

The Analysis of Electronic Marketing of Agriculture Products Based on Feasibility, Desirability, and Feasibility Risk

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Abstract: Many industries have been impacted by saturation in a highly competitive climate. Many conventional Business-to-consumer companies are dealing with the dilemma of fragmented and lost clientele. However, live-streaming commerce has shown its potential in recent years, which brought conventional enterprises an opportunity. While many primary industry entrepreneurs lack knowledge of this sector. Therefore, this report will discuss the feasibility of selling agricultural products online with live commerce. Both primary data and secondary data are used. I have collected data from multiple experienced sellers from electronic business platforms, including sales, market share, etc. However, literature is also used for analyzing live commerce's success factors and forecasting the feasibility of the online agriculture market. The results of this study show feasibility, desirability, and feasibility risk, lending practitioners in multiple traditional industries, especially agriculture suppliers, a more comprehensive understanding of the factors that would affect live commerce's success and motivations of consumer decisions. The outcomes can be further used as a fundamental of online platforms' improvement and agriculture products' online selling suggestions.

Keywords: e-commerce, live commerce, agriculture products

1. Introduction

During the covid-19 pandemic and the development of online platforms, many traditional companies are forced to transfer to marketing online, and further create broadcast room for product selling. It also helps people see the potential and success of live commerce. It is not only a new form of electronic economy, but also an opportunity for all conventional companies, include traditional agriculture products.

In the course of ongoing development and evolution, live streaming has progressively evolved into a new growth engine for e-commerce platforms, which is having an impact on numerous industries, including primary industry, and agriculture. This study focuses on exploring the relationship between live streaming and agriculture to see if it is an opportunity for traditional industries to improve and increase sales through technology. This report is aimed at the China region, which is the most mature market in the world for live-streaming commerce. By March 2020, there were 265 million live commerce users worldwide, or 29.3% of the nation's total internet users Michael & Shan [1]. The feasibility measures include the market's potential, the purchasing power of buyers, and the influence

of competitors. Desirability is measured by live streaming commerce's future and influence. In addition, recent trends in people are also considered during the analysis of risks.

Sales channels and business environments have been influenced and changed by live commerce platforms in the last 5 years. This innovative purchasing strategy may be viewed as a deft fusion of electronic commerce and social live-streaming services Hu & Chaudhry [2]. According to Kim et. Al [3], 7.5 billion USD was generated in Taobao's live show in the first 30 min of Alibaba's Singles' Day in 2020. However, only China has achieved success of live streaming commerce, therefore research has analyzed a few factors that possibly influence sales and provide suggestions to the traditional enterprises that have a wiliness on electronic transformation.

2. Methodology

2.1. Research Settings

The empirical context for this study is the live commerce and agriculture industry. In line with prior research, I defined live commerce as a combination of e-commerce and live streaming, which allows consumers to have an intuitive visual experience without a threshold Kim, He, and Miles [3]. In addition, scholars have argued that Asia will be a potential agriculture products market and reach its peak in 2027 BMI [4]. Its consumer group involves both young and old people, the former one is mainly high-income youth, while the latter one usually has more savings. According to the BMI report stated [4], consumers are increasingly turning away from products that are perceived as unhealthy, which offers agriculture products and live commerce a chance to hold an exhibition of the products and achieve sales growth. Furthermore, China is a mature market among all live-commerce markets, which has held 57% of e-commerce users for more than 3 years Becdach et.al [5]. Therefore, the data in this paper are mainly for agricultural products in the Chinese market and its e-commerce.

2.2. Research Design and Data Collection

I applied literature research and surveys to conduct the research. Literature research mainly analyzes data from online reports that study e-commerce and Asia agriculture reports, including Business Monitor International, while the other mainly focuses on surveying online users on different platforms.

I have researched through secondary data and further analyzed them. I have randomly surveyed online users on different platforms and analyzed data from online reports that study e-commerce and Asia agriculture reports, including Business Monitor International, etc.

I decided to random sample from experienced merchants on online platforms, to collect their data from published reports to prove our hypothesis, including sales, and revenue so I can further analyze the industry. I was mainly focused on several popular agricultural products, such as corn, and tomato. However, corn is a representative product which will elaborate later. Besides, there are several advantages to using these data. First, it is completely random sampling, which means there is no segment. That would avoid following the path of "The Literary Digest", which fails because of "survivorship bias", but only gains the real status in the industry. In addition, survey results and online reports could be outdated and too broad. However, recent and formal report could provide recent data and offers authenticity.

In addition, I have checked out survey results with other professional reports from online to ensure the completeness and acute of our data, including BMI food report and e-commerce research. First, Business Monitor International is a famous and reliable organization worldwide. They have been devoted to integrating country risk and industry analysis to publish dynamic and trend forecasts at global, regional, and country levels. It solves the problem of our lack of data on the Chinese food industry and handles the difficulty of large-scale research. In addition, the BMI report has also

provided us with a specific and detailed forecast of the agriculture food industry in the next 5 years, which laid the foundation for the proof of some hypotheses.

Furthermore, I have also collected online literature that studies e-commerce and live selling. The scholars have surveyed and analyzed results from users who experience using live commerce platforms, such as Taobao, Chinese TikTok, and JD.com. The research has illuminated consumers' motivations and the elements that influence their purchasing decisions, which laid the foundation for a better understanding of the new e-commerce platform economy and market competitiveness. This is done by examining consumers' intentions to purchase in the rapidly expanding live commerce platforms Kim et. Al [3]. These supplementary data contribute to the data's integrity and raise its level of professionalism.

3. Hypothesis Development

Based on data collection and literature analysis, I have developed these hypotheses and all are approved.

Hypothesis 1: China is a low-risk, high-reward market.

Hypothesis 2: People tend to buy more expensive vegetables and products.

Hypothesis 3: Health awareness has a positive effect on high-priced vegetables.

Hypothesis 4: The quality of the e-commerce platform could affect sales.

Hypothesis 5: Key opinion influencer has a positive impact on sales.

Hypothesis 6: Patriotism has a positive impact on sales for locals.

4. Discussions

Furthermore, BMI [4] states that mainland China leads the Asia region with an overall RRI score of 74.6 out of 100 in the Q223 updated Risk/Return index for Food and non-alcoholic beverages. (See Figure 1) The table is published by the BMI, and they have located China in the risks, high rewards matrix. These figures and tables could also tell the viability of the Chinese market. Therefore, hypothesis 1 is also approved.

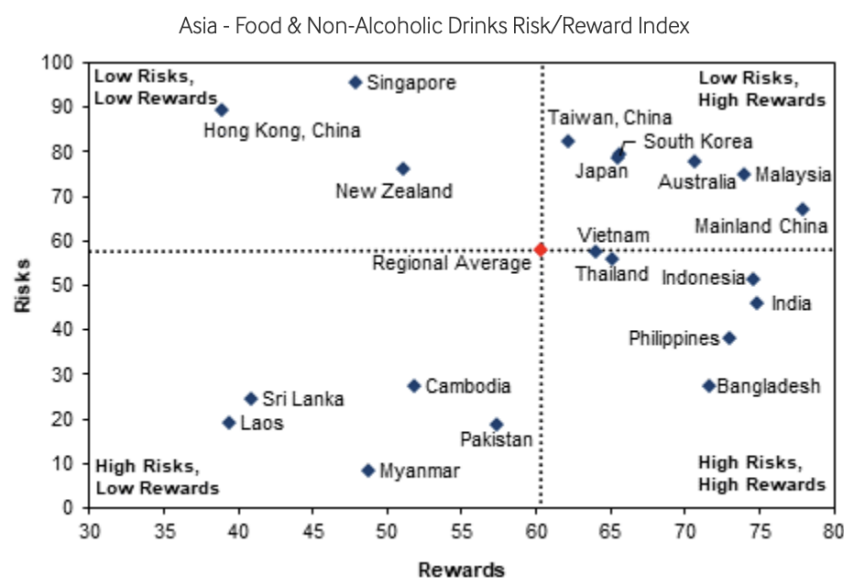


Figure 1: BMI's Asia food and Non-alcoholic drinks Risk/Reward index

The desirability of agricultural products on the internet has been measured by their prices, sales, and brand followers. I first choose multiple products to focus on, including corn, tomatoes, squash,

etc. The research found that there is huge potential for high-priced products. (See Figure 2) For instance, there is a famous corn brand “Tianqinglilijing”, which has gained 37% of the market share as the biggest company in the corn industry by setting a high price. Therefore, hypothesis 2 is approved.

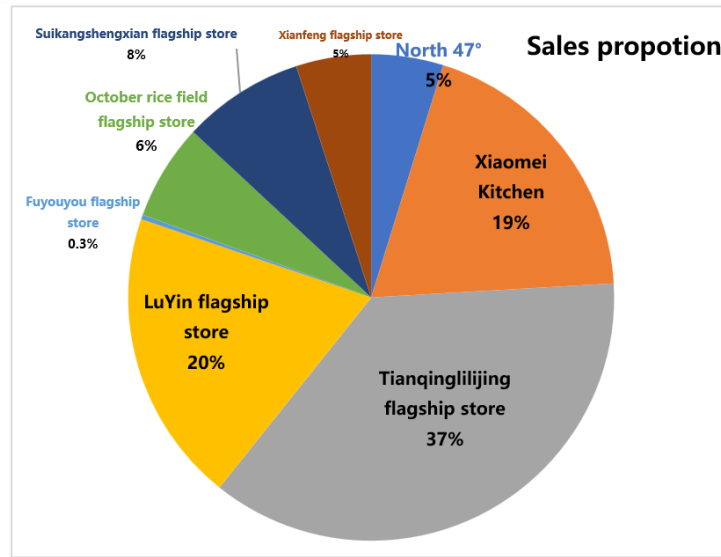


Figure 2: The market share of online corn market

I also found out that industry leaders have been focusing on advertising how healthy their products are, including “Tianqinglilijing”. While comparing our data from companies about sales with the BMI report [4]. It turns out that consumers, particularly those in metropolitan areas and higher income groups are seeking healthier lives, which will increase demand for natural and organic foods. That explains why those companies gain a huge share. Therefore, hypothesis 3 is supported. People tend to buy expensive products and focus more on the health properties of food.

In addition, Xiao and Cai’s research [6] also shows that situational elements have a significant influence on customers' emotions in a broadcast room's virtual environment, leading to increased impulse and impulsive buying behavior. As the increased live room’s activity degree, the sales volume will also rise. Furthermore, there is a relationship between the quality of platforms and sales. Wade and Shan stated nearly 80% of e-commerce was made up of Alibaba, JD.com, and Pinduoduo in 2021 (56%, 16%, and 7%, respectively). According to Kim et. Al [3], 7.5 billion USD was generated in Taobao’s live show in the first 30 min of Alibaba’s Singles’ Day in 2020. While other platforms that do not focus on live streaming do not achieve the same level of sales figures, such as Pingduoduo. That further led to hypothesis 5’s test, which results show that the quality of platforms could affect sales to some extent. Platforms have more experience in live streaming, consumers will prefer and purchase more through their channels. Therefore, hypothesis 4 is approved.

Furthermore, according to Liao et al [7], “Key opinion influencers” (KOL) are some people who are popular on the Internet and have the ability to transfer the love of followers into cash. For instance, Jiaqi (Austin) Li, was dubbed the "Lipstick King" and one of the most well-liked live streamers, with 6.5 million Taobao Live followers and 2 million daily watchers, which brought him countless money. In addition, Yan [8] also points out KOL has a positive influence and is tested in their research, which shows that KOL sometimes could make their followers make irrational decisions to buy some products they are not even familiar with based on their love and trust. That further boosts sales and increases the stock price of the company. Therefore, hypothesis 5 could be approved after analyzing data and literature.

Besides, the potential of the local brand and the viability of the Chinese market could be seen by combining and analyzing original information and secondary data. First, in the mass Internet corn consumption, the top three are Chinese brands. They have accounted for 76% of sales volume and created 72% of the industry's total revenue. (See Figure 2 and Figure 3) In addition, BMI report [4] have shed light on China's seeking to reduce dependency on import and to shift to the domestic market. According to the General Administration of Customs, China imported 10.08 trillion yuan in the first half of 2023, a decrease of 1.1% from last year. In addition, there is a rising nationalistic sentiments in Chinses consumers, which could be seen from consumer boycotts of Nike. (See Table 1) Therefore, hypothesis 6 is also supported.

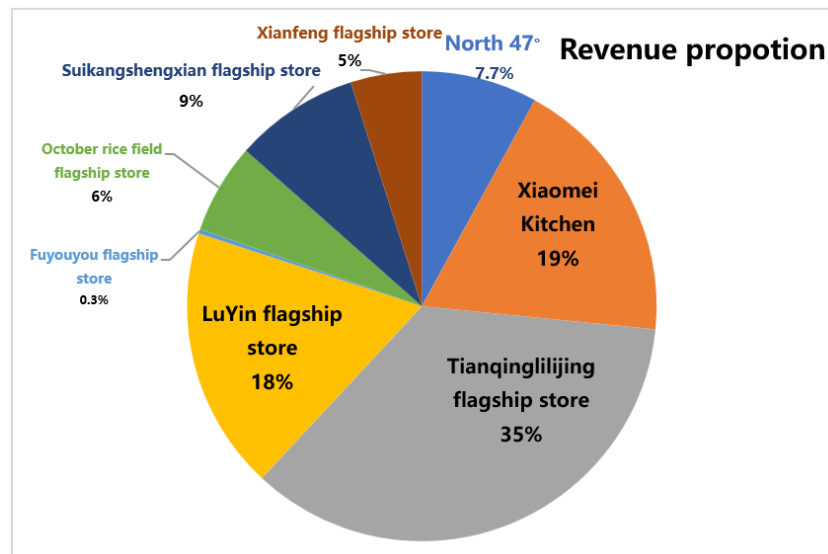


Figure 3: The revenue propotion online corn market

Table 1: Nike financial statement (2022)

NIKE, inc. DIVISIONAL REVENUES								
(Dollars in millions)	THREE MONTHS ENDED			% Change Excluding Currency Changes	TWELVE MONTHS ENDED			% Change Excluding Currency, Changes
	5/31/2022	5/31/2021	% Change		5/31/2022	5/31/2021	% Change	
Greater China								
Footwear	1,178	1,316	-10%	-12%	5,416	5,748	-6%	-10%
Apparel	350	572	-39%	-40%	1,938	2,347	-17%	-21%
Equipment	33	45	-27%	-28%	193	195	-1%	-6%
Total	1,561	1,933	-19%	-20%	7,547	8,290	-9%	-13%

Therefore, the feasibility could be supported by hypotheses 1 and 2, because they revealed the market and buyers' potential. Besides, hypotheses 4 and 5 provided proof of desirability for companies. They show the power of platforms and live streaming commerce. In addition, hypotheses 3 and 6 also find out the recent trend in the e-commerce industry could provide a path for companies to avoid the risks.

5. Conclusion

From the above discussions, this study came up with the following conclusions: (1) China is a low-risk, high-reward market, where consumers have huge potential and purchase power. It is worthy for local enterprises to invest. (2) High-priced vegetables are acceptable for consumers. With the development of the economy, vegetable's equilibrium point is increasing and has more consumer surplus than expected. (3) Consumers care about the health and quality of agricultural products, which further leads the price increases. People tend to buy expensive products, such as "Tianqinglilijing", just because they are organic and advertise themselves as healthy vegetables. (4) Platforms with better quality create higher sales. From our data could see that revenue and sticky users are usually gained by those apps that have experienced live-streaming commerce. Such as Taobao and JD.com. (5) KOL has a positive influence on sales. Chinese people trust KOL more than experts. From literature and research can see that Chinese people tend to buy the products recommended by KOL they have followed, even if they do not need them. KOL has the power to reduce sanity and further lead to irrational decisions. (6) Patriotism has a positive impact on sales for locals. In recent years, people have focused on local products instead of famous brands from other countries. Besides, many brands have realized that China is a difficult market to tame. Once leaves Chinese a bad image, the development will be greatly affected. However, it is an advantage for local firms. People spontaneously pay attention to local brands and readily accept the loss of customers from foreign brands. Therefore, primary industries companies are encouraged to enter the live-streaming commerce. This study shows live streaming commerce provides Chinese local firms with a great chance. In addition, the market's potential and consumers' purchasing power are also expressed the low risk.

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