Research on the Current Development and Strategy of Rural E-Commerce in China's Digital Market-Oriented Economy

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Abstract: The rapid advancement of e-commerce has introduced numerous challenges, particularly regarding the rural-urban divide, marked by disparities in income and resource distribution. Addressing these issues is crucial to ensure sustained growth in this sector. This paper examines the current state of rural e-commerce through secondary data analysis, noting the dichotomy of positive and negative impacts, with a particular focus on Taobao Village as a case study. While existing literature has extensively reviewed the benefits and drawbacks of e-commerce, this paper concentrates on the primary threats and underlying causes affecting rural areas. Notably, the digital divide and skill deficiencies emerge as significant obstacles. The digital divide highlights the gap between those with access to technology and those without, while skill deficiencies refer to the lack of necessary technical skills among rural populations to effectively engage with e-commerce platforms. To address these challenges, the paper proposes several practical solutions. These include increased financial investment in digital infrastructure and targeted training programs to enhance technological skills among rural residents. Additionally, efforts to change attitudes towards technology, particularly among those resistant to electronic devices, are crucial for fostering a more inclusive digital economy. Overall, the paper underscores the need for government intervention to mitigate the potential threats posed by e-commerce, ensuring that the benefits are equitably distributed and the industry continues to flourish.

Keywords: E-Commerce, Rural Areas, Digital Divide, Skill Deficiency, Taobao Village.

1. Introduction

1.1. Research Background

Since the Internet began to become prevalent at the beginning of the 21st century, the e-commerce of Chinese rural areas has started its rapid growth. Up to now, this industry has formed a mature market system, but it still has some flaws. The development of the E-commerce industry bridges cities and countries, inland and coastal places, and domestic and international markets by distribution services. To be specific, this requires a complete infrastructure system from city to city, as well as from countryside to city. The built-up roads would connect the countryside and city, leading to more economic collaboration and diverse labor sources, which would be beneficial for both cities and the countryside.

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If the e-commerce industry continues its growth, the rural economy will grow rapidly, resulting in a shrinking gap between the poor and the rich [1]. This is important because the fundamental aim of the Chinese Communist Party is to eliminate the gap between the rich and the poor. Additionally, there are also social values like bridging the digital divide and promoting innovation. In the past, most urban citizens mastered the use of electronic devices, while only a few in rural areas did so. However, if rural E-commerce were developed successfully, more rural dwellers would master the technique. As a result, everyone can enjoy the benefits of electronic devices. In terms of promoting innovation, the development of rural E-commerce not only gave rise to technical innovation but also formed a new business model--online shopping. Online shopping has various advantages, such as convenience and providing diverse choices for consumers. Specifically, customers do not need to travel long distances to shopping malls or shops, which reduces their commuting time. Additionally, consumers can compare the differences between commodities and the most cost-effective ones.

1.2. Literature Review

Li found that the government played an important role in promoting the rural E-commerce industry, but they should engage more in the management of the whole system instead of providing only financial support [2]. His statements provided evidence of the importance of governmental intervention in rural E-commerce. Secondly, Weicheng Tang and Jin Zhu analyzed some disadvantages of the current trend of E-commerce, which promoted the rat race among firms [3]. This cannot be neglected because the rat race would give rise to a price war, in which firms would decrease the quality of products to lower the cost of production. Plus, when prioritizing the price war, there would be less innovation in the industry, mitigating economic development. Thirdly, Min Liu, Shi Min, Wanglin Ma, and Tianjun Liu proposed that developing a rural E-commerce industry has a positive impact on increasing the sales price of farmers' agricultural products, reducing marketing costs, and increasing gross income [4]. Fourthly, Haiqing Yu and Lili Cui discovered that although rural E-commerce raised women's economic status in the market, it does not mean that they are given power in culture and politics. Due to the solidified idea of women, females are exploited by digital capital, which seems to be cheap, flexible, and docile labor [5]. This is also a vital issue that has not been tackled. The solutions for such a conflict involve not only changes in those solidified ideas but also governmental efforts. In addition, the E-commerce industry provides more opportunities for individuals and businesses, especially women. If women were successful due to their efforts, those solidified ideas may be eliminated over time.

Most scholars in this field mainly discussed the effects of the development of rural e-commerce and reviewed the process of this development, while only a few focused on the future strategy and causes.

1.3. Research Framework

In this paper, the entire development of rural e-commerce will firstly be reviewed again briefly via discussion over some cases to discover the causes of the trend. In terms of the causes, this study will discuss the main drivers for both consumers and producers in rural places that made them engaged in this field by applying knowledge of both Economics and Behavioral Economics. The reason is that to delve into why consumers and producers entered the e-commerce industry, finding out the incentives and rational factors that drove them into the sector is vital. After that, feasible strategies for current development will be provided by analyzing data provided by authorities or authoritative organizations.

2. Case Description

Taobao village is a cluster of e-tailers within an administrative village in China. The number and development of Taobao village can, to some extent, refer to the development of rural E-commerce. Hence, this essay will discuss the current situation of Taobao village to illustrate the current condition of Chinese rural E-commerce.

China's Taobao village is a rural development model based on Alibaba Group's Taobao e-commerce platform. Although most of the market shares of e-commerce have been occupied by social media like TikTok, the new development model led by Taobao is still remarkable. There are three standards for being a Taobao village. It must be in rural areas, with administrative villages as the unit. 2. Annual e-commerce sales reached 10 million yuan. 3. The number of active online shops in the village reaches 100, or the number of active online shops reaches 10% of the number of local households [2]. Today, the total number of Taobao villages reached 7780, which was only 212 in 2014. This striking figure benefited from not only governmental support but also technical development. Although this seems to be totally beneficial to the national economy, it is important to be aware of the potential threats caused by unrestricted development.

Firstly, the development of E-commerce provided a competitive platform for all sellers. However, this is not advantageous to small firms and businesses. Since big firms can produce at the economies of scale while small companies cannot, small firms have no power to compete with big firms. In the past, this could be solved by regional differences, where although they have the same product, small firms can sell their products to places without big companies' branch offices. However, under today's circumstances, the only way for small firms to compete is to provide unique products because there is less competition.

However, E-commerce is still beneficial to the national economy. The main effect is that the urbanrural gap is shortened, where rural citizens can sell products at the same price as the city does. This would result in a harmonious society where there is less inequality and promote the national economy. Another effect is that the infrastructure is boosted by E-commerce. Since delivering goods requires complete infrastructure that vehicles can pass through, Alibaba and the government are dedicated to establishing a well-rounded E-commerce system, including infrastructure construction.

3. Analysis on the Problem

3.1. Effect Analysis

3.1.1. Narrowing the Income Gap

The ever-accelerating development of China's rural E-commerce is widely believed to be a means of narrowing the income gap between the rich and the poor [6]. There are two main advantages for rural citizens, which are expanding the market and providing income and job opportunities.

Expanding markets can reduce the gap between rich and poor because it provides rural areas opportunities to access wider markets, allowing rural producers to sell their products directly to urban consumers. In the past, when there was no E-commerce system, rural sellers had to sell their products to middlemen or travel a long distance to adjacent cities. The problem is that the prices offered by middlemen are often lower than the market price, where they can earn profits. As for selling to adjacent cities, the price might also have fluctuated from city to city, where there was uncertainty for rural sellers. However, with the assistance of E-commerce platforms, rural sellers can contact urban buyers, where there are no middlemen. In case of price fluctuation, the E-commerce platforms enable sellers to see a standard price set by the market so that the sellers can have more control over pricing.

E-commerce has brought not only online jobs but also offline jobs to rural citizens. To be specific, online jobs like operation management, product sales, customer service, logistics distribution, and

warehouse management for online enterprises and offline jobs like logistics and delivery workers offered workers opportunities to gain as much as workers in the second-tier and third-tier cities. This directly increased the income of rural E-commerce workers, resulting in higher purchase power among those workers. Consequently, workers can enjoy materials at the same level as urban dwellers, which lowers the gap between the wealthy and the poor. Additionally, those jobs also potentially developed rural E-commerce workers' intelligence and entrepreneurship because jobs like operation management and product sales require that. This intelligence and entrepreneurship increase the possibility of becoming successful in starting a business, which potentially raises the opportunities to get a higher income.

3.1.2. Direct Economic Benefits

Since many long-established Taobao villages have been updated from isolated workshops to small manufacturing clusters, there are more and more direct economic benefits like the building of infrastructure and the integration of primary, secondary, and tertiary industries that have shown [7].

The benefits brought by the building of infrastructure can be attributed to two things: logistics system and mobile network coverage. In terms of the logistics system, by building roads connecting villages and cities, the efficiency of E-commerce could increase. Specifically, the time of the delivery of express would be cut because vehicles are able to access rural areas. In this way, the quality of rural consumers would be ensured. Hence, they would be more likely to purchase more online, leading to an increase in the local and urban economies. Secondly, mobile networks cover most parts of China, including islands and remote areas in northwest regions. This means that more people can enjoy using mobile phones to not only buy things on online platforms like Taobao but also entertain with their phones by either watching video clips or playing video games. Moreover, the young generation nowadays with a sedentary lifestyle would be more likely to go back to rural areas, alleviating the aging of the population in rural areas. This is because they could access rural places more easily if those roads and railways were constructed.

The integration of primary industry has already been discussed in 3.1.2, where the selling of crops or fruits can transform straight forward from producers to consumers. In terms of the secondary industry, which is manufacturing crafts or mechanicals, the sale of unique crafts can get more customers online, where producers can advertise their products to attract more attention. To explain, today there are fewer people appreciating conventional artifacts, but interesting video clips with incredible aesthetic experiences can undeniably attract more buyers. The sale of mechanicals would also be easier because it is easier to seek buyers online in the global or at least domestic region. As a result, this would integrate the secondary industry with E-commerce. As for the tertiary industry, E-commerce has given rise to many emerging industries like flow express, professional photography, image design, warehousing services, and IT technical support. These sectors combined the tertiary sectors closer with E-commerce.

3.2. Digital Divide

3.2.1. Problem Analysis

The digital divide is the problem of some members of society not having the opportunity or knowledge to use computers and the Internet that others have [8]. This difference often exists between cities and villages, people with different levels of education, the young generation, and the elderly people and people under distinct economic conditions. The difference between generations is the main problem of rural e-commerce because of the aging trend of today's population in not only cities but also villages. As a result, there would be an inequality in terms of utilizing and gaining profits

from E-commerce. To be specific, the young generation with a wider knowledge of using E-commerce platforms can gain more profits because they can sell products in a more efficient way.

3.2.2. Causes

The problem of the digital divide can be attributed mainly to the aging population, and there are two main reasons: technical familiarity and health concerns [9]. In terms of technical familiarity, the older generation was not born in the age of digital technology and might psychologically resent digital technology for conventional reasons. To explain that, compared with youngsters, they are not familiar with digital technology and hence might resent it because of some safety problems and addiction. In their view, the young generation is contaminated by digital technology, like the addiction to video games, which has led to poor academic performance and eyesight. As for health concerns, some diseases and the growing inflexibility of their body may psychologically discourage the older generation from learning to use digital technology because the utilization of digital technology requires screen touch, which is hard for elderly people. Moreover, it requires precise clicks on the screen, which the old generation could not have done due to tremors.

3.3. Skill Deficiency

3.3.1. Problem Analysis

Today, rural inhabitants still face a lack of skills for various reasons, which restricts their ability to use digital technology and, hence, they cannot manage their business efficiently [10]. For example, they might not be familiar with how online marketplaces work, do not know how to manage online stores effectively, or lack the skills to conduct digital marketing. This might lead to a lack of innovation and entrepreneurship, which is vital in achieving success in the competitive market. Consequently, if this problem still exists, the rural regions cannot develop as quickly as cities do, leading to the existence of an urban-rural gap.

3.3.2. Causes

The problem is due to the lack of educational resources and funding. In terms of the lack of educational resources, the rural areas may not have enough schools and training institutions to provide professional E-commerce education. Even if such institutions do exist, the courses and training they offer may not be comprehensive enough or updated enough to meet the latest needs of the market. As for the dearth of funding, according to the survey, about 80.71 percent of rural online entrepreneurs mainly relied on their own funds to start their businesses, while 64.96 percent did not raise funds through other channels [11]. This lack of capital has largely limited the scale expansion and innovation capabilities of enterprises. The fundamental reason behind this is the wealth gap, which is that wealthy people in first-tier cities earn far more than rural citizens.

4. Suggestions

4.1. Change in Attitude

Only by changing the conservative attitude of the elderly can the digital divide be remedied. In other words, the negative attitude held by the elderly is the major resistance to getting them familiar with electronic devices. One possible solution is to take no action, which means the young generation today, who have large incentives to use electronic devices, will get old in the future, replacing the old generation now. Plus, the emerging young generation can still maintain the utility of electronic devices. However, the change might take more than 3 decades to implement. A quicker solution to

the problem involves attracting the older generation to use electronic devices, at least on social media. If the elderly were to use social media, It would be common for them to hear about E-commerce. Hence, some of them might begin to learn about using those e-commerce platforms. Specifically, this measure requires firms to create content that targets the consumers of the elderly so that they can engage in it.

Moreover, there is a strong correlation between socioeconomic status and participation in the digital economy [8]. In other words, people with lower incomes are usually negative about accessing e-commerce platforms because they do not think they have free money to spend on them, and the price they are considered might be fairly high. However, products in most e-commerce platforms are often lower, and discounts and the use of discount coupons are not uncommon. Hence, changing the attitude of people with lower incomes can transform many potential consumers into real customers. To tackle this issue, the same approach to treating the elderly can be implemented, which is to create content that attracts a group of people. Because age does not limit income, there are still problems with the digital divide. Hence, the government can work with private sectors, such as the local community and the companies where they work, to enlarge the internet connection of these needy families through advertising or local activities.

4.2. Financial Investment

Financial investment can be made in both infrastructure and training. In terms of the infrastructure, the government can invest in network connectivity and bandwidth, which would increase the efficiency of E-commerce. Additionally, the money spent on building roads is also required because this allows rural inhabitants to transport to cities easily for both educational and business purposes. For instance, a person from a villages can get higher education about skills of E-commerce in the urban area or cooperate with urban companies that have better technologies. This would remedy the skill deficiency in rural places. Investment in network connectivity and bandwidth can improve the availability and reliability of the Internet, leading to better access to digital technologies for rural residents.

Investment in training aims to improve the computer and digital skills of rural residents. The function of these trainings is not limited to improving security awareness, improving digital marketing skills, and guiding entrepreneurial help. Firstly, these online and offline courses may help people get rid of Internet fraud, which is a flaw for many youngsters and elderly people nowadays. These courses would teach people how to judge right information from wrong online, how to use the Internet safely from cyberattacks and tracking applications, and how to gather helpful information in a short time. Secondly, digital marketing skills can also be taught through these courses, making them familiar with different online marketplace platforms and how to set up and manage online stores on these platforms. Thirdly, the teachers should be professional entrepreneurs who can impart essential experiences to people, increasing and providing a way of starting a business.

5. Conclusion

In conclusion, despite the ever-accelerating development of the Chinese rural E-commerce system, there are many potential problems like the digital divide and skill deficiency. These problems are due to the uneven distribution of resources and income between rural and urban regions. Undeniably, the E-commerce system has narrowed the gap by offering opportunities to enjoy the same matter and make profits. However, these benefits are still limited, so the government should intervene in the problems in a significant way. Some feasible solutions are trying to change the attitude of the group resisting digital technology or investing in professional training in online security and the E-commerce industry.

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This paper has reviewed some important effects brought by the emergence of e-commerce and has indicated some potential threats while providing some feasible solutions. This warned the government that they should not neglect the flaws and threats of E-commerce and try to make everyone enjoy the industry fairly. Generally, the paper has reached all of the aims while applying both economic and behavioral economic analytical measures(discussing the attitude of people who resist electronic devices).

Some flaws of this paper are that it includes only secondary data and neglects the uneven regional development between the West and East. In terms of the secondary data, although all of them are from the past 5 years, some might also be invalid in this age of booming information technology. Secondly, this paper discusses the difference between rural and urban areas but does not use the geographic economy. This is crucial because the western area of China is relatively underdeveloped, which might have a different relationship between cities and villages than eastern places. In the future, researchers can gather more primary data to update the condition of the E-commerce industry today because they are more valid and time-bounded, and they can prioritize the geographical difference between East and West in China.

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