

Revolutionizing agro-industrial business models through sustainable marketing strategies

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Abstract. The paper is devoted to the research of the possibilities of sustainable marketing to influence the transformation of business models for sustainable development of agro-industrial enterprises. The evolution of the concept of marketing management is in the direction of co-creation of value with the consumer and organization of effective interaction with stakeholders. Sustainable consumer behavior is, on the one hand, a factor determining changes in the business processes of agro-industrial enterprises. On the other hand, companies that transform their business models taking into account the achievement of long-term social and environmental goals, involving consumers in the co-creation of sustainable development ideas, form consumer models of lean sustainable behavior. The following directions for adapting the business models of agro-industrial companies based on sustainable development marketing are substantiated: optimizing the costs of product development and promotion to improve the pricing strategy for environmentally friendly products, developing ways to interact and involve consumers in the processes of creating and promoting sustainable development values.

1 Introduction

The concept of sustainable enterprise development actualizes the research of marketing possibilities, “focused on building and developing sustainable relationships with the environment and creating new customer value through the integration of environmentally friendly technologies for the production of goods and services, consumer culture and ethically verified decisions on the management of marketing interaction” [1].

Enterprises are restructuring their approaches to business organization in order to maximize customer focus and ensure competitiveness. The vector of sustainable consumption determines the change of decision-making motives in preparing and making purchases by the consumer. Therefore, in order to establish and maintain contact with the consumer, businesses will restructure and adapt their business models to offer consumers better ways to get value from a product or service, in accordance with consumer preferences.

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By focusing more attention and resources on decision-making, agribusinesses can get closer to their customers, building both paid and true loyalty. By evolving in this way, they can contribute to a more efficient, sustainable and profitable marketplace.

It is easy for modern consumers to utilize numerous advanced technologies when making wastage. By the time they have assembled a shopping cart - whether at the end of a line in a store or on a web store or marketplace website - they have already made numerous important decisions. Decision-making begins the moment consumers conclude that they need to make a purchase. This is followed by a series of pre-purchase behaviors, typically using technology, that are ultimately convenient, seamless and efficient.

The traditional marketing concept focuses on researching and maximizing customer needs and wants. In doing so, companies are focused on monitoring factors in the external marketing environment and developing a marketing mix for specific market segments. The evolution of the marketing management concept goes in the direction of co-creating value with the customer and organizing effective interaction with stakeholders.

Sustainable marketing is a consequence of the evolution of marketing as a phenomenon in two directions. On the one hand, marketing has come to be seen as a way to respond in a new way to the environmental, ethical, social and other consequences of human activity. In this direction appeared the concepts of macromarketing, green marketing, social marketing, which are effective applied approaches to solving the problems of traditional marketing. The second direction is the vector of transformation of marketing into attitude marketing, i.e. not to research the consumer, but to create the necessary value together with the consumer.

Peattie Ken & Belz Frank-Martin (2010) in their research emphasizes that for the project implementation of sustainable marketing it is necessary for the project implementation to consider socio-environmental problems as the starting point of the marketing process, rather than as external factors or constraints; holistic understanding of consumer behavior; changing the structure of the marketing mix; recognizing and using the transformative potential of marketing initiatives and interactions [2].

The modern approach to sustainable marketing emphasizes long-term social, economic and environmental benefits, as opposed to the short-term transactional effectiveness of traditional marketing. In doing so, the consumer is recognized as an active force capable of generating value creation.

However, much of the research on sustainable business models has been conducted from the life cycle perspective of specific product or sustainable development aspects. Co-creation and the relationship between these aspects have received little attention. Ceccagnoli et al. [3] reasoned that co-creation with stakeholders will benefit everyone, including the enterprise itself. Creating value for customers through shaping interactions beyond the act of buying and selling identifies the possibilities of scaling co-creation [4]. We believe that the research of ways to involve stakeholders in the formation and expansion of business models of enterprises based on sustainable marketing is topical. The purpose of this paper is to substantiate and describe the possibilities of sustainable marketing as a means of adapting business models of the enterprise under the influence of the need to take into account the emerging sustainable behavior of consumers.

2 Materials and methods

Sustainable business models were initially considered by the authors in terms of the breadth and depth of satisfaction of environmental, economic and social objectives of stakeholders.

Then the value-based approach was actualized, in which a sustainable development business model should be based on the creation of economic benefits based on the balance

of voluntary social and environmental actions, and not just on the demonstration of the coexistence of these benefits [5].

There is a growing body of research on how to build and develop sustainable development business models for enterprises, which are the basis of the organizational management model [6]. The main objective of business model adaptation for an enterprise is the possibility of reducing energy, material and cost consumption while expanding the possibility of obtaining financial and social benefits. At the same time, the financial model should reflect the effective distribution of economic costs and benefits among stakeholders.

Specific mention should be made of the direction of adapting a sustainable business model based on the cycle of creating value for customers, increasing value for enterprises and investing this value in environmental conservation [7, 8].

Li, Xiao, Jiarou Cao, Zhenggang Liu, and Xinggang Luo view the business model structure as five interrelated elements: the value proposition itself, the value creation mode, the value creation network, the financial model, and the interface with the customer [9]. The findings of this research are relevant for the purpose of our paper, and view sustainable business model (SBM) as “a network of digital twin platforms that can provide strong digital support, make it possible to provide effective internal and external communication, and strengthen the interconnection between dimensions”. The special feature of this approach is that based on the achievements of digital technologies applied in the new sustainable development paradigm, the business models of the enterprise are transformed.

3 Results

With consumers trying to minimize their spending and get the best value for the goods they buy, tracking changes in consumer preferences is particularly relevant. The Consumer Insights Pulse global survey of 8,975 consumers in 25 countries and territories confirms a clear need for companies seeking a competitive advantage. There is a need to empower their consumers with the tools, information, technology and decision support they need.

Half of consumers surveyed intend to increase their online spending over the next six months. More than half of consumers (55%) consider online searches to be their primary source of information before making a purchase. The majority of consumers (63%) have purchased directly from a brand's website. However, eight out of ten consumers said they would pay 5% more for eco-friendly products. Thus, providing consumers with information about the environmental responsibility of manufacturers and retailers at the purchase decision stage will make it possible to increase sales, facilitate consumer choice and strengthen consumer loyalty

While search engines and retailer websites are the primary sources of pre-purchase information, social media are also important, especially for Generation Z consumers [10]. PWC research demonstrates that overall, across a sample of consumers across all regions and age and social groups 29% of consumers use a website to compare prices, 31% of respondents use Social Media , 55% search engines , 34% retailer websites, 32% use retailer websites, 30% seek information by communicating with others , 36% use Amazon, 18% use Websites/apps that sell resale, recycled or previously used products, only 4% use chatbots [11].

Consumers indicate that they are willing to pay more for eco-friendly products and technologies. In a survey conducted by PWC in February 2023, more than 70% of respondents said they were willing to pay more for environmentally friendly goods. Consumers benefit from aligning their social interests in sustainable development with their purchasing practices; companies, for their part, can gain much-desired loyalty and additional profitability.

A survey conducted by the company in 2024 showed that at least 70 percent of consumers in the categories presented agree to a 5% price increase (Figure 1). And at least 50 percent of consumers agree to pay 6-10 percent more for environmentally friendly products [11].

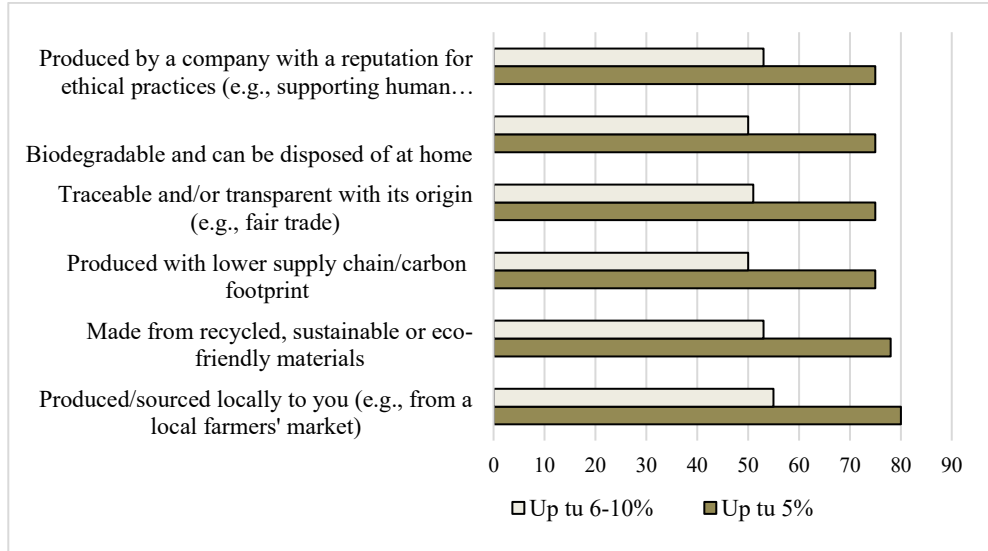


Fig. 1. How much above an average price would you be willing to pay for a product that is... (compiled by the author).

Business model, considered as an organizational logic of formation and assignment of value, has a clear structure represented by income blocks, cost structure, resources, key partners, which are formed on the basis of the value proposition (Sorescu) [12]. Consequently, through changes in the value component, the system of stakeholder relations, business models of enterprises change. Sustainable marketing makes it possible to take into account not only economic (transactional) consequences of transactions, but also social and environmental consequences in the long term at the level of business model. In this case, a clear and structured description of the business model of sustainable development of the enterprise organizes relations of co-creation with stakeholders and consumers in the creation and development of sustainable consumption model.

In this case, sustainable marketing, unlike traditional marketing, works in the context of a broad time frame, considers social and environmental effects not as an intrusive influence of the external environment, but as part of the interests of stakeholders who can influence the environment. By recognizing the impact and responsibility for the social and environmental impacts of production and consumption from the perspective of all stakeholders, sustainable marketing has the potential to bring about changes in the existing business models of enterprises.

4 Discussion

According to Khalina E.V., Yuldasheva O.U. et al. sustainable marketing is an extension of the concept of relationship marketing in the context of the entire ecosystem [13]. The empirical research realized by scientists on the barriers to the transition from traditional consumption and modern consumerism to sustainable consumption in Russian conditions showed the following. The lack of relevant knowledge and infrastructure, as well as the

need to make additional expenditures for sustainable behavior are the main barriers to changing consumer behavior.

Business models of enterprises for sustainable development are transformed in different planes (Figure 2).

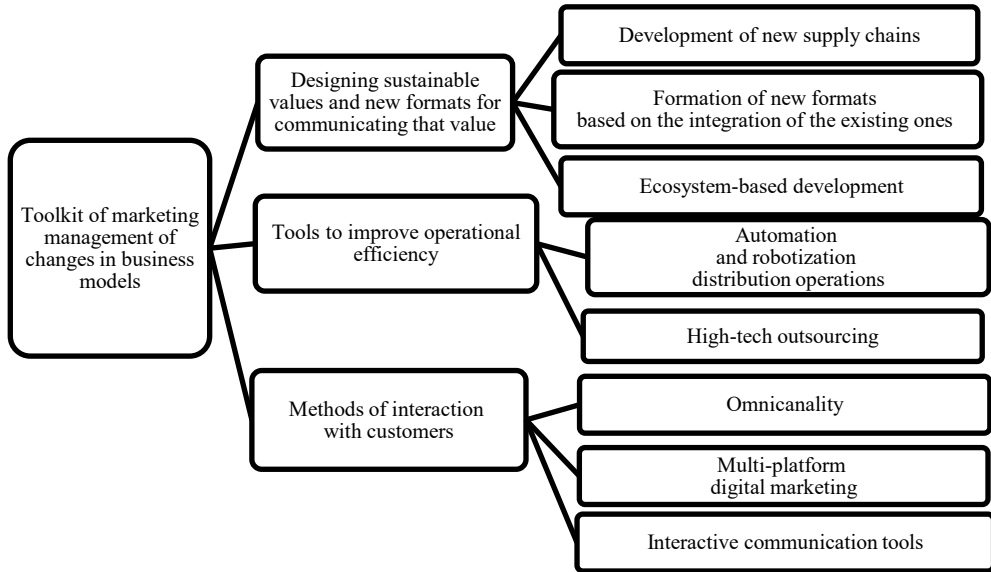


Fig. 2. Directions for adapting business models of enterprises on the basis of sustainable development marketing.

The first direction is to optimize the costs of product development and promotion in order to improve the pricing strategy for environmentally friendly products. A specific enterprise is not able to rationalize all business processes and reduce costs without sacrificing quality. However, an ecosystem as a type of business model makes it possible to use system resources optimally and minimize negative anthropogenic impact on the environment. Digitalization makes it possible to implement sustainable marketing principles based on platform business ecosystems. In this way of business model transformation, the interaction, consideration and interconnected sustainable development goals of all stakeholders are ensured.

The second direction of transformation of the business model of the enterprise under the influence of changing consumer behavior is the preparation and disclosure of enterprise reporting on the environmental and social benefits of the value proposition of environmentally friendly goods in the long term. To do this, companies need to reduce their negative anthropogenic impact on the environment by developing and implementing long-term sustainable development programs, which is impossible to do without involving all stakeholders.

Sustainable marketing is based on the theory of socially responsible behavior on the part of enterprises, sustainable consumption on the part of customers and obtaining positive social effects [14]. Therefore, changes in the business models of enterprises under the influence of sustainable marketing are possible in three planes (social, economic, environmental) and are aimed at overcoming the barriers to the formation of sustainable behavior of all stakeholders, primarily consumers, since they are the key object of marketing interaction. The third direction of transformation of business models is the

development of ways to interact and involve consumers in the processes of creating and promoting the values of sustainable consumption.

4 Conclusions

Thus, digitalization of the economy provides tools to transform business models of enterprises for sustainable development. Digital tools for sustainable marketing make it possible not just to find out consumers' preferences, but also provide the possibility of engaging them in value creation and sustainable behavior.

The concept of sustainable marketing is being actualized as a result of the developing sustainable consumption model and the emergence of I4.0 innovation tools, which provide the possibility to build the business model of enterprises in a fundamentally new way. Overall, it can be concluded that I4.0 innovation is contributing to the development of more sustainable practices, but it limits practitioners in considering social and environmental sustainability aspects when developing new processes and business models, as well as when making changes to supply chains and products. In addition to the introduction of modern technology, managers are constantly facing pressure from stakeholders to incorporate sustainable development considerations [15].

A limitation of this research is that it is necessary to investigate the interests and goals of sustainable development not only for consumers, but also for the business itself and society as a whole. The possibilities of sustainable marketing for this purpose are wide and insufficiently researched. Also in the future it is of interest to define and formalize the mechanism of business model adaptation for sustainable development, which can be considered as a tool of modern strategic management in a sustainable economy.

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