

разовательных услуг не соответствует потребностям рынка труда; нет надлежащей системы профессиональной ориентации. Теоретически доказано, что реинжиниринг бизнес-процесса формирования кадрового потенциала определяет ориентацию социальной и кадровой политики по повышению качества жизни населения, улучшению профессиональной структуры рабочей силы, сбалансированию спроса и предложения на рынке труда. Предложена модель развития бизнес-процесса кадрового потенциала.

Научная новизна. Предложен методологический подход к построению цепи процессов формирования, развития и управления кадровым потенциалом, подтверждена необходимость реструктуризации цепи данных процессов с помощью реинжиниринга.

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Практическая значимость. Сформированный методологический подход дает возможность систематизировать этапы формирования и развития кадрового потенциала, выделить основные и вспомогательные процессы, а также процессы управления кадровым потенциалом, что позволяет более детально прорабатывать стратегические и тактические планы развития и использования потенциала, выстраивать эффективную кадровую политику региона.

Ключевые слова: реинжиниринг, процесс, бизнес-процессы, кадровый потенциал, процессная зрелость, формирование кадрового потенциала

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ON THE USE OF THE ECO-ORIENTED DIMENSIONS OF MARKETING FOR PRODUCT PROMOTION ON THE MARKET

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ВИКОРИСТАННЯ ЕКОЛОГО-ОРІЄНТОВАНИХ ДИМЕНСІЙ МАРКЕТИНГУ ДЛЯ ПРОСУВАННЯ ПРОДУКТІВ НА РИНКУ

Purpose. The purpose of the paper is to justify the diagnostic methodology for the eco-oriented dimensions of product marketing elements to be used in product promotion on markets.

Methodology. The research has a tiered structure, consisting of: 1) the clarification of the marketing objectives in sustainable development concept; 2) an analysis of existing methodologies for the eco-assessment of product marketing; 3) justification of the diagnostic methodology for the eco-oriented dimensions of marketing (using the LCA method) in purpose of promoting industrial products.

Findings. The marketing objectives for sustainable development has been clarified. Methodological approaches to the application of the LCA method in industrial management and marketing have been analyzed. The criteria for the assessment of the life cycle of products from the viewpoint of the development of a marketing mix for sustainable development have been identified. A diagnostic methodology for the eco-oriented dimensions of the elements of product marketing has been justified.

Originality. An authorial diagnostic methodology for the eco-oriented criteria of product marketing, based on the integration of the existing methodologies, has been developed for the identification of business sustainable development.

Practical value. The proposed eco-oriented dimensions of product marketing and the accompanying eco-oriented activities can be empirically verified and applied to the practice of product promotion on the market.

Keywords: sustainable development, sustainable product, the LCA method, promotion on sustainable markets

Problem statement. The structural changes in a contemporary market witness the fact of the environmental orientation becoming an independent and dynamically developing segment.

Incidentally, 87% of the income from the sale of eco-friendly and organic products belong to the USA (46%) and

the member states of the EU (41%). In 2013, according to statistics, the annual sale of organic products exceeds 40 million euros in Lithuania, and the consumption of organic agricultural products is only 12 million euros in Ukraine. In this regard, the issue of the sparing use of natural resources remains acute, and investments in environmental projects have relatively higher risks and a lower rate of return. All that actualizes the problem of sustainable development

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tools in the industrial management and marketing, in particular such as Life Cycle Assessment (hereinafter: LCA). In European practice, the method of LCA is applied especially in the field of environmental resources conservation, and in the assessment of balance between economic, social and environmental objectives.

Identification of an unsolved problem. Marketing for sustainable development is a fundamentally new phenomenon and has not yet gained sufficient importance in post-Soviet countries. Contemporary entrepreneurs need a set of tools to underpin the philosophy of social responsibility marketing, thus providing them with long-term economic benefits and improved market positions. The LCA-provided opportunities have so far been little used in the development of promotion policies.

Analysis of the recent research in marketing has witnessed a growing interest in the studies of the role of sustainable development marketing. Many scientists, such as M. Polonsky, S. Bhaskaran, Sh. Fernandez, R. Ciegis, J. Ramanauskiene, B. Martinkus, O. Zhilinskaya, I. Orobits, V. Juscius, D. Lekaviciene, J. Uktveryte, J.J. Davis, C.R. Szocs, V. Tamuliene, J. Banyte, L. Brazioniene, A. Gadeikiene, et al., have the wide interest in the field of environmental marketing. A significant contribution to the field of promotion of sustainable product in competitive markets has been made by M. Eidukeviciene and A. Buciene, O. Ivanikova and J. Ruzevicius, J. Ramanauskiene and, A. Gargasas, L. Palekhova, et al.

Identification of unsolved part of the general problem. The analysis of the present state of studies in the topic revealed the following. The proposed methods and methodologies poorly integrated sustainable development tools in the field of marketing, which could result in long-term good effects under the conditions of growing competition. In particular, the development of a marketing mix based on the use of the LCA method has been studied insufficiently. In this regard, clear goals, objectives, functions, and the LCA methodology for the product promotion on markets were not yet defined.

Formulation of the research aim and objectives. The goal of the research is the justification of the methodological basis for the diagnostics of the eco-oriented dimensions of product marketing through the use of the LCA method.

To the goal, the following objectives have been formulated: 1) to analyse the methodological approaches to the use of the LCA method in industrial marketing; 2) to identify the criteria for the assessment of product life cycle from the viewpoint of social responsibility for the state of the natural environment; 3) to propose a diagnostic methodology for the environmental dimensions of marketing to promote products on eco-oriented markets.

Research methodology. The authors proceeded from the position that the use of the LCA method in marketing is to be considered in a dialectal interrelationship with the common trends of the development of the theory of marketing for sustainable development. Moreover, the authors made use of the findings of their own previous research in the field of marketing: the definition of the functions and objectives of marketing for sustainable development, the

identification the criteria for assessing the competitiveness of eco-products and production.

Presentation of the research results. As is known, the idea of sustainable development presupposes the balance of environmental, economic, and social goals of social development. In this context, the contemporary marketing is based on the fundamental principles of social-ethical (socially responsible) marketing, partnership relationship marketing, and environmental marketing.

However, at the same time marketing for sustainable development has a more specific focus: maximizing the commercial benefit based on meeting a complex of economic, environmental, and social needs, while ensuring social justice for the whole society both presently and in the future [1]. More than that, marketing for sustainable development (or sustainable marketing) may be viewed as a new philosophy for running business and an integrating function of management that has a strategic social orientation [2].

In management the LCA method has been widely recognized as a powerful tool towards sustainable use of the natural resource and reducing environmental burdens throughout the product life cycle [3]. In compliance with ISO 14040, the assessment of the LCA method is a procedure that includes the collection and assessment of the environmental impacts of the incoming and outgoing flows of manufacturing systems at all stages of the product life cycle [4].

The procedure of the LCA assessment of the product includes four individual, however, interrelated phases:

- the goal and scope definition – identification of the quantitative characteristics of the input and output parameters for each stage of the life cycle of the research object;
- the inventory analysis phase;
- the impact assessment phase: the assessment of the of human and environmental potential as a result of the inventory analysis phase;
- the interpretation phase: interpretation of the resource analysis outcomes and the assessment of their environmental impact with the aim to choosing the most preferable product or process.

The LCA method is based on the key principle – “from cradle to grave”, i.e. LCA studies the process at all stages of a product’s life cycle: raw material acquisition and materials, product manufacture, transportation and distribution, product use or consumption, final deposition. Intermediate products and process, auxiliary materials, waste with different forms of its recycling – all have contributed to the overall environmental profile of products [5].

The opportunities provided by the LCA may be extremely useful for the purposes of marketing, especially in the process of the product programs development. In the said area, the use of the LCA is most common in the procedures of development of business strategies R&D (Research and Development), when the environmental component is considered to be a competitive advantage at different stages of the product life cycle [6].

In the process of the development of a product, the LCA is mainly used for the following purposes [7]: 1) the collec-

tion of information on the environmental impact of products and the possibilities (conditions) of its reduction; 2) the collection of information for product certification; 3) the collection of information for marketing purposes; 4) the explanation to consumers of the most effective ways of product use and disposal; 5) informing of the authorities and the staff about the environmental impact of the activity of the enterprise.

It is necessary to agree with opinion of R.A. Weitz, J.A. Todd, M.A. Curan, and M.J. Malkin about that the use of the LCA both as an instrument of the generation of information on the environmental impact of a product/ enterprise, and as an instrument of strategic management. It enables the identification of the “best” product or technology on one’s own or similar markets. In that field, two LCA processes are important for marketing: the assessment and the matching of the environmental parameters at each stage of the life cycle of the product [8]. Among numerous methodologies of environmental assessment, a unique approach of R.J. Welford & D. Jone is of a particular interest; it is widely used in environmental management. The authors proposed a procedure that included seven major stages: 1) identification of the basic management principles; 2) evaluation of justice; 3) forecasting of future events; 4) definition of bio-diversity and the protection of animals; 5) assessment of the level of manifestation of human rights; 6) assessment of the local activity and its scope; 7) assessment of the environmental impact of the product’s life cycle [9]. Each stage of the procedure has its own individual set of instruments.

In accordance with the of R.J. Welford & D. Jone methodology, the quantitative assessment of the product is carried out on the basis of such criteria as: 1) responsibility; 2) an analysis of the product’s life cycle; 3) environmentally-friendly product design; 4) the lifespan of the product; 5) the acceptability of the product. It should be noted that

the proposed methodology has some shortcomings, namely the absence of an in-depth eco-analysis of the product performance; eco-dimensions in marketing remains poor; there is no systematic approach to study of the eco-characteristics of the market.

To our mind, these shortcomings can be compensated for by expanding the methodology using a set of tools proposed by Donald A. Fuller [10]. The specific quality of Fuller’s methodology was the interpretation of social responsibility for the environmental impact with respect to the elements of the marketing mix. The author also added certain elements to the classical 4P model of marketing, such as a target market and the environmental protection culture of an enterprise. In the assessment of the product, Fuller paid special attention to the following criteria: 1) the reduction of the pollution level in the process of product manufacturing; 2) environmentally-friendly product design; 3) the reduction of the pollution by the product; 4) the reduction of the level of component pollution; 5) the re-use of the product; 6) the reduction of the packaging pollution; 7) the re-use of packaging.

On the basis of Donald A. Fuller’s research, the eco-oriented dimensions predetermine the eco-oriented sphere of marketing:

- eco-oriented culture of an enterprise (the environment in the mission of the enterprise; awareness of the current environmental protection-related events in the enterprise; promotion of the staff protection activities on resource reduction in the production process; etc.);
- eco-oriented product (ways of pollution reduction in the production process; ways of product pollution reduction after its use; re-use of the product; re-use of the packaging; etc.);
- eco-oriented distribution (shortening of the sales cycle; sustainable transportation and greening of commodity supply chains; etc.);

Table 1

Hypothetical Comparison of the Research Methodologies of Donald A. Fuller and of R.J. Welford & D. Jone*

Dimensions of the Research Methodology	Donald A. Fuller	R. J. Welford, D. Jone
1. Conceptual dimensions (parameters) of the methodological research		
1.1. The concept of the welfare of society	Eco-centric	Eco-centric
1.2. The paradigm of business management	Environmental imperative	Environmental imperative
1.3. Responsibility	Eco-ethical responsibility	Eco-legal responsibility Eco-ethical responsibility
1.4. The dimensions of environmental assessment	Product and the process of its production Distribution Communication Price Target market Environmental culture of the enterprise	Product Environmental responsibility Life cycle of the product Environmentally friendly product design Lifespan of the product (durability) Acceptability of the product
2. Empirical parameters of the research		
2.1. The research goal	Auditing of environmental marketing	The study of the compatibility of business and nature
2.2. The research object	Environmental solutions of marketing	Environmental solutions of business management
2.3. The research subjects	Enterprise, consumer	Enterprise
2.4. The character of the research from the methodological viewpoint	Qualitative	Qualitative
2.5. Stability of the research assessment	Dynamic	Dynamic

*The interfaces of the two methodologies provided in the table are to be considered hypothetical, as they were identified on the basis of theoretical analysis. More precise interfaces can be identified only by means of empirical research

– eco-oriented communications (dissemination of information on the product environmental parameters through the means of eco-labeling, certification; environmental emphasis in the advertising programme; environmental reports of the company; etc.);

– eco-oriented prices (the impact of the eco-oriented attributes on the pricing strategy; etc.).

It has to be emphasized that in approaches of Donald A. Fuller and of R.J. Welford & D. Jone the prevalence of

eco-centrism, ethical- environmental responsibility, and environmental imperative can be seen. The comparative analysis of both conceptual approaches is presented in table 1. At the same time, the methodologies in question boast some differences predetermined by their different purposes: Fuller focuses on the marketing of the enterprise and the consumer, while R.J. Welford & D. Jone concentrate on the enterprise management and the environmental assessment of the product dimensions.

Table 2

Eco-oriented actions to diagnose the eco-oriented dimensions of marketing

Eco-oriented dimensions	Eco-oriented activities, methods, and decisions
1. Eco-oriented product-related activities	
Eco-oriented production process	<ul style="list-style-type: none"> - the application of environmental measures and methods; recycling of secondary raw materials; equipment updating - the level of compliance with the requirements for environmental protection from liquid, solid, and gaseous materials the level of compliance with the requirements for the protection of the environment from waste - utilization measures (methods) to save energy and water - encouragement of the staff for the ideas that reduce the use of resources in the production process; the level of implementation of recycling and re-use technologies - the level of product recycling and re-use capacity
Eco-oriented product	<ul style="list-style-type: none"> - the level of quality; the level of enforcement of environmentally friendly designs - the level of the re-use capacity - the level of the product's environmental impact - the level of health effects (safety) - the level of the environmental impact of the packaging - the use of environmental labeling - the level of processing and substitutability of the product components; the level of environmental raw materials
2. Eco-oriented product distribution-related activities	
Eco-oriented distribution	<ul style="list-style-type: none"> - the level of the environmental impact of the vehicles of the enterprise in the distribution process - the level of the environmental impact of hired vehicles in the distribution process; the level of the use of standardized packaging for the product (size, type) - the level of re-usable packaging in the process of transportation and distribution of the product - the level of recycling of the packaging designed for the transportation and distribution of the product - the environmental impact of the vehicles of suppliers in the transportation of raw materials - the level of the choice of environmental programmes by the suppliers of raw materials (e.g., the presence of ISO 14000) - the level of sourcing of the component parts of the product produced in compliance with the environmental requirements
3. Reflection of eco-oriented activities in promotion	
Eco-oriented promotion	<ul style="list-style-type: none"> - the level of dissemination of specific environmental attributes of the product in the activities of promotion (advertising, personal selling, sales promotion, public relations, and Internet) - the level of dissemination of environmental activities when creating a positive image of the enterprise by means of promotion measures - the level of client, salespeople, and manager awareness of the environmental attributes of the product - the level of dissemination of information about the production process in eco-oriented measures of promotion - the level of dissemination of information about the environmental projects, carried out in the enterprise, by means of promotion measures
4. Reflection of eco-oriented activities in the price	
Eco-oriented pricing	<ul style="list-style-type: none"> - the level of inclusion of the costs of eco-oriented activities in the final price of the product - the level of the impact of environmentally-friendly production and environmental attributes of the product on the price - the level of the impact of environmentally-friendly production and environmental attributes of the product on the costs of raw materials and energy per unit of production

It is clear that the combination of the two methodologies expands the boundaries of the environmental assessment for the purposes of marketing. As a result the following dimensions of environmental assessment have been proposed: eco-oriented production process; eco-oriented product; eco-oriented distribution; eco-oriented promotion; eco-oriented pricing.

Eco-oriented activities, methods, and decisions have been divided into the following groups: eco-oriented product-related activities; eco-oriented product distribution-related activities; reflection of the eco-oriented activities in promotion; reflection of the eco-oriented activities in the price. The proposed dimensions of environmental assessment and the structure of eco-oriented activities can be empirically verified, integrated, and summarized (table 2).

An analysis of the product life cycle allows one to make a comprehensive assessment of the eco-oriented dimensions of all the elements in the production chain of a product. The LCA method includes the identification of the most significant environmental impacts of the product that can be achieved by improving the product.

The outcomes of the assessment allow to manage and change the incoming and outgoing flows and, as a consequence, to increase the integrated resource effectiveness of production and to minimize the environmental impact.

To use eco-oriented criteria in promotion programmes, it is necessary to have a guarantee of the eco-oriented information being trustworthy. Such guarantees can be provided by the compliance with standard ISO 14024: reliability of the information (the enterprise shall have procedures for the confirmation and control of the reliability of information); transparency and reliability of managerial procedures in the production chain of the product that shall be guaranteed by the certification of a third party; and the possibility of holding consultations with the participants of the production process.

The organization of the LCA application to promotion processes may be based on a typical cycle of the process management which includes the following stages: preparation, goal setting, the development of an action plan, the implementation of the action plan, the monitoring of the process, and a report on the results. It should be noted that the procedure of the LCA organization for marketing purposes would depend on the type and structure of the marketing service, as well as the range of products and the volume of their production.

Research conclusions and outlook. The research resulted in the specification of the objectives of marketing for sustainable development. As a process, marketing for sustainable development includes two principal directions: 1) the study and the formation of the need for a sustainable product at all stages of its life cycle, 2) the development of marketing decisions (programmes, policies, and strategies) for the formation/support of balanced (economic, social, and environmental) and long-term competitiveness of the enterprise and its products.

It has been proved that the opportunities provided by the LCA method can be useful for marketing purposes, particularly in the process of the development of product pro-

grammes and promotion programmes on eco-oriented markets.

It has been proved that the integration of the two methodologies can provide a synergistic effect and become the basis for the development of a new methodological approach for the application of the LCA method to industrial marketing. In accordance with the results of integration of the methodologies of D. A. Fuller and R. J. Welford & D. Jone, specific eco-oriented dimensions of eco-oriented assessment of a marketing mix, as well as managerial and marketing activities, have been proposed.

The proposed methodology was obtained by means of integration of the existing methodologies for the identification of the compatibility of sustainable business development with the environment and the auditing of environmental marketing, i.e. it was defined based on theoretical analysis. Its verification and further development require special empirical research.

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Мета. Обґрунтувати методіку діагностики еколого-орієнтованих дименсій маркетингу, що може бути використана при розробці програм просування продукту на промислових ринках.

Методика. Дослідження має рівневу структуру: 1) уточнення завдань маркетингу для сталого розвитку; 2) аналіз існуючих методологій з екологічної оцінки продукту в маркетингу; 3) обґрунтування методіки проведення діагностики еколого-орієнтованих дименсій маркетингу (з використанням методу LCA) для просування продукції на промислових ринках.

Результати. Уточнені задачі маркетингу для сталого розвитку; проаналізовані методологічні підходи щодо застосування LCA методу у промисловому маркетингу; визначені критерії оцінки життєвого циклу продукту з позицій формування комплексу маркетингу для сталого розвитку; обґрунтована методіка діагностики еколого-орієнтованих дименсій маркетингу продукту.

Наукова новизна. Розроблена авторська методіка діагностики еколого-орієнтованих критеріїв маркетингу продукту, що заснована на інтеграції існуючих методологій дослідження для оцінки екологічної сталості бізнесу.

Практична значимість. Запропоновані еколого-орієнтовані дименсії маркетингу та супроводжуючі їх еколого-орієнтовані дії, що можуть бути емпірично перевірені та застосовані для розробки програм просування продукту на промисловому ринку.

Ключові слова: *сталий розвиток, стала продукція, LCA метод, просування на сталих ринках*

Цель. Обосновать методіку діагностики еколого-орієнтованих дименсій маркетингу, которая может

быть использована при разработке программ продвижения продукта на промышленных рынках.

Методика. Исследование имеет уровневую структуру: 1) уточнение задач маркетинга для устойчивого развития; 2) анализ существующих методологий по экологической оценке продукта в маркетинге; 3) обоснование методіки проведения диагностики эколого-ориентированных дименсий маркетинга (с использованием метода LCA) для продвижения промышленных продуктов на рынках.

Результаты. Уточнены задачи маркетинга для устойчивого развития; проанализированы методологические подходы по применению LCA метода в промышленном менеджменте и маркетинге; определены критерии оценки жизненного цикла продукта с позиций формирования комплекса маркетинга для устойчивого развития; обоснована методіка диагностики эколого-ориентированных дименсий маркетинга продукта.

Научная новизна. Разработана авторская методіка диагностики эколого-ориентированных критериев маркетинга продукта, базирующаяся на интеграции разных методологических подходов, в целях определения устойчивости развития бизнеса.

Практическая значимость. Предложенные эколого-ориентированные дименсии маркетинга и сопровождающие их эколого-ориентированные действия могут быть эмпирически проверены и применены для разработки программ продвижения продукта на промышленном рынке.

Ключевые слова: *устойчивое развитие, устойчивая продукция, метод LCA, продвижение на устойчивых рынках*

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