Digitization of marketing activities of agricultural entrepreneurship in the conditions of the Kyrgyz Republic

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Abstract: The problems associated with the current trend in the consumption of natural food products, the sale of manufactured products, increasing the competitiveness of domestic products, foreign product intervention, ensuring the institutionalization of Internet commerce by the state are discussed in the article. The analysis carried out features of the introduction and development of efficient, digital technologies in agriculture. Also, promising areas of digitalization of the agro-industrial complex are highlighted by the authors. It was recommended to entrepreneurs to create such sites, the effectiveness of which reached the audience at an appropriate level, the volume of orders was maximum, which ultimately would increase profits and strengthen market position.

1. Introduction

Based on the characteristics of agriculture, it is possible to distinguish those features of entrepreneurial activity that are not inherent in other industries, or are of particular importance for the development of entrepreneurial activity in agriculture. Today in Kyrgyzstan, the family farm is the main form of organization of agricultural production, which means that the farmer can only rely on himself.

In order to improve the efficiency of his business, he must possess knowledge in the field of the agro-industrial complex, know the equipment and be able to operate it properly, be knowledgeable with modern technologies of growing, processing and selling the manufactured products, know the accounting, know how to use computers, etc.

The victory in the fight against competitors for high quality products is strategically important for entrepreneurship, because, as you know, low quality products are not in high demand among consumers. In the aspect of international transformations, the identification of promising areas for improving the competitiveness of domestic products is one of the most important strategic issues of economic reform. Improving the quality and competitiveness of products is closely related to the improvement of the management system, standardization and certification of products. This problem cannot be solved without applying a systems approach to quality management at the enterprise level, as well as legal regulation at the macro level. The higher the quality, the better the needs of consumers are satisfied and the social and economic problems of the development of society are more effectively solved. Also, the interaction of information technology and entrepreneurship is the implementation of environmentally friendly products.

Therefore, the relevance of my research is related to the current trend in food consumption, the problems of sales of manufactured products and the increasing competitiveness of domestic products.
In modern times, when air, water and land are polluted, despite all the efforts of mankind, human activity and the ecological situation continues to deteriorate, people are increasingly beginning to think about their health. In the conditions of an oversupply of food products in stores, city dwellers tend to get better and more natural products in order to maintain their health. It is important to note that sales of fruits and vegetables, meat and dairy products are the fastest growing segments of the organic food market. The growth in sales of organically produced products is evidence that buyers are ready for the added value of goods. Consumers are placing increasing demands on the quality of food. Natural products, lack of use of genetic engineering in the production and the possibility of harm to health is a priority for them.

For a number of reasons, the movement of farm products to the end customer is not effective through traditional distribution channels. As a distribution channel for products, markets are also not able to fully comply with the requirements of producers of natural products and customers. At such sites, the level of service required for the sale of premium organic goods is absent, and buyers do not receive guarantees of product quality due to the low level of reliability of sanitary examinations organized in the markets. The sale of farm products to processing enterprises is also not feasible due to low purchase prices and low profitability for farmers, as well as due to the high quality and low volume of production in farms.

2. **Theory and Methods**

Therefore, Internet entrepreneurship is an independent new and advanced form of entrepreneurship. The online store is the main element of the functioning of the “Internet Enterprise” system. The online store is a representation of entrepreneurship on the Internet, created on the basis of a web server. Its main goal is to ensure the sale of goods and services to other Internet users.

The Internet allows farmers to make decisions using an exhaustive amount of information, and this opportunity is an important advantage in the implementation of Internet processes. The sale of organic farm products directly from the farmer, through the manufacturer’s online store, is being developed in Europe, the USA and China. Since it is the farmers who are involved in the processes of marketing and selling products without attracting distributors for this. It is important to note that prices for farm products are at a lower level than in supermarkets. This situation is achieved through constant monitoring of prices for organic products in supermarkets and savings in logistics.

Internet technologies will become the most important factor in the development of entrepreneurship. They allow you to create, store, process and provide effective ways to transfer information to the consumer. Creating the most favorable conditions for an entrepreneur to access information is the most important task of building the country's information infrastructure. Thus, the relevance is determined by the increasing value of information in the infrastructure of modern entrepreneurship. As information is needed for an entrepreneur about other producers, about potential consumers, about suppliers of raw materials, components and technologies, about prices, about the situation in the commodity and capital markets, about the situation in business life, about the general political and economic situation not only in their own country but all over the world.

Sales of products is the most important problem for farmers. This is due to foreign product intervention, extremely low technical potential of domestic production, insufficient state support, lack of information, insufficient marketing support, problems in the functioning of domestic wholesale markets and access to foreign markets. This not only deprives the farms of sufficient financial resources for development, but also the economic motives for increasing production volumes.

In this regard, online stores of agricultural products eliminate the above problems in the process of buying and selling. Online stores are ready to buy goods in small batches, not interested in long-term storage of the product. Online stores deliver goods to the buyer's table as soon as possible after they are purchased from a farmer, have all the relevant documentation. In online commerce, the ability to purchase goods from their location hundreds of kilometers away is an advantage. However, geographic limitations are characteristic of trade in the field of farm products. Delivery by freezing or preserving eliminates the advantageous qualities of an organic product that distinguishes it from a product of mass consumption. In this case, the online store is forced to cooperate only with local farms or farms from
nearby areas. In addition, the Internet audience is growing every day, therefore, the number of buyers who are ready to purchase goods on the Internet is growing.

Therefore, we recommend entrepreneurs to create such sites, the effectiveness of which reached the audience at an appropriate level, the product range and order volumes were maximum and regularly engaged in the expansion of communication opportunities. As a rule, e-commerce will increase profits, strengthen market positions, and also allow your company to reach a new level.

Thus, you need to start with an analysis of the sites of your competitors in order to achieve effective development of entrepreneurship on the Internet. Competitors have a strong influence on prosperity, both in real and in online entrepreneurship. The main thing is to fill the site with unique, rare, valuable or just useful information.

The only way to ensure the institutionalization of Internet commerce on the part of the state is to advance the development of the national logistics infrastructure and improve the regulatory framework. That is why, today, such recognized leaders of Internet commerce as China, Europe and the United States give priority to this.

But it is impossible not to note the fact that rural residents with traditional conservative views are, as a rule, farmers in Kyrgyzstan. They are not always ready to agree with the placement of detailed information about the farm on the Internet, as they are wary of advanced technologies. At least two problems need to be solved in order to improve the quality of Internet entrepreneurship:

The first and most important problem is the question of delivery, that is, logistics. The higher the level of the Internet, the greater the coverage of online shopping.

The second problem is the low level of implementation of online payment. Opportunities already exist, but objective factors exist that inhibit their widespread adoption. This is the absence of such a culture among the majority of the population, that is, fear, weak spread of electronic money, low level of use of bank cards. These specific problems are complemented by low Internet penetration in the regions of the republic, power outages, unreliable mail, etc.

But the solution of the two main problems listed above will lead to the effect and growth of online trading. Since round-the-clock availability, the absence of queues, a wide range of products, the opportunity to familiarize yourself with the technical specifications and use the price matching system without getting up from the chair will lead to an increase in online trading.

If you analyze the possibility of using Internet technologies in the fight against competitors for high quality products, the Internet has tremendous marketing potential and allows you to access, in the shortest possible time, the audience you need. To do this, it is not necessary to spend money. You can start promoting Internet entrepreneurship by exchanging banners, free advertising on subject forums, message boards and creating official pages on social networks. As your business grows, you can start buying ads or order a professional promotion on the Internet. Initially, online trading in social networks is a very effective tool for promoting products and services. Ordinary people and big companies can use this service equally effectively.

Therefore, by monitoring the status of these indicators, the management and marketers of the online store have the opportunity to identify positive and negative characteristics and work on the errors made when creating a resource.

I hope that the recommendations I have listed will help you to improve and increase your sales.

Agriculture is an important component of the country's economy. In agriculture, a huge economic potential is concentrated and products that are vital for society are produced. The development of agriculture and the agro-industrial complex as a whole determines the state of the entire economic potential, the level of food security of the state and the socio-economic situation in society.

Today, the problem of ensuring the effective functioning of entrepreneurship in agriculture is poorly understood in the conditions of Kyrgyzstan. From this position it can be argued that the affected issue is relevant and timely. Therefore, the importance of entrepreneurship for the development of agriculture is great and at the same time, its underdevelopment determines the relevance of the study.

The purpose of this study is to study the characteristics, forms, problems and prospects of entrepreneurship in agriculture in the Kyrgyz Republic at the present stage. And in the long term, the
goal is to provide the people of the country with plenty of high-quality and complete nutrition of their own production and turn Kyrgyzstan into one of the world leaders in organic agriculture, ensuring sustainable development of the economy.

To achieve the goal, the following tasks are set:

- Exploring the essence of the economic efficiency of entrepreneurship in agriculture;
- Studying the international experience of using Internet technologies in order to improve the efficiency of entrepreneurship;
- Identifying problems and prospects for the development of entrepreneurial activities in agriculture;
- Analyzing the use of information technology in agricultural entrepreneurship;
- Identifying the main factors affecting the development of entrepreneurship in agricultural production: legislation, taxation, resources, government support, market infrastructure and the formation of entrepreneurs.
- Developing a set of organizational and economic measures to ensure the implementation of operations for the purchase and sale of agricultural products;
- Organizing a training for entrepreneurs in the form of business seminars;
- Analyzing the competitiveness of environmentally friendly products in the international market;
- Identify the most effective ways to influence potential customers of the online store of agricultural products;
- Developing convenient and inexpensive ways to deliver goods, i.e. logistics.

3. Results

The practical significance of the work lies in the fact that the research results create a methodological basis for the organization of online trading of environmentally friendly products. This is done in order to increase the competitiveness of business entities engaged in business activities in agriculture.

By 2025, according to United Nations projections, food production will need to increase by 70%. Therefore, the agricultural sector is faced with the task of increasing labor productivity and competitiveness based on the application of the latest scientific achievements and best practices. Thus, in the second decade of the digital age, many areas of life and professions underwent transformation. Now, the image of the farmer, as a simple peasant, familiar to our imagination, has irrevocably sunk into the past. And the current agricultural worker is a modern manager who can manage economic activities through computer programs and work with electronic data.

Digitalization is the conversion of information into digital form. The digital economy is a global network of economic and social events. They are implemented through platforms such as the Internet, as well as mobile and sensor networks. In our time, the boundaries have already been erased, and all commercial companies can be called digital. After all, every person uses Internet access, mobile communications. Increasing labor productivity and reducing costs are two key indicators that will be achieved in the era of digitization of agriculture.

Experts predict that by 2020, 25% of the global economy will move to the introduction of digitalization technologies. They allow the state, business and society to function effectively.

Based on the above facts in the field of digitalization, the comment of foreign and domestic experts should be cited, as well as foreign experience of using Internet technologies in order to improve the efficiency of entrepreneurship.

According to the “Digital Kazakhstan” program, Amr Salem, global managing director for Smart Cities Internet of Everything Cisco, said that Kazakhstan has the right approach to digitalization as a strategy for developing the economy and improving people's lives. Two factors are important here - the creation of an infrastructure that connects all government agencies with each other, and a single platform for providing services to the population. The expert also stressed that the digitalization program is a great journey, and not a project with some kind of ending, it will live for many years and constantly improve [1].
The director of the Boston Consulting Group in the Middle East, Alexander Tyurpits, noted that the growth of the Internet economy in developing countries is 15-25% per year, which no other sector of the economy can show. He reported that 90% of all global data was created in just the last two years. And 99% of the world's data is already digitized. 35 billion devices worldwide generate data and share it every day. It is five times larger than the world's population and makes up only one percent of the devices that can be connected. According to him, the timely introduction of technology will increase productivity in various industries and give them a "second life", will create jobs. In addition, Alexander Tyurpits noted that the growing electronic commerce erases the borders of states. Each country follows its own unique path. And the country focuses on one of the technologies that changes our lives. For example, Germany is developing the industrial Internet of things, the USA is artificial intelligence, Sweden is the blockchain, China is 3D printing, and Saudi Arabia is big data. Kazakhstan is one of 15 countries in the world, which is launching a comprehensive program that includes all four components of success - the digital transformation of traditional industries, the development of human capital, the digitalization of state services and digital infrastructure development.

He also noted the reasons for failures in this area. This is a limited participation of the private sector, focusing primarily on the ICT sector, focusing only on fast results and on “current” technologies. The expert also stresses that the fight against cybercrime is the other side of the process (digitalization). Last year, governments and corporations spent almost half a trillion dollars on countering cyber-attacks [2].

Alexey Gordeev, Presidential Plenipotentiary Representative in the Central Federal District, said that digitization of agriculture is necessary for the further development of the industry in the world. "Digitization of agriculture is of great importance. This is one of the most promising areas for sustainable development of the agri-food sector ", he said during the 31st session of the Regional Conference of the Food and Agriculture Organization of the United Nations (FAO) for Europe. According to Gordeev, the feasibility of digitalization has matured due to the need to use natural resources productively, develop sustainable and inclusive food systems, reduce losses of agricultural raw materials and food, and pursue an open and sustainable agricultural policy in all countries [3].

At the St. Petersburg International Economic Forum 2018 “Internet technologies in the agricultural sector,” Deputy Minister of Agriculture of Russia Ivan Lebedev said that digitalization is a fundamental trend in the development of agriculture, it allows you to increase agricultural production and ensure the profitability of the industry. Since according to preliminary estimates, the overall minimum economic effect from the introduction of IoT technology in agriculture for the period up to 2025 may be about 469 billion rubles due to the optimization of personnel costs; reduce crop losses (grain); reduce the loss of fuel and lubricants (POL) [4].

At the international conference “Digital Transformation of Agriculture,” organized by the Internet Initiatives Development Fund (IIDF), the Ministry of Agriculture of Russia and the World Bank together with the Association of the Internet of Things, held on May 15, 2018 in Moscow, it was noted that over the past 5 years total global investment in digital technology for agriculture has reached $ 10.1 billion. Russia still occupies only 1.5% of the global volume of the Internet of Things, while in agriculture the share is even lower. Increased investment will increase the level of digitization of agriculture [5]. In addition, digital technologies allow farmers in different countries to be trained in best practices, as well as adhere to uniform production standards. For example, Nestle (Switzerland) has trained 10,000 farmers in West Africa with modern technology for farming and storing products. As a result, the company received raw materials of guaranteed quality, and farmers - access to the global market and product sales at high prices.

On May 29, 2014 in Astana, the agreement was signed on the establishment of the Eurasian Economic Union. From January 1, 2015, the EAEU began to function together with Russia, Belarus and Kazakhstan as its participants. From January 2, 2015, Armenia became a member of the EAEU, Kyrgyzstan became a full member of the Union on August 12, 2015. In addition, the concept of digital transformation of the Kyrgyz Republic for 2019-2023 was developed in Kyrgyzstan in 2018. Digitization focuses precisely on the activities of state bodies, contributing to the improvement of public administration, improving the quality of services to the population, optimal business management and
the development of the economy as a whole. The head of Kyrgyzstan Sooronbay Zheenbekov also stressed that the implementation of the regional development strategy will continue. At the same time, in the coming year, emphasis will be placed on the introduction of new technologies in the economy and everyday life. To this end, the year 2019 was declared in Kyrgyzstan the “Year of the development of regions and the digitalization of the country”. The President said that in order to support rural entrepreneurs, new enterprises were exempted from inspections of supervisory bodies for 3 years, a moratorium on unreasonable business inspections was introduced, laboratories for certification and standardization of products were built, significant tax exemptions were made to local enterprises engaged in processing agricultural products, agricultural finance improved. Kyrgyzstan plans to implement the program “Digitization of agriculture” for 2019-2023 [6].

In our country, often raw materials are the main attractive factor for foreign investors. Kyrgyzstan is rich in various types of raw materials bases in various directions, this attractive factor reinforces low prices for them. Two main problems are listed, such as the lack of new technologies for processing raw materials and the lack of understanding of how to maintain and develop the raw material base [7], [5].

4. Conclusion

In conclusion, I note that today is the time when intelligent digital solutions should help the country's agriculture to cope with the problems of increasing productivity and sustainable development. The agricultural sector is the most vulnerable sector of the economy, largely dependent on the vagaries of nature. And the impact of climate change on food security in the world will only increase. Digitization of the agro-industrial complex will reduce these risks, adapt to climate change, increase crop yields and animal productivity, and plan field work in a timely manner. And a farmer, in order to remain competitive, must be able to predict the supply of his products depending on demand and consumer preferences. In order to make the right, or, as they say now, “smart” management decision, the farmer needs to own digital technologies. So, it is necessary to change the system of professional training of highly qualified personnel, starting from school, college, university and review the policy in the field of education. Additional financial resources are needed by rural entrepreneurs to speed up digitization. The Kyrgyz-Russian Fund was established in Kyrgyzstan for the implementation of investment projects in such areas as the agro-industrial complex, clothing, textiles, manufacturing, mining and metallurgical industry, transport, housing, trade, development of entrepreneurship and infrastructure. However, I consider it expedient to create an independent fund of digitalization of the agro industrial complex. This will allow the country's agriculture to become attractive for investments. Digitization of agriculture is an increase in labor productivity and cost savings. The main goal is to increase the yield and product quality. The agro-industrial complex of Kyrgyzstan is a field of activity with increased risks and depends largely on climatic factors. Digitization of agriculture in Kyrgyzstan will help reduce the impact of climate and gradually move to precision agriculture. [8, p. 83]

With the successful implementation of the program “Digitization of Agriculture”, it will give new advantages in the following main areas: (a) availability of funding through process automation; (b) the issuance of accompanying and permitting documents will be automated, electronic grain receipts, product-to-field traceability are provided and conditions for the introduction of online trading are created; (c) the registration system of agricultural equipment of its pledge and traceability will be automated, and the time frame for obtaining public services will be reduced; (d) a geoportal is created using space monitoring of forest and water resources, wildlife, hunting and fisheries.

Most importantly, the introduction of Internet commerce will increase direct sales by at least 20% and eliminate unscrupulous intermediaries.

Agricultural producers and cooperatives will be able to quickly consolidate their products into bulk lots, ensure a systematic supply and effectively promote them in the domestic and foreign markets. Also, as part of the task of technological re-equipment, work on introducing elements of precision farming, creating SMART farms, and engaging entrepreneurs in the use of IT technologies will be carried out. The introduction of elements of precision farming will significantly improve the efficiency of production processes of farmers. These elements include electronic field maps, accurate weather data, sensors and
sensors, space monitoring, etc. The introduction of SMART farms will allow monitoring livestock and herd management, provide autonomous greenhouse management, keep records and analyze costs in online mode.

Obviously, the digitalization of the agro-industrial complex will improve competitiveness and productivity, ensure the implementation of environmentally friendly products and food safety, as well as ensure investment attractiveness in the industry.

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