



A Systematic Review on Ag Business-to-Business Technology-Based Marketplaces

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Abstract

Businesses worldwide face both new opportunities and new obstacles because of the Internet. Agribusiness, like other industries, must adapt to the changing market by modifying its business model and putting these new strategies into practice through Internet-based initiatives. New business partnerships, markets, companies, and advertising models emerged directly from (EC) E-commerce. E-commerce, which first made its way into the agricultural sector at the century's end, gives established businesses another channel to reach new customers and promote their wares. By taking advantage of the many benefits of doing business online, many agricultural corporations have increased the visibility and accessibility of their products. Online agricultural markets still hold much promise and come with several advantages.

The proposed systematic review gives insights into Ag Business-to-Business Technology Marketplaces, the Future of Marketplaces, their advantages, and the challenges involved.

Keywords: B2B; Business-to-Business; Marketplace; E-Commerce; Technology; AgTech

Introduction

Getting an agricultural product from the farm to the consumer is called "agricultural marketing" [1,2]. To provide these services, one must plan, organize, direct, and handle agricultural produce satisfactorily to farmers, intermediaries, and consumers. Planning production, growing and harvesting, grading, packing and packaging, shipping, storage, agro- and food processing, providing market information, distributing, advertising, and selling are just some of the many interrelated operations involved. As a practical matter, the phrase covers the whole gamut of activities involved in the distribution of agricultural goods, from one-off transactions to more coordinated networks like contract farming [4]. Business-to-business (B2B) transactions in the agribusiness sector, such as purchasing, selling, trading, delivering, and contracting, are prime candidates for digitization. In the United States and elsewhere, e-commerce has spread into the agricultural sector. By the year 2000, one out of every 25 farms in the United States had already made purchases or sales of agricultural goods via the World Wide Web [3]. According to BlueWeave Consulting, the global digital farming

market reached USD 4,770.8 million in 2020. It is further projected to reach USD 10,702.3 million by 2027, at a CAGR of 12.7% during the forecast period (2021-2027).

Challenges of the B2B agriculture marketplaces

The below section provides various challenges faced by B2B marketplaces.

Advertising: Bringing in the clients

How do you expect people to learn about your web store? You need the plan to direct people from social media, email, and other forms of advertising to your website and online store if you want to bring in new customers and keep existing ones coming back.

Creating meaningful relationships with your customers

Both farmers' markets and their clientele value their connections highly. One of the main reasons people shop locally is to build relationships with the farms and farmers they support by visiting and interacting with them in person, an experience that can be challenging to duplicate in a virtual Marketplace.

The market is not well-organized

Rural areas are home to the profession's vast majority. There need to be more centralized Marketplaces in rural areas. So, consumers and farmers in rural areas need access to the markets necessary to distribute agricultural products and inputs. Thus, the farm market needs to be more organized.

Required amount of time

Implementing e-commerce [5] is a time-intensive endeavor. From the time to research and assess e-commerce choices for fit with your business model and items, to set-up time, to routine maintenance, there will be an additional time investment. How much time and effort do you devote to this, and will you need to bring in outside help? Assess this just as you calculate the time required for a new in-person market outlet such as a farmers' market.

The dominance of intermediaries

Intermediaries have complete control of the agricultural market. They control most of the farm market, including pricing, purchasing, and selling. Because of this, the farmers and the consumers can only obtain fair pricing for their goods. Agro-products are purchased cheaply from farmers by intermediaries, who then resell them to consumers at inflated prices. As a result, the abuse of intermediaries has significantly impacted the agricultural market.

Assistance with technical matters and administration

Technical expertise in the e-commerce platform and any linked systems (inventory management, accounting, etc.) is essential. You'll need these abilities yourself, or you'll need to learn them, or you'll need to pay someone else to perform them.

Insufficient knowledge of the market

There need to be more official organizations to notify farmers about the state of agricultural product production, pricing, market conditions, etc. Landlords, moneylenders, and agro-businessmen take advantage of farmers because they are misinformed about their rights.

Product anxiety in the consumer market

Consumers gain a new perspective when they see things in person, whether at an on-farm market, farmers' market, or other events, you can sway a customer's purchasing decision through direct interaction, free samples, and other means. When conducting

business online, you cannot engage in these actions. Therefore, you must rely on visuals, descriptions, ratings, and recommendations from previous buyers.

Lack of a guaranteed minimum price system

The agriculture market lacks a minimum price fixing system. The result is the exploitation of the farming community. Thus, the issues of agricultural marketing include a lack of an organized market, a reliance on intermediaries, a failure to standardize and grade products, a shortage of storage and transport facilities, an absence of effective peasant organizations, a need for market information, a lack of a minimum price fixing system, and so on.

Distribution and packaging

Self-delivery, shipping/mail delivery, and customer pickup are all viable options for delivering online-purchased goods to the customer. You'll need to weigh the benefits and drawbacks of each choice to determine which is best for your situation. Additional workforce, transportation, and refrigeration may be required to make a self-delivery (perishables). Items or purchases that weigh a lot to ship via mail or courier may incur high shipping costs. Only some things may make it through shipping unscathed or in the quality you and the consumer expect.

Regarding the quality of the product and the satisfaction of the end user, the packaging plays a crucial role in the things that will be shipped to the consumer. Customer pickup will need either setting up a timetable or having all orders ready to go when consumers come. Some suppliers may prefer to work with larger orders or charge more for less, making it easier for small enterprises to source packaging materials. Because of this, you need to scrutinize your costs and prices.

Advantages of B2B agriculture marketplace

The potential to benefit from niche Marketplaces increases alongside technology and online commerce development. The farm B2B market is a rich source of information for anyone working in the agricultural sector. These centers help farmers meet their demands for purchasing and selling agricultural inputs and machinery parts. This allows them to sell their harvests to retailers and wholesalers. The agriculture industry, whether as a farmer or a distributor, stands to gain significantly from adopting an e-commerce strategy. The benefits of business-to-business (B2B) [6] electronic commerce in the agricultural sector is the subject of this essay. By

2024, fifteen percent of B2B companies will rely on digital commerce platforms to assist in all their sales activities, from customer service to sales assistance.

Logistics of grain are simplified by a business-to-business (B2B) paradigm

One of the most challenging aspects of the agriculture business is the logistics involved. Since grain goes through so many hands, managing its distribution can be difficult. Some grain logistics platforms facilitate the most efficient pairing of shippers and carriers.

Automation and system integration

Farmers, distributors, and wholesalers face difficulty coordinating their many sales and distribution points. Contacting the appropriate solution supplier is crucial to facilitate that procedure in your company. Using B2B SAP Commerce Cloud, Digit commerce Group, a full-service e-commerce agency, is helping a large farm company set up an e-commerce platform. SAP's B2B commerce cloud, Commerce Cloud, can accommodate even the most intricate platform integrations. It is a centralized hub for managing relationships with many wholesalers, distributors, and suppliers. Consequently, this will result in less downtime and overhead costs for the farmer, distributor, and wholesaler.

Agricultural products can be sold straight to the consumer

By switching to a B2B model, you may avoid intermediaries and talk to your customer individually. As with other sectors, the food business has been shaken by the ongoing COVID-19 outbreak. Nevertheless, food is a necessity. Thus, technological advances will likely be made to the agricultural supply chain. Some business-to-business (B2B) Marketplaces have developed apps to help suppliers fulfill the growing demand for healthier and more sustainably farmed food. Fresh produce for supermarkets, farmer's markets, and restaurants can be bought and sold on these sites. Farmers can sign up for an account, start listing auctions and connect with buyers needing their products. Finding a reliable distributor is crucial to establishing and retaining credibility. Locating an appropriate distributor is a vital step. Identifying a reliable distributor is essential to target a particular region. To boost your profits, it also helps you zero in on growth areas with the most potential. Long-term, trustworthy partnerships are also essential to maintaining a smooth supply chain. New markets and potential distributors can be found with the help of technologies like Easy Business. Find the best suppliers and take care of your logistics with the help of Kom-

pass.com [7] to boost your value chain's efficiency. You can make the most of the industry with the best resources.

Expanding your market

To reach more customers, farmers and wholesalers must enhance their platforms with features that make international sales easier. The B2B Enterprise Solution's integration with Big Commerce supports multiple languages and currencies. Core features of this solution that ease the buying and selling process include integration with credit card processors and other payment gateways. Distributors can access more potential customers thanks to their web presence. This feature can be activated or deactivated depending on the company's needs. If a wholesaler wants to get in touch with his local customers, he could, for instance, try selling to his final consumers. At the same time, he reaches out to wholesalers, which is where this solution shines.

Software can identify and predict rainfall using data

The agricultural sector also benefits from the assistance of big data and machine intelligence. You'll need access to high-quality data to improve your forecast and harvest. Prioritize high-quality data collection over quantity. Precipitation reports based on Artificial Intelligence (AI) can be used to plan the year's work on your farm. If you put this information to good use, you may maximize your profits and returns on investment (ROI) while reducing wasteful spending.

Digital, comprehensive products catalogs

Managing vast, complicated catalogs is a pain point for business-to-business internet shoppers. However, with a business-to-business (B2B) online store, shoppers may tailor their orders and make purchases quickly and easily. Farmers, for instance, can acquire replacement components for their tractors online with the help of a model-specific serial number. When a distributor's stock becomes short, they can place an online order with a farmer to replenish their supply.

- **Bottom line:** business-to-business (B2B) e-commerce is the future wave in the agricultural sector. At some point in the future, all farms, wholesalers, and distributors will use B2B commerce platforms to manage their operations. Because of the millennial demographic, it is necessary to recognize the benefits of B2B commerce platforms. The improved return on investment will help businesses expand.

GPS helps people discover you, and digital precision farming optimizes your job

In the agriculture sector, precision farming is a popular business-to-business service. It helps you coordinate your workforce so that every shift is productive. Rather than being stale and inaccessible, the information you receive is timely and valuable. Quality GPS equipment also allows your staff to continue working in hazardous conditions where visibility is poor. You can monitor your farming equipment in real-time using GPS data, eliminating the need to depend on smell senses alone.

Software engineers are making applications for the farming industry (SaaS)

Like every other industry, agriculture is under pressure to cut costs and improve efficiency. The rise of SaaS (software as a service) has been a game-changer in this area. Over the next five years, the agriculture sector's use of software as a service (SaaS) is expected to increase by 28%. All your information and preparations may be accessed from anywhere with one of these systems. Refrain from worrying about data loss or being restricted in your ability to organize. Subscribing to these programmers instead of purchasing individual licenses can significantly reduce your costs. Customer relationship management (CRM) systems designed specifically for the agricultural sector are gaining popularity among experts. When an issue does develop, you'll have instantaneous access to information. No of the size of your farm, a CRM membership is a valuable investment.

The demand for IT solutions from agribusinesses is growing

The necessity for information technology in the agricultural sector has also grown. Thanks to B2B information technologies, the farm industry can hire IT professionals to do remote work. Because of the high concentration of farm businesses in the countryside, sending out an IT expert for a repair call can sometimes be cost-effective. Cyber security becomes an issue for even rural businesses. Man-in-the-middle attacks and malware have breached entire data supply chains. Given how critical this information is to your organization's infrastructure and supply chain, it makes sense to pursue business-to-business when seeking top-tier security. In addition, IT personnel may maintain your hotspots, enhance encryption, and synchronize devices. When these informational requirements are met, everyone in your firm may remain on the same page.

Digital items are rising

The transition to digital is currently underway. People will pay a high price if the digital product has enough value. Experts in the agricultural industry are cashing in big time with digital goods since information is today's currency. Recently, the sector surrounding the sale of electronic books has grown to be worth close to \$9 billion. Whether you're offering a brand-new training programmer on cultivation and irrigation methods or a how-to manual for repairing farm machinery, you stand to gain from these opportunities.

Maintain a level of interest in the latest agricultural developments

These examples demonstrate how rapidly agricultural practices are changing. By purchasing B2B solutions, you may take advantage of these changes. You will maintain a cutting-edge business and seek innovative ways to increase productivity and profits. B2B is here to stay as a business model in 2022, whether selling replacement parts for farming equipment or providing advisory services. You'll benefit your farming enterprise more from these developments the more you stay abreast of them.

Few farms management software in use

Farm management software helps farmers streamline their processes and oversee their production activities. In addition to automating tasks like record keeping and data storage, the programmer also aids in monitoring and analyzing farming activities and simplifying production and work schedules. Custom needs of the farm, given that each company has a unique set of operations. Each client's individual needs are taken into account when developing the software. Remember that farming is highly specialized; therefore, you should be picky about your chosen software.

Agrivi

Agrivi is farm management software that simplifies the process of planning, monitoring, and analyzing a farm's operations for farmers. When it comes to bettering their agriculture, farmers in over 150 nations have chosen Agrivi. Agrivi is the most comprehensive set of features available, allowing farmers to easily manage their fields, finances, inventories, personnel, and overall agricultural performance. Agrivi's automatic pest and disease identification alert farmers in time to protect crops, and it's built on top of a robust agricultural knowledge base. Everything from tilling and planting through crop protection, fertilizing, irrigation, and harvesting is easily controlled from a single interface.

Granular

Granular is a set of tools for managing large-scale farms that facilitates increased output by linking the farm with the main office. Thanks to this technology, farm owners and managers can always stay on top of everything, no matter where they are. Granular also allows farm managers to delegate duties to their employees ahead of time. The software's support for native apps on Android and iOS devices facilitates seamless collaboration between remote workers and those stationed in the office. Also, Granular helps businesses keep their constituents informed. The software bundles a reporting system so that users can make their reports.

Trimble

Trimble works with agricultural businesses and organizations worldwide to improve efficiency and productivity. Trimble Ag Software improves efficiency, mitigates risk, and frees up time for better business decisions by automating crucial processes. Trimble Ag Program is the only software available today that works equally well on a computer, in the cloud and on mobile devices. This robust, user-friendly software platform is accessible whenever and wherever it is needed, making it ideal for the needs of any farming enterprise. The whole agricultural supply chain can rely on Trimble Agriculture for solutions to complicated technical challenges.

FarmERP

When it comes to managing and analyzing information related to farms, farmers, procurement, processing, supply chains, and finances, no other software platform can compare to FarmERP. It has assisted numerous industry leaders in realizing their goal of establishing an agribusiness that is both profitable and sustainable. Easily expandable and prepared for the future, this platform for intelligent agriculture management software is the wave of the present and the future. It has all of the robust features you'd expect from an enterprise resource planning (ERP) system integrated right in. At the same time, it offers high-end analytics to back up corporate judgment. Its core features include an administrative section, a purchasing section, a production section, a post-production section, a contract farming section, and a contract farming section.

FarmLogs

FarmLogs is an all-encompassing program that helps farmers control their businesses. There's even a mobile app compatible with iOS and Android devices. The days of using notebooks and binders with multiple rings are over. FarmLogs streamlines the process of

keeping digital records of your time in the field. The documentation will be sorted, encrypted, and available from any device with an internet connection. Evaluation of seasonal trial outcomes and overall yield performance can be achieved using the dynamic maps provided. You may check out the current futures prices and compare them to the daily price swings, and you can look for the prices close to your home by entering your ZIP code.

Review of Five Business-to-Business Markets for Agricultural Products in 2022

It's easier to reach many customers in a B2B market, and their deals can be tailored to their specific needs. Business transitions are facilitated by improved organizational connectivity between enterprises. Profit margins are higher in business-to-business because of the volume of transactions. You can also discover a B2B platform devoted solely to agricultural items, or "agriculture."

eWorldTrade

Regarding meeting the needs of both buyers and sellers, eWorldTrade is the top B2B platform in the world. eWorldTrade is a versatile platform where you may search for agricultural commodities. The inbuilt search bar allows searching for anything with just a tap away. You may quickly and easily locate reputable manufacturers or suppliers through their comprehensive product directory. The user-friendly website connects buyers and vendors promptly. On this platform, you can also obtain a free quote from the representatives who can aid in solving any difficulty. eWorldTrade provides flexible membership options to meet the needs of its customers.

Agrimp

Agrimp is an online Marketplace for agricultural-focused business-to-business services. A Marketplace where buyers and farmers can meet online payment processing, product quality assurance testing, and logistics services are all made possible. Across the supply chain, Agri MP and its associates have you covered. The platform now features a bidding system for agricultural products. Farmers can respond to buyers' inquiries about their wares thanks to this feature, facilitating communication during the market. When pricing is public, Agrimp will charge a nominal fee for the service.

Profitable amazon.com operations

For the business world, Amazon Business is a miraculous new development. We designed this Marketplace to facilitate business-

to-business deals. It's a fantastical realm stocked with authentic wholesale agrarian goods. Amazon goes after many different markets, and for each one, it has the ideal service to provide. To better serve their customers, they accept a variety of payment types. To better comprehend the items, the website displays all relevant information.

Zagro

Zagro is a business-to-business Marketplace for the agricultural industry. It's a meeting place where people from all over the world who want to purchase and sell can do so easily and quickly. They enhance Zagro by providing more options for buyers and vendors. Their portfolio of crop care products numbers 782, and it includes 150 trademarks. Zagro guarantees high-quality goods and services on the website, come hell or high water. Zagro regularly participates in and hosts industry events, elevating its reputation. They have been contributing to the economy by supplying agricultural supplies across Asia for quite some time. The business is broadening its horizons by investing in agribusiness and producing non-commoditized goods.

Atrophy

With products including farm vehicles, tools, machinery, land, and more, Agrofy Agro is an online Marketplace for the agricultural industry. As part of their weekly offerings, they discount various things for purchase. In addition to weekly deals, Agrofy provides a curated selection of top sales and a powerful featured search function. Agrofy's mission is to streamline the agricultural industry with cutting-edge digital tools. To improve the agriculture industry, the Agro DNA has been created. In addition to expanding their business, they are concentrating on strengthening the local farming community.

Goods from the agricultural sector are indispensable to any enterprise. This list is an excellent resource for finding a legitimate and trustworthy B2B platform. These sites have been hand-picked for their extensive knowledge of B2B platforms. The top platform can be selected with the aid of the provided list.

Conclusion

People in society become more economically specialized as they start to rely on others to provide some of the goods and services they require. Now the process of trading goods and services between buyers and sellers may begin. Buyers and sellers keep in close touch for some time, during which time they learn about each

other's wants, needs, and acceptable exchanges. The necessity for specialized marketing services such as physical distribution, storage, grading, market intelligence collection, and so on grows in tandem with the economy as the quantity and types of transactions increase. Since many of the specialized services between the seller and the end buyer are provided by intermediaries, the number of participants likewise rises. In today's sophisticated marketing environment, very few transactions take place directly between customers and sellers. Marketplaces in AgTech plays a crucial role in Agriculture e-commerce in the coming years.

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