

## AGRICULTURAL SOFTWARE MARKETING: ASSESSING STRATEGIES FOR SUCCESS

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### Abstract

The agricultural sector contributes economically to Romania's GDP (gross domestic product) and employment levels, important pillars of the country's economy. Despite the crucial importance of the agricultural sector in Romania, there has been a lack of adaptation to technological development in all fields all over the world. The marketing strategies currently used in agriculture have both advantages and disadvantages. The present study aimed to identify the main marketing methods and present them in terms of the advantages and disadvantages of their use in the agricultural sector. The following main current strategies used were identified: interviews, marketing research, competitor analysis, group discussions and SWOT analysis. For each of these strategies were identified and discussed advantages such as customer needs, preferences, requirements and areas for improvement, quality of the products or services offered, insights into industry competitors, identifying market opportunities and the possibility of monitoring and adjusting marketing strategies, customer relationships, customer loyalty and satisfaction. Although identified in smaller numbers, the disadvantages include the following: high costs of implementation, time-consuming activities and the subjectivity of the retrieved information (for example, in the case of market research strategy), risk of imitating competitors or risk of incomplete information in the case of competitor analysis strategy or limitations in group size and representativeness or group biases (for strategies involving group discussion).

**Key words:** marketing methods, agricultural sector, market research, interviews, SWOT, competitor analysis

The agricultural sector is a crucial part of any country's economy, contributing significantly to the country's gross domestic product (GDP) and employing a large percentage of the population. In Romania, where nearly one-fifth of Romanians are employed in agricultural - related activities, \*compared to the European Union (EU) member average of 4 per cent. Romania's 2.9 million agricultural landowners account for one-third of the EU's agricultural holdings (ITA, 2022).

According to the National Institute of Statistics in Romania, in 2021, the agricultural sector's contribution to the country's GDP was 4.6%, positioning 11 at the European level (TGE, onsite) and 111 worldwide. GDP from Agriculture in Romania decreased to 2079.60 RON Million in the fourth quarter of 2022 from 2286.80 RON Million in the third quarter of 2022. Despite the significant increase in the IT industry in Romania and the availability of a diverse range of software solutions, the adoption of these solutions to increase the efficiency of agricultural work remains low.

The marketing strategies related to this low degree of adoption have become the subject of the

present research study to illustrate the advantages and disadvantages of their use and offer a better understanding.

### MATERIAL AND METHOD

The application of qualitative research was aimed at distinguishing and summarising the pros and cons of existing marketing strategies, with the purpose of providing a clear overview of the available options and assisting in the selection of the most suitable strategy to enhance the efficiency of software solution adoption. In addition to understanding the benefits of selecting a marketing solution, it is crucial to comprehend the drawbacks and primary factors that can impact the effectiveness of the selected marketing strategies.

### RESULTS AND DISCUSSIONS

Over time, a series of scientific studies have demonstrated the practical effectiveness of various marketing and commercialisation strategies for software solutions in agriculture. A 2020 study published in the journal Sustainability examined the

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impact of market segmentation on the purchasing behaviour of farmers in India (Bisht I.S. *et al*, 2020).

The researchers found that market segmentation led to a significant increase in sales of agricultural products. A 2019 study published in the Journal of Agricultural Education and Extension examined the impact of partnerships on agricultural technology adoption in Ghana. The researchers found that partnerships were an important factor in promoting agricultural technology and encouraging farmers to adopt the technology. Another 2019 study examined the impact of free trials on agricultural technology adoption in Nigeria. The researchers found that the free trials were effective in encouraging farmers to adopt the technology and make subsequent purchases. A 2018 study examined the impact of email marketing on the purchasing behaviour of US farmers. Researchers

found that email marketing was effective in increasing the number of purchases and increasing the average order value. These studies suggest that different commercialisation strategies can be effective in promoting agricultural software solutions and encouraging the adoption of agricultural technology. However, it is important to consider the specifics of the target market and adapt strategies to customer needs and preferences to maximise impact and effectiveness.

**Interviews.**

Marketing based on interviews can be an effective method of obtaining direct feedback from potential customers and gaining useful information about their needs.

**Interviews**

ADVANTAGES
<ul style="list-style-type: none"> <li>• Customer preferences and requirements</li> <li>• Enhancing the quality of the products or services offered</li> <li>• Identify areas of improvement</li> <li>• Customer relationships</li> </ul>

DISADVANTAGES
<ul style="list-style-type: none"> <li>• High costs</li> <li>• Time-consuming</li> <li>• Subjectivity</li> <li>• Challenging</li> </ul>

This can help develop products and services that meet customer needs and create more effective and targeted marketing. Regarding the benefits of conducting interviews with potential customers, several advantages can be identified. Firstly, direct feedback can be obtained from the target market, enabling a comprehensive understanding of their preferences and requirements, including insights into how they intend to use the product or service. Such feedback can serve as a valuable resource for enhancing the quality of the products or services offered. Secondly, feedback obtained through interviews can be utilised to identify areas of improvement, leading to the development of effective solutions that cater to customer needs. Lastly, customer relationships can be cultivated through interviews, providing opportunities to establish rapport and convey a genuine interest in customer satisfaction.

With respect to limitations, the interview-based marketing strategy may encounter certain issues, including high costs associated with hiring specialised personnel or utilising specialized

equipment. Furthermore, the interview process can be time-consuming, particularly when targeting a large pool of potential clients. Additionally, feedback obtained through interviews can be prone to subjectivity, influenced by the interviewee or contextual factors. Lastly, securing interviews with potential customers may be challenging, particularly if they are reluctant or constrained by time.

**Market research.**

It should be noted that the advantages and disadvantages of a market research-based marketing strategy are contingent upon the specific approach employed and the objectives of the research. This section discusses the advantages of implementing a market research-based marketing strategy (*table 1*).

Firstly, conducting market research provides a comprehensive understanding of customer needs and preferences, which can inform product and service development and marketing strategies. Secondly, market research enables the identification of current and future market trends, as well as

insights into industry competitors. Additionally, market research mitigates risks associated with developing and launching products and services by

### Market research

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> <li>• Customer needs and preferences</li> <li>• Identify areas of improvement</li> <li>• Market trends</li> <li>• Insights into industry competitors</li> <li>• Market demand and supply</li> <li>• Enhance brand image</li> <li>• Identifies the most effective marketing channels</li> </ul>	<ul style="list-style-type: none"> <li>• Costly</li> <li>• Time-consuming</li> <li>• Subjective</li> </ul>

providing information about market demand and supply. Moreover, market research helps identify how customers perceive a brand and aids in the development of strategies to enhance brand image. Lastly, market research identifies the most effective marketing channels, facilitating adjustments to marketing strategies to maximise their impact. Overall, implementing a market research-based marketing strategy offers numerous advantages that can inform strategic business decisions and enhance customer satisfaction.

While a market research strategy provides an in-depth understanding of customer needs and preferences, leading to the development and marketing of relevant products and services, it may also present certain disadvantages. For instance, conducting market research can be costly, particularly if an external specialised agency needs to be hired. Moreover, market research can be time-consuming, especially if data needs to be collected from a large number of respondents. Additionally, the data collected through market research may be subjective, varying depending on the respondent or

circumstances, which can lead to inconclusive or erroneous results and, ultimately, poor marketing decisions. Thus, it is crucial to thoroughly evaluate both the advantages and disadvantages of a market research-based marketing strategy and decide whether it is the most suitable approach for achieving the business's objectives, given the available resources.

#### Competitor analysis.

The utilisation of a marketing strategy that is based on competitor analysis can result as well in both benefits and drawbacks. Competitive analysis is capable of providing invaluable insights regarding the competition in the industry, such as their products and services, marketing and sales strategies, and strengths and weaknesses. Enhanced comprehension of competitors can assist in the development of more effective marketing strategies and in distinguishing one's business from others.

Competitive analysis can aid in identifying market opportunities and pinpointing customer needs and preferences that are currently unmet by competitors in the industry.

## Competitor analysis

### ADVANTAGES

- Identifying market opportunities
- Customer needs and preference
- Businesses strengths and weaknesses
- Most effective marketing channels

### DISADVANTAGES

- Risk of imitating competitors
- Risk of incomplete information
- Costly /expensive
- Challenging to keep constantly update

Through competitive analysis, businesses can identify their own strengths and weaknesses which are unique relative to those of their competitors, which can in turn, be leveraged to establish unique strengths and differentiate themselves in the market. Competitive analysis can enable the identification of the most effective marketing channels, thus facilitating the tailoring of marketing strategies accordingly.

The risk of imitating competitors is very common. While analysing the competition, businesses may become overly focused on competitors and end up imitating their strategies rather than developing distinctive ones of their own. Additionally, there is the risk of incomplete information; competitive analysis may provide an incomplete picture of the market and its competitors, which can result in incorrect decisions. Conducting a comprehensive competitor analysis

can be an expensive undertaking, particularly if a specialist agency needs to be engaged.

Difficulty in keeping information current to constantly update the information regarding industry competitors, which can prove to be a challenging and costly task.

### Group discussions.

Discussion groups can serve as a valuable tool for businesses to obtain direct feedback from customers regarding their products or services in a structured and secure setting. Such feedback can offer businesses valuable insights into customer opinions, preferences, and concerns, enabling them to tailor their offerings to better meet customer needs. Additionally, discussion groups can provide a forum for the generation of new and innovative ideas related to products and services, as well as feedback on areas that require improvement.

## Group discussion

### ADVANTAGES

- Customer needs, preferences, and concerns
- Quality
- Product improvement
- Customer loyalty and satisfaction
- Market opportunities

### DISADVANTAGES

- Limitations in group size and representativeness
- Subjectivity and external influences
- Group biases
- Costs
- Time commitments

By communicating with customers in a more personalized and interactive manner through these groups, businesses can foster greater customer loyalty and satisfaction. Furthermore, focus groups can assist in developing a deeper understanding of

customer needs and preferences, facilitating the development of products and services that are better suited to customer demands. Limitations in group size and representativeness: The size and representativeness of the discussion group can be

restricted, leading to potential errors in generalisations or the development of products and services that may not be relevant to a broader customer base.

**Subjectivity and external influences:** Opinions expressed within discussion groups can be subjective and influenced by external factors, as well as personal biases of group members, which may not accurately represent the broader market.

**Group biases:** Discussion groups can be influenced by group biases such as social conformity or disagreement, which can impact the opinions and decisions of the group members.

**Costs and time commitments:** Participating in focus groups can be an expensive and time-consuming process, including planning, recruitment, and compensation of participants.

**SWOT analysis.**

In the context of marketing, a SWOT analysis can offer both advantages and disadvantages. The benefits of utilising SWOT analysis include the ability to identify business strengths and opportunities and develop effective marketing strategies to capitalise on them. SWOT analysis can

also help identify business weaknesses and threats and develop marketing strategies to address these issues. Additionally, SWOT analysis can be used as part of the strategic planning process to develop clear and well-defined goals and strategies for the business. It provides flexibility, as it can be tailored to the specific needs and objectives of the business and can be used as part of the process of monitoring and adjusting marketing strategies as the business develops.

However, it is important to consider the potential drawbacks of SWOT analysis, such as oversimplification of complex issues, subjective interpretation of data, and a lack of specificity and detail that may limit its usefulness. Therefore, it is important to weigh the advantages and disadvantages of SWOT analysis when considering it as a marketing strategy for your business.

A marketing strategy based on SWOT analysis has both advantages and disadvantages. On the one hand, SWOT analysis can help identify business strengths and opportunities, as well as weaknesses and threats, and develop marketing strategies to capitalise on them or address these issues.

**SWOT analysis**



Additionally, SWOT analysis can be used as part of the strategic planning process to develop clear and well-defined goals and strategies for your business. It is also flexible and can be tailored to the specific needs and objectives of your business.

On the other hand, there are some potential disadvantages of using SWOT analysis as a marketing strategy. For instance, it can be subjective and influenced by the personal biases and

past experiences of those conducting the analysis. Also, it may not provide enough detail or relevant information to develop specific marketing strategies or specific information about customer needs and preferences. Moreover, the limitations of SWOT analysis may affect the effectiveness of the marketing strategies developed, such as a lack of relevant information or experience in conducting SWOT analyses.

Advantages and disadvantages of marketing methods

ADVANTAGES	DISADVANTAGES
<ul style="list-style-type: none"> <li>• Quality of the products or services offered</li> <li>• Customer needs, preferences and requirements</li> <li>• Areas of improvement (PRODUCT/MARKET)</li> <li>• Customer relationships, customer loyalty and satisfaction</li> <li>• Market trends</li> <li>• Insights into industry competitors</li> <li>• Market demand and supply</li> <li>• Enhance brand image</li> <li>• Identifies the most effective marketing channels</li> <li>• Market opportunities</li> <li>• Businesses strengths and weaknesses</li> <li>• Business weaknesses and threats</li> <li>• Strategic planning process</li> <li>• Flexibility</li> <li>• Process of monitoring and adjusting marketing strategies</li> </ul>	<ul style="list-style-type: none"> <li>• High costs</li> <li>• Time-consuming</li> <li>• Subjectivity</li> <li>• Challenging</li> <li>• Risk of imitating competitors</li> <li>• Risk of incomplete information</li> <li>• Challenging to keep constantly update</li> <li>• Limitations in group size and representativeness</li> <li>• Group biases</li> <li>• Oversimplification of complex issues,</li> <li>• Lack of specificity and detail</li> </ul>

### CONCLUSIONS

By analysing the marketing strategies used in agriculture and identifying their advantages and disadvantages, it was observed that methods such as interviews, SWOT analysis, and marketing research present the most favourable advantage/disadvantage ratio, although they are confronted with a high level of subjectivity in the data obtained, as well as high implementation costs and long periods required to obtain results from the actions undertaken. In the case of the other two strategies presented (competitor analysis and group discussion), the advantages and disadvantages identified were relatively equal in number, being negatively influenced by cost, subjectivity, available human resources, and ability to keep up with changes.

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