

HARNESSING DIGITAL MARKETING TO BOOST AGRIBUSINESS

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***Abstract:** This study explain a simple way to boost agricultural productivity of agribusinesses. It means transition from the traditional marketing to digital. Digital marketing emerges as a tool for transforming the relationship between farmers and consumers, boosting production and promoting agribusiness. The study explores the integration of digital marketing in agriculture, modernizing the field while also modernizing farming practices, which ultimately tend to improve the overall efficiency and success of the sector.*

Keywords: marketing, agriculture, innovation, strategy, digitalization.

INTRODUCTION

Information technology is currently developing very rapidly and is being widely applied in various sectors, ranging from business, industry, agriculture and other sectors. These sectors are competing to utilize information technology that can help their activities. One of the uses of information technology development that is now widely used is the use of the internet. The Internet has become part of everyday activities, from communication to marketing [3]. Nowadays, the agriculture sector although a top sector, which is maintained by hundreds and thousands of households, faces the most difficult challenges. From the lack of resources, to the high and complex demands of the population, who have different needs, preferences and opinions what is the ideal agricultural product in their head.

Digital marketing comes as a powerful tool that can simplify the relationship between households and consumers bilaterally. It not only boosts production, but also improves the way agribusinesses and farmers connect with their markets. While being consumer-oriented, it must capitalize on technologies that are always evolving, combined with innovative marketing strategies. In this way, however, an upgrade in productivity and the promotion of farm households can be achieved [1,5].

Until the implementation of digital marketing in the agricultural sector, it was the approach of agricultural marketing that suggested a transportation of agricultural products from the farm to the consumer, and its logistical role was also evaluated. In spite of the fact that it was customer-oriented and provided profit to farmers, traders, shops, peasant households and etc., in the era of IT field development farmers have to accommodate with the new emerging innovations to improve their profits and not only. [7,10]

Although the agricultural sector is one that may involve a huge number of farmers and their emergence in the market, the consumer will choose the one whose product will fulfill all his needs. The farmer or agricultural enterprise dealing with a particular product must be able to attract the consumer to the product. So this is where the role of digital marketing comes in, with advertising being used on the internet, mobile phones, social media, TV and radio. Each of the marketing channels listed has its own specific strategy. So in addition to the choice of channel, a product promotion strategy needs to be created. Digital marketing is an integral part of all communication methods and has become a success factor in agriculture [2,9].

So, why agribusiness needs to use digital marketing tools to get a boost?:

1. Access to information and e-commerce

In today's world, a farmer can receive real, modern and up-to-date information on weather conditions, market prices and farming techniques on his handheld device or tablet using available online platforms. E-commerce allows farmers to sell their products directly to consumers and businesses without middlemen, increasing profits. This model helps small and medium-sized enterprises much more [15].

2. Social media marketing and content marketing

As is well known, marketing is considered the key to growing and retaining an audience, whether offline or online. Content, generated by blogging, vlogging and other forms of social media on Facebook and Instagram, would help agribusiness better connect and engage with its audience so that potential customers can be harvested [6]. Likewise, streams carried on such platforms as TikTok, YouTube and even Twitch could show consumers the whole process that agricultural produce goes through until it reaches their homes, thus familiarizing the consumer.

3. Global expansion and profitability

Digital marketing comes with its benefits in that it reaches a global audience, increases sales and builds a brand that is not only appreciated locally but also internationally. The farm business or a farmer could in a few clicks create a social media page and instantly upload content there. Even if digital strategies seem complicated, especially when it comes to the agricultural sector, these methods prove to be financially rewarding in the long run, allowing real-time changes to optimize return on investment and then capitalize on profitability [8].

MATERIALS AND METHODS

The study involves researching the field of digital marketing and identifying optimal solutions to push the agricultural sector towards success. So, that agricultural producers are able to involve some simplistic aspects of this field by pursuing their initial goals and objectives. This study uses a qualitative methodology that combines observational methods with a literature review. The study proposes to highlight digital marketing for increasing agricultural productivity. This being achieved by reviewing the existing body of research and industry findings. Key topics include issues and possible impacts on production as well as current digital marketing trends, tools and tactics relevant to agriculture. Therefore, since digitization is a process by which information acquires a digital aspect and observation methods are used to gather insights into real-world practices and applications of digital marketing in agriculture. Observational research focuses on:

- *Social Media Analysis* - observing digital marketing activity on digital platforms such as Facebook, Instagram, TikTok, YouTube, which are focused on commercialization of agricultural production, cooperatives and agribusinesses activity. The key elements observed tend to be reflected in the content published on the web pages, through which the strategy applied to the messages is conveyed to farmers, if it is a reference to the B2B sphere, or to consumers, B2C respectively.
- *Ag-commerce platforms* - analysis and monitoring of the websites through which agricultural production is sold, and thus e-commerce to supply it to different markets. The digital market concept can also be used by farmers and agricultural businesses to reach closer to consumers and to have flexible promotion.
- *Digital Campaigns and Outreach* - observation of digital marketing campaigns by agricultural extension programs, NGOs, and Agribusiness companies in general and those targeted at the rural farmer for increasing productivity by promoting best practices, new products, and technologies.

RESEARCH RESULTS

Data from 2023 reports that the global digital agriculture market, estimated at 22 billion USD, has a forecast to grow by 2029 to 39.8 billion USD with a compound annual growth rate (CAGR) of 10.4%. Accelerated adoption is, therefore, taking place toward digital technologies that are emerging continuously in North America, Europe, the Asia Pacific, South America, and the Rest of the World (RoW). The largest shares of holdings appear to be located in North America and Asia-Pacific, with significant contributions from other regions, which points towards a global shift to digital solutions in agriculture.

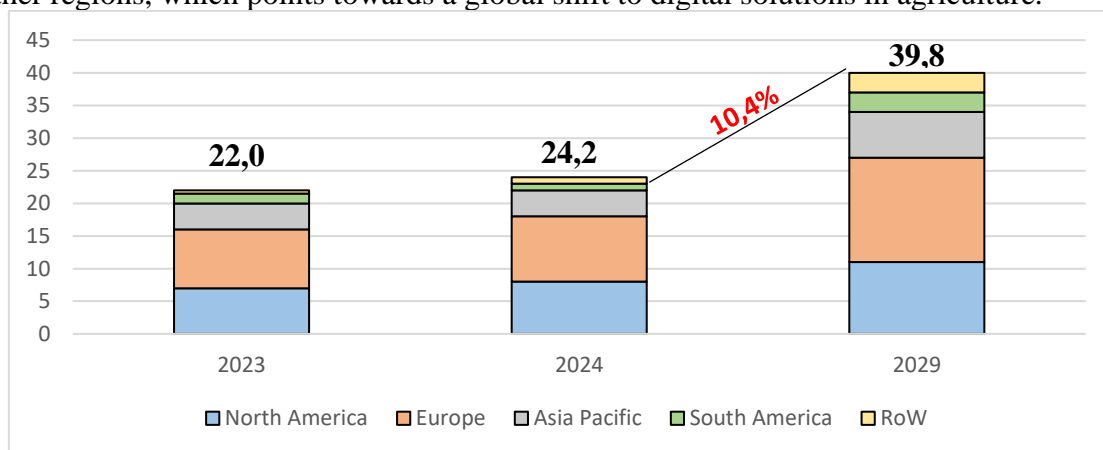


Figure 1. Digital Agriculture Market Global Forecast to 2029 (USD billion) [13]

This growth signals a rising role of digital marketing as an important tool for the betterment of agricultural activities, in that farmers can leverage data-based information to undertake their operations better and be more productive. With the growing market, possibly digital platforms are going to be the key matchmakers between producers and buyers in optimizing supply chains and promoting sustainability in agriculture across the world.

Understanding Digital Marketing in Agriculture

Harnessing digital marketing in agriculture transforms the way farmers and agribusinesses interact with consumers, making them more efficient, profitable and sustainable, key aspects being:

- **Wider market access** - strategies used in digital marketing help to significantly increase the market reach of agricultural products, and therefore the global market. Using social media campaigns and digital content such as blogs, videos, and newsletters keep customers engaged and informed about new products, farming practices, and industry trends. Digital marketing also helps to promote sustainability practices, attracting environmentally conscious consumers [11].

- **Data-driven decisions** - while digital tools such as analytics and big data exist to enable farmers to make informed crop management decisions, market trends and consumer preferences are constantly changing, so all subsequent decisions need to take this into account. These technologies can process vast arrays of structured and unstructured data to provide useful real-time insights. For example, the use of big data analytics helps to interpret patterns and trends from different data sources, thus contributing to better resource management and increased productivity. However, the willingness of farmers to participate remains a challenge due to barriers in obtaining and using this data, but still it is better to improve access as farmers use big data to make better decisions [17].

What digital marketing tools should boost agriculture business?

In a digital age, agribusinesses can benefit from a stronger relationship with their consumer as well as increased profitability by implementing digital marketing and corresponding channels. These digital marketing channels not only increase visibility, but

also improve customer engagement and stimulate growth. Marketing channels used in the agricultural sector can be:

1. Using PPC ads - these help to increase online conversions and sales and are also called digital ads. The farmer or farming business only has to pay for the ad placed. They can increase brand awareness by 80% and the conversion per click can be \$2 for every \$1 spent. So potential consumers who make such clicks on the ads placed by farmers are 50% more likely to make the final purchase [16].

2. Create a social media page - so there are over 3 billion users on social networks, on Facebook, Instagram, YouTube, TikTok - the farm business or farmer can choose the network that is most accessible to him. All he need to do is to regularly post videos or pictures of his agricultural production on social media to show potential or loyal consumers his online presence. Also, social media is a channel to strengthen the relationship with its audience as well as with the general public through messages, reviews and questions below the posts. The use of digital advertisements in social media can also bring new customers to the farmer or farm business.

3. Start an email newsletter - this tool involves daily, weekly or monthly contact with the public who are interested in the business or the agricultural sector. Newsletters can be distributed both on social media and via email. By e-mail, it provides customers with more information about products, the business, promotions or discounts. The return on investment is about \$44 for every \$1 spent, with an ROI of 4400% [4].

4. Create customized content - this concept involves increasing online visibility by creating a customized web design, with the agricultural sector using colors such as green, blue, yellow. Farmer or farm business should also adjust his SEO strategy - which involves ranking agribusiness higher in search engines. This will lead to increased traffic on the website or social media, with content being visible to more potential consumers. In this way, brand awareness and trust increases as consumers start to recognize the product.

Implementing these strategies across digital marketing channels can help agribusinesses and farmers reach a wider audience, interact more effectively with customers and drive growth. By utilizing SEO, PPC, email marketing, content marketing and web design, farm businesses can improve their online presence and achieve long-term success.

Digital Marketing Strategy for Agribusiness (IoT)

The idea of a digital marketing strategy is the Internet of Things, which selects the right "sensors", which are targets, resources, time or budget on which either the needs of the farm business or the farmer depend [12]. The IoT system contains software and other technologies, these can be managed depending on what the farmer would like to incorporate. For the purpose of connecting and exchanging data with other devices and systems on the internet, there are currently over 7 billion IoT connected devices, but experts expect this number to grow to 10 billion by 2020 and 22 billion by 2025[14]. Although the idea of IoT has been around for a long time, a number of recent advances in several technologies has put it into practice that would be very useful for procurement activity and would streamline the procurement process:

- *Cheap and easy access to sensor technology.* Affordable and reliable sensors make IoT technology usable by multiple producers, agencies, government bodies, so its use by farmers will not provide very high costs out of their own budget, but also simple to manage with it.

- *Connectivity.* A host of networking protocols for the internet has simplified the connection of sensors to the cloud and other "things", these include general, specific and strategy goals and other aspects, for efficient data transfer.

- *Cloud computing platforms.* Increasing the availability of cloud platforms would allow farmers and consumers to access the infrastructure they need to scale without effectively

having to manage it all. The consumer would be able to select only what they are interested in, or access an analytics where they could see what investment the business or farmer is making in technologies to process their agricultural production or what certificates they have earned.

- *Conversational artificial intelligence (AI)*. Advances in neural networks have brought natural language processing (NLP) to IoT devices (such as Alexa, Cortana and Siri personal digital assistants) and made them appealing, accessible and viable for home use. Thus they could be used to connect with the consumer to explain specific attributes or benefits of agricultural produce produced by the particular company they represent or with reference to pricing, ordering and delivery, the process by which the harvesting of agricultural produce takes place, etc.

Therefore, digital marketing both simplifies and offers market interactivity for agricultural businesses, enabling them to establish long-lasting relationships with wider audiences and more global value, thereby stimulating demand, increasing profits and engaging customers in the farming business.

CONCLUSIONS

Put differently, digital marketing has the strong potential of improving agricultural productivity and enhancing the sustainability and efficiency of the food value chain. With novelty approaches such as social networking, SEO, email marketing, and data analysis, farmers and agribusiness will be able to optimize operations and engage consumers more effectively, responding flexibly to dynamic market changes.

While the industry of agriculture keeps moving forward, it becomes clear that those who make use of digital marketing techniques will be excellently positioned to meet even bigger challenges in the future, pushing productivity and sustainability.

Digital marketing offers solutions to overcome problems in selling agricultural products, which still have a relatively long marketing channel and might put farmers at a disadvantage as producers.

Through digital marketing, it is possible to open up new markets in which farm produce may be channeled, bringing the products that farmers manufacture to the attention of the people. Digital marketing may thus enable consumers to have more confidence in the agricultural produce offered, by providing information on the applied production practices, food safety certification, and present sustainability programs.

Therefore, if the position of digital marketing in agriculture is increasingly important for increasing the sales of agricultural products and increasing the profits of businesses, then it will be a key position in creating the value of the ad. Through the right marketing strategy, it can easily be identified in the market, improved in terms of brand image, and registered as significantly differentiated.

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