

China's Tech Ecosystem and the Rise of Pinduoduo

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COMMERCE IN THE MIDDLE KINGDOM

According to the South China Morning Post, China is home to 772 million internet users, the biggest online community in the world. Although Internet penetration rate is only 56%,ⁱ far lower than USA's 85%, government efforts to rebalance the economy from exports towards consumption are causing the rise of the Chinese shopper - consumption accounted for 78% of economic growth for 2018's first quarter.

In China, Digital payments and e-commerce are intricately connected – Alipay and WeChat pay are the most common digital payment platform, and they are a fundamental part of China's e-commerce craze. As disposable income and consumer confidence are set to increase, consumers are likely to spend even more online. Based on a PwC report, e-commerce is predicted to account for a quarter of China's total retail sale by 2020. Yet, unlike United States, the growth of Chinese e-commerce does not succeed physical retail; instead, e-commerce and physical retail complement each other and grow *together*.

Because of this unique situation, the Online to Offline (O2O) business model is gaining steam in China – this concept integrates online and offline retail elements, such as products, services, logistics, marketing and analytics, bringing both challenges and opportunities to current retail players. For example, Hema Supermarket offers fresh food, imported products and dining like typical supermarkets. Shoppers are encouraged to purchase goods through its app, in which spending and consumer profile are saved and utilized for marketing purposes. Consumers are also entitled to door-to-door deliveries within 30 minutesⁱⁱ, providing a solution for people unwilling to brave the weather when a typhoon hit. Virtually every business in China is plugged into this ecosystem, where online platforms are integrated with offline services and goods, and a single app, such as Meituan-Dianping, can provide a range of online and offline services. Moreover, the concentration of mobile commerce has transformed China's advertising ecosystem from open to closed loop, and social media is now an essential marketing tool. Local Internet companies are already using social networking on their platforms to drive user engagement.

The best example of how e-commerce can be seamlessly combined with social networking is Pinduoduo, a social commerce platform that enables users to participate in group-buying deals. The excitement surrounding Pinduoduo can be explained by its exponential growth rates. Despite being founded only as recently as 2015, the firm recorded a gross

merchandise value (GMV) of RMB 199 billion last year, and claimed nearly 300 million monthly users. The app's penetration rate has increased from 1% in 2016 to 19.4% in late 2017. And in late July, Pinduoduo surges above the offer price of USD19 to close at USD26.80 per share during its initial public offering.

SOCIAL SHOPPING AND THE RISE OF PINDUODUO

Through Taobao, Alibaba is indisputably China's king of e-commerce. However, the lack of a social media product has always been a worry for Jack Ma, and this inability to create a single successful engagement platform has been Alibaba's nightmare. It represents an unconquerable challenge in their battle with Tencent, the creator of the messenger app QQ and WeChat.ⁱⁱⁱ

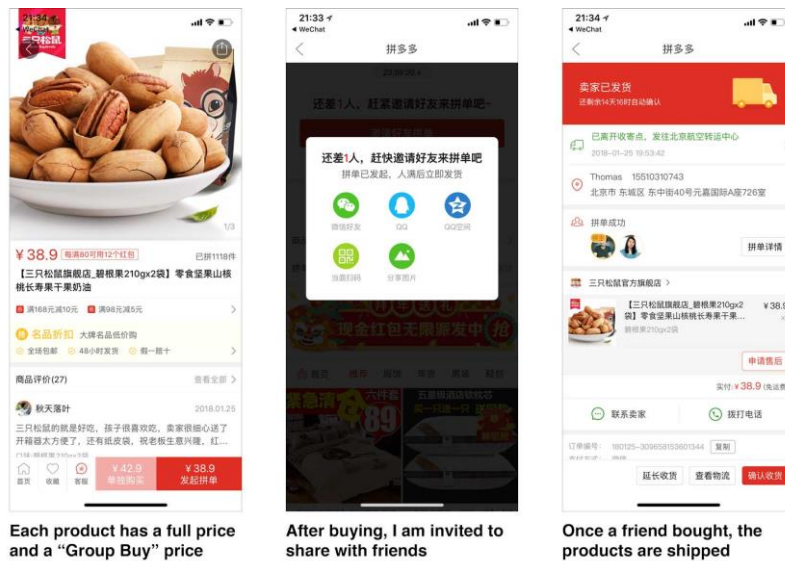
Like the predominant e-commerce companies Taobao and JD.com, Pinduoduo also offers a wide variety of products from groceries to consumer electronics. Yet, its trump card is the ability to integrate social components into a traditional e-commerce experience, known as the social e-commerce model. When Groupon from Chicago first conceptualized the group-buying model a decade ago, it did not succeed. Today, China's super app environment, digital payment platform, and mobile-first users are changing that failure into success. Alibaba and Tencent are China's Internet companies known for their e-commerce and social networking/gaming dominance respectively. Has Pinduoduo found the sweet middle ground that combines the strengths of these giants?

PLAYING WITH PSYCHOLOGY

In its early days, Pinduoduo harvested its first users by directing people to Pinduoduo's WeChat mini-program on their mobile phone. By sharing product information on social networks like WeChat, users are motivated to invite their contacts and form a shopping group in order to get discounts on goods. The bulk-selling model easily creates huge orders for the sellers and gives them the ability to cut prices, which in turn attracts more customers, creating a positive feedback loop. This discount can go up to 90% - imagine computers that only cost RMB 1000, and groceries purchased at 1/5 of the original price.^{iv}

This sales technique, also known as the customer-to-business model, relies on human psychology. The desire to reduce a product price typically prompts consumers to nudge their WeChat friends into purchasing the items together. In this way, a customer's friend list on WeChat and QQ metamorphizes into valuable tools for sellers to advertise their goods. A successful purchase creates the euphoria of closing a good deal. This mechanism generates an interactive and dynamic shopping experience and allows Pinduoduo to acquire users at a very low cost. Indeed, the C2B model is a stark contrast to Taobao's customer-to-customer model. Taobao's interface is search-based and focused on displaying multiple products,

while Pinduoduo's product listing appears like a social network feed, giving more exposure to fewer bestsellers that would attract more buyers and increasing the ease of listings becoming viral.



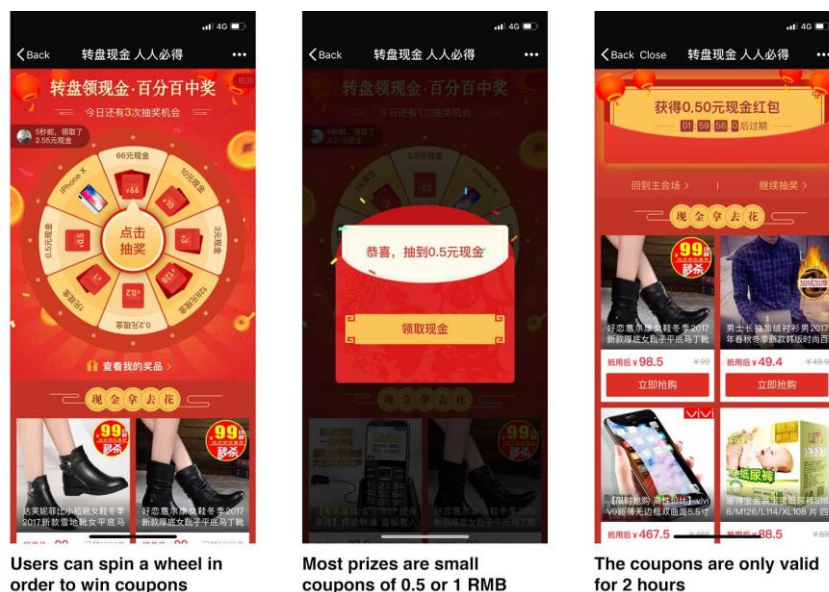
Each product has a full price and a "Group Buy" price

After buying, I am invited to share with friends

Once a friend bought, the products are shipped

Social e-commerce and Group Buy in Action. Image retrieved from Tech in Asia.

Another core characteristic of Pinduoduo is its heavy reliance on gamification. With multiple coupons and deals, Pinduoduo simulates the thrill of playing an online video game, where the end-goal is to find the best and cheapest deals. There is a feature that displays offers only for new users, such as 1RMB lipsticks. In another feature, "Slash the price", users are shown products with prices that decrease if they share the page with friends.⁹ Electronic shopping has never been more fun.



Users can spin a wheel in order to win coupons

Most prizes are small coupons of 0.5 or 1 RMB

The coupons are only valid for 2 hours

Gamification in Pinduoduo. Image retrieved from Tech in Asia.

SUPPLY FOR DEMAND

Any e-commerce platform involves the matching of demand and supply. Pinduoduo first attracts businesses by charging no fee to list on the platform, but continues to provide value to merchants through advertisement and bulk ordering. As the number of Pinduoduo users grows, the app fosters the ecosystem of user-based product promotion, thereby enabling sellers to reach the 300 million users organically. Advertising via user social media sharing is also effective and cost efficient, since product information are directly shared to friends and groups that have similar purchasing power and consumer preferences. The C2B model enables manufacturers to sell their goods directly to customers and eliminate layers of distributors, further reducing the price for buyers, thus increasing the user retention rate. Known as “Pin factories”, the merchants are able to focus on just a small number of product types with huge order volumes.

Since the prompt matching of large supply and demand is extremely pertinent for the sales of perishable agricultural products, Pinduoduo’s bulk purchasing behavior renders the platform suitable for sourcing fresh produce from local growers, known internally as the farmer-to-customer model. According to company data, in 2017, nearly 1000 factories were opened just to meet the exponential increase in order volumes from Pinduoduo’s users.^{vi} Through a different acquisition and engagement model, Pinduoduo is now viewed as a key threat to Alibaba’s e-commerce dominance in China.^{vii}

A HIDDEN MARKET

Alibaba may have only themselves to blame for underestimating Pinduoduo’s threat and not recognizing how big and segmented the Chinese market can be. Because e-commerce giants have been competing for affluent consumers in the urban regions, a significant missing group from the Internet giants’ target audience is distributed in 3rd or 4th tiered cities. Indeed, consumers from these lower-tiered cities account for 65% of Pinduoduo’s user base, as compared to less than 50% for JD.com. The success of Pinduoduo is a reminder that many Chinese consumers are still sensitive to price, and low-end suppliers continue to be a huge chunk of China’s economy. Unlike the maturing Internet population in the coastal regions, the population in lower-tiered cities are only recently going online and depend solely on WeChat and neighbors as their source of information.^{viii} The habit of following friends’ online shopping suggestions to place shopping orders may explain Pinduoduo’s widespread popularity in these less developed regions.

Although the shopping culture is spreading from wealthy urban areas to rural regions, keep in mind that the average Chinese resident has only 1800 RMB of monthly disposable income, while a rural resident has less than 1000 RMB. The average consumer is still thrifty,

and for them, quality is less of an issue than the incentive to save even 1 RMB on commoditized items such as toilet paper and detergent. Living outside China's coastal megacities, this group of consumers cannot resist bargains, even when the quality of products may be slightly compromised.^{ix} According to a McKinsey report, since 2015, e-commerce spending in lower-tiered cities has surpassed that in first and second-tier cities, and 71% of Chinese who would start to shop online in the next few years will come from lower-tiered cities, demonstrating how lucrative Pinduoduo's target market can be.^x

Furthermore, even though only 35% of China's current rural population is connected to the Internet, e-commerce success may have a positive impact on rural economic development. The Chinese internet ecosystem has created jobs and improved education and digital accessibility in less developed regions; it is now common to hear accounts of how software engineers working in bigger tech firms are seeking opportunities in rural areas to build viable businesses, while creating new jobs that revitalize local communities. There are already more than 2100 villages with at least 10% of households selling online; these merchants accounted for 490 000 online shops, USD 19 billion in annual sales, and 1.3 million new jobs created.^{xi} According to a report, by 2020, half of all villages defined as poor by the central government will have e-commerce infrastructure, giving more merchants from these regions the ability to sell beyond physical boundaries.

TUMULTUOUS TIMES?

Pinduoduo's growth may be tied to the prosperity of China's consumer economy. However, the company's journey forward will not be smooth-sailing. Despite a successful IPO, stock prices are tumbling, and not without reasons – exposure to public scrutiny revealed Pinduoduo's weak financials. The firm suffered a net loss of RMB 292 million and RMB 525 million in 2016 and 2017 respectively. Over 85% of Pinduoduo's revenue in this first quarter was solely spent on marketing. In comparison to other e-commerce platforms, Pinduoduo is way behind in terms of total value of goods sold. The average customer spends RMB 50 on the platform last year, while Alibaba's spends RMB 1300, and JD.com's spends RMB 500. Due to these factors, net loss is expected to continue widening, and Pinduoduo is unlikely to be profitable anytime soon.

There is also a negative correlation between the affordability and legitimacy of goods sold on the platform. In 2017, Pinduoduo took down over 10 million problematic listings and had to set up a 150 million dollars fund to compensate users for inferior and shoddy goods.^{xii} Customer complaints typically point to misleading advertisements and slow deliveries. Just recently, Pinduoduo was hit by an IP infringement lawsuit from the US. As Alibaba and

JD.com have spent efforts to remove fake listings on their sites, these fake goods are increasingly moving to Pinduoduo.

To add to these woes, Alibaba's C2C e-commerce platform, Taobao, has now acknowledged the potential of rural markets and lower-tiered cities. They have just launched an app, 淘宝特价, Taobao Discounts, to target China's lower-end users who are price-sensitive.^{xiii} As Pinduoduo transits from growing traffic and users to enhancing the quality of product listings, they must find a way to defend their value proposition against other competition. Maintaining its existing users and growth momentum will be the biggest challenge.

LESSONS FOR SOUTHEAST ASIA

Tracking how Pinduoduo attempts to overcome its challenges will be valuable to Southeast Asia's e-commerce ecosystem as well. China may be a segregated country, but not to the extent of Southeast Asia. With a population of more than 600 million people, Southeast Asia is divided by politics, language, and culture. Some cities like Singapore and Kuala Lumpur are developed, while other regions have insufficient infrastructure and are separated by land and sea, posing logistical woes. Nonetheless, as the region's middle class continues to grow and go online, e-commerce sales there could hit USD 88 billion by 2025. Sensing the strong resemblance between Southeast Asia and China in terms of general consumer behavior, and observing the advancement made by Alibaba, Tencent and Baidu (BAT) in China, a "copy-from-China" approach has been adopted by the Internet industry in the region.^{xiv} Ideas being duplicated include the concept of super apps and expanded online platforms to create convenience to users.

Southeast Asia (SEA)'s existing horizontal e-commerce market has been well-consolidated into a few companies, such as Lazada, Shopee, Tokopedia, and JD.com (JD). Hence, new opportunities must be found in specific vertical categories and through seeking a comparative advantage via other means. Consider the fact that one of Pinduoduo's investors is Tencent, which has already set its eyes on the rapidly growing Southeast Asian market through investment in Sea and Go-Jek. Is Southeast Asia ready for a business concept like social e-commerce to flourish? I believe that 3 ingredients are critical – social connectivity, mobile penetration, and a unified digital payments system.

(1) Social Connectivity

Like in China, Advertising and marketing in Southeast Asia face a "no-tail" ecosystem, where advertising is restricted to a few dominant advertising platforms. During the early days, when the e-commerce space is still relatively empty, firms like Lazada took advantage of the low cost-per-click (CPC), but these days, CPCs for online ads have exponentially risen. Existing

alternatives include TV and offline physical stores as cost-efficient ways to acquire users and simplify last-mile logistics. Thus, the use of social network as an advertising channel provides significant value-add to e-commerce companies.

Yet, the feasibility of social e-commerce still has to depend on having a single, universally dominant chat app like China's WeChat. Regretfully, each country currently has multiple different dominant apps that create software engineering complexity for a social e-commerce platform. While WhatsApp and Facebook may be Southeast Asia's most common chat app, they lack WeChat's flexibility of having payments, social sharing and B2C e-commerce all integrated on one platform. Having a single dominant chat app will boost the viability of Pinduoduo's social and viral customer acquisition strategy.

(2) Mobile Penetration

Southeast Asia is also similar to China in terms of high mobile usage compared to developed markets in America and Europe, and this can enable sales with lesser restrictions. The majority of O2O and e-commerce transactions in China takes place on mobile. Startups like ShopBack are adopting a mobile-first strategy, while companies like Lazada and Shopee see over 65% of their orders coming solely from mobile.^{xv} A higher mobile penetration rate implies that a larger proportion of Southeast Asia is connected to the Internet. Therefore, a well-established presence of smartphones, Internet connectivity and social media should enable the group discount concept to take root and scale faster and more effectively now than in the United States (by Groupon) during the late 2000s.

(3) Unified Payments System

One of Pinduoduo's successes is the ability to make digital payments in rural regions through WeChat Pay. Yet, in Southeast Asia, only Singapore and Malaysia are credit card-dominated, while the rest of the region relies primarily on Cash-on-Delivery, due to little trust in an electronic system, poor bank account penetration, and the weak banking infrastructure outside urban areas. Attempts to create a universal digital payment platform have little success – Sea's Airpay, and Line Pay have faced a lack of distribution or use case. The platform with the most potential would be Go-Jek's Go-Pay, which has a massive distribution channel by utilizing Go-Jek user base. More crucially, Go-Pay users are able to top up their accounts by handing cash to Go-Jek drivers during their trips, acting like a reverse-ATM machine.^{xvi}

But beyond having a unified payments system, what's important is for this system to be part of a larger app platform. Without the WeChat ecosystem, Pinduoduo would not have encountered the same degree of success today – the convenience of WeChat Pay and WeChat's expansive social community allows Pinduoduo to reach massive distribution by

tapping into the network of over 1 billion WeChat users. Although Go-Jek has yet to enter the e-commerce industry, given that Go-Jek and Pinduoduo both have Tencent as investors, it will not be surprising if a Pinduoduo model is launched on Go-Jek's platform in Indonesia, utilizing the social and physical connectivity of users, and the centralized payments system.

Indeed, Pinduoduo can offer a model for Southeast Asia's e-commerce platforms to emulate. Both regions are mobile-first and contain rural regions that are coming online at an exponential pace, with populations that have huge consideration for the affordability of products. However, hurdles include Southeast Asia's regional diversity, and the lack of a universal and deeply-rooted communications and payments platform. Any company must overcome these barriers before they can claim success in this bloody battle for Southeast Asia's e-commerce dominance.

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