Kajtazi, K.; Rexhepi, G.; Sharif, A.; Ozturk, I. Business model innovation and its impact on corporate sustainability. *J. Bus. Res.* **2023**, *166*, 114082. [CrossRef]
33. Bafas, S.A.; Alexandropoulou, A.P.; Fousteris, A.E.; Didaskalou, E.A.; Georgakellos, D.A. Sustainable Development and Business Strategies: An Exploratory Study of Greek Businesses. *Businesses* **2023**, *3*, 441–459. [CrossRef]
34. De Villiers, C.; Kuruppu, S.; Dissanayake, D. A (new) role for business—Promoting the United Nations' Sustainable Development Goals through the internet-of-things and blockchain technology. *J. Bus. Res.* **2021**, *131*, 598–609. [CrossRef]
35. Di Vaio, A.; Palladino, R.; Hassan, R.; Escobar, O. Artificial intelligence and business models in the sustainable development goals perspective: A systematic literature review. *J. Bus. Res.* **2020**, *121*, 283–314. [CrossRef]
36. Trusko, B.; Friedman, L.; Varma, V. Sustainability in a World of Innovation. *Int. J. Innov. Sci.* **2012**, *4*, i. [CrossRef]
37. Lozano, R.; Muñoz-Torres, M.J. Typologies of Sustainable Business. In *Decent Work and Economic Growth*; Leal Filho, W., Azul, A.M., Brandli, L., Özuyar, P.G., Wall, T., Eds.; Springer International Publishing: Cham, Switzerland, 2020; pp. 1–12, ISBN 978-3-319-71058-7.
38. Rudnicka, A. Understanding Sustainable Business Models. *J. Posit. Manag.* **2017**, *7*, 52–60. [CrossRef]
39. Adiguzel, Z. Competitiveness of International Business. In *Handbook of Research on Decision-Making Techniques in Financial Marketing*; Dinçer, H., Yüksel, S., Eds.; Business Science Reference: Hershey, PA, USA, 2020; pp. 68–91. ISBN 9781799825593.
40. Bocken, N. Sustainable Business Models. In *Decent Work and Economic Growth*; Leal Filho, W., Azul, A.M., Brandli, L., Lange Salvia, A., Wall, T., Eds.; Springer International Publishing: Cham, Switzerland, 2021; pp. 963–975. ISBN 978-3-319-95866-8.
41. Rossignoli, F.; Lionzo, A. Network impact on business models for sustainability: Case study in the energy sector. *J. Clean. Prod.* **2018**, *182*, 694–704. [CrossRef]
42. Dreyer, B.; Lüdeke-Freund, F.; Hamann, R.; Faccer, K. Upsides and downsides of the sharing economy: Collaborative consumption business models' stakeholder value impacts and their relationship to context. *Technol. Forecast. Soc. Change* **2017**, *125*, 87–104. [CrossRef]
43. Ramdani, B.; Binsaif, A.; Boukrami, E. Business model innovation: A review and research agenda. *New Engl. J. Entrep.* **2019**, *22*, 89–108. [CrossRef]
44. Lüdeke-Freund, F. Towards a conceptual framework of business models for sustainability. In Proceedings of the Knowledge Collaboration & Learning for Sustainable Innovation, ERSCP-EMSU Conference, Delft, The Netherlands, 25–29 October 2010; pp. 1–28.
45. Jonker, J.; Krukowska, M. Transformacja w kierunku zrównoważonego rozwoju: Siedem zasad koniecznych do wprowadzenia "zielonej gospodarki"–wkład do przygotowań do Rio +20 (Konferencji Organizacji Narodów Zjednoczonych na rzecz Zrównoważonego Rozwoju) w 2012 roku. *Manag. Bus. Adm.* **2012**, *20*, 92–106. [CrossRef]
46. Bocken, N.; Short, S.W.; Rana, P.; Evans, S. A literature and practice review to develop sustainable business model archetypes. *J. Clean. Prod.* **2014**, *65*, 42–56. [CrossRef]
47. Dunphy, D. Chapter 1 Conceptualizing Sustainability: The Business Opportunity. In *Business & Sustainability: Concepts, Strategies and Changes*; Eweje, G., Perry, M., Eds.; Emerald: Bingley, UK, 2012; pp. 3–24. ISBN 978-1-78052-438-2.
48. Schaltegger, S.; Hörisch, J.; Freeman, R.E. Business Cases for Sustainability: A Stakeholder Theory Perspective. *Organ. Environ.* **2019**, *32*, 191–212. [CrossRef]
49. Lozano, R. A Holistic Perspective on Corporate Sustainability Drivers. *Corp. Soc. Responsib. Environ. Manag.* **2015**, *22*, 32–44. [CrossRef]
50. Evans, S.; Vladimirova, D.; Holgado, M.; van Fossen, K.; Yang, M.; Silva, E.A.; Barlow, C.Y. Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. *Bus. Strat. Environ.* **2017**, *26*, 597–608. [CrossRef]
51. Andersson, S.; Svensson, G.; Molina-Castillo, F.-J.; Otero-Neira, C.; Lindgren, J.; Karlsson, N.P.E.; Laurell, H. Sustainable development—Direct and indirect effects between economic, social, and environmental dimensions in business practices. *Corp. Soc. Responsib. Environ. Manag.* **2022**, *29*, 1158–1172. [CrossRef]
52. Elkington, J. Accounting for the Triple Bottom Line. *Meas. Bus. Excell.* **1998**, *2*, 18–22. [CrossRef]
53. Carter, C.R.; Easton, L.P. Sustainable supply chain management: Evolution and future directions. *Int. J. Phys. Distrib. Logist. Manag.* **2011**, *41*, 46–62. [CrossRef]
54. Carter, C.R.; Rogers, D.S. A framework of sustainable supply chain management: Moving toward new theory. *Int. J. Phys. Distrib. Logist. Manag.* **2008**, *38*, 360–387. [CrossRef]
55. Alhaddi, H. Triple Bottom Line and Sustainability: A Literature Review. *Bus. Manag. Stud.* **2015**, *1*, 6–10. [CrossRef]
56. Elkington, J.; John, E. *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*; Pbk. ed.; Capstone: Oxford, UK, 1997; ISBN 1-900961-27-X.
57. Elkington, J. Enter the Triple Bottom Line. In *The Triple Bottom Line: Does It All Add Up? Assessing the Sustainability of Business and CSR*; Henriques, A., Richardson, J., Eds.; Earthscan: London, UK, 2004; pp. 1–16. ISBN 9781849773348.
58. Amos, O.A.; Uniamikogbo, E. Sustainability and triple bottom line: Anoverview of two interrelated concepts. *Igbinedion Univ. J. Account.* **2016**, *2*, 88–126.
59. Nursimloo, S.; Ramdhony, D.; Mooneeapen, O. Influence of board characteristics on TBL reporting. *Corp. Gov.* **2020**, *20*, 765–780. [CrossRef]

60. Farooq, Q.; Fu, P.; Liu, X.; Hao, Y. Basics of macro to microlevel corporate social responsibility and advancement in triple bottom line theory. *Corp. Soc. Responsib. Environ. Manag.* **2021**, *28*, 969–979. [CrossRef]
61. Goel, P. Triple Bottom Line Reporting: An Analytical Approach for Corporate Sustainability. *J. Financ. Account. Manag.* **2010**, *1*, 27–42.
62. Rodríguez, R.; Svensson, G.; Otero-Neira, C. Future direction of sustainable development in private hospitals: General similarities and specific differences. *J. Bus. Ind. Mark.* **2019**, *35*, 537–550. [CrossRef]
63. Rogers, K.; Hudson, B. The Triple Bottom Line: The Synergies of Transformative Perceptionsand Practices for Sustainability. *OD Pract.* **2011**, *43*, 3–9.
64. Hubbard, G. Measuring organizational performance: Beyond the triple bottom line. *Bus. Strat. Environ.* **2009**, *18*, 177–191. [CrossRef]
65. Tseng, M.-L.; Chang, C.-H.; Lin, C.-W.R.; Wu, K.-J.; Chen, Q.; Xia, L.; Xue, B. Future trends and guidance for the triple bottom line and sustainability: A data driven bibliometric analysis. *Environ. Sci. Pollut. Res. Int.* **2020**, *27*, 33543–33567. [CrossRef] [PubMed]
66. Gao, J.; Bansal, P. Instrumental and Integrative Logics in Business Sustainability. *J. Bus. Ethics* **2013**, *112*, 241–255. [CrossRef]
67. Svensson, G.; Ferro, C.; Høgevold, N.; Padin, C.; Carlos Sosa Varela, J.; Sarstedt, M. Framing the triple bottom line approach: Direct and mediation effects between economic, social and environmental elements. *J. Clean. Prod.* **2018**, *197*, 972–991. [CrossRef]
68. Fryczyńska, M.; Kinowska, H.; Lulewicz-Sas, A. Wymiary zrównoważonego zarządzania zasobami ludzkimi. *Przegląd Organ.* **2022**, *6*, 29–37. [CrossRef]
69. Lemańska-Majdzik, A.; Okręglicka, K. Sustainable Development of Small and Medium Enterprises in Poland Implementation in the Multi-Dimensional Approach. *Zesz. Nauk. Wyższej Szkoły Humanit. Zarządzanie* **2023**, *24*, 27–41. [CrossRef]
70. Bek-Gaik, B.; Surowiec, A. Sustainable Business Models in Non-Financial Reporting in Polish Practice. *Eur. Res. Stud. J.* **2023**, *XXVI*, 1002–1024. [CrossRef]
71. Olak, R. Badanie EY: Polski biznes wciąż na drodze do zrównoważonego rozwoju. 2022. Available online: https://www.ey.com/pl_pl/news/2022/05/ey-biznes-zrownowazony-rozwoj (accessed on 22 May 2024).
72. Mazur, B.; Walczyna, A. Bridging Sustainable Human Resource Management and Corporate Sustainability. *Sustainability* **2020**, *12*, 8987. [CrossRef]
73. Vargas-Merino, J.A.; Rios-Lama, C.A.; Panez-Bendezú, M.H. Critical implications of education for sustainable development in HEIs—A systematic review through the lens of the business science literature. *Int. J. Manag. Educ.* **2024**, *22*, 100904. [CrossRef]
74. Dziubaniuk, O.; Nyholm, M. Constructivist approach in teaching sustainability and business ethics: A case study. *Int. J. Sustain. High. Educ.* **2021**, *22*, 177–197. [CrossRef]
75. Ikerd, J. Business Management for Sustainability. *Sustainability* **2024**, *16*, 3714. [CrossRef]
76. Fontanella, S.; Fraccascia, L.; Nonino, F.; Scarnicchia, A. Sustainable Business Model in Practice: A Digital Business Game Training for High School Students. *J. Syst. Cybern. Informatics* **2024**, *22*, 18–26. [CrossRef]
77. Hina, K.; Khalique, M.; Shaari, J.A.N.; Mansor, S.A.; Kashmeeri, S.; Yaacob, M.R.b. Nexus between green intellectual capital and the sustainability business performance of manufacturing SMEs in Malaysia. *J. Intellect. Cap.* **2024**, *25*, 233–252. [CrossRef]
78. Su, Y.; Wu, J. Digital transformation and enterprise sustainable development. *Financ. Res. Lett.* **2024**, *60*, 104902. [CrossRef]
79. Mignon, I.; Bankel, A. Sustainable business models and innovation strategies to realize them: A review of 87 empirical cases. *Bus. Strat. Environ.* **2023**, *32*, 1357–1372. [CrossRef]
80. Bocken, N.; Boons, F.; Baldassarre, B. Sustainable business model experimentation by understanding ecologies of business models. *J. Clean. Prod.* **2019**, *208*, 1498–1512. [CrossRef]
81. Yunus, M.; Moingeon, B.; Lehmann-Ortega, L. Building Social Business Models: Lessons from the Grameen Experience. *Long Range Plan.* **2010**, *43*, 308–325. [CrossRef]
82. Seelos, C.; Mair, J. Social entrepreneurship: Creating new business models to serve the poor. *Bus. Horiz.* **2005**, *48*, 241–246. [CrossRef]
83. Wells, P. Degrowth and techno-business model innovation: The case of Riversimple. *J. Clean. Prod.* **2018**, *197*, 1704–1710. [CrossRef]
84. Raworth, K. A Doughnut for the Anthropocene: Humanity's compass in the 21st century. *Lancet Planet. Health* **2017**, *1*, e48–e49. [CrossRef]