# Analysis on the sustainable development of Chowbus: based on POCD framework

Kai Dou<sup>1, a, †</sup>, Meijin Li<sup>2, b, †</sup>, Tianhao Wang<sup>3, c, †</sup>

<sup>1</sup>Shanghai Jiao Tong University

<sup>2</sup>Monash University

<sup>3</sup>Emory University

<sup>a</sup>1223605639@qq.com, <sup>b</sup>limeijin1110@126.com, <sup>c</sup>jacksonthwang@gmail.com <sup>†</sup>These authors contributed equally.

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**Abstract:** With the post-pandemic economic recovery, rising consumption and inflation have provided the online food delivery industry new opportunities and challenges. According to U.S. Bureau of Labor Statistics, the annual inflation rate has been above 5% since May 2021. Meanwhile, the competition in the industry has moved to a more cash-burning stage. As major players in the online food delivery industry are not providing differentiated service compared to each other, the advertising expense and the acquisition cost for customers, drivers, and restaurants remain high growth. Besides major player with over \$10 billion market capitalization such as DoorDash, GrubHub, and UberEats, there are also startups that focus on niche market. Our research subject is Chowbus, an online food delivery company that focuses on premium Asian food. We are analyzing Chowbus by using the POCD framework.

#### 1. Introduction

Investment in startups looks like an attractive chance to become wealthy suddenly. Once the company is successful, one can get hundreds or even thousands of times in returns. Nevertheless, high risks are always accompanied by considerable returns. An effective prediction is very essential before taking investment. In the past several decades, the methods used to evaluate a company is based on their assets, historical earning data and cash flows. For instance, the 'Publicly-traded comparables' method which usually looks at the last and next twelve months EBITDA [1]. 'Book Value' method that focus on the entirely balance sheet [2]. Also, 'Discount Cash Flow' method is focus mostly on the historical performance [3].

However, historical data is the most scarce resource in startups. It makes these methods unsuitable for estimate startups' value. Therefore, the ultimate goal of this report is to develop an appropriate way for estimate startups firms valuation that relies on their existing incomplete data. The method we practised is the POCD framework. As indicated by its name, it contains four elements that a successful firm should consider: people, opportunity, context and deal. In this report, the first three will be concentrated applied to Chowbus future prediction.

Chowbus is a food delivery platform (online app) that provides high quality, authentic Asian food. Features for this platform the only Asian cuisine provided and quality control for reputation. This company is used as research object to examine whether it has potential ability to get extra financial support from investors.

The rest part of the paper is organized as follow. The section two structure as the people, opportunity and context factor in Chowbus with the collected data and information; section three will summarize all partial analysis to give a clear prediction result.

Based on the analysis, conclusions from 'POC' aspects can be demonstrated as following. As Margaret stressed that human is the most fundamental element that we can't ignore for establishing a

successful company [4]. Chowbus has a great expression on its 'people' factor: two knowledgeable founders, concerted managers and hard-working employees.

### 2. Analysis By pocd framework

#### 2.1. People

# 2.1.1. Founders' background

Chowbus's initiators LinXin Wen and Suyu Zhang are the best friends since childhood, they have the same dream when they are 4 years old, "connect people with Asian restaurants". The important finding by Christine's interview with Kenny, Tsai, COO of Chowbus, is before the establishment of Chowbus, there were almost no third-party food delivery apps corporate with Asian restaurants [5]. Therefore, this pair of bosom friends caught the market vacancy for Asian cuisine.

Only the idea is far more than enough. In order to practise their dream in the real world, they both study at the same university with two different departments: IIT Stuart School of Business and Illinois Institute of technology. They focus on building entrepreneurship and program's technology separately. Everything comes to him who waits, in 2015, Chowbus was successfully founded by CEO Linxin Wen and CTO Suyu Zhang in Chicago. Even though so many years passed, the initial intention to set up a company was not changing. Rely on the passion for Asian food, LinXin also encourages that Chowbus and restaurants can support each other in future collaboration. He points out that Chowbus really go the extra mile to helping restaurant partners succeed by eliminating hidden fees [5].

### 2.1.2. Excellent employees

Through the differentiated food services in Asian cuisine, Chowbus got positive feedback from the market and growing rapidly in a few years. Even in the period of the COVID19 pandemic, Chowbus still maintain its growth speed by "non-contact" delivery model. As Chowbus declared, the success of Chowbus depends on its excellent employees [6].

Drivers are the crucial factor for a delivery firm and be the secret for Chowbus success. Chowbus provides a flexible schedule and instant deposits for drivers, which can help drivers arrange their time efficiently and inspire them to deliver more orders. The advantage of hard-working staff can be seen during the COVID19 period, Chowbus drivers become "heroes" who shuttle in the cities, also create revenues for Chowbus under the economic recession condition. Drivers must accept temperature detection every day before they start to deliver and strictly follow the "non-contact" instruction.

Salaries can be another superiority to retain staff and reduce turnover rate. There are almost 229 numbers of employees in Chowbus (Aug 2021), and the salaries for drivers are 37% above the U.S. national average with approximately \$22.07 [7]. More than \$50,000 wages for market specialists, which exceed the U.S. national average (2019) of 18,867 dollars [8].

Furthermore, work with colleagues who have the same goals can perform better. Chowbus is aiming to build a harmonious work community that every staff can join in for comfortable communication and highly efficient collaboration. Managers plan Chowbus growth strategy followed by the CEO's thinking, building a long term business instead of concentrate on profit-oriented.

# 2.1.3. Customers Loyalty

Another piece of information that can be seen through Christine's interview is more than 50% of Chowbus's clientele do not use other platforms [5]. Again, this finding can verify that Chowbus is actually fill the market vacancy for Asian food. Additionally, it cultivates a group of loyal spenders. According to the Chowbus official report, in 2020, one of the consumers placed 624 orders in a year, and the annual bill for him was \$24,816.07 [9]. That is the best example to show how popular Asian cuisine is.

As Xingshu emphasised one element for a firm to succeed is the entrepreneur, especially for their human relations, personalities, specialists and work experiences [10]. In Chowbus, founders Linxin and Suyu shows their strong friendship, persistent personality and high academic background, which

can lead Chowbus on a correct and sustainable expansion. Moreover, good-performance staff and passionate clients also can be vital human resources for successful operate a startup.

# 2.2. Opportunity

#### 2.2.1. Short review of the market

According to the report of JMP, food delivery market in the US is a large market with a valuation over 40 billion dollars and a high growth rate over one hundred percent (the extreme situation in 2020). Besides, the revenue of the food delivery market increases rapidly these years. Moreover, with penetrate rate of restaurant market just below 10% in 2020 and the growth rate over 115% of food delivery industry sales in 2020, as means that there is ample room for growth at the whole industry, we could know that the food delivery market is a promising market.

Several scholars point out that the great increase in the 2020 isn't sustainable without the impact of the pandemic. For instance, Charlene Li, Miranda Mirosa and Phil Bremer hold the same opinion.

However, according to a research report of Qualtrics XM Institute about the global consumer trend in 2021, over 19% of people in the US ordered food online for the first time in the past year and about 20% of them conveyed strong desire that they will continue to order food online after the pandemic. It will still be a huge group of consumers and the other individuals will become the potential customers of food delivery. It is reasonable to assume that the pandemic help to form the consumption habit of the public because it forced the people to experience the convenience and the consumer-friendly price of the food delivery service. The COVID-19 pandemic accelerated the online food delivery industry and, in our view, changed the restaurant business for good. Stay-at-home orders forced more diners to turn to food delivery services as restaurants looked online for demand. Simply stated, we believe food delivery is the new normal. Unfortunately, there is little statistical research on the field to prove this assumption. However, we could still say that the massive increasing of the food delivery market in the period of pandemic is significant and it provides a promising future of the industry.

# 2.2.2. Competitor

The food delivery is viewed as a "winner takes most" market. According to the data of JMP, Doordash takes up half of the total market (50%), the share of Uber Eats which has purchased Postmates is over 30% and that of Grubhub is about 18%. It is obvious that the sum of the shares of those three successful companies has taken over 98% of the total market.

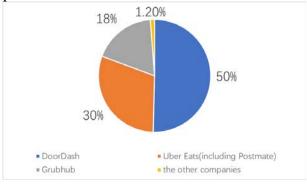


Fig. 1 The market share of food delivery companies

Among the three companies, the DoorDash is the most successful company. With over 50% of market size of food delivery market, the DoorDash is worth to be analyzed. DoorDash is a three-sided logistics platform that connects over 390 thousand merchants, 18 million consumers, and 1 million Dashers to enable last-mile delivery of local commerce. The impressive scale of DoorDash drives local density and the scale economy, creates lower variable costs that we believe can lead to further share gains of the 640 billion dollars off-premise dining category. Moreover, the better products, more choices and faster delivery speeds of Doordash, combined with a more accustomed consumer base, we could say that the increased demand for DoorDash due to COVID-19 is relatively sticky. Therefore, it is hard for Chowbus to compete with them in the traditional field.

## 2.2.3. The advantage of Chowbus

Chowbus chose the strategy which is to focus on Asian food delivery market that is still a blue ocean. The other companies in food delivery industry focus more on the general products. The difference of their products could attract the Asian American more than the other food delivery platforms.

The reputation of Chowbus among the group of international students is very good. Based on the questionnaire survey, almost half of the Chinese international students know Chowbus and 23% of the group have used Chowbus to order a food online. In contract to the statics present before, it is a really high rate.

According to the statistics, the valuation of Asian food delivery business is over 10 billion dollars. With a higher level of income than the average, the Asian American are the targeting customers of Chowbus.

The population of the Asian American takes up over 5% of the US, and has a growth rate over 6%. Besides, the 80% of the new Asian are migrants. It is reasonable to assume that they will keep their former dietary habit unchanged.

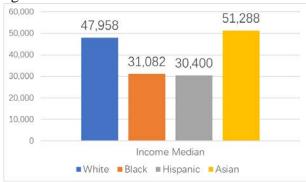


Fig. 2 The income distribution by race

The cost of Chowbus to acquire a new customer is hard to evaluate exactly, because of the missing of the key data, but we could compare to the other companies. Another food delivery company named JET had a total growth over 8.5 million of daily active users in the year 2020.

In 2020, JET spent 369 million dollars on marketing. As a consequence, the average cost of JET to acquire a new daily active user is over 46 dollars. Nevertheless as the group scales up, it can drive marketing efficiencies. Hence, the actual cost of Chowbus may be larger than that of JET.

#### 2.2.3. The operation risk of Chowbus

There are already some large competitors in the industry, and Chowbus cannot compete with them in terms of capital reserves. Some American dishes don't require a short delivery time, i.e., Americans have a high tolerance for delivery time. However, Chinese takeout is mostly hot food, as makes the delivery time much more importance.

After the pandemic, the huge amount of people will go back to their formal jobs, which are canceled during the crisis, as means the deliver's amount will decrease. It is obvious that the cost of delivery will increase rapidly and the financial burden of Chowbus will increase, too.

#### 2.3. Context

#### 2.3.1. US Food Delivery Industry

According to the U.S. Census Bureau, U.S. consumers spent \$669 billion in restaurants and other establishments in 2019 (\$766 billion in bars). As restaurants benefit from switching from cooking at home to eating or delivering meals, company executives are also seeing this as online food delivery growth. Based on BAC aggregated credit and debit card data, sales grew 123% in the second quarter of 2020 up from 40% pre-coronavirus. Door Dash, a leading company, has its sales increased by 129 points from 98% growth in Q1 2020 to 227% growth in Q2 2020. Brick & Mortar restaurant spending

has declined an average of 34% y/y since April, while online spending has increased. It has increased by more than 100% over the same period. Online restaurant orders increased 107% y/y from 4Q to 12/12. Bank of America research analysts estimate that the online food delivery industry will grow by 15-20% in 2021. Vaccine supply expanded in 2Q.

Chowbus has benefited from the headwinds of online food delivery caused by travel restrictions, and online food delivery companies could continue to see high growth through 2021 as restrictions increase in major cities, e.g., SF and NYC. New strains of the COVID-19 disease include: A 'Delta' variant has been revealed worldwide and has spread to the United States, possibly triggering a new lockdown that could last longer than people expect.

# 2.3.2. Significant Growth in Urban Areas

According to a report by Edison Trends, the U.S. local food delivery logistics category is larger and growing faster in smaller metropolitan areas than in the top metropolitan areas. In the end of 2018, approximately 175 million Americans lived in suburban or small metropolitan areas, compared to 98 million in core urban counties and 46 million in rural areas.

Industry-leading company Doordash mentions in their Initial Public Offering S1 that there has been significant more growth in suburban markets than in large metropolitan markets because these smaller markets have been historically underserved by merchants and platforms that enable on-demand delivery. In this case, residents in these markets are more acutely affected by the lack of alternatives and the inconvenience posed by distance and the need to drive to merchants. Ultimately, consumers in these markets can derive greater benefits from on-demand delivery. Further, easier parking and lighter traffic mean that online food delivery companies are able to serve these markets more efficiently.

Chowbus has not absorbed the high growth of smaller metropolitan areas. Instead, Chowbus is focusing on providing higher-quality services in top cities, e.g., ordering from different restaurants in a single order. As the leading companies are competing in the high-growing lower-tier cities, Chowbus is continuously enhancing its service quality given that they mainly serve premium Asian food.

## 2.3.3. Competitive Challenge in the Industry

Food delivery has been scrutinized in the same way as riding hail because it is an "earth devastating" business model where you can't build loyalty with no differentiator your company offers. For major players like Door Dash and Uber Eats, this is a classic "generating \$0.90 revenue per \$1.00 marketing spend" negative unit economy death trap for investors. On the other hand, according to third-party data from Edison Trends (credit card data), Door Dash customer retention is 48% compared to Uber Eats 36%, Postmates 31% and GrubHub 19%. Therefore, the retention of customers is a highly competitive game in online food delivery industry.

Jurisdictions across the United States, including New Jersey, Los Angeles County, San Francisco, Seattle, Washington, and New York have imposed temporary commission caps for local food delivery logistics platform. These commission caps have been and will have a negative impact on the results of online food delivery companies' operations in the future. While these commission caps may increase the commissions charged by online food delivery companies to consumers, we understand that they may further increase costs in jurisdictions that have adopted explicit bans regarding commission caps. Due to the duration of COVID-19, these existing commission limits are expected to be maintained in the near future and in additional jurisdictions operating to implement similar limits. If this situation occurs or if the commission limit is maintained even after the COVID-19 pandemic has subsided, it could further negatively affect the business, financial position and operating performance of online food delivery companies.

## 2.3.4. Post-Covid Challenge

Owing to the COVID-19 pandemic, online food delivery companies have seen significant increases in revenue. The revenue increase is driven by increase in total orders and Marketplace GOV growth. It shows that there is an increasing consumer demand for delivery and more merchants are using the platform to facilitate both delivery and takeout. The situation where business growth has accelerated

in the aftermath of the COVID-19 pandemic may not continue in the future, and Total Orders and Marketplace GOV, which are expected to grow sales of online food delivery companies, are expected to decline in the future.

Additionally, because COVID-19 is transmitted through person-to-person contact, employees of online food delivery companies and all components of their networks can become infected and may choose or seek advice to avoid contact with others. The ability to provide a platform and enable merchants, consumers and drivers to use the platform. In addition, stay-at-home orders and similar regulations affect a restaurant's ability to operate a business, a consumer's ability to receive an order, and a driver's ability to deliver on time or at all. It can also significantly reduce demand for businesses that typically place large orders for employees or face-to-face meetings. Although the COVID-19 pandemic may allow merchants to continue to operate, many merchants may operate with limited hours, menus, capacity and other restrictions. Restrictions, suspensions or closures of merchant businesses may affect the choices available on the online food delivery company platform, interfere with the ability to operate local logistics platforms, and adversely affect business.

On account of the COVID-19 pandemic, merchants may also be perceived as unsafe to ship or pick up orders. If there is a public perception that an online food delivery service provider's platform may pose or exist a significant risk of spreading COVID-19, the demand for food delivery service will be negatively affected. Customers' concern of exposing them to Covid will reduce their willingness to pay for food delivery. Similarly, it will also negatively impact a driver's will to make a delivery. Therefore, the concern could adversely affect the whole established business network, financial position and earnings result. As the sustainability of networks of restaurants, consumers and drivers remains critical, online food delivery companies plan to continue increasing their investments in programs designed to drive more business to restaurants, including promotions, fee reductions and new product initiatives.

Therefore, Chowbus is required to use more business resources to ensure safety and efficiency at the same time of boosting sales. In the post-pandemic period, Chowbus has been benefiting from customers' increasing online ordering behaviour. In other words, the competition would be more intense among companies in the online food delivery industry. Since Chowbus sacrifices the penetration into smaller metropolitan areas, it must significantly differentiate its service from the leading companies to succeed.

#### 3. Conclusion

In summary, POC framework is an appropriate method to analyse the business of Chowbus and to predict its future income. Based on the analysis, the Chowbus is a start-up enterprise with great potential for growth that also has potential risk which may lead to crisis.

It can be known from the previous analysis, according to the statistics, the valuation of Asian food delivery business is over 10 billion dollars. With a higher level of income than the average, the Asian American are the targeting customers of Chowbus, as promotes a huge potential market. Additionally, in Chowbus, its founders show their strong friendship, persistent personality and high academic background which can lead Chowbus on a correct and sustainable expansion. Moreover, good-performance staff and passionate clients also can be vital human resources for successful operate a startup.

However, Chowbus needs to use more business resources to ensure safety and efficiency while promoting sales. In the post-pandemic period, Chowbus has been benefiting from increasing online ordering by customers. In other words, there will be more competition among companies in the online food delivery industry. There are already some large competitors in the industry, and Chowbus cannot compete with them in terms of capital reserves. As Chowbus sacrifices penetration into small urban areas, it must significantly differentiate its services from those of leading companies in order to succeed.

To conclude, Chowbus is a start-up company which has great potential for growth and is worth to invest. Although the company is confronted with a great challenge, we believe the company still has

the potential for sustainable growth. These results offer a guideline for the investment of Chowbus and the investment of start-up company.

#### **Authors' Contributions**

These authors contributed equally.

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