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# Key Challenges in the Adoption of E-Marketing and Digital Agriculture Platforms

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Abstract: Agriculture is the backbone of many economies; it does not only depend on crop cultivation but also on effective agricultural marketing strategies. Agricultural marketing is the entire process of moving agricultural products from farm to consumer, which includes various stages such as production, processing, storage, transportation and distribution. The key challenges in adopting e-marketing and digital agriculture platforms include lack of technical knowledge, lack of internet connectivity, initial cost of investing in digital tools, availability of reliable digital platforms and cyber security issues. In addition, the repetitive features of many platforms and lack of awareness among farmers are also major barriers to the adoption of e-marketing and digital platforms.

**Keywords**- Agricultural marketing, Awareness, E-marketing and digital agriculture.

#### Introduction-

In today's digital age, the agricultural sector is undergoing a significant transformation. One of the most notable changes is the rise of e-marketing or electronic marketing, which leverages digital tools and the internet to market agricultural products and services. This shift is not only reshaping how farmers and agribusinesses operate but also enhancing the overall efficiency and transparency of agricultural markets. India is an agricultural country that is directly or indirectly dependent upon the agricultural sector. India has placed a strong emphasis on agricultural production, ranking second in the world such as crops rice, fruits, and vegetables after China. Marketing is getting crucial in the field of agricultural products to consumers, selling output, obtaining a fair price, building relationships, and delighting customers. Agriculture marketing has been assumed that includes all services involved in getting a farm product from the farm to the end user. Planning, organizing, grading, packaging, holding, processing food, distributing and marketing are all made easier with it. Due to increased marketed surplus, rising urbanization, and income levels, and subsequent changes in the pattern of demand for marketing services, the agriculture marketing system has undergone many changes over the previous60 years. Important factors that affect the anticipated result The application of (ICT) in the agricultural industry is known as e-agriculture or e-agri business. Every aspect of the agri-food chain will be affected by digitalization, but it will necessitate big changes in farming, rural economics, and produce marketing. Farmers gain from ICT use in agriculture since it enables them to learn about the market and sell their product.

#### The objectives of adopting e-marketing and digital agriculture platforms are

- 1. To Study the Increasing market access.
- 2. To Study the Improving efficiency in supply chains.
- 3. To Study the Getting better prices for farmers.
- 4. To Study the Reducing transaction costs.
- 5. To Study the Increasing transparency.
- 6. To Study the Providing availability of information (market prices, weather).
- 7. To Study the Increasing overall sustainable growth for agribusinesses and startups.

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# Challenges of adopting E-marketing and Digital Agriculture

### 1. Digital literacy and access

One of the primary challenges in adopting e-marketing is the level of digital literacy among farmers. Many farmers, particularly in rural areas, may lack the skills and knowledge needed to effectively use digital tools and platforms. Additionally, access to reliable internet connectivity can be limited in some regions, posing a barrier to e-marketing adoption.

#### 2. Trust and security

Building trust between farmers and consumers is essential for the success of e-marketing. Farmers must ensure that their products are accurately represented online and that transactions are secure. Implementing secure payment systems and providing transparent information about product quality and sourcing can help to build consumer trust.

#### 3. Competition and market infiltration

As more farmers and agribusinesses adopt e-marketing strategies, the level of competition in the digital marketplace may increase. To stand out from the competition, farmers must develop unique selling propositions and invest in effective marketing strategies. Additionally, they must continuously monitor market trends and adapt their approaches to stay ahead of the competition.

# How to facing challenges of adopting e-marketing and digital agriculture using through government scheme

#### **✓** Bridge the Digital Divide:

#### I. Infrastructure Investment:

Government must invest in reliable internet connectivity and electricity supply, especially in rural areas, to enable farmers to access and utilize digital tools.

#### **II. Digital Literacy Training:**

Implement targeted, hands-on digital literacy and skills training programs in local languages to help farmer's master platforms like e-NAM and other digital tools.

#### ✓ Provide Financial Support and Incentives:

#### I. Subsidies and Loans:

Offer financial incentives such as subsidies, low-interest loans, and credit facilities to reduce the financial burden of technology adoption on farmers.

#### II. Support for Agri-startups:

Provide financial and infrastructural support to agri-tech startups to accelerate the development and adoption of digital solutions.

#### ✓ Improve Market Access and Linkages:

#### I. Strengthen E-Marketplaces:

Promote farmer and trader participation in platforms like e-NAM to improve market linkages and price discovery.

#### II. Public-Private Partnerships (PPPs):

Foster collaborations between government, private sector, and NGOs to improve market access, knowledge sharing, and access to advanced marketing technologies.

#### ✓ Foster Capacity Building and Awareness:

#### I. Localized Training Programs:

Design and deliver flexible, localized, and hands-on training programs for farmers and FPCs (Farmer Producer Organizations) in digital marketing and financial management.

# **II. Digital Innovation Hubs:**

Establish digital innovation hubs as one-stop solutions to provide farmers and startups access to the latest technology, information, and expertise.

#### III. Invest in Rural Infrastructure:

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Schemes should fund the expansion of reliable internet and electricity supply in rural areas to ensure farmers can access and use digital tools effectively.

# IV. Standardize and Regulate Technology:

Develop standard protocols and regulations for agricultural technologies to support interoperability and ensure effective adoption.

# ✓ Advisory Services:

Provide pre-emptive agricultural advisory services to help farmers understand and adopt appropriate digital technologies for their specific needs and plots.

#### **I. Demonstration Sites:**

Establish demonstration sites to showcase the practical benefits and successful adoption of digital technologies by other farmers.

#### ✓ Address Data and Content Issues:

# **I. Timely Content Updates:**

Ensure timely development and updating of relevant agricultural content and information to support digital transformation.

# **II. Address Ownership Issues:**

Clarify issues surrounding data ownership between government and private data to build trust and facilitate collaboration.

#### **Conclusions:**

Digital technologies present unique opportunities to empower agri startups by strengthening their capabilities in marketing their products. Despite these possibilities, the fact that there is no single, best digital solution for all conditions. Also, often use of the phrase 'Digital solution', technology is not the solution on its own, but rather a tool that can be used to help you better achieve the firm's objectives. As an increasing number of startups expand their networks through technology adoption, those with the most refined marketing skills will likely reap more benefits than those without. Providing technical assistance on marketing skills to startups and farmers, therefore, will continue to be important, however, challenges such as digital literacy, trust, and competition must be addressed to fully realize the potential of e-marketing in agriculture. While this paper presents an integrated framework for development practitioners to evaluate, plan and deploy impactful technological interventions in agriculture to facilitate marketing of agro products.

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