

## RESEARCH ARTICLE

# FEASIBILITY STUDY ON LIVESTREAMS SELLING OF AGRICULTURAL PRODUCTS ON TIK TOK PLATFORM -- A CASE STUDY OF YINGKOU CITY IN LIAONING PROVINCE

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## ABSTRACT

Since the beginning of 2020, offline physical stores and the sale of large quantities of agricultural products have all been affected by COVID-19. However, e-commerce in this case could make full use of its advantages of not being restricted by regional space. From 2020 to 2021, many regions and businesses have tried the form of e-commerce livestreams selling. However, as of May 2021, Yingkou city of Liaoning province was still affected by the COVID-19, resulting in a large number of unsalable agricultural products. The daily unsold volume of three towns in Bayuquan district and five towns in Gaizhou city was nearly 400 tons, which undoubtedly caused huge losses to the local farmers. This situation also indicated how little local farmers knew about the mode of livestreams selling. As the leader of short video platforms, Tik Tok has been studied by a large number of scholars on its operation mode, selling mode and cash ability. Because each region has many problems such as differences in urban factors, refined research is more suitable for these regions. For this reason, it is of certain significance to study the livestreams selling of agricultural products on Tik Tok platform of Yingkou city in Liaoning province.

## KEYWORDS

Agricultural Products, Market Analysis, Tik Tok, Livestreams, Yingkou City

## 1. OVERVIEW OF TIK TOK PLATFORM

With the booming development of short video in today's era, its status in the media ecosystem continues to rise. From the perspective of specific usage time, users who watch short videos for more than 60 minutes a day account for 56.5%, the average daily usage time rises to 87 minutes, and the proportion of users expecting to watch more short videos rises to 57.9%. In the meanwhile, short videos also serve as the "glue" for users' fragmented time. According to the data, the percentage of users who watch short videos "at night before going to bed" is rising fastest, the proportion of which rose to 61.3 percent in 2021. And 20.7 percent of short video users choose to watch short videos "while watching TV" (CSM, 2021). In the meanwhile, livestreams selling has also become an important way for short video platforms and bloggers to turn their Internet traffic into cash.

Short video marketing has significantly accelerated the realization speed and improved user experience. According to the report, 72.0% of users have purchased goods/services through short video platforms, with nearly 70% of goods/services priced between 51 yuan and 300 yuan. In addition, the proportion of rural users' orders also sets a new record. As the originator of short video platforms, Tik Tok now has a fairly stable user group and traffic. After the introduction of the livestreams function on Tik Tok platform, e-commerce has gradually developed on the platform. At present, the number of Tik Tok users has exceeded 400 million, and the attention brought by this has provided a huge market and possibility for traffic realization. Therefore, Tik Tok can bring huge benefits to businesses through various of ways, including product placement, livestreams selling, comprehensive scene representation, personalized display of Internet celebrities and creative video content production.

## 2. FOUNDATIONS AND CONDITIONS FOR LIVESTREAMS SELLING OF AGRICULTURAL PRODUCTS FROM YINGKOU CITY ON TIK TOK PLATFORM

## 2.1 Advantages in Location and Transportation

Yingkou is located in the south-central part of Liaoning Province. It is not only at the intersection of Northeast Asia economic circle and Bohai economic circle, but also at the intersection of Liaoning coastal economic belt and Shenyang metropolitan circle. With Panjin city in the north, Dalian city in the south, Anshan city in the east and Liaodong Bay in the west, it is one of the national logistics hub cities with two ports in northeast China. Yingkou city is an important land transportation hub in Liaoning Province. Yingkou port is an important national logistics hub port, which is not only the bridgehead of Eurasia, but also the offshore channel of northeast hinterland.

Relying on Yingkou port for maritime rail transport, a total of 12 China-Europe railway expresses have been opened, which serves as an important maritime rail transport between China, Mongolia and Russia. In addition, Yingkou port has established routes in more than 50 countries and regions and more than 150 ports such as Russia, Southeast Asia, Japan and South Korea, and its combined sea-railway volume ranks first in China. Furthermore, Yingkou Lanqi airport is the fifth airport in northeast China that opens domestic all-cargo routes. Up to now, Yingkou city has built a comprehensive transportation system integrating land, sea and air (Yingkou People's Government Office, 2021).

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## 2.2 Basic Advantage of Agricultural Industry

In 2020, Yingkou's primary industry increased by 3.5%-to-10.73-billion-yuan, 0.3 percentage points higher than the provincial level. The sown area of grain is 1.3998 million mu (about 933.2 million square meters), and the average and highest yield per unit of rice have ranked first in the province for five consecutive years. A total of 30,000 mu (about 20 million square meters) of land was added to build demonstration areas for comprehensive cultivation and breeding of high-quality rice and fishery. A total of 656,600 tons of vegetables, 784,900 tons of fruits, 367,600 tons of meat, eggs and milk and 488,000 tons of aquatic products were produced. There was no major animal epidemic throughout the year. By the beginning of 2021, Yingkou city has 210 agricultural brands. More than 10 products, including "Yingkou rice", "Yingkou jellyfish", "Yingkou silkworm pupa", "Yingkou Prawns", "Yingkou hairy crabs", "Liaozhou down producing goat", "Gaizhou apples" and "Gaizhou grapes", are listed as protected national geographic indication products. They have extremely high-quality development resources and have a solid foundation for the processing of agricultural products.

By the end of 2020, there are 107 agricultural products processing enterprises and more than 5,000 logistics trading enterprises above designated size in the city, achieving a revenue of 18.2 billion yuan. The city has 62 key leading enterprises of agricultural industrialization above the municipal level, among which there are 3 national key leading enterprises of agricultural industrialization. As a provincial agricultural products processing agglomeration area, Liaohe Development Zone achieved the annual main income of 937 million yuan, a year-on-year increase of 8.1%. With the rapid development of the processing industry, the construction of the processing industry clusters in Yingkou are also advancing steadily. The overall level of development has been constantly improved, and its contribution to the city's economic growth has been enhanced (Yingkou Government, 2021).

## 2.3 Basic Advantages of Internet Celebrity Economy Realization — A Case Study of The Tik Tok Account "I Am Classmate Zhang"

In 2021, the Tik Tok account "I am Classmate Zhang" quickly became popular and attracted the attention among the masses. By filming his own rural life in Yingkou city of Liaoning Province, "I am Classmate Zhang" presented his life to the public in a simple and down-to-earth way through sitcoms, which attract a large number of fans. As of December 31, 2021, Zhang's fans have reached 18 million after only two months of posting the short videos. The popularity of Zhang's account also shows that life in rural northeast China is attractive to Tik Tok users, and the most representative thing in rural northeast China is agricultural products, which is undoubtedly a great help to livestreams selling in Yingkou city.

## 3. MARKET ANALYSIS OF LIVESTREAMS SELLING THROUGH RURAL WE MEDIA OF YINGKOU CITY IN LIAONING PROVINCE

The rise of e-commerce requires certain application scenarios. For instance, the realization of visualization, socialization and popularization is the basic requirement of constructing e-commerce transformation and upgrading application scenarios and marketing environment. With the acceleration of urbanization and industrialization, social e-commerce has not only become a huge and rapidly growing market segment that cannot be ignored, but also become an increasingly important new business model for urban industry and commerce. In this case, rural areas are no exception. Under the condition of poor transportation and logistics links, the transformation and construction of e-commerce application scenarios are more urgent in rural areas than in cities. In recent years, with the huge development achievements accumulated and innovated by China's "poverty alleviation", the infrastructure construction in the vast majority of rural areas in China has been improved, and the smooth conditions of information, transportation and logistics in these areas have been greatly improved. At the same time, it has also created the foundation and conditions for the application of e-commerce and market in rural areas. In the following chapters, the author will analyze it from multiple dimensions.

### 3.1 PEST Analysis

#### 3.1.1 Policy Support

Since the 19th CPC National Congress, the Party Committee and government of Yingkou city of Liaoning Province have thoroughly implemented the spirit of the documents issued by the State Council of the CPC Central Committee and the provincial government. The construction of agricultural products processing agglomeration area has been regarded

as an important starting point of rural industry revitalization. Yingkou city of Liaoning Province implemented the guiding principles of General Secretary Xi Jinping's important speeches and instructions, as well as the decisions and plans of the CPC Central Committee and Liaoning Provincial Government.

In accordance with the requirements of *National Industrial Development Plan for 2020-2025*, *Liaoning Province's 14th Five-year Plan for National Economic and Social Development*, *Outline of its Long-term Goals in 2035*, and *Liaoning Province's 14th Five-year Development Plan for Agricultural Products Processing Agglomeration Area*, Yingkou city compiled the *Development Plan of Yingkou Agricultural Products Processing Agglomeration Area in the 14th Five-year Plan* based on the actual development of Yingkou agricultural products processing agglomeration area and scientific evaluation of the implementation effect of *Yingkou People's Government's Opinions on Accelerating the Development of Agricultural Products Processing Industry* (Yingkou Agriculture and Rural Affairs Bureau, 2021). These policies are undoubtedly important guarantees for the development of livestreams selling of agricultural products from Yingkou city in Liaoning province.

#### 3.1.2 Economic Needs

In terms of supply, the market share of agricultural products in Yingkou City of Liaoning Province is low and its influence is not great nationwide. Accordingly, because there are few commodities with the same quality, market development space of it is big. In terms of demand, as the Chinese people are working towards the Second Centenary Goal, they have a higher pursuit of the material products. Therefore, high quality agricultural products will also be an important direction of market demand. Livestreams selling through Tik Tok short video platform is conducive to the introduction of high-quality agricultural products in Yingkou city of Liaoning Province to the whole country.

It can not only provide higher economic growth for Yingkou city of Liaoning Province, but also satisfy people's pursuit of quality of life at home and abroad. In 2020, China's per capita regional GDP exceeded \$10,000, and the per capita disposable income of urban and rural residents in Liaoning reached 39,000 yuan and 16,000 yuan respectively. The food consumption pattern, which used to be simply adequate, is now changing to a pattern with flavor, nutrition, convenience and function. Under the double cycle economy, the demand of market consumption provides a broad development space for the transformation and upgrading of agricultural processing industry and the improvement of industrial chain (Yingkou People's Government Office, 2021)

#### 3.1.3 Social Needs

Livestreams selling of agricultural products from Yingkou city of Liaoning Province can not only bring economic growth to Yingkou City, but also help spread the characteristic culture of Liaoning Province through livestream. In addition to providing a better life for farmers in Yingkou city, the use of Tik Tok short video platform will also provide them with a colorful entertainment life. In this way, local farmers can not only experience the convenience of the Internet, but also feel more confident about their future life and will not worry about the unsalable agricultural products.

#### 3.1.4 Technical Support

The advent of the Internet era has brought benefits and convenience to all Chinese people. Google published a report called *The Consumer Barometer report*, which surveyed users in 46 countries around the world. The report shows that Asian users prefer to use smart phones to surf the Internet, and the penetration rate of smart phones in China is 66% (Zhang and Shao, 2016), which indicates that the development of e-commerce in China is very advantageous, and the application of 5G has increased this advantage to a certain extent.

### 3.2 Analysis of Porter's Five Forces

#### 3.2.1 Competitiveness of Existing Competitors in The Same Industry

In terms of products, there are a large number of agricultural products that are livestream sold on Tik Tok platform at present. Take the characteristic agricultural products of Yingkou rice, Yingkou jellyfish and Yingkou fruit as examples. Most of the rice livestream sold on Tik Tok platform are Wuchang Rice from Wuchang city in Heilongjiang Province. When searching Yingkou rice in Tik Tok, there are only three search results and the sales volume is 0, which shows that the Yingkou rice brand has not entered the Tiktok market at all. Yingkou rice does have advantages in terms of brand scarcity, but from the existing competitors in the same

industry, there is great competition pressure. Take Taobao as an example for comparative analysis of traditional e-commerce platforms. Firstly, compared with Taobao platform, Tik Tok livestream selling does not require complicated online registration procedures, and short videos on this platform will also bring more traffic to its shops.

Secondly, compared with Taobao, Tik Tok has lower requirements for livestream, and the operation of livestream on Tik Tok platform is easier, which is more suitable for livestream selling in super first-tier cities and areas outside first-tier cities. Take Kuaishou as an example for comparative analysis of short video platforms. From the perspective of the types of anchors, many of the anchors of Tik Tok are businessmen themselves, which has a lot to do with Tik Tok's strong support. However, most of Kuaishou's anchors are individuals or MCN anchors. In contrast, Kuaishou has more fan stickiness. From the initial stage of livestream selling, Tik Tok will give more traffic support to businessmen, which will help them turn their Internet traffic into cash and sell their products in the initial stage. Therefore, Yingkou city of Liaoning province is more suitable for livestream selling on Tik Tok platform in the early stage.

### 3.2.2 Ability of Potential Competitors to Enter The Industry

In terms of products, agricultural products have high barriers to entry into the market. As the planting of agricultural products requires a long cycle and has high requirements for geographical location and natural environment, potential competitors are less able to enter the market. In terms of anchors, there are lower requirements and fewer restrictions for anchors in livestreams selling. Many businesses can enter the market of livestreams selling through simply learning, so there is great pressure on competitors to enter the market. In terms of livestream platforms, the market of traditional e-commerce platform and short video platform is now relatively saturated and mature, with stable fan flow and user stickiness. For livestream platforms, due to high entry barriers, potential competitors have less pressure to enter.

### 3.2.3 Substitutability of Substitutes

In terms of commodity attribute, agricultural products are necessities of life with a wide range of species. As consumers have many choices for agricultural products which have strong substitutability, only products with high-cost performance and high quality are likely to attract consumers.

### 3.2.4 Bargaining Power of Suppliers

Since there are few suppliers for agricultural products, the bargaining power of suppliers is weak. And because merchants rely on the platform to sell and their fans are bound to the platform, they have a strong dependence on the platform. From the perspective of platform, suppliers have strong bargaining power.

### 3.2.5 Bargaining Power of Buyers

In the case of livestreams selling through well-known anchors, anchors usually reduce the price of agricultural products in order to increase sales volume, so buyers have strong bargaining power at this time. In the case of livestreams selling by merchants themselves, merchants can set their own prices according to their own quality. However, due to the large number of products on the Internet platform, the high price is difficult to occupy the market, which also reflects the strong bargaining power of buyers. From the perspective of consumers, it is difficult for them to directly determine the price of goods. Therefore, buyers have weak bargaining power in this aspect.

## 4. DEVELOPMENT PLAN OF INTERNET CELEBRITY ECONOMY IN YINGKOU CITY OF LIAONING PROVINCE AND OTHER CITIES

Internet celebrity economy is an important basis for livestreams selling. Therefore, it is of great significance to study the planning and development of Internet celebrity economy in Yingkou city of Liaoning Province.

### 4.1 Development Situation

#### 4.1.1 Outflow of Young Population

The Internet celebrity economy in Liaoning province has not formed a relatively complete system, which is relatively backward compared with other super first-tier cities and new first-tier cities. Among them, the outflow of young people is one of the main factors that slow the economic development of Internet celebrities. As the transformation of old industrial cities is not timely enough and there are not many Internet enterprises to support, many graduates do not choose to stay in Liaoning

province after graduation. This has resulted in a lack of young workers in Liaoning province and a lack of vitality in the city. In addition, because of the special nature of agricultural products, the number of young people engaged in related jobs is even rarer. At present, farmers are not familiar with Internet products, which leads to the scarcity of livestreams selling in Yingkou of Liaoning Province.

### 4.1.2 Scattered and One-Sided Development of Internet Celebrity Economy

There are few leading Internet celebrities on Tik Tok platform in Liaoning Province. In addition, there are few excellent large-scale MCN institutions, which makes it difficult to form the interaction between Internet celebrities. Taking Tik Tok accounts "BaiQiao has a problem", "Uncle Wan Ning" and "Liu Dabaozi" as examples, the leading online celebrity accounts in Liaoning province are largely composed of funny jokes. "I am a sunny day" and "Come and invite your princess to eat meat" are food account. The number of beauty makeup and other categories of leading online celebrity accounts is small. Most accounts dealing with beauty and clothing in Liaoning province have moved to southern cities. The existing Tik Tok online celebrity accounts in Liaoning province have a low interaction rate and lack professional planning, so it is difficult to form economies of scale.

### 4.2 Development Potential

According to a list recently released by the Ministry of Education, Liaoning has 116 universities, ranking among the top 10 in the country. As a result, universities produce a large number of graduates every year, so Liaoning have a strong advantage in human resources.

For young people, the vitality of a city is very important. Therefore, Liaoning has made some adjustments to the outflow of young people. Shenyang also actively adjusts the plate of the new city and introduces high-tech industries such as Huawei. It is hoped that the Government of Liaoning Province and Shenyang City can introduce more Internet companies to better meet the employment of young people in Liaoning Province, and then take Shenyang city as the center to drive the development of young people in surrounding cities in the province and make efforts to build a better hometown.

### 4.3 Future Planning

#### 4.3.1 Professional Operation Teams & Accessory Equipment Perfection

The operation of Tik Tok platform has its own unique mechanism and a professional team can better identify and solve problems for accounts. In addition, live streaming requires a lot of manpower for front-end and back-end interchange and the accumulation of some resources. Therefore, the operation and maintenance of a professional operation team will play a very strong role in ensuring the sales of agricultural products in Yingkou City of Liaoning Province. Yingkou City of Liaoning Province now has the advantages of convenient transportation and logistics support, which can better help livestreams selling and provide consumers with better after-sales protection. However, it still needs to continue to learn and explore, so that the industry chain is complete and more skilled.

#### 4.3.2 Encouraging The Creation of Excellent Works

The works created by the "I am Classmate Zhang" account is encouraged to learn to develop regional features and establish differences in video content.

#### 4.3.3 Encouraging The Formation and Interaction of Small Groups of Tik Tok Internet Celebrities

For example, Tik Tok celebrity "Dongbei Jiang" attracts a large number of fans by photographing his daily Vlog, and then introduces his friends into the video content through daily trivia and interesting things, arousing the curiosity and interest of the audience. Later, each of his friends gradually joined the filming team of "Dongbei Jiang" life Vlog. They often revolve around the same event and individual life to carry on the multidimensional narrative, which is very vivid and interesting. Gradually, nearly ten million accounts were formed. The operation model of "Dongbei Jiang" team is worth learning to expand the fans in a friendly and funny way. The "I am Classmate Zhang" account can be used as an example to prepare for the subsequent account of new people by adding new people to the video content. Creating hot topics through the interaction with other Internet celebrity accounts is also one of the important ways to increase the number of fans. In this way, it will be quicker to build up millions of online celebrity accounts to prepare for livestreams selling of agricultural products and other products from the countryside.

#### 4.3.4 Creating Opportunities to Learn The Use of Internet Products

Villagers can learn about Internet products in the units of family, village, town and community. Young people should teach their elders to use Internet platforms. The government should also regularly organize professionals to teach Tik Tok livestreams selling courses in villages, townships and towns. These measures will enable people in Yingkou to better experience the convenience of the Internet era and no longer worry about poor sales of agricultural products.

### 5. FEASIBILITY SUMMARY OF LIVESTREAMS SELLING OF AGRICULTURAL PRODUCTS FROM YINGKOU CITY ON TIK TOK PLATFORM

In conclusion, there is enough market space for Yingkou City in Liaoning Province to carry on livestreams selling of agricultural products. After comprehensive consideration of the city and market analysis, the author believes that the feasibility and potential of the scheme is very strong. In this process, Shenyang, as the capital city Liaoning province, must also play its important role in driving the development of surrounding cities. For the initial model of livestreams selling, it is better to use the combination of merchant livestream and celebrity anchor livestream. Among all the factors, the popularity and supporting equipment of Internet celebrity economy and livestreams selling will play a crucial role. It is believed that in the near future, livestreams selling will bring unlimited wealth to Yingkou city and other cities in Liaoning Province.

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