Ruslana Levkina, Anna Petrenko

Kharkiv Petro Vasylenko National Technical University of Agriculture
Ukraine

MANAGEMENT OF INNOVATIVE MARKETING TECHNIQUES
AS AN EFFECTIVE BUSINESS TOOL

Purpose. The purpose of the article is to highlight the ways of marketing labeling of agricultural products as effective aspect of business and their interpretation in a clear form to consumers.

Methodology / approach. Research of optimization and correct choosing ways of agricultural product marketing labeling based on the following methods: analysis and comparative characteristics used in world practice labeling methods; methods of decision-making marketing.

Results. According to the recent market trends, labeling of agricultural products acquires varied complicated structure, which makes some difficulties to consumers orientation in labeling types, and, at the same time, complicates the business of agricultural products producers and processors, in consequence of which, marketing potential of business efficiency improving is not fully realized. This article explores ways to streamline marketing labeling for agricultural products, as an effective tool for innovative marketing, and their interpretation in an understandable for the consumer form as an aspect of effective entrepreneurship. As a result of the study, the authors developed and proposed a method for labeling agricultural products, which is based on the most common marketing labeling methods and includes their characteristics.

Originality / scientific novelty. Author’s developed method of marketing labeling is a combination in the same tabular form of the information that will be useful for consumers, and it will beneficially allocate products among competitors and will encourage the purchase. Accordingly, the proposed method provides a list of the most used labeling types, their characteristics, so, labeling type which corresponds to a specific product, released in the table by color, that makes thus labeling type a comprehensive and effective. The need for separate labeling of the nitrates concentration in agricultural products is due to the popularity of consumer requests and the complexity of determining this indicator in household way.

Practical value / significance. Using the author’s proposed labeling method for agricultural products leads to the achievement of the following results: informing consumers without additional information sources; process oriented consumer choice; assessment of competitive advantages in accordance with the production method; increase the volume of sales that increases the efficiency of enterprise economic activity. The research helps resolve problems streamlining marketing labeling methods for agricultural products and their interpretation in a clear form to consumers, and, also, used as an effective entrepreneurship marketing tool.

Key words: innovations in marketing, agricultural products labeling, marketing in entrepreneurship, efficiency of business activity.

Introduction and review of literature. The «natural products» term interpretation variety is directly reflected and used in the agricultural products labeling and foodstuffs, and therefore requires attention to the labeling system construction, depending on its type, composition, nutrients content and origin. From the historical realities of the emergence and development of agriculture, vegetables,
fruits, grain products and animal origin products view point, which have consumed humanity for millennia, are not «natural» because they arose not as a nature’s actions result, but instead is the result of intentional human actions. In view of using «natural» term in recent years, which is usually understood as «safe», it is necessary to divide it into natural, safe for human use and «safe», containing poisonous natural substances. Among these: poison ivy, pastel and hundreds of other plants. In commodity research, the «natural product» term is used primarily as a certification of the natural origin of food products mainly in the fashion marketing strategy context, than as a confirmation or as a product safety guarantee for consumers. Taking into account the fact that the process of producing «natural» products is not devoid of security problems, which are more similar to the producing synthetic products process, they must be evaluated and certified in accordance with their qualitative characteristics, the safety level for humans, animals, the environment and utility taking into account consumer properties, the consumers risk level, but not the type of origin («by nature» or as a result of systematic human actions). The growing number of agricultural products labeling types and foodstuffs and their multi-level nature require consumers to focus constantly and to concentrate on the information presented on the packaging, which is extremely burdensome. Acquiring full information about the characteristics and specifics of production and processing standardization and certification is impossible for wide segments of consumers, requires special knowledge, and development technical information analysis skills. Consequently, in the context of the entrepreneurship marketing development, we consider it necessary to address the issue of simplifying the labeling system of agricultural products taking into account modern principles based on the complexity and variety of labeling types. This will improve the marketing activities for manufacturing and sales companies, increase sales of properly marked products and, accordingly, increase the entrepreneurial activity efficiency for producers, processors and intermediary structures.

Analysis of world trends in agricultural products trade with special markings indicates proved the consumers demand is increasing for products labeled as «organic» and «environmentally friendly». So in the United States of America, where the organic produce market is growing at a faster pace than other types of agricultural products, organic products consumer demand is the largest and currently stands at more than 43 billion USD. Organic products are presented on the 75 % shelves of all categories supermarkets, with 13 % of vegetables and fruits that sold under the mark «Organik» [1]. It has been established that the food products correct labeling prompts buyers to choose more «healthy» products, which positively affects the quality and person’s life expectancy [2]. On way of determination, how active operational policy is aimed at continuously improving the compliance quality, and influences the optimal use of marketing tools used to implement new products, F. El Ouardighi, G. Feichtinger and G. E. Fruchter conclude that the market potential and innovative effect are much higher when using advanced operational marketing policy [3]. Such researchers as A. G. Mauri, R. Minazzi, M. Nieto-García noted that the results of
their research, based on the Shepeple value regression, show that personal reputation has primary importance, explaining 40% of the popularity. And they insist on the significant impact of personal reputation and product description, which leads to the use of innovative marketing tools in labeling [4]. According to A. Joueid and G. Coenders more recently, innovations in marketing mix went beyond the traditional role of marketing in providing external consumer information and were detailed in specific product information lists and consumer choice that recognizes the need to improve product labeling on the market [5]. At the same time S. E. Colby, L. A. Johnson, A. Scheett, B. Hoverson argues that the consumer behavior from the early childhood is shaped by the influence of television and the Internet, which dictates to the target audience the need to select products that are labeled as ecologically pure or organic; and points to the need of explanation to consumers the labeling characteristics features that based on the marketing strategies used in the commodity [6]. This testifies in favor of our research relevance.

Analysis of conducted research by B. E.s. S. Bandara, D. A. M. De Silva, B. C. H. Maduwanthi, W. A. A. I. Warunasinghe in Sri Lanka, made it possible to conclude that the importance of labeling on food packaging is crucial for making a decision to purchase such a product. For consumers, information on the presence of sodium glutamate in food products is particularly valuable, which often leads to a refusal to purchase such products. Consumers carefully study the packaging information of the product and compare it with the possible risks of the disease, religious and national traditions, environmental impact, etc. [7].

In the European developed countries established the regulating principles of using labeling system introduced under standards and limited marketing activities. Thus, in almost all European countries, there are special marketing standards for a list of 10 types of products: apples, citrus, kiwi, salads, peaches and nectarines, pears, strawberries, sweet peppers, table grapes and tomatoes, which should be marked in a special way, which is significantly narrows the scope of marketing for manufacturing companies activities [8]. As noted W. E. Huffman, J. J. McCluskey, food labels are one of the potentially important sources of information for consumers about product characteristics, their composition, which is key to making a decision on its purchase. Of course, the economic and political environment as factors of influence on this situation are objective and affect the list of necessary information to be indicated on food labels. A particularly small amount of crop or livestock production, the division into varieties with identical organoleptic parameters has been achieved for some time at a negligible cost to the value of the final product. In large volumes of bulk grains and oilseeds (including genetically modified), sharing and preserving the total volume identity of product is potentially expensive relative to the cost of the final product. Thus, the major trading countries will benefit from the agreement of management to use genetically modified organisms in the production [9]. In turn D. Carrigan, G. Dunne, M. Hughes, etc. noted that in Ireland it is expedient to explain to the public the marketing terms of food labeling for the correct behavior of consumers and the appropriateness of consumer choice. These terms are represented
by the following list: handicraft products, household products, traditional and natural products. For each type of product, a detailed description of the marketing markup should be provided, in accordance with the Guidelines, which are recommended for the public in Ireland to facilitate the understanding of the essence of each type of marking [10]. To this end, the American Academy of Nutrition and Dietetics invites consumers to explain the main types of labeling in this classification: natural product, processed or unprocessed products, natural, whole and organic products [11]. Consequently, such a classification of marketing marking of agricultural products and foodstuffs has certain characteristics in different countries and accordingly creates barriers in the process of consumers product choosing and requires careful research, analysis, improvement and interpretation in an accessible and comprehensible form.

As it notices L. Tesserases the study of the Chartered Institute of Marketing (UK) indicates that consumers are not fully understood by the principles of food products labeling and require brand owners and retailers to explain the composition of products, the presence of chemical and inorganic substances and consider it a mission of manufacturing and trading institutions, and not a matter of countries government [12]. The researches of S. Borra in 2003, together with the International Council for Food Information, prove that consumers are always turning to information on the packaging in the decision-making process in purchasing food. More than 8 out of 10 consumers (83 %) study the ingredients list or nutritional information at least occasionally, from time to time; 11 % always thoroughly study such information; 32 % – almost always; and 40 % – sometimes. Only 13 % of consumers sometimes used packaging product information, and 4 % never did this [13]. Authors such as S. Banerjee and M. N. Conte emphasize that all stages traders also needs to be quickly guided in information about environmental friendliness, organics and product quality, therefore it is necessary to reach a compromise in achieving marketing goals and informativeness of product packaging [14]. According to B. V. Campenhout, K. Pauw, N. Minot, for developing countries whose governments are facing unsustainable world food prices, it is very important to properly present home-produced goods in order to implement protectionist policies and balance the economic situation [15]. It is necessary to pay an attention to the conclusions of J. L. Dahlhausen, C. Rungie, J. Roosen, who declare that the structure of preferences underlies the intentions of buying food marked with attributes of trust. In three consecutive hypothetical experiments with discrete choice, consumers chose food based on signs of organic, local quality, animal welfare, certified «free of antibiotics» and prices. The results of this analysis show that heterogeneity of preferences is stable for different products and can be best explained by common characteristics in trust attributes [16]. Consequently, this confirms the conclusion on the exceptional importance of such marketing tool as agricultural labeling and points to the need to improve the types and methods of labeling products system in order to meet the consumers needs and appropriate increasing the economic efficiency of producers and processors activities.

The variety of types and methods of agricultural products labeling, the
incomprehensible information on food packaging for consumer leads to a decrease in the efficiency of commercial activity on the one hand, and a low level of consumer utility of such goods on the other. The solution of this tasks will increase the products sales volume, improve marketing activities in products labeling and increase the entrepreneurial activity efficiency of producers, processing enterprises and intermediary trading structures in the agricultural products sales.

The purpose of the article is to highlight the ways of marketing labeling of agricultural products as effective aspect of business and their interpretation in a clear form to consumers.

Results and discussion. Effective entrepreneurial activity requires a high level of marketing organization, which is simultaneously focused on maximizing profits, taking into account consumer interests and designed to grow the target audience. The purpose of the agricultural labeling system should achieve two main objectives: improving the enterprises efficiency, meeting the needs of the market and the end consumers of agricultural products. In this context, we consider it expedient to organize the types and methods of agricultural products and foodstuffs labeling at the marketing services level of agricultural producers and processing enterprises. At this stage, the question is how to organize the process of developing a marking system to achieve a pre-programmed result. However, the main goal of the company’s marketing service is to increase profits by ignoring the issue of meeting the consumers needs and transferring this function to public authorities and profile institutions.

Consumers in the situation of choosing agricultural products and food are in a state of searching answers regarding information on the existing types of labeling and the specific products characteristics indicated on the labels. Without special knowledge and skills, this is practically impossible. Free orientation and understanding of the peculiarities of one or another type of labeling requires from consumers (i) the processing of a large amount of technical documentation, production methods state standards, and processing of agricultural products, or (ii) the search, accumulation and awareness of information from various information and consulting companies, instructions and recommendations provided by relevant government agencies. The disadvantage of this option is the inability to use, especially in the selection of goods in the sales area, when the acquisition of a particular product requires the study and development of 5–6 brochures or labeling bulletins. The solution to such a domestic problem for consumers, which essentially solve the «fate» of entrepreneurial structures, is the interests disputes elimination between producers and consumers by introducing a homogeneous method of labeling products that is not only useful to the consumer, but will also allow them to compete with other producers and encourage them to making a purchase. This labeling method is proposed by the authors and is presented as an example of application in table 1.

This labeling method allows to achieve several goals of the study:

1. Provides consumers with more complete information on the type of production, characteristics and quality of products that the potential consumer is
paying attention at this time and sale-place, and allows to simplify the procedure for processing too large amounts of unnecessary information or to avoid the involvement in using special information guides and labeling instructions.

2. It clearly indicates the competitive product advantages: for each type of labeling, has its own advantages in determining the product qualities that are critical for a given target market segment when choosing a particular product from an existing list, including those presented by competitors. So one group of consumers can prefer organic products, and another – other products, the production process of which does not pollute the environment. It allows to create and maintain competitive advantages, orienting consumers to the quality of local products, promoting the special nuances of the production technology. Thus, the manufacturer, with support of the proposed marking method, enables consumers to answer the main marketing question «What are the benefits of a particular product?», «Why is our product better?» and due to an increase in the volume of goods procurement to promote the growth of business efficiency.

### Table 1

Agricultural products labeling based on the main product characteristics and its constituent content

<table>
<thead>
<tr>
<th>Labelling Type</th>
<th>Pollute production</th>
<th>Organic Certified</th>
<th>Chemicals, antibiotics</th>
<th>Using of pesticides</th>
<th>Using of phosphates</th>
<th>Separated production</th>
<th>GMO</th>
<th>Preservatives</th>
<th>Using of nitrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecologically clean products</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ecologically clean and safety</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Organic product</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>GMO free</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No preservatives</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Natural</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>BIO</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>No pesticides</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

*Source:* developed by the authors.

3. Allows objectively evaluate the process of product choosing according to the level of consumer income. Most buyers when choosing products rely on solution searching based on the compromise in price and products quality, mainly leaning towards price, not quality, taking into account the average per capita income and the consumer basket structure. We believe that in search of a consumer equilibrium point for food products that constitute the basic population’s biological needs, the proposed method of labeling, which is complete information, can help. Consumers have the same space to match the quality of the product, its value, utility and its price. The proposed method of marketing labeling can be attributed to the so-called «honest
marking», which belongs to the principles of social and ethical marketing and at the same time contributes to increased sales and maximize profits.

4. Allows to inform consumers about the production technology advantages and has feedback from the manufacturer, forcing it to increase product quality and improve the production and storage process, which will again increase efficiency.

We suggest paying attention to the issue of the previous material, namely the presence of harmful substances, such as nitrates, in high concentrations in agricultural products and food. This requires separate consideration, since the extremely high residual nitrate level in food is dangerous for human health. So the Australian and New Zealand Food Standards Organization reports that the main sources of human food nitrates are vegetables (42–78 %) and fruits and fruit juices (11–30 %). The processed meat accounts for less than 10 % of the total nutritional value of nitrates. Therefore, the choice of foodstuffs for consumers to a greater extent means searching for those in which the amount of nitrates is minimal and does not affect health and livelihoods [17].

For each type of agricultural product, the maximum permissible values of the concentration of nitrates are determined, but this information is practically not indicated on the packaging, which is advantageous for unscrupulous competitors, who do not comply with production standards. Also, cases of exceeding the maximum permissible nitrate rate may be presented at the beginning of the season of growing green vegetables (onions, dill, parsley, salads, etc.) and fruits in the period of high demand and maximum prices. Due to the lack of relevant information on finished products packaging and high prices for devices that measuring the level of nitrates in households (about 100 USD), which is too expensive for most families in Ukraine, labeling on the packaging would be the only source of information for consumers. Thus, the problem of protecting consumers from excessive amounts of nitrates and other harmful substances entering the product during its production, processing and storage remains a problem.

Given the high level of relevance and timeliness of the research conducted in terms of the need to inform consumers about the food products quality we propose, in addition to the system of indicators presented in Table 1, to introduce a mark of labeling in relation to the absolute nitrates content in the product, and a relative permissibility parameter within the norm (for each individual food product the approved norm of nitrates content). Graphic signs labeling must be such (Fig. 1).

Thus, a scientific study on the labeling agricultural products features as a marketing tool for effective entrepreneurship proves in favor of the information provided graphic presentation by consumers regarding the content of nitrate in products in comparison with the approved norm and tabular method of reporting information on production and processing technology, the presence of harmful substances in the form of pesticides residues, nitrates, etc. Systemic informing process in this way will solve the problem of conscious approach to the food products choice based on an understanding of the principles of food labeling marketing and its consequences.
Fig. 1. Marking of the nitrates content in the food product

Source: proposed by authors.

During the study, the effectiveness of proposed method as a marketing technique was evaluated based on the results of a consumer preferences study when making purchases of goods with the proposed labeling and other standard types of labeling.

The result of the assessment (in the opinion of 100 respondents) is presented in table 2.

Table 2

<table>
<thead>
<tr>
<th>Features</th>
<th>Conversion (ratio of purchases to total visits number), %</th>
<th>Awareness level, %</th>
<th>Marking understanding level, %</th>
<th>Purchase satisfaction, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Organic/eco/bio” label</td>
<td>38</td>
<td>64</td>
<td>83</td>
<td>54</td>
</tr>
<tr>
<td>Proposed marking method</td>
<td>46</td>
<td>87</td>
<td>92</td>
<td>78</td>
</tr>
<tr>
<td>Non specia label</td>
<td>22</td>
<td>12</td>
<td>11*</td>
<td>34</td>
</tr>
</tbody>
</table>

Note. *Consumers know this brand very well.
Source: developed by the authors.

In accordance with the table data, we can see that the proposed in the article labeling method as a marketing technique shows undeniable effectiveness. For clarity we presented them graphically in figure 2.

Fig. 2. The effectiveness of proposed labeling method
Source: developed by the authors.
From the above, we can conclude that the proposed marking method as a marketing technique shows a high efficiency in the marketing component management.

**Conclusions.** A scientific research has been carried out on finding ways to improve the procedure marketing labeling for agricultural products and foodstuffs provided an opportunity to reach a conclusion on the expediency of its simplification and interpretation in an understandable to consumers form.

The analyzes of the works of leading marketers confirm the relevance and timeliness of the chosen topic of research, the need for further improvement of the system of agricultural products, food products marketing labeling and correct interpretation for its practical implementation as an innovative marketing tool for effective entrepreneurial activity.

The author’s proposals are presented in a tabular way, which combines the most common technologies of production and processing of products with the provision of their quantitative and qualitative characteristics, which in the process of consumer choice allows for comparative competitive analysis without using any additional information. The effectiveness of such a method of marketing labeling is confirmed by the opportunity to solve a whole range of direct and indirect tasks: informing the consumer about the goods; representation in an implicit form of the competitive advantages of the manufacturer; focus on the target audience; performance of the «dialog» between the manufacturer and the consumer, including feedback; stimulating the manufacturer to use organic, ecological, resource and energy saving technologies.

The necessity of separate labeling of nitrate concentration in agricultural products and foodstuffs is proved. Taking into account the extreme importance of this indicator for human health, it is expedient to use on the packaging its graphic image with indication of the nitrates concentration level and comparison with the indicator of the limit of the norm (in accordance with the established norm for each type of product). This will satisfy the consumers’ need for information and become an effective marketing tool in the complex of actions aimed at increasing the products sales volumes. Thus, the complex use of the authors’ proposed methods of the agricultural products marketing labeling allows us to form the basis for solving current scientific methodological problems and their practical use in the production process and marketing activities, to achieve the purpose of scientific research.

The practical application question of the agricultural products labeling principles in the process of sale in local markets, fairs and farmers’ markets remains debatable. Labeling of such products to a greater extent occurs spontaneously or by providing features orally by sellers. Often, marketing efforts are limited to the establishment of labels and conducted of private dialogue with the buyer, and the effectiveness of such measures is determined by the communication abilities of salespersons or consultants. Even taking into account the structure of the distribution channels for agricultural products and food products using of new and improved existing marketing tools at farm markets, fairs, local district markets, specialized sales places will increase the
sales volumes of manufacturing companies, in the structure of organizational and economic mechanism sufficiently formed the basis for the functioning of the motivational mechanism for market development. Therefore, the tasks proposed by the authors of this scientific study, have prospects for further development.

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