CHINA'S CICO AGENT EVOLUTION

FROM COOPERATIVES TO SOCIAL COMMERCE

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DFS LAB

Caribou Digital

Learnings from the China experience for other countries

Lessons from China

G2P can introduce the last-mile to agent-based services but it does not mean it will be sustainable

- Tying G2P to card-based accounts creates a forcing mechanism to open account for beneficiaries and have them regularly utilize agent services.
- The focus on cash out as the sole service for agents help regulators limit risk while additional services like deposits and credit can be added in later.
- China's CICO agents are not profitable as DFS businesses in areas with lower activity, especially those tied to harvest cycles in agricultural towns.

For agents, there must be additional benefits than CICO revenues

- Banks benefited from agent point for this practise greatly reduce their cost in setting up physical branches
- The central bank has relaxed regulations and allowed them to do more, but agents are limited by a flat commission structure with a monthly ceiling.
- Profitability can be improved with partnerships and increased foot traffic and shopping in physical stores which makes offering CICO services more palatable at lower subsidies.
- Agents we interviewed also saw their CICO services, along with their role as financial educators as a social responsibility.

Agents play a key role in demand aggregation in last-mile ecommerce and help reduce costs to viable levels

- Income generation opportunities are key to attract agents to ecommerce platforms
- Even with China's hyper efficient logistics networks, it seems only models that are able to aggregate demand with little to zero user acquisition costs are finding traction.
- Increasing agent value to their customers through ecomm aligns incentives from banks wanting active accounts to customers and platform players who still need CICO.

THE BANKING LANDSCAPE

A BACKBONE FOR CICO

China’s rural agents evolved from subsidized CICO to a business model that enables ecomm platforms

Expansion of Financial Services		Urban	Periurban / Rural	Rural Last Mile
2000 - 2011+	Big 6 Banks	Branches	Sub-branches + Village Township Banks	CICO Agents
	Rural Credit Cooperatives Rural Commercial Banks		Branches	CICO Agents
2009+	Digital Payment Platforms - Alipay / WeChat Pay	In-App Payments		
		QR Codes		
2014+	eCommerce Platforms - PinDuoDuo / Taobao	In-App Purchases		
				Platform Agents

Subsidized Agents

Agents used to distribute G2P and microcredit. CICO is not profitable in low activity areas and issues with NPLs.

Digital Payments

2017: 66.5% of rural users used digital payments

2019 QR: Total cash payments fell to 19%

eComm Use Cases

Agents provide cash out for the rising rural ecomm movement which in turn, has provided agents with additional revenue ops.

Profitability suffers significantly in the last mile for service providers but agents have income opportunities

	Provider Revenue	Provider Costs	Agent Incomes
Agent Service Points are unprofitable at the last mile	Made on transactions but oftentimes supported by government subsidy in most remote areas.	Agent commissions are capped at 2,000 RMB/month in most cases. Many are paid to cover their costs of approx ~200 RMB/month.	Many treat their CICO duties as an "add-on" or social service. They benefit from increased traffic and the potential to cross-sell.
Digital Payment Platforms are profitable due to cross-subsidy	Made on non-last mile credit and technology services to other financial institutions. Ant Financial posted a $611M profit in Q2 2019.	Consumer payments have little revenue and high costs wrapped up in user acquisition and retention.	Enabler of additional agent services such as ecomm but not a direct contributor. There is an incentive for agents to help users onboard onto digital payments.
eCommerce Platforms are still scaling and most are unprofitable; Alibaba is highly profitable overall	Made on sales of fundamental products like produce, paper goods, and clothing for rural customers.	Strategically, costs must be minimized through agent-led demand aggregation and cheap customer acquisition through social channels like WeChat.	Potential to increase agent incomes in many ways from delivery, aggregation services, order fulfillment, customer service, and referrals to training programs.

China's current pillars of rural financial inclusion (2016-2021)

1. **Created rural cash withdrawal access points (agent network)**. Services as the CICO backbone and is now infrastructure for ecommerce, financial education, and consumer protection.
2. **Lowered barriers to financial access.** Includes free to open accounts, G2P available at all agent points, and the development of mobile and online banking options.
3. **Proliferation of digital payments.** Started with the ecommerce use case but now digital payment wallets have platforms of their own. They provide digital payment option for individuals and businesses covering all the frequent transactions they occur.
4. **Expanded microcredit providers (not traditional microfinance)**. Microcredit providers include local rural commercial banks, city commercial banks, county-level local banks, local-level mutual aid fund/society, saving clubs, and internet financial companies such as Alipay serve as the "capillaries" to reach those who the mainstream banks cannot reach as the "arteries."

The rural reach of China’s financial ecosystem

	Rural Reach	Rural Financial Services
Big 6 Banks	• State-owned banks mostly serve large enterprise in rural areas • 85,000 total outlets across the country • The Postal Savings Bank of China has the most rural outlets at 19,000 out of their 39,680 outlets • The Agricultural Bank of China has 10,689 outlets	• Loans for poverty alleviation, rural infrastructure, etc • E-banking, deposits, debit/credit cards • Settlements
Rural Commercial Banks & Credit Cooperatives	• Managed by rural cooperatives then allowed to reorient to a more commercial RCB model in 2003 • Heavily geared towards agricultural lending • 77,258 RCB outlets in 2019	• Microloans for local SMEs, farmers, and the impoverished • E-banking, deposits, debit/credit cards • Settlements
Village and Township Banks	• In 2006 VTBs were introduced to promote competition and extend rural finance through an independent enterprise model with bank sponsors • 1,519 providers as of 2016	• Deposits • Loans • Domestic settlements • Bill payments • Interbank borrowing • Insurance

The rural reach of China's financial ecosystem (cont.)

	Rural Reach	Rural Financial Services
Agent Banking Service Points	• Introduced in 2000 but grew in 2011 for G2P cashout with services expanded in 2014 to CICO with rollout • 983,400 service points by 2016, covering 90% of administrative villages and averaging 1.8 service points per village. **Coverage at 97% in 2018.** • Mostly established by ABC, PSBC, RCBs, RCCs and 2% by non-bank digital payment providers.	• Cash out (2011) • Deposits (2014) • Remittance (2014) • Bill payments (2014) • P2P transfers (2014) • Insurance (2014) • Financial education
Microcredit Companies	• Formed with private capital in a LLC or joint-stock company • Focus is on serving farmers, agriculture and rural. • 8,673 providers in 2016	• Loans • Cannot take deposits
Fintech and eComm	• 66.5% of rural users used digital payments in 2017 • Increasingly rural: Alibaba has a 40% rural penetration rate while 70% of new active customers are rural. • JD claims a 99% coverage with 90% 24hr delivery • There are rural-first ecommerce players like PinDuoDuo whose avg customer is tier 3 or below.	• Savings • Loans • Bill payments • Insurance • P2P transfers

POLICY FOR INNOVATION

BEYOND “WAIT AND SEE”

Key events in China's CICO journey

Policy Event

Fintech Event

2006	Regional and rural clearing centers established
2007	5-year ecommerce development plan is established
2008	
2009	Alipay for individuals launches Guidance released for account-based (G2P) subsidies
2010	Ule and China Post partnership launches
2011	Rules for agent-based service centers established First 27 payment licenses are issued for ecommerce companies
2012	
2013	WeChat Pay launches Rules for agents updated to increase services and limits
2014	WeChat launches its Red Envelope event during Chinese New Year Several ecommerce-related guidance is released including funds for 256 demonstration counties
2015	PinDuoDuo launches and revolutionizes social ecommerce Guidance promoting the development of internet finance released
2016	5-year financial inclusion plan setup (2016-2020) Measures released around KYC requirements for non-bank payments
2017	
2018	Shihuituan and other agent-led ecommerce takes off "NetUnion" becomes required mobile payments clearing house & reserve funds managed by PBoC QR code regulations come into effect capping daily QR usage by consumers

A shifting regulatory framework with a bias for innovation

2006 - 2014: Agent Banking and eCommerce	2014 - 2016: “Wait and See”	2016 - Present: Control
The pre-2014 era built upon the rural banking mandates of the past including account-based subsidies (G2P) and expanding last-mile agent models as well as preparing the regulatory framework for the coming growth of ecommerce.	The 2014 to 2016 era was highlighted by the “Wait and See” approach by regulatory bodies in China, enabling continued growth in different internet-enabled financial services and business models in the country, especially the payments platforms Wechat Pay and AliPay	2016 signaled a palpable shift in regulations due to two factors: (1) the downfall of the Chinese P2P lending platforms and (2) the massive growth of the fintech payment platforms as duopoly. However, a lighter touch has been employed when it comes to newer business models.

The central bank credits a part of China’s mobile payments boom to their approach of observing and correcting, with a focus on encouraging innovation by being hands off while curbing risk when it appears.

Pre-2014: Agent Banking and eCommerce

The pre-2014 era built upon the rural banking mandates of the past including account-based subsidies (G2P) and expanding last-mile agent models as well as preparing the regulatory framework for the coming growth of ecommerce

- **2006:** ***Guidelines on Implementing Effective Payment and Settlement Activities in Rural Areas***
  - Accelerate development of rural payment systems, expand the reach of clearing systems in rural areas, and promote the use of non-cash payment instruments
- **2007:** ***eCommerce Development 5-Year Plan***
  - The government developed an ecommerce 5-year plans to address the needs to reorient certain sectors to help ecommerce work in the country - the first ecommerce payment licenses are granted in 2011
- **2009:** ***Guidelines on Improving Payment Service Environment in Rural Areas***
  - Emphasized the factors needed to transition to account-based payments for subsidy transfers and sought to further encourage the integration of rural financial service providers into payment and clearing systems
- **2011:** ***Notice on Promoting Bankcard Withdrawal Services for Rural Residents***
  - Focused first on creating cashout points for rural users through rural agent-based service centers (¥1000 max)
  - Eventually expanded to allow remittances, billpay, and P2P transfers and raised cashout to ¥2000.
  - Nonbank digital payment providers can also create agent points with a “bank card acquirer” license
  - Service fees are capped by regulation
- **2013:** ***Notice on Deepening the Pilot Program for the Reform of Rural Credit Cooperatives***
  - MSME sub-branches had a maximum line of credit of ¥5 million
- **2014: Several ecommerce guidance is issued including:**
  - Guidance on the development of the mobile payment business of the People’s Bank of China
  - Relevant issues on the Pilot Project of the coordinated development of E-commerce and logistics express
  - The supervision and management approach of Internet food and drug business
  - Announcement on the strengthening the management of commercial banks and third party payment mechanisms cooperation business

2014-2016: “Wait and See”

The 2014 to 2016 era was highlighted by the “Wait and See” approach by regulatory bodies in China, enabling continued growth in different internet-enabled financial services and business models in the country, especially the payments platforms Wechat Pay and AliPay.

- **The government spent RMB 4.8 billion to support the development of rural ecommerce in 256 demonstration counties in ecommerce (56 counties in 2014 and 200 in 2015)**
  - Aiming to encourage and support the development of rural e-commerce, the Ministry of Commerce actively promoted the commercial information services in rural areas, established and improved the standards and specifications for ecommerce of agricultural products and the logistics distribution system, organized rural e-commerce innovation competitions and the rural ecommerce talent program.
- **Target to further transform RCCs into market-oriented enterprises with steady growth**
  - Emphasis is placed on agricultural modernization and rural economic restructuring through financial services. However, issues with poor governance, small markets, and complexities with local authorities still exist.
  - RCCs still face challenges with digitization and modernization, especially with competition from new digital entrants.
- **2015:** *Guidance on Promoting the Healthy Development of Internet Finance*
  - Promoting innovation via internet finance platforms, products, and services and encouraging existing financial institutions to adopt new technology.
  - Encouraging cooperation between financial institutions and tech companies.
  - Improving access to capital for internet finance firms through promoting venture capital, SME finance, and public listings.
  - Reducing administrative approvals and other barriers to development.
  - Implementing an appropriate tax system for firms in the industry that benefits small firms and encourages investment in new technology.
  - Encouraging the participation of internet finance companies in the development of a national credit information infrastructure.

2016 - Present: Control

2016 signaled a palpable shift in regulations due to two factors: (1) the downfall of the Chinese P2P lending platforms and (2) the massive growth of the fintech payment platforms as duopoly. However, a lighter touch has been employed when it comes to newer business models.

- **2016:** ***Interim Measures on Administration of Business Activities of Online Lending Information Intermediaries***
  - Limited to business scope of P2P platforms to be information intermediaries only
  - Requires custody accounts with commercial banks for investor and borrower funds to prevent platform owners from stealing
  - Requires daily account reconciliation
  - Online lending platforms also required to register with the local regulatory authority
- **2016: Tiered account system for nonbank financial institutions**
  - Type I: Identity verified remotely via at least one legal and secure database
    - RMB 1,000 lifetime transaction volume limit - includes transfers to own bank account
    - RMB 1,000, 5,000, or other daily transaction limit depending on security level of the transaction
  - Type II: Identity verified in person or remotely via at least 3 legal and secure databases
    - RMB 100,000 annual transaction volume limit - does not include transfers for own bank account
    - RMB 1,000, 5,000, or other daily transaction limit depending on security level of the transaction
  - Type III: Identity verified in person or remotely via 5 legal and secure external databases
    - RMB 200,000 annual transaction volume limit - does not include transfers for own bank account
    - RMB 1,000, 5,000, or other daily transaction limit depending on security level of the transaction
- **2018: Caps on daily QR code payments**
  - Based on security measures and user credentials, daily transaction limits are set at RMB 500, RMB 1,000, or RMB 5,000
- **2018: "NetUnion" centralized clearing platform for mobile payments and handling of reserve payments**
  - Alipay and Tenpay each own 10% whereas 35% owned by central bank-affiliated entities, rest of the 45% owned by non-bank payment companies
  - Payments must go through this clearing house called NetUnion
  - Requires mobile payment companies to allocate their reserve funds under central management of the PBoC

SHIFTING AGENT ROLES

SPEARHEAD TO PROMOTER TO ENABLER

China's evolving rural banking ecosystem

Act I
Creation of the agent network through policy

Act II
A payments inflection point

Act III
Agents as infrastructure for the digital economy

- Rural commercial banks
- Policy to establish cash out agent service points
- Card-based G2P policies

- Smartphone adoption
- Changes in payment behavior
- QR code proliferation

- Distribution points
- Social commerce
- Return to rural movement

The narrative and role for agents also evolved

Act I
Creation of the agent network through policy

Act II
A payments inflection point

Act III
Agents as infrastructure for the digital economy

"The major financial service provider for rural area, spearheaded poverty alleviation and rural revitalization"

- Extension of the rural banking system as cash out service points
- Cash out for card-based G2P

"Promoting and facilitating the adoption of digital payments."

- Expanded services including deposits, bill pay, remittances, and P2P
- Helping users adopt digital payments

"Incorporating multiple functions to serve rural and provide last-mile service coverage for all."

- Continued role as cash out service points
- Added roles as last mile distribution, customer service, and sales.

Act I: Creation of the agent network through a policy lens

Rural Commercial Banks (2000)	Cash Out Agent Network (2000)	Account-based G2P (2011)
Rural commercial bank (“RCB”) pilot zones were created in 2000 in Jiangsu province when three rural credit cooperatives (“RCCs”) were allowed to transform into rural commercial banks (which are allowed to go public). Additional RCBs emerged after 2013 when the central bank published ***Notice on Deepening the Pilot Program for the Reform of Rural Credit Cooperatives*** which allowed for microcredit lending up a total of 5 million RMB for RCC sub-branches.	The first agent network pilot zone was created in 2000 in several cities which allowed rural credit cooperatives to use contractors to provide services when there’s no local bank branch. In 2011, this was formalized and published in ***Notice on Promoting Bankcard Withdrawal Services for Rural Residents*** which paved the way for mass expansion of the network, led by the same RCCs. The Postal Savings Bank of China, the Agricultural Bank of China, and several local banks also began to roll out agents.	For G2P subsidies, the 2011 policy that meant every beneficiary had multiple cards for different subsidies/payments and that led to confusion and complexity. Later, this was amended with a “single card” policy that allowed a singular checking account to receive all benefits. This was made possible by different government agencies sharing and contributing data to the national and local credit rating system as well as ensuring POS access for every agent.

Rural banking reform in China has not been smooth

- **The early 2000's RCB policy was itself a reaction to insolvent RCCs**
  - RCCs started in the 1950s to serve rural populations and were handed to the Agricultural Bank of China in 1979.
  - They were then taken out of ABC's control in 1996 and reformed under a cooperatives structure.
  - Insolvency was a strict concern prior to 2003 reforms when the central bank helped strengthen the capital position of RCCs through capital notes and loans of approximately ¥170 billion.

- **RCBs themselves faced governance issues and the government once again stepped in to attempt reform in 2006 and 2007**
  - The government introduced regulations for a new type of rural financial institution called village and township banks (VTB) and rural mutual credit cooperatives (RMCC) designed to promote competition and extend services.
  - VTBs were sponsored by banks which had to have at least 15% ownership and provide some level of oversight
  - RMCCs were established to further leverage existing farmer cooperatives to provide banking services

- **By 2012 the RMCC model was shut down and VTBs lagged in innovation**
  - RMCCs faced the same issues at RCCs where improper governance was rampant, especially improper fundraising and absorption of deposits by organizations under the guise of financial cooperatives.
  - VTBs did bring stronger oversight but the heavy influence of their sponsor banks meant less innovation for rural customers as their practices resembled the traditional banking sector.

- **RCCs and RCBs continue to face issues with NPLs and profitability**
  - 25% of the country's non-performing loans sit on the books of RCBs
  - PBoC continues to monitor the profitability of agent service points and banks such as the Bank of Communications have started to scale back on agents who are in low-activity areas.

Act II: A payments inflection point

- **While Alipay for individuals launched in 2009, it wasn't until WeChat Pay's launch in 2013 that mobile payments really picked up in China**
    - In 2011, the first non-bank payments licenses were issued to Alipay, WeChat, UnionPay, and KuaiQian.
    - More licenses has been created since including a clearing license that allows partnerships with banks to provide clearing services, a cross border settlement license which allows sellers to accept VISA, Mastercard, AMEX, and JCP card payments, and a digital microfinance license.
    - In 2013 to early 2014, WeChat saw monthly active user (MAU) growth (over 220% Q1 to Q3 2013) settling to approximately to 44% over 6 months in 2015 and 2016. In 2013 to 2018, WeChat grew from 200 million MAUs to over 1.1 billion.
    - Payment products have not been profitable, but instead drive customer stickiness for other products like digital credit, advertising, and services for traditional banks

- **In this same critical time period, WeChat launched its Red Packet event during Chinese New Year (and later to other Chinese holidays)**
    - They introduced a digital red envelope game in 2013, allowing users to send digital red envelopes with digital money gifts which can be won randomly through taps (read: like gambling).
    - In Chinese New Year 2014, WeChat introduced the game to an audience of 700 million viewers of China's Spring Festival Gala with a $80 million USD pot from corporate sponsors. Viewers would shake their phones for a chance at the pot and as a result, 20 million users shook their phones 11 billion times.
    - Over the next month, WeChat Pay users tripled from 30 million to 100 million.

- **QR codes spiked in usage in mid-2017, with 104% growth in Q2.**
    - In Q2 of 2017, mobile barcode payment transactions (most are QR code scans) more than doubled, going from 0.6 to 1.2 trillion RMB. By Q4 of 2018, these same payment transactions reached 7.2 trillion RMB. An 11X increase.
    - By Q1 of 2019, the transaction value of cash had dropped to 19%.
    - It should also be noted that QR codes as a form factor to transfer data goes beyond financial transactions and includes everything from scanning to add users on WeChat to booking reservations at restaurants. The multitude of use cases helped Chinese users get accustomed to navigating to and utilize the scan QR code feature in their apps.

Act II: China's shift to mobile banking (2013 to 2018)

China's Mobile Banking Transactions (2013 — 2018)		
Year	Number (billion)	Value (billion RMB)
2013	1.67	9,640
2014	4.52	22,590
2015	13.84	108,220
2016	25.71	157,550
2017	37.52	202,930
2018	60.53	277,390

Frequency of Chinese Mobile Banking (2018)	
Year	Percentage
Daily	80.1
2-3x per week	14.4
1x per week	2
1x per 2 weeks	1.4
1x per month	1.2
<1x per month	1

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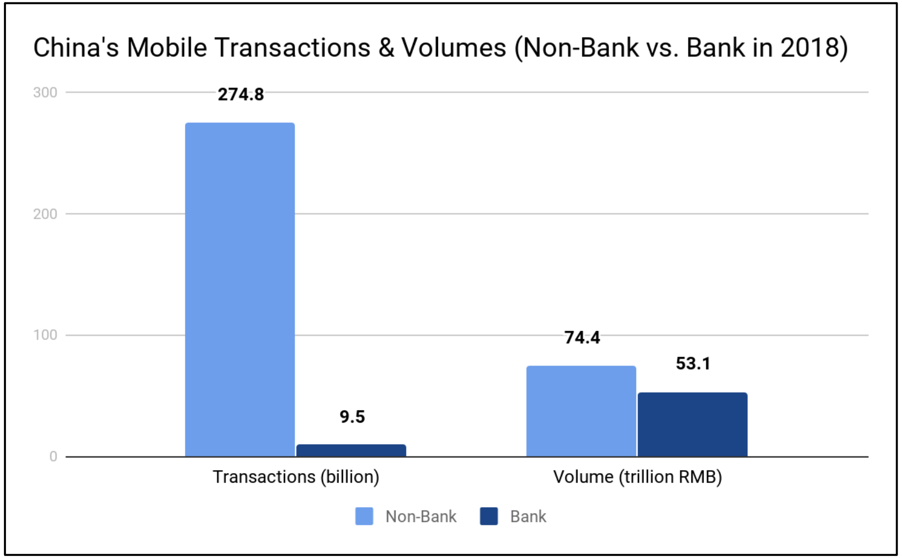
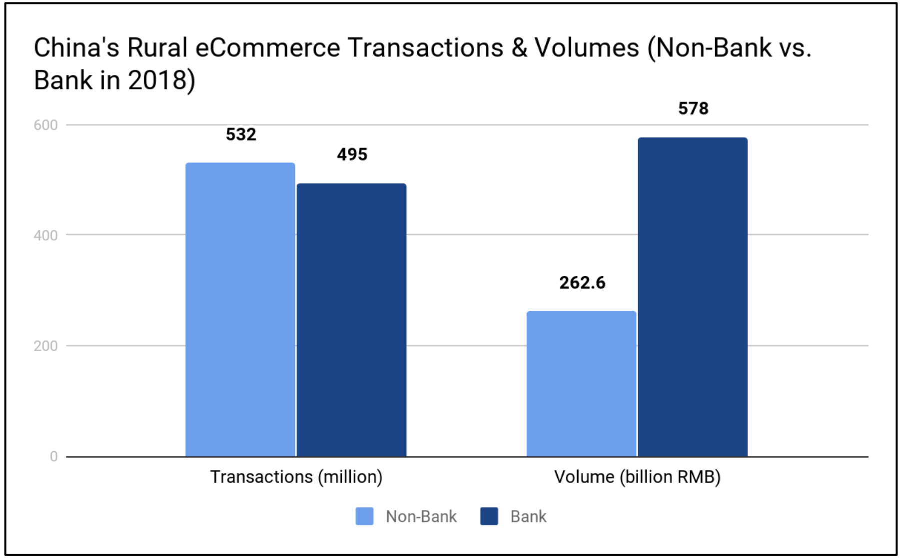
Act II: China’s shift to digital payments by 2018





Breakdown of Chinese QR Transactions (2018)		
Year	Number (billion)	Value (billion RMB)
0 - 500 RMB	171.69	6,080
500 - 5,000 RMB	8.654	14,280
>5,000 RMB	0.274	3,260

Act III: Agents as infrastructure for the digital economy

The baseline of near universal rural banking and a growing baseline of digital payments led to a foundation for the growth of ecommerce in China, extending the role that last mile agents play in the digital commerce value chain and creating additional demand for digital payments.

- **Last mile delivery** is a core piece of infrastructure that has allowed rural ecommerce to expand. JD claims it can reach 99 percent of China and able to reach 90% in 24 hours. Overall in China, 70% of deliveries are made in 24 hours or less.
  - Agents help facilitate the final step of delivery, either distributing packages from their drop-off points or hand-delivering them directly to customers.
  - Agents can also manage customer service and returns at point of delivery.

- **Social commerce** has been a key piece to build up behavior around online purchases while driving down the cost of user acquisition and retention. In some platforms, messaging platforms have helped to create a near-zero customer acquisition cost.
  - Agents serve as social facilitators who kickstart group buying on WeChat often serving as the main marketing channel.
  - Within those same social groups, agents are able to promote user engagement through events like video reviews.

- **The back to rural movement** has resulted in a reverse migration of migrant workers going back home. In the face of a slowing economy and new entrepreneurial opportunities through ecommerce platforms at home. In 2018, returning entrepreneurs accounted for two-thirds of all new business registrations in rural areas.
  - Digital native, urban transplants are returning home to become entrepreneurs who help connect their local products to the broader marketplace. Digital platforms are providing the tools for these returnees to get started.
  - The government itself has funded ecommerce training for rural areas and farmers.

DRIVING DEMAND FOR AGENTS

AGENT-LED LAST MILE ECOMMERCE

Development of demand for agents has been critical

We focus on CICO points, but the Chinese experience has shown that demand for agents more broadly is what closes the digital commerce loop.

- **Cash out serves as infrastructure, not as a feature**
    - In our interviews, cash out is seen as solved and therefore service providers do not have customers with cash out anxiety. In many instances, they let the informal economy take care of cash out needs. For example, when agents sell goods from several farmers on PinDuoDuo, the agents themselves keep track of who needs cash vs. who is willing to be paid digitally.
    - Cash out is an opt-in choice when payments like G2P or platform sales are paid digitally. By default, users are topping up accounts with every subsidy and sale. This in turn enables digital commerce once trust is established. (COD was still prevalent in the beginning of ecomm not because of lack of digital, but because of trust of the platforms).

- **Agent costs are not manageable without demand increases for agents more broadly**
    - Last mile agents in China often serve as cash out points out of social responsibility. They have a subsidy ceiling and can justify the service only when combined with increased foot traffic to their existing brick and mortar stores or if it enables them to increase incomes through ecommerce platforms.
    - The very idea of a fixed-point agent is being challenged given the costs associated with maintaining a brick and mortar location.

- **Increased demand for agents align incentives**
    - Aggregation continues to be the agent’s role in last mile areas in China. They not only aggregate logistics for local producers (e.g. PinDuoDuo), they also aggregate rural demand which has been historically fragmented and hard to manage (e.g. Shihuituan).
    - Agents increase incomes with higher demand and growth in responsibility (e.g. marketing, customer service, logistics, etc.)
    - Banks are able to preserve customer touch points in remote areas and incentivize rural account ownership.
    - Governments can digitize G2P as well as boost rural development through ecommerce platforms.

Last Mile Agent Model Case Studies

1. Last-Mile Agents and Loss Leaders
2. Shihuituan and Disrupting Last-Mile Costs
3. Ule and the Partnership Approach
4. PinDuoDuo and Social Behavior Change

Case Study: Last-Mile Agents and Loss Leaders

AT A GLANCE

China has over 1 million agent banking service points, of which many have grown to include additional services beyond CICO

- Almost 500 million transactions totalling ¥424 billion were transacted in agent-based service points
- Services fees are capped and therefore it is difficult to make profit on cash-out and other banking services
- Agents have started to incorporate revenue opportunities beyond including ecommerce and last-mile logistics marketing and facilitation

Case Study: Last-Mile Agents and Loss Leaders

Learnings

1. Rural CICO agents can successfully serve as service points for multiple stakeholders
2. New service offerings for agents should focus on increasing traffic to their stores
3. Subsidies play a role to ensure the early success of agent offerings beyond CICO

Enablers

- The rise of ecommerce, especially sales from rural to urban provided new opportunities for agents
- Government subsidies ensure new offerings are affordable and attractive to rural customers
- Non-exclusive nature of agents allows an entire suite of ecommerce and logistics offerings

Barriers

- CICO revenues have not been profitable and given the rise of digital payments, PBoC has started to wind down its support
- Offerings beyond CICO are also not big revenue drivers and must be easy for the agent to sell

Derived from agent interviews in Shanxi and Hunan provinces

Case Study: Last-Mile Agents and Loss Leaders

Learning: Rural CICO agents can successfully serve as service points for multiple stakeholders

- For context, these agents are based in rural, agricultural communities where they serve as the village convenience store
    - In 2011, PBoC pushed the ***Notice on Promoting Bankcard Withdrawal Services for Rural Residents*** which allowed these agents to offer cash withdrawal with a 2,000 RMB cap
    - Services then expanded to cash-in, remittances, bill payments, and P2P transfers
- Since, agents are at the center of many traditional transactions in the villages, they've expanded their service offerings for multiple stakeholders including:
    - **Banks and Digital Payments Providers:** Agents provide cash-out, billpay, P2P transfers, and remittance services for a flat commision ranging from from 200 RMB per month to cover some costs to approximately 2,000 RMB per month as a ceiling for highly productive agents. Their revenues tend to peak during harvest season when farmer cash flows are richest while P2P revenue flows have started to slow due to the increased adoption of digital wallets and payments.
    - **Agricultural Insurance Providers:** Agents sell weather insurance and harvest price insurance to farmers from third-party providers. Insurance premiums are subsidized by the government and agents earn a commission on each policy sold.
    - **eCommerce Providers:** Agents market promotional products but also refer rural producers (agriculture & artisanal goods) to ecommerce training teams in the village from whom farmers can get state-sponsored ecommerce training. Agents receive a per-referral commission of approximately 300 to 400 RMB.
    - **Shipping Providers:** Agents serve as a shipping drop-off point for China's various rural logistics providers by offering bulk shipping discounts and on-site label printing. Agents make a percentage-based commission based on shipping costs.
    - **Agricultural Aggregator:** More agents are now also becoming agricultural aggregators providing things like agronomy education and marketplace offerings to farmers but most interviewed see this as a social role rather than a commercial one

Case Study: Last-Mile Agents and Loss Leaders

Learning: New service offerings for agents should focus on increasing traffic to their stores

- It has proven difficult for agent banking service points to become profitable for several reasons:
    - Their service fees are capped. The agents we talked to had commissions that were capped at approximately 2,000 RMB per month even if the agent was top performing. Low-performing agents received a tenth of that sum.
    - P2P transfer and remittance revenues have especially been hard hit by the increase of digital wallet and payments usage in China, even in rural areas
    - Initially, agents were not allowed to open accounts or take deposits due to regulatory risks determined by PBoC
- However, even with the expansion the types of businesses last-mile agents can help support, their core revenue stream continues to be offline sales they make in their store
    - The agents we talked to indicated that while the service offerings beyond CICO have increased their revenues, they have merely helped them breakeven as an agent
- These new services do help agents increase traffic for their stores and result in higher offlines sale revenues
    - For agents, these services must be easy to provide and sell so it does not interfere with their day job of maintaining their store
    - These services must have an aspect that attracts physical foot traffic to their stores. For example to apply for insurance, to ship physical goods, or learn about the latest ecommerce promotions and trends.
    - It is then also important that agents do not have to sign exclusive contracts with these service providers in order to offer the widest breadth of services to their customers

Case Study: Last-Mile Agents and Loss Leaders

Learning: Subsidies play a role to ensure the early success of agent offerings beyond CICO

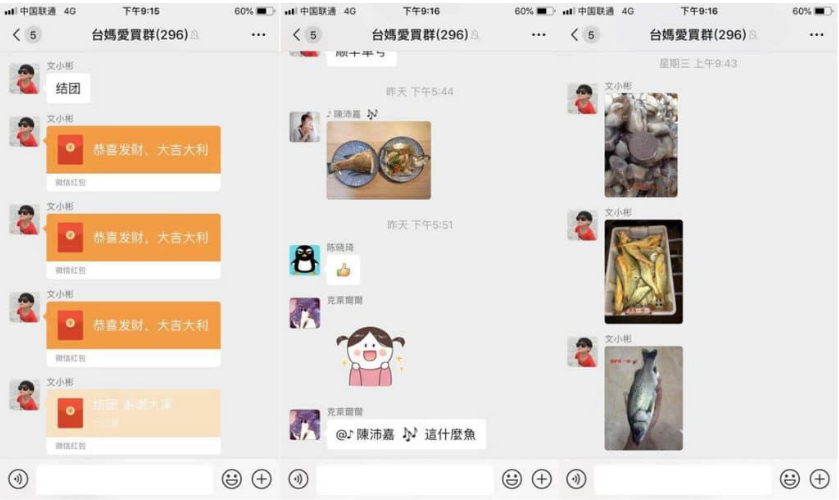
- There is a role that government subsidy can play in ensuring new services offered through the agent banking service points are successful
  - For ecommerce, the government has been sponsoring training and digital shop set-up services provided by the major ecommerce platform players JD, PinDuoDuo, and Taobao.
  - For crop insurance companies, the government has provided insurance premium subsidies in order to incentivize farmers' uptake of weather and harvest price insurance products
- The subsidies have a waterfall effect - not only does it make it more affordable for service providers to offer these services, it also means that agents have a much easier time selling /referring these services their customers and increase revenues directly and indirectly with more foot traffic to their stores.

Case Study: Shihuituan and Disrupting Last-Mile Costs

AT A GLANCE

Shihuituan (十荟团) founded in 2018 is China's biggest "community-commerce" platform selling fresh groceries to rural communities

- They serve 20 million households in 60 cities
- Shihuituan has a monthly gross merchandise volume of over 500 million RMB
- They rely upon a network of 80,000 "community leaders" who help them with sales and marketing, delivery, and customer support
- Shihuituan mostly sells fresh groceries and their average basket size is around 10 RMB



Send red envelops | Encourage user generated content | Live streaming the products

Case Study: Shihuituan and Disrupting Last-Mile Costs

Learnings

1. Community influencer “agents” can help lower costs dramatically in rural ecommerce
2. Smaller basket sizes increase demand but must come with cheap, fast delivery
3. Increased incomes for agents should come with more autonomy and value for the platform

Enablers

- Cheap and quick logistics mean “1-meal” order sizes can still be profitable to sell and deliver
- Social media platforms provide a springboard to aggregate demand and provide local support
- Mobile payments cut down costs and streamline logistics

Barriers

- Reliance on social media as a communications hub means dependence on another platform
- This is highly competitive space with several other startups using the same model
- High frequency of small orders means that keeping bureaucracy down per order is critical

Case Study: Shihuituan and Disrupting Last-Mile Costs

Learning: "Community influencer" agents can help lower costs dramatically in rural ecommerce

- Key cost metrics for Shihuituan's model:
  - The average ecommerce platform has two primary cost barriers (1) user acquisition and (2) logistics
  - The average platform plays $10-20 USD to get a paid user, Shihuituan pays "near zero"
  - Shihuituan's logistics cost per order is also approximately 1 to 1.5 RMB, or less than 20 cents USD
- Shihuituan is able to dramatically reduce cost through a network of 80,000 community influencers who serve as local agents for the platform and perform several functions
  - Perform sales and marketing for the platform and its products, generally through WeChat groups initially
    - Not only do they need to directly market products, they need to encourage continuous engagement with the group
    - They can incentive through "red envelopes" (small cash gifts) as well as encouraging user-generated content like reviews and product unboxings, making the purchase a very social event
  - Aggregate demand through WeChat and place orders on Shihuituan's mini program in WeChat
  - Receive aggregated orders and store them, including providing refrigeration if necessary
  - Sometimes the community influencer will also do door-to-door delivery
  - Provide after-sales support including direct refunds
- For their services, community influencers make 8-10% in commissions. While there have not been benchmarks for Shihuituan's average commissions, other similar platforms require 30-40K RMB in sales per month for their agents, resulting in incomes of approximately 3,000 to 4,000 RMB. This could effectively more than double household income for an agent.
- 60-70% of their agents are small shop owners while 30-40% are mothers. Shihuituan found that mothers work less when school starts so they have shifted their focus away from this segment a bit.

Case Study: Shihuituan and Disrupting Last-Mile Costs

Learning: Smaller basket sizes increase demand but must come with cheap, fast delivery

- One of the barriers previously faced by rural ecommerce providers is the need to create a basket size large enough to justify delivery to the more remote areas in the country. Many, like PinDuoDuo focus on demand aggregation - using their agents to gather enough orders together that the aggregated basket is big enough.
  - Shihuituan also aggregates demand through their agents, but their relentless focus on reducing costs also means the “floor” for profitability per order is lower as well. They can be profitable on 10 RMB orders.
- A 10 RMB fresh produce basket is similar to how “sachet” pricing in FMCG, where one purchase is for one or usages. In this case, Shihuituan sees customers ordering groceries for one or two meals the day before.
  - Customers on average order 14X per month. This high frequency of orders helps increase customer trust quickly and maintains consistent engagement with the platform and its last-mile agents
  - This also means their products are fresh, but must move quickly through their logistics chain - including cold chain.
- A key enabler of this small basket, high frequency model is the logistics platform that Shihuituan is able to take advantage of in China
  - They are able to delivery orders before noon, next day as long as orders are placed before 11 pm in the evening
  - Their agents can store goods that arrive mid-day in refrigerators for pick-up by customers before meal preparation
  - This speed is reflected in their top 3 products: fruits, vegetables and frozen seafood
  - Shihuituan owns no fixed assets, they use third-party logistics companies and rents warehouses in rural areas
    - They do have a logistics IT platform that was developed in-house

Case Study: Shihuituan and Disrupting Last-Mile Costs

Learning: Increased incomes for agents should come with more autonomy and value for the platform

- Shihuituan's community influencers are their "moat" against competition, but they are not exclusive agents to their platform. The company must offer them opportunities to advance and additional training to keep them. At the same time, this base of agents are what keeps the model's costs manageable and therefore, investments into the network must come in the form of strategies that "grow the pie" for everyone.
    - Shihuituan's agents are their customer-facing after-sales team as well
        - As agents become more experienced, Shihuituan offers them more autonomy in being able to offer customer requests such as refunds on their own without reporting to a manager.
        - They try have each agent service 100 customers but not more so personal relationships stay strong
        - As order frequency grows, the reduction of bureaucracy is a cost reduction as well
    - Agents also become more sophisticated social marketers as time goes on
        - Not only do they simply market hot products, they are tasked with continued WeChat group engagement. They learn to spur community events such as video unboxings and promote good product reviewers in the channel.
        - As users get comfortable with Shihuituan as a platform, the agent must also begin to help users order place orders directly from their own devices on Shihuituan's site - helping the platform reduce its reliance on WeChat. 30% of orders are now directly on the site vs. from WeChat groups.
    - Training will need to improve in the future
        - Shihuituan can imagine a point where agents in the future will have service specializations and can be moved around geographically as needed, but for now, the number one focus is having enough density of agents to serve all the end-users the platform can reach

Case Study: Ule and the Partnership Approach

AT A GLANCE

Ule is a joint business between China Post and TOM Group, a technology and media company. Started in 2010, they utilize post offices points to offer both B2B and B2C ecommerce services.

- 90.3 billion RMB in total GMV (2017)
- 640,000 participating retail stores in rural China (2018)
- Utilizes the post office as distribution and the postal bank as it's main banking partner
- Partnered with global retail intelligence company Rubikloud and SME loan company WeLab

Case Study: Ule and the Partnership Approach

Learnings

1. Key partnerships create a mutually beneficial ecosystem for agent-led DFS and ecommerce
2. Agent-based ecommerce purchases does not seem to be working for Ule
3. Focus on B2B ecommerce, helping SMEs compete with direct-to-consumer

Enablers

- Smartphone penetration and digital payments in rural areas have increased
- China Post and the Postal Savings Bank of China have expanded aggressively into rural areas
- Retail stores must react to the threat from direct-to-consumer ecommerce

Barriers

- Expensive to fit each SME with the technology and know-how needed to extract actionable data
- B2C ecommerce seems to have slowed, now focused on B2B ecommerce
- Large coverage due to post office partnership but growth is much slower than social ecommerce players like PinDuoDuo

Case Study: Ule and the Partnership Approach

Learning: Key partnerships can create a mutually beneficial ecosystem for agent-led ecommerce

- ULE is a partnership-based rural ecommerce company that focuses on retail SMEs as platform facilitators. Its ecosystem relies upon a few core partnerships
  - **Distribution:** Started in 2010 as a joint venture with China Post, who owns 43.7 percent of Ule. China Post has extensive, almost universal coverage, in China, and offering 1-day delivery in most cases. Ule works with 2000 China Post warehouses in China to ensure that products with high-local demand can be delivered efficiently.
  - **Banking:** Postal Savings Bank of China: As part of its joint venture with China Post, Ule also gains access to PSBC's network of rural banks. The financial services offered by this network include CICO and savings through PSBC.
  - **Data:** Ule and TOM Group have ownership in Rubikloud, a Toronto-based startup that indexes and predicts the world' retail behavior through machine-learning and data science. While their first products have been for North American, they are able to apply those learnings to Ule's data from rural China. Their goal is real-time placement in physical stores.
  - **Lending:** Both Ule and TOM Group have also invested in WeLab, a Hong Kong-based fintech that credit scores small shopkeepers using online and offline data including from credit bureaus, social apps, and mobile device. China Post provides the capital.
- The partnership has been highly beneficial for China Post, which is trying to reinvent itself in the ecommerce era
  - Ule has contributed to half of the growth of China Post's parcel business in some provinces.
  - Ule has also contributed to half of the growth of PSBC's cash deposits in some provies due to the increased business it can provide to farmers.
  - China Post and PSBC's financial products, such as utility payments and insurance attracts customers to physical stores.
  - The addition of online catalogue of goods increases the amount of SKUs each store owner can offer - Ule tracks more than 3 million SKUs

Case Study: Ule and the Partnership Approach

Learning: Agent-based ecommerce purchases does not seem to be working for Ule

- Ule has shifted from a strategy focused on ecommerce in general to one that is specifically targeting the growth of B2B ecommerce - supplying products and services to the MSME owners.
  - In 2018, the company stopped reporting overall Gross Merchandise Value and started to report just B2B Gross Merchandise Value which was at 7.6 billion RMB in 2018. Ule recorded 3.6 billion RMB B2B GMV in the first half of 2019.
  - TOM group's ecommerce business (which is mostly Ule) has been unprofitable since inception and in 2018 reported losses of 7.1 million HKD on 9.2 million HKD of revenue. It's clear they have not yet monetized effectively thus far on the ecommerce business.
  - Ule currently charges a platform service fee to China Post.
  - It is assumed Ule also makes revenue on product margins on its platforms but that has not been confirmed.
- Ule was started its partnership with China Post in 2010 when the smartphone ecosystem in China had yet matured to its current state. As such, their approach included a heavy digitization of SMEs - including costly equipment like barcode scanners, receipt printers, a digital scales, laptops, and internet connectivity equipment.
  - While the ulitized the postmen network to help with training, the equipment costs alone contribute to a high cost acquisition cost.
  - There are efforts by Ule to have postmen pay for equipment upgrades (e.g. bicycles to vans) with the incentive of additional revenue from increased package delivery and subsidized gas, but it's still a huge capital outlay.
- This is congruent to other examples of agent-based ecommerce purchases in China:
  - A slowing of the Taobao Village program when it came to purchases from rural areas (TMall growing faster than Taobao)
  - PinDuoDuo's view that fixed-location agent-based ecommerce is a model of the past and gets quickly leapfrogged by direct-to-consumer sales models
  - Shihuituan's WeChat-focused model seems to be finding traction, mostly through cost reduction

Case Study: Ule and the Partnership Approach

Learning: Focus on B2B ecommerce, helping SMEs compete with direct-to-consumer

- Ule's shift to focus on B2B ecommerce is still aligned with the partnerships they have created:
  - **Distribution:** The postal service continues to be a strong distribution partner but its pressure to fulfill B2C orders at low cost are minimized due to the bulk nature of B2B. It continues to offer strong pricing for SME owners.
  - **Banking:** The Postal Savings Bank continues to be both a critical CICO partner, DFS provider, and source of lending capital for the Ule ecosystem
  - **Data:** The data strategy with Rubikloud continues to be the same but equipment costs continue to fall. Smartphone-based POS systems and the pick-up of digital payments by consumers reduce the need for traditional POS equipment including printers.
    - Behavior change like barcode-based inventory management is still needed and the postmen network continues to help as a group of trainers that go to the SME owners
    - A transition from data collection to suggestions are aligned with a focused on B2B ecommerce
  - **Lending:** Ule's partnership with WeLab as an alternative data credit scoring partner and PSBC as a lender continues in a B2B ecommerce model
- The B2B model is not just products being sold to rural SME owners and their customers but also includes rural products being sold to urban areas.
- The pressure that direct-to-consumer ecommerce (e.g. Taobao, PinDuoDuo) places on rural shop owners will continue to increase and they must continue to digitize stores, offerings, and methods to compete.

Case Study: PinDuoDuo and Social Behavior Change

AT A GLANCE

PinDuoDuo (PDD) is a Chinese social ecommerce platform launched in 2015 that uses a “team purchase” model and heavily leverages the WeChat messaging superapp.

- 840 billion RMB in annual gross merchandise volume
- 438 million monthly active users
- 65,000 New Generation Farmers (NGF)
- 60% of customers are from tier 3 cities or below
- 42% of customers with high school edu or below
- Revenue breakdown (2017): 68% advertising, 30% commission fees, 2% direct sales

Each product has a full price and a “Group Buy” price

After buying, I am invited to share with friends

Once a friend bought, the products are shipped

Case Study: PinDuoDuo and Social Behavior Change

Learnings

1. Leverage social use-cases and have friends encourage behavior change
2. Development of last-mile supply is critical for last-mile demand to flourish
3. A new generation of “agents” can be empowered (not directed) to jumpstart rural ecommerce

Enablers

- Smartphone penetration in rural areas has increased alongside mobile coverage
- Red-envelope gifting on WeChat helped train users to use digital payments during Chinese New Year
- Small merchants / farmers struggled to win traffic on the competing ecommerce platforms

Barriers

- There are new users who require much longer to learn to benefit from the platform because their villages are too disconnected - PDD treats these as social impact cases
- They developed PDD villages where they send agronomy experts and offer face-to-face ecommerce training over multiple harvests

Case Study: PinDuoDuo and Social Behavior Change

Learning: Leverage social use-cases and have friends encourage behavior change

- PDD's core customer is the young (25-35 years old) woman living in a tier 3 city or below in China
  - The internal culture of the company also revolves around serving this customer first - before the urban rich
- Offer goods that represent unparalleled value for the target segment
  - Average purchase size is just $6 USD compared to $60 on JD.com or $30 on Taobao and TMall
  - Best sellers on PDD include $2 USD for 10 boxes of tissues and umbrellas for $2.40 USD
- Critically, PDD uses WeChat, China's messaging platform to facilitate the team purchase model. Customers can join teams or invite friends to form new teams. Teams enjoy discounts on products and while allowing each team member to pay individually. The team purchase model has several important features tailored for last-mile customers:
  - Leverages the familiarity of WeChat and WeChat Pay to initiate and share shopping sessions, making them more into fun, almost addictive social events
  - The virality of sharing is encouraged through gamification elements like a points leaderboard
- PDD believes that the app must be designed so that it's able to self-learn the process. However, the app makes it easy for new users to learn how to use it and also share that behavior, driving digital payment behavior and lowering customer acquisition costs
  - You can get a friend or relative to pay - even rewarding users with discounts when they pay for someone else
  - Several actions (installing the app, referring friends, etc.) will get you points for free products which will allow you to try the entire "purchase" flow without even buying anything
  - PDD give free products through referral points and a "bargaining" game where if you get enough friends to use the app, products costs keep reducing until they are free. While giving away products might seem costly, the high margins mean customers feel high-value while actual costs to PDD will only be a fraction of that price.
  - Enables automatic (one-click/press) payments after the first time one pays, so you don't have to enter your passwords again

Case Study: PinDuoDuo and Social Behavior Change

Learning: Development of last-mile supply is critical for last-mile demand to flourish

- Make it cheap and easy to start ecommerce stores
  - Zero monetary cost of starting
  - Does not require any special licensing or new employees
  - No contract or exclusivity - PDD sellers can use other platforms/services freely
- "Viral and organic" recruitment of sellers is critical to manage costs - PDD sellers come due to the reputation of the platform
  - Discovery engine doesn't require the same amount of paid marketing as other platforms to find success because of the social ecommerce model
- Online PDD university to help new sellers understand what makes a good digital storefront with tips on:
  - Increasing quality of produce and other products
  - Providing good customer service
  - How to use marketing tools and create eye-catching headlines
  - How to take photos that customers like
- Selling on the platform creates trust to buy on the platform and vice-versa
  - Farmers and other sellers who are able to make money on the platform already trust it as a place to spend that money; afterall, they sell their own goods on it and are familiar with how to navigate it
- Reduce risk for sellers in more rural / last-mile areas by aggregating demand and taking payments ahead of time
  - Sellers know exactly how much they will be paid ahead of time

Case Study: PinDuoDuo and Social Behavior Change

Learning: A new generation of "agents" can be empowered (not directed) to jumpstart rural ecommerce

- PDD does not believe in the traditional agent model and in fact designed its "agents" to not look like Taobao's or other's agents
  - Does not believe that stationary ecommerce agents make sense in China where smartphones are common
  - Does not believe in the contracted facilitator as the catalyst for more ecommerce in rural areas - too old fashioned
- PDD has a model for what it calls **New Generation Farmers (NGFs)**
  - 65,000 across China in 2019
  - Younger, generally less than 30 years old who are digital natives
  - Some technical college or agronomy school education
  - Several profiles:
    - Returnee from bigger city who sees the blue ocean opportunity back home
    - Farm produce middleman who already does business in the village
    - Agent for the China Post or other ecommerce point in the village (including Taobao)
- NGFs are not employed, contracted, or paid directly by PDD
  - They are simply empowered to take advantage of the PDD platform's demand aggregation to sell their villages goods through relationships and processes that already existed
  - They generally start with their own family businesses (agricultural produce, artisan crafts, etc.) but will also help others in the village set up digital storefronts as well
  - For PDD, each new merchant increases their commission fees and also potential marketing fees
- **Demand aggregation is critical for this model to work** - group buys are paid for first and then NGFs have 72 hours to ship
  - NGFs know how much sellers will pay and how much product is needed - they can then negotiate on the profit margins. This takes risk away from the end farmer and places it on the NGF to gather the goods quickly
  - Because this process eliminates so many middlemen, everyone can offer better pricing
  - Payment is handled directly by the NGF and can be P2P, bank transfer, or cash - depending on whatever the farmer needs

Principles for Inclusive CICO Networks

The Chinese experience largely agrees with CGAP's principles

- New revenue streams must be easy to integrate to an agent's normal day-to-day and at near-zero cost to the agent
- Revenue improvements do not have to be direct - they can come in the form of increased foot traffic to their existing businesses.
- Enablement should mean training but also expanded responsibility to manage the informal and social aspects of rural communities.

- Many agents are accessible to rural customers, but need a way to easily organize and communicate with them - this is where messaging platforms like WeChat are critical.
- Accessibility can also mean a more personal service experience - for example: in-person customer service and local refrigerated storage for goods that are perishable.
- Keeping a smaller pool of customers per agent works if they are incentivized well to generate repeat transactions with the same group.

- In China rural CICO is still served by agent banking service points and rural branches who are able to do cash out. That said, new generation of **entrepreneurial** agents are emerging.
- The rural ag dealer is becoming a common ecommerce organizer, especially those who are digital savvy or have come home specifically to help create digital storefronts
- Young mothers are another segment that are being recruited given their familiarity with digital apps and social circles, but can have seasonal availability due to school schedules.

Principles for Inclusive CICO Networks

Lessons from China

4 — Identify and manage risks posed by rural agents without stopping innovation

- China's central bank originally rolled out agent services slowly and started with just cash out. This has still resulted in an unsustainable network they're still struggling with today.
- They saw the coming fintech and ecommerce-led businesses and switched to a supportive role through a wait-and-see approach that included demonstration cases.
- When they did regulate, they were controlling for demonstrated risk or anticipated risks due to near duopoly conditions in digital payments.

5 — Develop a data-driven strategy to close the gender gap in CICO access and use

- China has very little data on the gender gap in CICO usage.
- From an ecommerce perspective, fresh produce and fashion are high frequency product segments in the social commerce platforms.
- There are approaches that enable young mothers to become ecommerce agents in the hope that they'll bring their own social networks onto the platform.

6 — Expand public and private partnerships that share CICO agents

- The government has been open for platforms to utilize CICO agents and those agents have had the flexibility to work with different platforms that suit their needs
- Logistics is a core infrastructure layer and partnerships are a common way to kick off service provision without having to built it out yourself (e.g. with the postal service).
- Government subsidy plays a role - the Chinese government set aside capital for ecommerce training that help lower costs for platforms and jump started shared logistics infrastructure.

ANNEX: LAST MILE CICO LANDSCAPE

Last Mile CICO Landscape

1. Big 6 State-Owned Commercial Banks
2. Agent Banking Service Points
3. Rural Commercial Banks & Rural Credit Cooperatives
4. eCommerce Platforms

"Big 6" State-Owned Commercial Banks

Companies & Organizations

ICBC 工
中国农业银行 AGRICULTURAL BANK OF CHINA
China Construction Bank
交通银行 BANK OF COMMUNICATIONS
中国银行 BANK OF CHINA
中国邮政储蓄银行 POSTAL SAVINGS BANK OF CHINA

Distribution

- PSBC has 39,680 outlets, the largest in China of which ~32K are operated by China Post in an agency model
  - 19K of these outlets are in rural areas and they are the only bank that is allowed to use agency outlets. PSBC pays China Post a deposit fee for operating its agency banking branches.
  - The agency outlets previously only took deposits but are now piloting microfinance
  - None of the other five commercial banks have more than 25K outlets and small banks have less than 5000 outlets
- ICBC has 16,400 outlets, 26K self-service banks, and 89K ATMs - 97.7% of transactions were considered online
- BOC has 10,726 outlets, 17K self-service banks, and 41K ATMs - 93.99% of transactions were considered online
- CBB has 14,977 outlets, 28K self-service banks, 92K ATMs
- BoCom has 3270 outlets, 3K self-service banks, 25K ATMs covering 71% of the country in 239 cities

Profitability

- Net Profits in 2018 (billions CNY):
  - ICBC: ¥298
  - CCB: ¥255
  - ABC: ¥202
  - BoC: ¥180
  - BoCom: ¥73
  - PSBC: ¥52
- Profits grew across five from 4-5% on the back of strong interest rate spreads in the country, but the Postal Savings Bank saw a 9.8% rise

Customers

- PSBC: 578 million customers
  - ¥545 billion in loans to 1.4 million MSME borrowers at an average of 6.67%
  - ¥93.8 billion in loans targeted for poverty alleviation specifically
- ICBC: 600 million customers, 400 million using online banking
  - 258 MSME banking centers in rural areas
  - ¥321 billion in loans to 300K MSME borrowers at an average of 4.95%
  - ¥89 billion in loans to 55K farmers at an average of 5.03%
- BOC: ¥304 billion in loans to 380K MSME borrowers at 5.27%
- CCB: 784 outlets with inclusive finance options
  - ¥710 billion in loans to 550K MSME borrowers
- BoCom: 662 outlets with inclusive finance options
  - ¥770 billion in across 155K MSME loans

"Big 6" State-Owned Commercial Banks

Infrastructure

- **Sub-branches extend infrastructure to rural**
  - Community Sub-Branch: Self-service model with 2-3 employees and ATM(s) accepting deposits and selling financial products including microloans
  - MSME Sub-Branches: Like community sub-branches but focus is on MSME with hours and products catered towards industries
  - For commercial banks, it extends their customer base in areas where fixed costs for these branches (real estate, staff) are low, even in periurban

- **Agent-based service centers**
  - First withdrawals, then expanded to transfers and billpay
  - POS devices oftentimes subsidized by local government
  - By 2016, almost a million agent points covering 90% of villages
  - Started with ABC and PSBC but now many different parties involved including the nonbank digital payment providers

- **Regional and rural clearing centers**
  - Clearing Center for City Commercial Banks set up in 2002 in partnership with city commercial banks to solve for inter-region clearing issues
  - Similarly, Rural Credit Bank Funds Clearing Center set up in 2006 to solve rural clearing issues in partnership with rural financial institutions
  - In concert with national level switches, these regional and local clearing centers ensure fast and ***convenient*** digital finance across China.

Policy

- **2006:** ***Guidelines on Implementing Effective Payment and Settlement Activities in Rural Areas***
  - Accelerate development of rural payment systems, expand the reach of clearing systems in rural areas, and promote the use of non-cash payment instruments

- **2011:** ***Notice on Promoting Bankcard Withdrawal Services for Rural Residents***
  - Focused first on creating cashout points for rural users through rural agent-based service centers (¥2000 max)
  - Eventually expanded to allow deposits, remittances, billpay, and P2P transfers
  - Nonbank digital payment providers can also create agent points with a "bank card acquirer" license
  - Service fees are capped by regulation

- **2013: Lighter licensing requirements for sub-branches in rural areas**
  - MSME sub-branches had a maximum line of credit of ¥5 million

- **2014:** ***Guidelines on Promoting Village-Level Coverage of Basic Financial Services***
  - Established the overall goal of achieving basic financial services in all villages in three to five years
  - Measures include subsidies, tax deductions, risk compensation, guarantee mechanisms, and better branch security

"Big 6" State-Owned Commercial Banks

CICO Barriers

- A core barrier continues to be the profitability of the most remote and inactive agent service points. The fee caps that have been instituted may drive usage, but without additional value-added service revenue, these band-led agent points are having trouble finding profits. For example the Bank of Communications actually closed low-activity agent service points in order to focus on ones with higher activity.

- In the 2013 - 2015 period, banks lacked the incentive to invest in CICO infrastructure as they received strong profits in service higher-income and larger enterprise customers.

    - They found the risks and costs of serving the under- or un-banked to be too high compared to their other options

    - **The removal of this barrier came only at the erosion of bank profits by WeChat Pay and Alipay.** Their ability to serve billion-plus users profitability in rural and lower-income areas was a wake-up call for the incumbents

    - No one, including PBoC, understood how quickly this would transform payments in China and the "regulatory void" that resulted allowed for a ton of innovation and experimentation - both good and bad - including the P2P criss that eventually occurred.

Risks

- The tiered nature of payment platform onboarding means that many of the digital accounts do not yet have identities fully verified, bringing in the potential for fraud, money launders, and other illicit activity.

- The same risks continue to exist on the merchant side as well, where not all merchants are qualified to receive digital payments and must prove that they have internal mechanisms to reduce risk before getting permits.

- While consumer finance protection bureaus are established, there continues to be risk around high-interest loans being sold to those who are less educated or familiar with digital products.

Agent Banking Service Points

Companies & Organizations

- Big 6 Banks
- RCC/RCBs
- Non-Bank Financial Institutions (2%)

Distribution

- By 2016, almost a million agent points covering 90% of administrative villages
- Almost 500 million transactions totalling ¥424 billion were transacted in agent-based service points
- Started with ABC and PSBC but now many different parties involved including the nonbank digital payment providers. However the nonbank digital payment providers accounted for only 2% of these service points in 2016.
- Interoperability has been a contentious issue since the draw for providers has been rural expansion. PBoC has pushed for interop through lowering the cost of interbank clearing. However, PBoC has still allowed for an exclusivity period for acquirers establishing new service points and allowed for an additional interchange fee if using other providers' cards.

Profitability

- Breakdown of transactions at agent-based service points across China:
  - 52% cash withdrawal
  - 27% transfers (incl. remittances)
  - 23% bill payments
- Service fees are capped via regulation and therefore makes it hard for each service point to achieve profitability without subsidy from local governments
- Improved margins must come from operational efficiency or increased revenue from non-cashout services such as bill-pay and transfers
- Low-profit points are seen more as social responsibility than market opportunity

Customers

- 500 million transactions made in mostly rural and lower-tier areas
- China's agent density rate sits at 88/10,000 adults

Agent Banking Service Points

Infrastructure

- [Agent-based service centers]
  - First withdrawals, then expanded to transfers and billpay
  - POS devices oftentimes subsidized by local government
  - By 2016, almost a million agent points covering 90% of villages
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  - Accelerate development of rural payment systems, expand the reach of clearing systems in rural areas, and promote the use of non-cash payment instruments

- **2011:** ***Notice on Promoting Bankcard Withdrawal Services for Rural Residents***
  - Focused first on creating cashout points for rural users through rural agent-based service centers (¥1000 max)
  - Eventually expanded to allow remittances, billpay, and P2P transfers and raised cashout to ¥2000
  - Nonbank digital payment providers can also create agent points with a “bank card acquirer” license
  - Service fees are capped by regulation

- **2014:** ***Guidelines on Promoting Village-Level Coverage of Basic Financial Services***
  - Established the overall goal of achieving basic financial services in all villages in three to five years
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Agent Banking Service Points

CICO Barriers

- As mentioned before, a core barrier continues to be the profitability of the most remote and inactive agent service points. The fee caps that have been instituted may drive usage, but without additional value-added service revenue, these band-led agent points are having trouble finding profits. For example the Bank of Communications closed low-activity agent service points in order to focus on ones with higher activity.

Risks

- The biggest risk agent banking service centers face are that they fall into the same fate as other agent banking networks where low-activity centers simply become unsustainable and an afterthought when in reality, there are several methods to increase utilization.

- Agent banking service points have also largely become exclusive for cash outs in a move that may help justify further expansion of the model, but in the long term, will hamper the amount of activity at any one center. Monopolistic tactics need to be monitored.

Rural Commercial Banks & Rural Credit Cooperatives

Companies & Organizations

- 1,114 RCBs with a total of 49,307 outlets
- 1,125 RCCs with a total of 28,285 outlets

Profitability

- China's listed RCB's saw a total profit of ¥26 billion
- However, profitability growth slowed down to 6.24% compared to 8.74% the year before
- RCCs saw ¥51.9 of net earnings in 2016, down from ¥66.4 in 2015

Customers

- Conceived in the 1950s to serve three-prongs: (1) the agricultural sector, (2) rural development, and (3) rural residents.
- In 1979, RCCs were handed to the Agricultural Bank of China but were then taken out of ABC's control in 1996 and reformed under a cooperatives structure
- After additional reforms in 2003 focused on financial health, many RCCs were changed in RCBs

Rural Commercial Banks & Rural Credit Cooperatives

Infrastructure

- Agent-based service centers
  - First withdrawals, then expanded to transfers and billpay
  - POS devices oftentimes subsidized by local government
  - By 2016, almost a million agent points covering 90% of villages
  - Started with ABC and PSBC but now many different parties involved including the nonbank digital payment providers

- Regional and rural clearing centers
  - Clearing Center for City Commercial Banks set up in 2002 in partnership with city commercial banks to solve for inter-region clearing issues
  - Similarly, Rural Credit Bank Funds Clearing Center set up in 2006 to solve rural clearing issues in partnership with rural financial institutions
  - In concert with national level switches, these regional and local clearing centers ensure fast and ***convenient*** digital finance across China.

Policy

- **2006:** *Guidelines on Implementing Effective Payment and Settlement Activities in Rural Areas*
  - Accelerate development of rural payment systems, expand the reach of clearing systems in rural areas, and promote the use of non-cash payment instruments

- **2011:** *Notice on Promoting Bankcard Withdrawal Services for Rural Residents*
  - Focused first on creating cashout points for rural users through rural agent-based service centers (¥2000 max)
  - Eventually expanded to allow remittances, billpay, and P2P transfers
  - Nonbank digital payment providers can also create agent points with a "bank card acquirer" license
  - Service fees are capped by regulation

- **2014:** *Guidelines on Promoting Village-Level Coverage of Basic Financial Services*
  - Established the overall goal of achieving basic financial services in all villages in three to five years
  - Measures include subsidies, tax deductions, risk compensation, guarantee mechanisms, and better branch security

Rural Commercial Banks & Rural Credit Cooperatives

CICO Barriers

- RCCs largely suffer from poor governance, small customer bases, and lack of innovation. While profitability has increased, the government has scaled down RCCs from over 35K in 2002 to a bit over 1,100 today. Many have been transformed into RCBs which have grown from 3 in 2002 to over 1,100 today.

- Policies require that RCC/B's and their outlets maintain a surveillance system, an ATM, and/or a POS machine, all which increase the cost of running the outlet.

- The slow response to the mobile banking revolution means less services are used at RCC/RCB outlets including wire transfers, balance inquiries and bill payments. They face a CICO barrier of simply not being needed anymore for many of their offerings.

Risks

- Rural commercial banks hold more than 25% of China's non-performing loans on the back of a slowed economy and risky lending
- Insolvency was a strict concern prior to 2003 reforms when the central bank helped strengthen the capital position of RCCs through capital notes and loans of approximately ¥170 billion.

eCommerce Platforms

Companies & Organizations

Alibaba Group 阿里巴巴集团 | JD.COM

拼多多 | 邮乐 ule.com

Distribution

- ○ Alibaba's penetration rate in cities is 70% while it's about 40% in rural areas however, about 70% of its increased active customers is coming from those rural areas
- ○ Rural Taobao exists in 26,000 villages, 8,000 of which are considered impoverished (some have placed at 30,000+)
- JD claims it has 99% of China covered and is able to reach 90% in 24 hours
  - JD's in-house logistics business which it has put five years of investment in has reached breakeven - it has 95K delivery personnel and 550 warehouses - the most in the country
- In China overall, 70% of parcel deliveries are made within 24 hours
- Ule's partnered with China Post in 640,000 participating retail stores in rural China utilizing 2,000 China Post warehouses to transport goods regionally and locally.

Profitability

- PinDuoDuo
  - Spend of ¥1,600 annual spend per active user
  - ¥840 billion in Gross Merchandise Value
  - ¥7.8 billion in revenue
  - ¥8.5 billion in operating expenses
- JD.com
  - ¥462 billion in revenue
  - ¥464 billion in operating expenses
  - Nearing break-even at -¥2 billion operating loss
- Alibaba
  - ¥376 billion in revenue
  - ¥319 billion in operating expenses
  - ¥57 billion in operating profits
- Ule reported losses of 7.1 million HKD in 2018

Customers

- About 17% of of ecommerce now occurs in rural areas
- PinDuoDuo had over 438 million MAUs as of Q3 2019
  - Just launched its poverty alleviation efforts by training villagers to setup ecommerce shops on PDD - small trial of 60
- Alibaba saw 755 million MAUs in FY 2019
  - Over 14 million of its new annual active users (70%) were from rural areas
- JD has 305 million annual active users in FY 2018
- Ule has shifted from general ecommerce to a business model that focuses on its 640,000 retail store clients across rural China serving their local communities
  - It's clearly the smallest player compared to those compared are is attempting to leverage the China Post network to scale. However, its SME owners are the closest representation to last-mile, fixed-location agents we have seen in China.

eCommerce Platforms

Infrastructure

- **Payments**
  - The UnionPay interbank network that links all ATMs and card networks of each bank. It is the largest such network in the world by transaction value ahead of Visa and Mastercard.
  - Alipay and WeChat Pay now comprise of 65% of the payment options buyers choose on ecommerce sites. They hold together a core aspect of the cashless infrastructure to reduce costs associated with ecommerce and cash.

- **Delivery**
  - Every ecommerce player relies on a delivery infrastructure to move goods at a volume that translates to a certain cost at scale.
  - Alibaba and JD have their own internal delivery services that they use in combination with a series of national and local delivery companies
  - Alibaba has 2 million drivers in its network but Cainiao is just a data network and depends third-party delivery services like ZTO, STO, and YTO.
  - JD has 65,000 drivers on their internal delivery network and 515 warehouses across the country
  - Both claim strong revenues from their delivery arms as long as volume minimums can be fulfilled, oftentimes by opening up to third-parties.

Policy

- *E-Commerce Development Five-Year Plan (2007)*
  - The government developed an ecommerce 5-year plans to address the needs to reorient certain sectors to help ecommerce work in the country. Now ecommerce is featured in the national five-year plans, the most recent of which is for 2016-2020 which aims to increase ecommerce volume to ¥40 trillion by 2020.

- **In 2014-2015, the government has spent RMB 4.8 billion to support the development of rural e-commerce in 256 demonstration counties.**

- **There are several overarching policy objectives which the government has attempted to support its ecommerce policy:**
  - **Lowering the threshold to support ecommerce infrastructure** - including logistics platforms, distribution stations and community service stations in more rural areas to help with express delivery. For example, the state government requires local governments to reserve land for logistics warehousing and storage.
  - **Supporting the financial sector to support ecommerce -** including a tax incentive for SMEs to replace business tax with a VAT tax to support ecommerce, encouragement of financial institutions to offer services to ecommerce SMEs, and guides investment funds to support ecommerce startups.
  - **Strengthening the credit system** - including a standardized ecommerce credit info management system what includes the credit of all stakeholders and a credit penalty mechanism that helps prevent fake goods.
  - **Increasing ecommerce security** - through IT protection and technical standards including the usage of digital certificate
  - **Revamping of the legal system** - to include laws related to online commerce including the legal rights of electronic bills, contracts, and other documents
  - List of several other ecommerce support policies

eCommerce Platforms

CICO Barriers

- They are riding on the CICO capability of the major wallet providers who in turn, deal with CICO through the banking infrastructure.

- In 2014, approximately of 1/3 of shoppers still preferred cash-on-delivery or COD for ecommerce purchases

  - Consumers faced several issues with ecommerce adoption that COD effectively solved:
    - Descriptions online do not accurately reflect the actual products they receive
    - Online payment safety
    - Do not know how to use online banking
    - Do not feel comfortable paying without seeing the actual products or knowing a brand

- By 2017, only 3% percent of ecommerce was COD, while more than 65% had migrated to digital wallets.

  - Arguably, the bridge that created such a shift in payment channel was the creation of online trust between buyers and sellers. Alipay was introduced as an escrow service that was critical to trust, holding onto payments until buyers verified the quality of products. It evolved from there.

Risks

- Forced exclusivity on platforms, locking in merchants on those competitive marketplaces resulting in anti-competitive pricing

- As advertising on ecommerce platforms becomes more important, the costs start to shutout the smallest sellers, a phenomenon we already see on Alibaba's Taobao platform. This is exacerbated by increased competition that comes from more local sellers joining a platform as well as competition from outside suppliers entering local markets.

- There are worries that cashless cities are being built too quickly and may harm the elderly and those in the most remote areas. The People's Bank of China even issued some informal statements warning cities who promote cashless societies at the expense of those who are left out.

- Fake and counterfeit good were prevalent at the launch of many of the ecommerce platforms and eroded the trust of the buyers initially. Although they remain an issue, many risk prevention mechanisms have been implemented by both the platforms and the government.