

Digital strategy to strengthen the commercial management of Cuban agro livestock cooperatives

Estrategia digital para fortalecer la gestión comercial de las cooperativas agropecuarias cubanas

Estratégia digital para potenciar a gestão comercial das cooperativas agrícolas cubanas



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ABSTRACT

Agro livestock cooperatives play a significant role in food production and distribution in Cuba. This study identified deficiencies related to the business management processes of these organizations that affect their economic performance. Although there are several studies aimed to improve the efficiency of the marketing and commercialization systems in Cuban cooperatives, there is a lack of studies related to the application of digital technologies in the commercial relations of these organizations. This research aims to strengthen the commercial management of Cuban agro livestock cooperatives by applying a digital strategy. Analytical-synthetic, historical-logical and modeling methods were used as scientific methods. The proposed strategy is based on the use of social trade through the social network Facebook. The implementation of this strategy will make it possible to expand marketing, market relations, technological innovation and competitiveness of Cuban agro livestock cooperatives.

Keywords: agricultural commercialization; digital marketing; electronic business; social networks

RESUMEN

Las cooperativas agropecuarias desempeñan un rol significativo en la producción y distribución de alimentos en Cuba. En este estudio se identificaron deficiencias relacionadas con la ejecución de los procesos de gestión comercial de estas organizaciones que afectan su desempeño económico. Aunque existen diversas

investigaciones orientadas a elevar la eficiencia en los sistemas de comercialización y el marketing de las cooperativas cubanas, se constató la carencia de estudios sobre la aplicación de las tecnologías digitales en las relaciones comerciales de estas organizaciones. Esta investigación tiene como objetivo desarrollar una estrategia para contribuir a fortalecer la gestión comercial de las cooperativas agropecuarias cubanas mediante el empleo de las tecnologías digitales. Se utilizaron como métodos científicos el analítico-sintético, el histórico-lógico y la modelación. La estrategia propuesta se sustenta en el uso del comercio social mediante la red social *Facebook*. La aplicación de esta estrategia posibilitará ampliar el marketing, las relaciones de mercado, la innovación tecnológica y la competitividad de las cooperativas agropecuarias cubanas.

Palabras clave: comercialización agrícola; marketing digital; negocios electrónicos; redes sociales

RESUMO

As cooperativas agrícolas desempenham um papel significativo na produção e distribuição de alimentos em Cuba. Este estudo identificou deficiências relacionadas com a implementação dos processos de gestão empresarial destas organizações que afetam o seu desempenho económico. Embora existam vários estudos que visam aumentar a eficiência dos sistemas de marketing das cooperativas cubanas, faltam estudos sobre a aplicação das tecnologias digitais nas relações comerciais destas organizações. Esta pesquisa visa desenvolver uma estratégia para ajudar a fortalecer a gestão comercial das cooperativas agrícolas cubanas através do uso de tecnologias digitais. Métodos analítico-sintéticos, histórico-lógicos e de modelagem foram utilizados como métodos científicos. A estratégia proposta baseia-se no uso do comércio social através da rede social Facebook. A aplicação desta estratégia permitirá ampliar a comercialização, as relações de mercado, a inovação tecnológica e a competitividade das cooperativas agrícolas cubanas.

Palavras-chave: marketing agrícola; marketing digital; e-business; redes sociais

INTRODUCTION

Food is the product most consumed by the population and the study of agrifood chains is a relevant issue for the development of modern societies. The production and marketing of food represents an endogenous development strategy in all countries, mainly in underdeveloped countries (Suárez Castellá et al., 2016). The need to meet the demand for agro-livestock products and guarantee food security gives the commercial management of the agricultural sector significant importance (Fernández Lorenzo & Contreras Dí, 2016).

Commercial management is an important element in all enterprise systems, with a marked impact on national economies (Fernández Lorenzo & Contreras Dí, 2016). Commercial management is the activity that deals with the study and exchange relations of the organization with the market, as well as the placement at the disposal of the final client of the products and services provided by the entity in exchange for a monetary

value (Ponce Andrade, 2017). This activity integrates the business models of the organizations and evolves together with them.

In Cuba, cooperativism represents an agent for promoting local development with a marked impact on the agro-livestock sector (Padrón Carmona, 2015). Agro-livestock cooperatives have made it possible to achieve acceptable levels of efficiency in this sphere of the economy and have contributed since the beginning of the Revolution to overcoming the difficult economic situation faced by the country's rural areas (Prego Regalado & Ugalde Crespo, 2015). However, these organizations must adapt to the demands of the market and make their offerings more dynamic in order to become true actors in local development and achieve sustained economic profitability (Padrón Carmona, 2015).

In Cuba, around 94% of the forms of production that make up the agricultural sector are cooperatives (ONEI, 2019a). During the period 2012-2017, the production of food and fruit by agro-livestock cooperatives represented more than 90% of national production (ONEI, 2018) and in 2018 this sector marketed 30.1% of the agro-livestock products produced during that year (ONEI, 2019b). These data show the remarkable participation of agro-livestock cooperatives in the Cuban agricultural market. However, in recent times, the agro-livestock product marketing system in Cuba has shown deficiencies and it is recognized that it is still far from meeting the population's food demand (Arias Salazar, 2018; Fernández Lorenzo & Contreras Dí, 2016). This is largely due to the existence of shortcomings in the production systems and trade management processes of the different actors operating in the Cuban agro-livestock market (Arias Salazar, 2018; Fernández Lorenzo & Contreras Dí, 2016; García Álvarez & González Águila, 2016).

According to Padrón (2015), technological development is one of the factors that influence the market and the organizations that operate in it. The development of digital technologies and their wide application in current commercial relations have modified the traditional models of negotiation (Tello Pérez & Pineda González, 2017). This led to the emergence of a new type of business called e-business. E-business is defined as the application of digital technologies in organizations to enable productive and administrative functions that facilitate the buying and selling of products, services and the exchange of information through digital channels (Tello Pérez & Pineda González, 2017). E-business is a broad concept that includes activities such as e-commerce, digital marketing and e-banking.

E-businesses have significant growth globally and represent a driving force in the economic development of nations (Perdigón Llanes et al., 2018). These businesses improve promotion, information flow, market transparency, access to new clients and suppliers and reduce costs related to the production process, contracting, transactions, marketing and distribution of agricultural products (Carvalho, 2015). However, although these businesses have a wide application in the commercialization of agricultural products in developed economies in the West, they are still considered an alternative distribution channel in developing countries (Nikolaou et al., 2018).

In Cuban agro-livestock cooperatives there are deficiencies that affect their business management processes and hinder their economic development (Fernández Lorenzo &

Contreras Dí, 2016; García Álvarez & González Águila, 2016; Padrón Carmona, 2015). Currently, there are various investigations aimed at increasing the efficiency of the marketing systems and the marketing of Cuban cooperatives. Padrón (2015) briefly analyzes the advantages of adopting the marketing approach in the commercial management of cooperatives as a guarantee for the achievement of their economic and social objectives. Prego and Ugalde (2015) delve into the role of relationship marketing as a tool to stimulate the articulation of the link between first and second degree agro-food cooperatives, although the country still lacks the latter type of cooperatives. Fernández and Contreras (2016) elaborate a procedure for the improvement of the marketing system of the Agro-livestock Production Cooperatives of Pinar del Río. However, the literature consulted did not identify any research aimed at improving the commercial management of Cuban agro-livestock cooperatives through the application of digital technologies.

This research aims to develop a strategy to help strengthen the commercial management of Cuban agro-livestock cooperatives using digital technologies. The proposed strategy is in line with guidelines 108 and 155 of the economic and social policy of the Communist Party of Cuba, related to the computerization of Cuban society and the transformation of the ways of marketing agro-livestock products in the country.

MATERIALS AND METHODS

The Google Scholar search engine was used to find information. Google Scholar is a free, geographically neutral database that indexes a considerable number of academic sources. Historical-logical, analytical-synthetic and modelling methods were used as scientific methods. These methods allowed the analysis of the literature, the extraction of the elements related to the object of study, to know its evolution in time and the elaboration of the proposed digital strategy. The research carried out is of a descriptive-propositive type because it details the elements related to the commercial management process of Cuban agro-livestock agricultural cooperatives and proposes, based on these results, a strategy to strengthen this activity through the application of digital technologies.

RESULTS AND DISCUSSION

Agricultural marketing systems are dynamic, competitive, and subject to continuous change and improvement. These systems must be consumer-oriented while providing benefits to the different actors involved (Rizo Mustelier et al., 2017). Agricultural marketing based on market orientation is an alternative to address poverty in underdeveloped nations (Martey et al., 2017).

In developing countries, there is a lack of road infrastructure that makes it difficult to market agricultural products, a situation that causes the post-harvest loss of 25 to 50 percent of these productions (Sánchez et al., 2018). Currently, the process of

commercializing agro-livestock products is very traditional, because contacts are established with markets or contracting centers, to which the seller goes with or without the presence of the merchandise (Sánchez Mojica et al., 2018).

In Cuba, agricultural marketing is developed through two management models with their own characteristics and weaknesses: one in which the collection system centralizes marketing and another in which marketing takes place through the agro-livestock enterprise or directly through the production scenario (Jordán Pantoja & Téllez Villardi, 2019). Since 2013, several measures have been adopted to homogenize the marketing rules among the different participants of the Cuban agricultural market. However, the results achieved are discrete and differences in the distribution of benefits along the value chain were evident, mainly favouring retail traders (García Álvarez & González Águila, 2016).

According to Sánchez et al. (2018) the lack of effective communication between buyers and sellers makes the marketing of agro-livestock products difficult. In the case of Cuba, the characteristics of a developing economy and the economic prohibitions imposed on the nation by the US blockade make it difficult to acquire the goods and inputs needed to ensure the production, marketing and distribution of food. This affects the productive, commercial and economic indices of the different forms of agro-livestock production in the country. In addition, the limited role of agro-livestock cooperatives in stimulating trade, the lack of competitiveness, disagreements with the established economic contracting process and the existence of excessive regulations that limit access to or the operation of the market are factors that affect the quality levels and production of Cuban agro-livestock cooperatives (Arias Salazar, 2018; Fernández Lorenzo & Contreras Dí, 2016; García Álvarez & González Águila, 2016). Likewise, the lack of specialized personnel for marketing, the lack of a sales department and market research, the incipient or non-existent marketing approach and the scarce technological development of these organizations are elements that affect their performance in the market, their commercial management and hinder their economic development (Fernández Lorenzo & Contreras Dí, 2016; García Álvarez & González Águila, 2016; Padrón Carmona, 2015).

Improving the agro-livestock marketing system is a necessity for the development of the Cuban economy (Arias Salazar, 2018; Jordán Pantoja & Téllez Villardi, 2019). Suárez Castellá et al. (2016) described a procedure for designing agro-livestock product value chains at the local level in farms in Matanzas and Villa Clara. García and González (2016) propose a set of actions to help improve the performance of the Cuban agro-livestock system. Fernández and Contreras (2016) developed a procedure to improve the marketing system of Agro-livestock Production Cooperatives in Pinar del Río province by adapting enterprise improvement to the particular characteristics of these organizations. Rizo Mustelier et al. (2017) designed a marketing strategy for a state-owned agro-livestock market belonging to the Empresa Provincial de Acopio in the province of Santiago de Cuba in order to improve its sales management. Arias Salazar (2018) defended the idea of maintaining and improving the Empresa de Acopio and creating second grade marketing cooperatives to complement state markets in order to increase the efficiency of the agricultural marketing system. Nova, Prego and Robaina (2018) identified the potential of intercooperation relations between agricultural cooperatives to achieve the full advancement and application of production-value linkages, under the win-win concept for all their members.

Although research on agrifood chains and the agricultural marketing system in Cuba is abundant, there are still difficulties in the marketing and supply of these inputs. In addition, no research was identified that applies digital technologies to strengthen the trade management system of the different actors involved in the Cuban agro-livestock market.

Proposed digital strategy

A digital strategy is a means of setting objectives and action programs to drive digital initiatives, measure their progress and rethink them as necessary. Digital strategies represent a response to external opportunities and threats and enable the transformation of products, processes, organizational aspects and business models by using new technologies to achieve the organization's competitive advantage through the delivery of services through digital channels (Matt et al., 2015).

In order to elaborate the proposed digital strategy, a set of premises were considered that contribute to guarantee its correct implementation and operation in Cuban agro-livestock cooperatives. These premises are:

- Support from the managers and members of the cooperative: The interest of the organizations' management is one of the organizational factors identified in the literature that affect the adoption of digital technologies in their business processes.
- Staff of the organization with experience in the use of digital technologies and skills in marketing and electronic promotions: It is necessary to prepare the members linked to the commercial management of the co-operative in the use of digital technologies, marketing and electronic promotions in order to achieve an efficient implementation and operation of the proposed digital strategy. This premise is related to one of the principles of cooperativism: education, training and information. The improvement and training of cooperative members in universities and entities specialized in services related to Information and Communication Technologies (ICT) constitutes a way to achieve this purpose.
- Access to digital technologies and the Internet: The strategy is based on the use of digital technologies as fundamental means of the organization to carry out its commercial and business processes, a situation that attributes great relevance to access to these technologies. At present, this is not an unattainable goal; on the contrary, the use of digital technologies by the different sectors of Cuban society is increasing.

The general objective of the proposed strategy is to strengthen the commercial management of Cuban agro-livestock cooperatives. Figure 1 shows the stages that make up the strategy. These stages complement each other and cannot be conceived independently of each other. The stages have actions in correspondence with their specific objectives and with the general objective of the strategy.

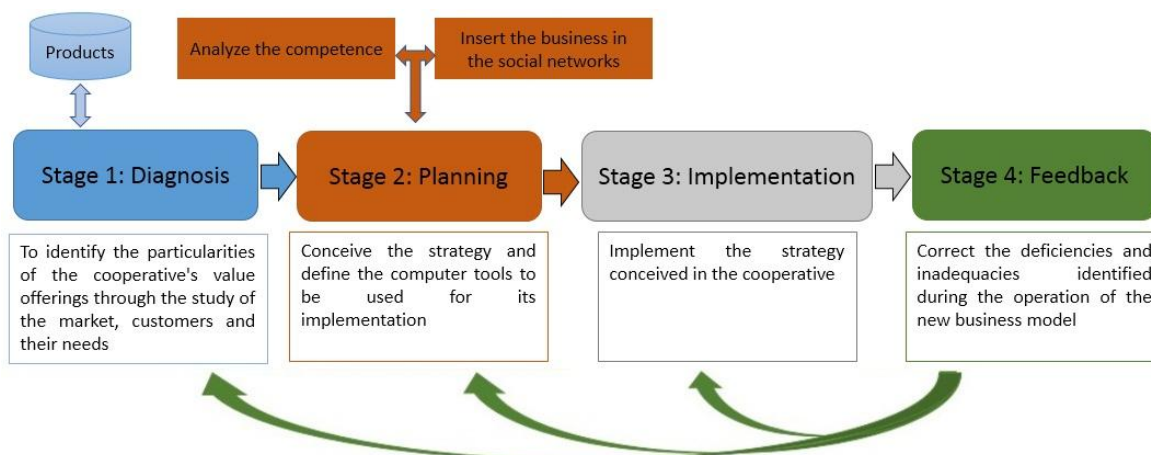


Fig. 1 - Digital strategy to strengthen the commercial management of agricultural cooperatives

Source: Own elaboration

The strategy is based on the use of the social commerce modality as a fundamental means to insert the offers of the agro-livestock cooperatives in the digital market. This type of trade is based on the use of Internet social networks to establish online business relationships. This trade modality was used because Internet social networks are widely used by the Cuban population and facilitate the creation of profiles and digital sites for business. The stages that make up the strategy are described below:

Stage 1: Diagnosis

Objective: To identify the particularities of the cooperative's value offerings through the study of the market, customers and their needs.

In this first stage, an analysis of the market where the cooperative operates, the characteristics of its offers, the products it sells and its commercial management is carried out. This stage helps to identify the weaknesses of the business model and the marketing system of the cooperative. The following actions are proposed:

- Analyze the commercial and financial performance of the cooperative to determine the key business processes to be enhanced.
- Determine the characteristics of the products to be marketed, their benefit and the elements that differentiate them from their similar products in the market. It is recommended that a SWOT matrix (strengths, weaknesses, opportunities, and threats) be used as a tool to facilitate this task.
- Identify and quantify potential customers in the market.
- Establish a correct correspondence between product quality and price.
- Facilitate different mechanisms to access products, strengthen their production, and supply chain.
- Establish different commercialization channels according to the particularities of the clients.

Stage 2: Planning

Objective: Conceive the strategy and define the computer tools to be used for its implementation.

To carry out this task it is necessary to analyze the competition in depth, study the particularities of the clients, the current trends of digital business and make an efficient use of ICT. At this stage, actions are proposed using ICTs, which contribute to increasing the marketing of the business and the attraction of new customers and business partners. The actions proposed for this stage are:

- Analyze the competition.
- Identify similar businesses and analyze the fundamental elements of their proposals.
- Create profiles in social networks that make it possible to interact and increase the attraction of new customers and business partners. The use of Facebook is proposed because it is currently the most used social network in promotions and marketing.
- Insert the cooperative's business on the web. To do this, we propose to position the organization's offers in the marketplace of the social network Facebook.
- Develop a simple, agile and safe sales process that uses different payment mechanisms. A reliable and secure payment gateway should be used to carry out electronic financial transactions between the cooperative, its members and clients. The use of bank transfers and the Cuban payment gateway PasaRed is proposed.
- Use personalized digital marketing techniques with adequate and true content through different computer techniques to ensure effective promotions. The author proposes implementing content marketing techniques in accordance with the products marketed by the cooperative and strengthening the positioning of its business through techniques such as search engine optimization (SEO).

Stage 3: Implementation

Objective: Implement the strategy conceived in the cooperative.

At this stage the traditional business management model of the cooperative is modified. It is proposed as a fundamental action of the stage:

- Implement the elements defined in the previous stages in the business that the cooperative develops.

Stage 4: Control and feedback

Objective: Correct the deficiencies and inadequacies identified during the operation of the new business model.

This stage allows redirecting the objectives and the scope of the cooperative's business in real time, to avoid market losses, to increase competitiveness, and to achieve customer loyalty and trust. To achieve this objective, the following actions are proposed:

- Evaluate the performance of the strategy by measuring the economic and commercial indicators of the cooperative: sales levels, market increase, decrease in operating expenses, etc.
- To update and follow continuously the profile of the business in the social networks.
- Establish an effective communication channel between the business managers in the digital platforms and the cooperative's managers to execute corrective actions in time.
- Re-elaborate and adjust the strategy according to the results obtained during this stage.

The proposed strategy encourages the use of digital technologies, is aimed at strengthening the implementation of business management processes of Cuban agro-livestock cooperatives and contributes to improving the efficiency and competitiveness of these organizations. The active participation of customers in the value offerings of the cooperatives through digital technologies makes it possible to improve the attention to their needs and raise their levels of satisfaction.

An analysis of the literature has shown that there is an urgent need to strengthen the process of marketing agricultural products in Cuba. A group of shortcomings and deficiencies were identified in the market relations and commercial management of Cuban agro-livestock cooperatives. The lack of research related to the application of digital technologies in the commercial management processes of these forms of production was noted.

In this research, a strategy was developed to help strengthen the commercial management of Cuban agro-livestock cooperatives using ICTs. The strategy developed will make it possible to expand marketing, market relations, technological innovation and competitiveness in these organizations.

The authors of future research can measure the impact of the proposed strategy on the commercial and economic indices of cooperatives. It is also recommended to analyze the levels of satisfaction of the members and clients of these organizations with the proposed business model.

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Conflict of interest:

Authors declare not to have any conflict of interest.

Authors' contribution:

The authors have participated in the writing of the paper and the analysis of the documents.



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