Pinduoduo (Nasdaq:PDD) Injecting Tech into Agriculture
Presentation overview

1. Overview of Pinduoduo (PDD)

2. Why is PDD well suited to help farmers and digitize agriculture?

3. *Duo Duo Farms: Alleviating poverty via team purchase*


5. Summary
Summary

E-commerce platforms can utilize their large user traffic for social good, working together with local government for meaningful long-term progress in poverty alleviation

- PDD leverages its team purchase model to aggregate demand for farmers
- PDD’s understanding of its ~600m users allows it to recommend products and stimulate or even create demand from consumers
- PDD can provide local governments and farmers with insights on consumer preferences and market pricing to help them better market and tailor their products
- PDD creates a virtuous cycle by working with local governments and agronomists through Duo Duo Farms to raise productivity and build sustainable models
- With its existing network and infrastructure, PDD could quickly roll out measures in response to Covid-19 to help farmers sell their produce rapidly at better prices while providing much-needed resources such as training and farming supplies
Overview of Pinduoduo (PDD)
Pinduoduo – more savings, more fun

Pin

Duo

Duo

TOGETHER

MORE savings

MORE fun

VALUE and HAPPINESS for EVERYONE
China's second largest e-commerce platform by users and order numbers

Within 4.5 Years

GMV
RMB1,006.6bn\(^{(1)}\)

Active Merchants
5.1 mn

Active Buyers
585.2mn\(^{(1)}\)

Annual Orders
19.7bn\(^{(3)}\)

MAU
481.5mn\(^{(2)}\)

Daily Orders
54.0mn\(^{(4)}\)

- Founded in October 2015
- Headquartered in Shanghai, China
- Listed on Nasdaq in July 2018 with market cap over US$40 billion
- ~6,000 employees; more than 50% are software engineers and data scientists

Notes:
(1) Gross Merchandise Volume and active buyers in the twelve months ended Dec 31, 2019
(2) Average MAUs for our mobile app in the three months ended Dec 31, 2019
(3) Annual orders in the twelve months ended December 31, 2019
(4) Average number of daily orders in 2019
We are the largest online agriculture platform in China

FY2019 agriculture GMV
RMB136bn
109% YoY growth

Active buyers in 2019
240mn
174% YoY growth

Active merchants
586k
142% YoY growth

47%
Agriculture SKU YoY growth

150%
Vegetable GMV and order volume YoY growth

402%
Imported fruit GMV YoY growth

370%
Meat GMV and order volume YoY growth

64kg
Average fruit consumption per frequent buyer

Source: company internal data
Notes: Numbers as of 2019.
(1) Frequent buyers refer to those who have purchased at least 3 times.
We have grown our user base and GMV rapidly

**GMV(1)**

(LTM, RMB in billions)

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</thead>
<tbody>
<tr>
<td>Value</td>
<td>141.2</td>
<td>198.7</td>
<td>262.1</td>
<td>344.8</td>
<td>471.6</td>
<td>557.4</td>
<td>709.1</td>
<td>840.2</td>
<td>1,006.6</td>
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**MAU**

(Average, in millions)

<table>
<thead>
<tr>
<th>Period</th>
<th>4Q17</th>
<th>1Q18</th>
<th>2Q18</th>
<th>3Q18</th>
<th>4Q18</th>
<th>1Q19</th>
<th>2Q19</th>
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<tr>
<td>Value</td>
<td>141.0</td>
<td>166.2</td>
<td>195.0</td>
<td>231.7</td>
<td>272.6</td>
<td>289.7</td>
<td>366.0</td>
<td>429.6</td>
<td>481.5</td>
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</table>

Notes:

(1) “GMV” refers to the total value of all orders for products and services placed on the Pinduoduo mobile platform, regardless of whether the products and services are actually sold, delivered or returned. Buyers on the platform are not charged for shipping fees in addition to the listed price of merchandise. Hence, merchants may embed the shipping fees in the listed price. If embedded, then the shipping fees are included in GMV. As a prudential matter aimed at eliminating any influence on Pinduoduo’s GMV of irregular transactions, the Company excludes from its calculation of GMV transactions in certain product categories over certain amounts and transactions by buyers in certain product categories over a certain amount per day.
Our buyers are spending more over time

Active Buyers
(LTM, in millions)

<table>
<thead>
<tr>
<th>Period</th>
<th>Active Buyers (LTM, in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTM Dec-17</td>
<td>244.8</td>
</tr>
<tr>
<td>LTM Mar-18</td>
<td>294.9</td>
</tr>
<tr>
<td>LTM Jun-18</td>
<td>343.6</td>
</tr>
<tr>
<td>LTM Sep-18</td>
<td>385.5</td>
</tr>
<tr>
<td>LTM Dec-18</td>
<td>418.5</td>
</tr>
<tr>
<td>LTM Mar-19</td>
<td>443.3</td>
</tr>
<tr>
<td>LTM Jun-19</td>
<td>483.2</td>
</tr>
<tr>
<td>LTM Sep-19</td>
<td>536.3</td>
</tr>
<tr>
<td>LTM Dec-19</td>
<td>585.2</td>
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</tbody>
</table>

Notes:
(1) “Annual spending per active buyer” in any given period references to the quotient of total GMV in that period divided by the number of active buyers in the same period.

Annual Spending Per Active Buyer(1)
(LTM, RMB)

<table>
<thead>
<tr>
<th>Period</th>
<th>Annual Spending Per Active Buyer (LTM, RMB)</th>
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<tbody>
<tr>
<td>LTM Dec-17</td>
<td>576.9</td>
</tr>
<tr>
<td>LTM Mar-18</td>
<td>673.9</td>
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<td>LTM Jun-18</td>
<td>762.8</td>
</tr>
<tr>
<td>LTM Sep-18</td>
<td>894.4</td>
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<tr>
<td>LTM Dec-18</td>
<td>1,126.9</td>
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<tr>
<td>LTM Mar-19</td>
<td>1,257.3</td>
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<tr>
<td>LTM Jun-19</td>
<td>1,467.5</td>
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<tr>
<td>LTM Sep-19</td>
<td>1,566.7</td>
</tr>
<tr>
<td>LTM Dec-19</td>
<td>1,720.1</td>
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Why is PDD well-suited to help farmers and digitize agriculture?
We re-invented the team purchase model to promote interactions

Step 1: Visit our platform

Step 2.1: Initiate a new team purchase

Step 2.2: Join an existing team purchase

Step 3.1: Invite friends and family on social networks

Step 3.2: Wait for team formation in the next 24 hours

Confirm team formation

Product shipment

Review

Individual purchase ¥ 36.8
Team purchase ¥ 29.9

¥ 36.8
¥ 29.9
Self-reinforcing virtuous cycle

TEAM PURCHASE

Higher volume and sales → More users

Lower production and supply chain cost → More savings to users

More savings to users → More value-for-money products

More value-for-money products → More users

More users → More trust and recognition

More trust and recognition → Better understanding of users

Better understanding of users → More interactions among users

More interactions among users → Better user experience

Better user experience → More fun

More fun → More savings
Team purchase aggregates demand that would otherwise be dispersed

People’s decisions can be dynamically influenced by their trusted sources as they do not always have strong preferences.

I want apples on Monday
I want pears on Thursday
I want oranges on Tuesday

I have great deals on apples and pears, why don’t we all buy apples on Monday and pears on Thursday?

Let’s buy apples on Monday together...

...and pears on Thursday together

Sounds good!

Volume aggregation for merchants
Our “Internet + Agriculture” business model = recommendation + aggregation

- Recommend products to relevant consumers
- Aggregate demand through “team purchase” model
- Guarantee large volume of orders
- Eliminate layers of distribution

Make recommendations to the relevant consumers with attractive pricing and produce

Aggregate demand across different dates and varieties of fresh produce

Generate large volumes of orders for farmers

Sourced directly from local farms

Enhance supply chain efficiencies

Fresher and safer products at lower prices

More income and better production planning
Benefit to farmers: 1) Better economics

Price increase of RMB7 per 500g

Layer 1
RMB1 per 0.5kg

Layer 2

Layer 3

Layer 4

Distributors & Channels

Retail Outlet
(supermarket, food shop, etc.)

Layer 5

Consumer
1

Consumer
2

Consumer
3

Consumer XX...

For instance, our one-day “Pin Agricultural Goods” event held in Hebei’s Zhongmu County in 2018 fetched 47,000 orders, helping impoverished farmers sell over 165 tonnes of garlic and generating over RMB 1m in sales for farmers while reducing the retail price of garlic for consumers by ~76%
Benefit to farmers: 2) Demand creation and aggregation

- Yacon is a South American root vegetable that was introduced to Yunnan in 2004. However, local demand for yacon was limited to just a few provinces and its acreage gradually shrank due to oversupply.
- In 2016, PDD identified yacon as a product with potential to be marketed as a health food suitable for dieters given it is low in calories but high in soluble dietary fiber. Yacon was presented to users on our platform whom we ascertained to be latent potential consumers based on their shopping behavior and profile, and once these users started sharing the product with their social network to form team purchases, demand for yacon started to grow rapidly. Farmers started planting more yacon again.
- In 2018, PDD sold over 18,000 tons of yacon, representing 4.8 million orders.

![Image of farmers working on土地](image1.jpg) ![Image of yacon harvest](image2.jpg)
Benefit to farmers: 3) Consumer insights

• Unlike offline retail, e-commerce platforms like PDD develops insights on consumer preferences in real-time and can even help shape some preferences. We have also been building a system that tracks the status of production of various agricultural goods across China as well as the availability of logistical support.
• With all this supply and demand data, we can guide farmers on what they should plant, when they should plant and how they should market to consumers more effectively.
• We have partnered with tea producers from Anxi, Fujian to provide consumer insights and help them build their brand. From our data, we can provide suggestions on preferred packaging, price points and product development based on the preferences of different target audiences (e.g. young/old, family/single buyer).
Duo Duo Farms: Alleviating poverty via team purchase
Creating a sustainable new model to alleviate poverty and support farmers

The core of poverty alleviation through e-commerce is to leverage advantages of technology to solve problems in agricultural produce circulation, in order to ensure production brings sales and work leads to gains in poor areas.

**Duo Duo Farm Model**

**Brand Innovation**
Aiming at documented poverty-stricken households to create the innovative and poverty-alleviating Duo Duo Farm.

**Perception Innovation**
Marrying anti-poverty charity efforts with e-commerce shopping festivals to mainstream helping the rural poor.

**Product Innovation**
Launched Duo Duo Orchard to alleviate poverty through multiple channels with more savings and fun.

**Training Innovation**
Support creation of Pin brands in agriculture and develop New Farmers to alleviate poverty.

**Cooperative Innovation**
Cross-sector cooperation for poverty alleviation to achieve “1+1>2”.

**Model Innovation**
“Team Purchase of Agricultural Produce” model to realize seamless connection between production and sales.

**Empowerment:**
Enabling farmers to better help themselves

**Stimulating demand:**
Making it easy for consumers to help

**Improving the supply-side:**
Setting the right incentives, removing obstacles

Alleviate Poverty via “Team Purchase”
**Duo Duo Farm** enables farmers to gain more profit

- **12+ mn** Farmers connected
- **RMB15.9 bn** Marketing resources
- **RMB 2.9 bn** Cash Subsidies
- **9** Poverty alleviation projects

**Transform impoverished farmers to new agriculture merchants**

- Shorten agriculture supply chain from 6-8 links to 2-3 links
- Integrate demand and supply through “distributed AI + product flow”
- Resources support and comprehensive merchant services

**Poverty alleviation, rural revitalization**
Collaboration model of *Duo Duo Farms*

**Agronomic research institutes**
- Provides technical support
- *Imparting crop-growing and processing knowledge*

**PDD**
- Provides financial support
- *Providing funds, e-commerce training, traffic and brand-building support*

**Co-op**
- Formed by farmers living below the poverty line
- *New Farmers* handle Co-op sales and business development

**Local governments**
- Provides operational support
- *Policy incentives, operational guarantees, supervision and management*
Duo Duo University empowers merchants with e-commerce knowhow

86K New Farmers empowered

Training programs on e-Commerce and online store operation

“New Farmers” to drive hometown development

490K agriculture merchants took our online courses

Strategic partnership with China Agricultural University

1,400 hours offline courses in 12 provinces

Duo Duo University empowers New Farmers with knowledge and tools to form a closed loop supply chain and promote their products to the whole of China
Agronomic inputs are tailored to each *Duo Duo Farm*

- **Wenshan**: Working with the Yunnan Academy of Agricultural Sciences (YAAS) to designate the area as a recognized production zone of yacon and to establish national standards for yacon to better oversee the production.

- **Baoshan**: Working with the YAAS Institute of Tropical and Subtropical Cash Crops to select high quality coffee varietals suited to the latitude and altitude of the area and through intercropping increase the economic yield of the land.

- **Nujiang**: Introducing mandarin orange and citron varieties that are suited to the high-altitude valley setting of Nujiang; deploying drip irrigation technology in the area for the first time.
Pilot program: Yunnan *Duo Duo Farm* Project

Benefit distribution mechanism boosts collective economy in rural areas, driving long-term growth.

**Launched *Duo Duo Farm* in Nujiang Gorge area, turning farmers to shareholders**

### Technology Support
- Study the current status of local agricultural produce
- Academic workstation + Israeli agricultural technology
- Breed new plant varieties, and build a pilot science-based planting field as a demonstration site

**Funding Support**

- *Duo Duo Farm* sponsored RMB2.3 mn
- Farmers become shareholders, entitled to year-end earning distribution and voting rights
  - Each household’s equity investment worth RMB17,046
  - To realize RMB5,000 dividend payout in the fifth year
  - To cover 2,419 people from 685 households in the village in the seventh year

**In the Next 5 Years**

- To launch 100 *Duo Duo Farm* projects in Yunnan
- To cover 500 impoverished villages
- To develop 10,000 locals with e-commerce know-how
- To build 100 specialty agricultural produce brands

Benefit distribution mechanism boosts collective economy in rural areas, driving long-term growth.
Nujiang Citrus *Duo Duo Farm* Case Study

From farmers to shareholders…

498 co-op members today

Demonstration site on combined co-op land

Teaching by Doing:
- Agronomic expert selected a variety suitable to the high-altitude climate
- Variety bears fruit between Jan-May, the “off-peak” season for citrus
- Demonstrated correct way to plant and imparted better understanding of crop lifecycle and maintenance needs to maximize yield

Introduced Israeli drip irrigation for water and fertilizer inputs

Farmers demonstrate what they learn, technical support phases out

The orange trees grown under this pilot uses **15% less fertilizer, 30% less labor**, and is expected to **increase earnings per 0.165 acre by RMB 800-1,500**
Among 80 million orders from Yunan, 32 million of which are agricultural produce, comprising over 40%. Orders from Yunan’s national poverty counties exceeded 8.4 million. Among 80 million orders from Yunan, 32 million of which are agricultural produce, comprising over 40%. For the 1st 10 months of 2019, Yunnan agricultural produce orders have increased by 174% YoY. In 2019 agricultural produce sales exceeded RMB 136 billion, with an YoY increase of 109%. Beyond Yunan, we are targeting to reach an additional 7 provinces in the next 5 years, for a total of 1,000 Duo Duo Farms.
Covid-19 response
PDD’s response to Covid-19: 1) Selling agricultural produce

- Covid-19 resulted in a dislocation between supply and demand as the wholesalers and transport network bringing produce to consumers were unable to function regularly just as consumers were looking to stock up more produce while they stayed home.
- To connect farmers to consumers, we invited farmers who were facing difficulties selling their produce to submit data to us and created a dedicated portal to highlight such produce to consumers.
- From the launch on Feb 10 till March 18, a total of **27.5 million orders** representing over **120,000 metric tons** of agricultural produce had been sold through the online portal.
- On Apr 1, we announced a partnership with Hubei province to showcase their specialty agricultural produce and groom **500 New Farmers** from Hubei. Hubei was the region most hard-hit by Covid-19.
PDD’s response to Covid-19: 1) Selling agricultural produce

Strawberries from Sichuan:
Farmer Zhao: Our strawberries from Daliangshan are sweet, succulent and large. Due to disruptions from the pandemic, wholesale merchants from other regions could not enter and procure the goods. Strawberries cannot be stored and the losses of local farmers are likely to be severe. We hope to sell them online rather than leave them to rot in the fields. We will select large and good quality fruits for you! Thank you for your support!
PDD’s response to Covid-19: 1) Selling agricultural produce w/ livestreaming

- We also recruited some community leaders to act as spokespeople for the agricultural produce and they engaged with our shoppers through interactive livestreams.
- Since Feb, we have had 35,000 new agricultural produce livestreaming channels created.
- As of Apr 20, over 300,000 metric tons of produce that otherwise would be stagnant have been sold. To date, the initiative has helped 180,000 farmers from close to 400 agricultural areas, including 230 poverty-stricken counties.
PDD’s response to Covid-19: 2) Online sales of agricultural inputs

- The spring planting season between Mar-May is a critical period for farmers in China as much of the grain production comes from spring planting.
- Covid-19 disrupted the production of agricultural inputs and also impacted logistics. Coupled with problems selling harvested produce, farmers were tight on cashflow and risked not getting key inputs in time for spring planting.
- In mid-March, we held a Spring Planting Festival offering up to **RMB 300 million of subsidies** whereby farmers could procure subsidized agricultural inputs ranging from fertilizers to farm equipment.
PDD’s response to Covid-19: 3) Online training for farmers by agronomists

- Farmer training is usually through offline classes and roadshows held by government bodies and technical institutes, but many of these classes were cancelled due to the coronavirus outbreak.
- PDD stepped in to introduce livestreamed classes in conjunction with its Spring Planting Festival.
- The New Farmer Lecture Series was jointly organized with the China Agricultural University and the National Engineering Research Center for Information Technology in Agriculture (NERCITA).
- Agricultural experts touched on topics ranging from how to prevent pest infestations to smart agricultural services and equipment and farmers got their questions addressed live by the experts.
- **4 million farmers** are expected to benefit from the lecture series.
Summary

- PDD leverages its **team purchase** model to **aggregate demand** for farmers.
- PDD’s understanding of its ~600m users allows it to recommend products and stimulate or even **create demand** from consumers.
- PDD can provide local governments and farmers with **insights on consumer preferences and market pricing** to help them better market and tailor their products.
- PDD creates a virtuous cycle by working with local governments and agronomists through **Duo Duo Farms** to raise productivity and build **sustainable models**.
- With its existing network and infrastructure, PDD could quickly roll out measures in response to Covid-19 to help farmers **sell their produce rapidly at better prices** while providing much-needed resources such as **training and farming supplies**.

*We see a long runway for agricultural productivity gains in China. We hope to work with partners to bring meaningful impact to agriculture and agritech development in China.*
For regular updates from PDD, sign up at: https://tinyurl.com/yx5ugt58
You can also follow us on Twitter (@PinduoduoInc) and Linkedin (https://www.linkedin.com/company/14606760/)
How the Pinduoduo app works
A browsing and discovery-oriented experience focusing on SKUs

Each page is dynamically personalized, resembling a virtual bazaar whereby users can scroll and explore different products.
From farmer to consumer – unravelling the layers of pricing markups
How PDD connects farmers to consumers

With distinct flavor
1. Choose your own fruit tree to grow
2. Earn water droplets to nurture and grow your fruit tree
3. Receive an actual box of fruits for free!

Fun and interaction case study: Duo Duo Orchard