



WENZHOU-KEAN  
UNIVERSITY



# Research on Agricultural Supply Chain Based On Agricultural E-commerce Environment: A Case of Pinduoduo in China

**Presenter:**

Yating Song

College of Business and Public Management  
Wenzhou - Kean University



# Contents

---

**1** Introduction

**2** Purpose of the Study

**3** Literature Review

**4** Methodology

**5**

**Conclusion & Implication**

**6**

**Future Research**



WENZHOU-KEAN  
UNIVERSITY

PART ONE

01

---

# Introduction



# Introduction



WENZHOU-KEAN  
UNIVERSITY

In recent years, with the gradual improvement of the **market mechanism** and the **government's policy support**, the value of e-commerce in the supply chain of agricultural products has gradually emerged. Based on information sharing, the e-commerce environment effectively improves the efficiency of logistics transportation and industrial chain cooperation (Li, 2016). However, China's agricultural e-commerce enterprises are still in the control and unification stage (Liu et al., 2013). There are still many problems and deficiencies in the actual work process of agricultural product logistics management in the e-commerce environment.



Figure 1: Farmers are selling vegetables live

# Introduction



WENZHOU-KEAN  
UNIVERSITY

From the point of view of product characteristics, agricultural products are **perishable** and **seasonal** (Liu et al., 2018). Specifically, the perishability of agricultural products makes it necessary to adopt cold chain logistics and other ways to maintain product quality in the transportation process (Liu et al., 2018). This dramatically increases the cost of transportation. At the same time, the seasonal characteristics of agricultural products will lead to periodic changes in their prices (Wang et al., 2020). This increases the cost of managing the agricultural supply chain (Jean and Bureau, 2016).



Figure 2: Vegetable Product Display

# Introduction

---



WENZHOU-KEAN  
UNIVERSITY

Pinduoduo started by using the **Internet** to sell fresh agricultural products, and it's good at grasping consumer psychology, such as making Duoduo orchard, "price haggling," and other playing ways for shopping (Bie, 2020). To form a more benign market environment so that high quality and price of agricultural products "upside," which means efficient use of the Internet to help farmers sell their products.



Figure 3: Pinduoduo: Together with the farm goods



WENZHOU-KEAN  
UNIVERSITY

PART ONE

02

---

# Purpose of the Study





# Purpose of the study



WENZHOU-KEAN  
UNIVERSITY

This study takes **Pinduoduo** as the primary research object. By studying the operation model of the traditional agricultural supply chain and **the main agricultural supply chain of Pinduoduo**, the differences between them are compared. To further analyze why Pinduoduo can efficiently use the agricultural e-commerce environment to improve the supply chain of agricultural products. In addition, the supply chain model adopted by Pinduoduo is discussed in detail to help more e-commerce enterprises develop and better help agricultural products upside.







WENZHOU-KEAN  
UNIVERSITY

PART ONE

03

---

# Literature Review



# Literature Review



WENZHOU-KEAN  
UNIVERSITY

Source	Table of Content	Information
He. (2021) Huang et al. (2016)	<b>Customers to Business(C2B) Model</b>	C2B means <b>customers to business</b> , and the C2B business model is a new business model developed under the background of the Internet economy. Medium e-commerce enterprises will integrate consumers' demands and generate orders suitable for centralized production by suppliers to reduce intermediate links in the supply chain and improve efficiency.
Morgan et al.(2018)	<b>Food Value Chain</b>	The food value chain includes <b>all activities in the entire food supply chain</b> , including inputs and production, storage, processing, transportation, and retail.
Zhang et al. (2019) Zhang & Dai. (2021)	<b>Agricultural products on the upside</b>	Making agricultural products upside refers to the combination of agricultural products and e-commerce, agricultural products on the Internet for sale. Products can help local farmers open up sales channels for agricultural products and satisfy urban residents' pursuit of a higher standard of living.



WENZHOU-KEAN  
UNIVERSITY

PART ONE

04

---

# Methodology



# Methodology

---



WENZHOU-KEAN  
UNIVERSITY

Qualitative Methodology

Use qualitative methodology by researching Pinduoduo agricultural product supply chain.

# Findings

First, fresh produce sellers need to optimize the **consumer community experience**. The consumer identity formed by the construction of the brand community can only provide the initial participation of the community. Currently, due to the behavior of some fresh agricultural product sellers in the process of community operation (forced advertising placement, irrelevant recommendation, etc.), the loss of consumers is profound. Therefore, sellers need to strengthen communication with consumers in the community and optimize the consumer community experience through innovative online and offline community service forms. Only in this way can consumers' loyalty and purchasing power be effectively enhanced.



WENZHOU-KEAN  
UNIVERSITY



# Findings

---



WENZHOU-KEAN  
UNIVERSITY

Second, fresh produce suppliers need to **increase production** and **processing capacity**. Supplying high-quality fresh agricultural products to consumers is the core link of this model to realize the closed value. And at present, China has a high organization degree and can recognize the main body of fresh agricultural products. Professional production and processing quantity have yet to be promoted, so the fresh agricultural products supplier (producers) based on Internet technology to improve their production and processing capacity, strict product quality, and safety traceability system become a modern management concept of fresh products supplier.





# Findings

---

Third, fresh agricultural supply chain members must strengthen their **cold chain** infrastructure construction. The pattern of consumption of fresh agricultural products tends to have high frequency, product category, the dispersion characteristics such as strong timeliness and subject, and the present construction of the cold chain logistics system is relatively lag, does not meet the requirements of other members of the supply chain and consumer, so fresh agricultural product suppliers and logistics enterprises to strengthen their own cold chain in infrastructure construction, create the complete cold chain intensive circulation form, improve and ensure the freshness of fresh agricultural products, reduce the product circulation decay rate.



WENZHOU-KEAN  
UNIVERSITY



# Findings

---



WENZHOU-KEAN  
UNIVERSITY

Fourth, the **government** needs to **increase support** to the supply chain members of fresh agricultural products. Government departments at all levels need to step up the implementation of the national strategic deployment and increase support for supply chain members in this model from the aspects of finance and taxation, personnel training, and essential services.





WENZHOU-KEAN  
UNIVERSITY

PART ONE

05

---

# Conclusion & Implication



# Conclusion & Implication

---



WENZHOU-KEAN  
UNIVERSITY

**Efficient circulation** model is the key to developing fresh agricultural products e-commerce in rural areas. To guarantee farmers' income and break the barriers to the circulation of fresh agricultural products, Pinduoduo put forward the upside mode of fresh agricultural products to reduce the markup caused by the circulation of fresh agricultural products and guarantee farmers' income.



# Conclusion & Implication

---



WENZHOU-KEAN  
UNIVERSITY

Through the way of helping farmers sell slow-moving agricultural products while ensuring the farmers' growth is stable; not only can make consumers **satisfy** their own needs for fresh agricultural products through an online shopping experience but also can realize an electric business platform of **commercial value**, promote the fresh agricultural products circulation channels of cooperation and coordination among subjects, solve the contradiction between small-scale production and big market, and will promote large-scale and systematic agricultural development in rural areas.





WENZHOU-KEAN  
UNIVERSITY

PART ONE

06

---

# Future Research





# Future Research

---



WENZHOU-KEAN  
UNIVERSITY

- 1 Researchers can combine quantitatively studies to obtain more accurate and comprehensive findings.
- 2 In the future, researchers could study more companies' supply chains.



WENZHOU-KEAN  
UNIVERSITY

# Thank You

**Presenter:**

**Yating Song**  
**songyat@kean.edu**

**College of Business and Public Management**  
**Wenzhou - Kean University, China**

