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Introduction



BACKGROUND

Improvement of living standard

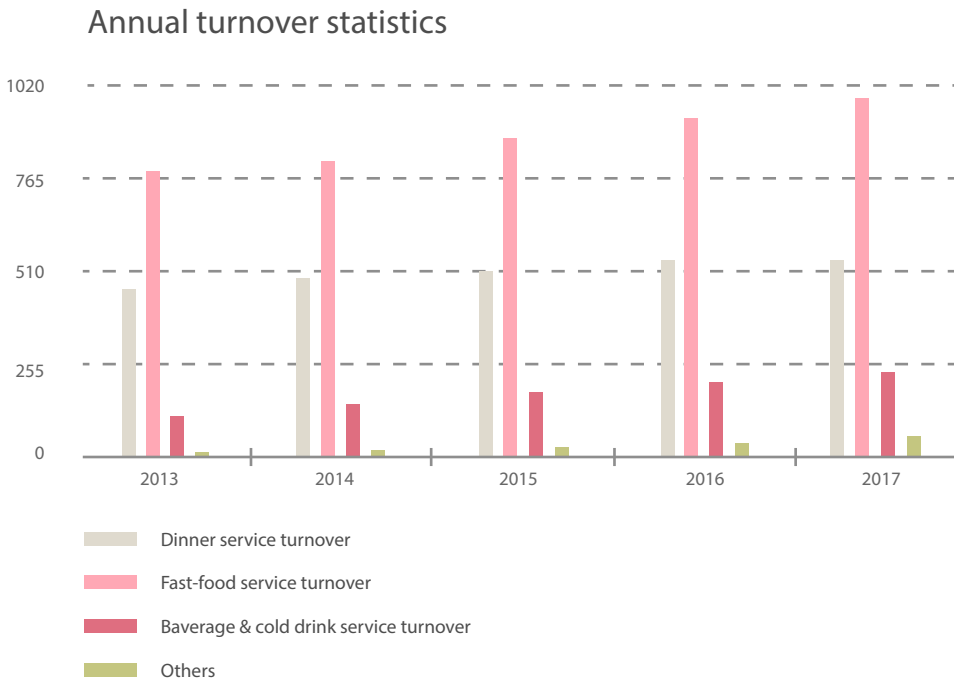
In the past 40 years of reform and opening up, with the rapid development of China's economy and society and the significant enhancement of comprehensive national strength, China's residents' income has risen steadily, consumption levels have increased substantially, and residents' consumption levels and consumption structure have improved significantly. Urban and rural residents began to lean from basic consumption and to development and enjoyment consumption.

In 2011-2017, the per capita disposable income of urban residents increased from 6,284 yuan to 36,396 yuan, with an average annual increase of 8.5%; per capita consumption expenditure increased from 5,350 yuan to 24,445 yuan. The average annual growth rate is 7.4%.

BACKGROUND

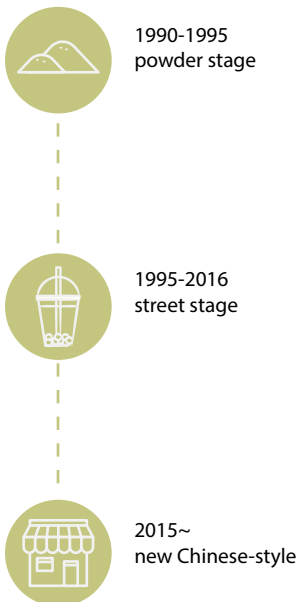
Consumption on food

According to statistics, from 2014 to 2017, the turnover of the catering industry has increased year by year, among which the growth rate of the beverage and fast food service industries is relatively large, and the beverages still occupy a large share in fast food such as take-out, which shows that people are getting more and more Love light food.



BACKGROUND

Development of milk tea



Since 1990, the Chinese milk tea industry has developed via three stages: the powder stage, the street stage and the new Chinese tea stage. In the powder stage, the milk tea is presented in the form of a powder, and at this time, the milk tea contains neither milk or tea. Development to the street stage, milk tea used tea residue as the base, supplemented with fresh milk, and the industry began to develop at a high speed. So far, the new Chinese-style tea has risen, and the milk tea industry has gradually become more formalized and high-end.

According to the data, the number of existing beverage stores in China has exceeded 450,000 in 2018. At the same time, the demand for new Chinese-style tea market has further expanded. In 2018, the size of China's new Chinese-style tea market exceeded 90 billion yuan.

BACKGROUND

New Chinese-style tea culture

The rapid development of light food drinks has greatly enriched people's lives and at the same time gradually exposed some problems. From the beginning of the tea powder that has no nutritional value to some street milk teas nowadays, many merchants choose to use milk saccharin instead of pure milk in order to maximize the interests. Although such milk tea is inexpensive, it also has an adverse effect on human health. As a result, more and more young people will choose a higher-end milk tea brand in pursuit of a healthier lifestyle, which is the new Chinese tea that is currently developing. These types of merchants usually have more elegant storefront decoration, more refined product packaging and higher prices. The fashion-conscious young people's enthusiasm for this type of tea is also evident: In the first month after the opening of a tea shop in February 2017, it created a record of "buy 1 cup for 7 hours" and there are scalpers who sold the number or spot.

Regardless of the cost performance and nutritional value, according to the current sales situation of milk tea, the waste caused by the packaging is also immeasurable.

BACKGROUND

Home-made milk tea?

Based on the above background and basic research, I think that in order to meet the needs of users for healthy and refined life, homemade milk tea is a good choice - providing a slow process of making milk tea while ensuring healthy ingredients, which is a veritable new expression of Chinese traditional tea culture in the young age.

RESEARCH SCOPE & METHODS

My main research is divided into two part.

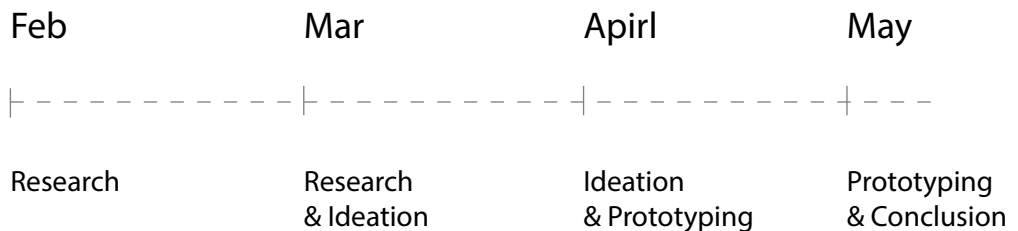
The first part is quantitative research, through statistical data to understand the development of the market and some existing problems.

The second part is qualitative research, mainly through the literature review and survey to determine the characteristics of the consumer group.



AIM & TIMELINE

For the time being, there is no special tool for making milk tea at home. People generally use a variety of props, such as mineral water bottles. The most important issue is to have a set of tools to make milk tea at home, specially a tool to make milk foam--a kind of favorite topping of young people.





Process

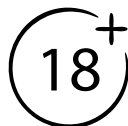
Research

Market Analysis



Population in China

1.38 billion



Age between 15-45

56.71%



Urbanization Rate

57.35%



Annual Average Purchase

14.3 cups



Average Unit Price

15.2 yuan



Drinks, as a light meal, without a fixed dining scene, can naturally be integrated into a variety of entertainment activities: to provide small breaks during shopping, to become a companion for sightseeing, to provide energy supplements during the working hours.

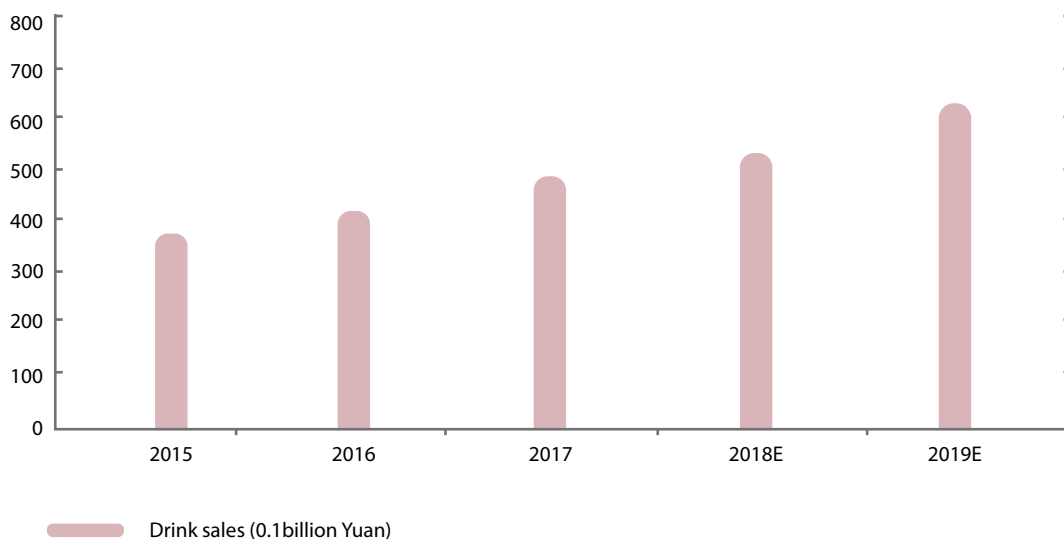
$$\text{Person} \times \text{18+} \times \text{Urbanization} \times \text{Purchase} \times \text{Price} = 97.8 \text{ billion}$$

There is no authoritative statement about China's current beverage industry, but we can make a rough estimate through some related data: according to the sampling statistics of consumers aged 15 to 45 in 25 cities in China, it can be assumed that the market size of ready-made drinks close to 100 billion yuan.

Research

Market Analysis

National beverage sales and forecasts

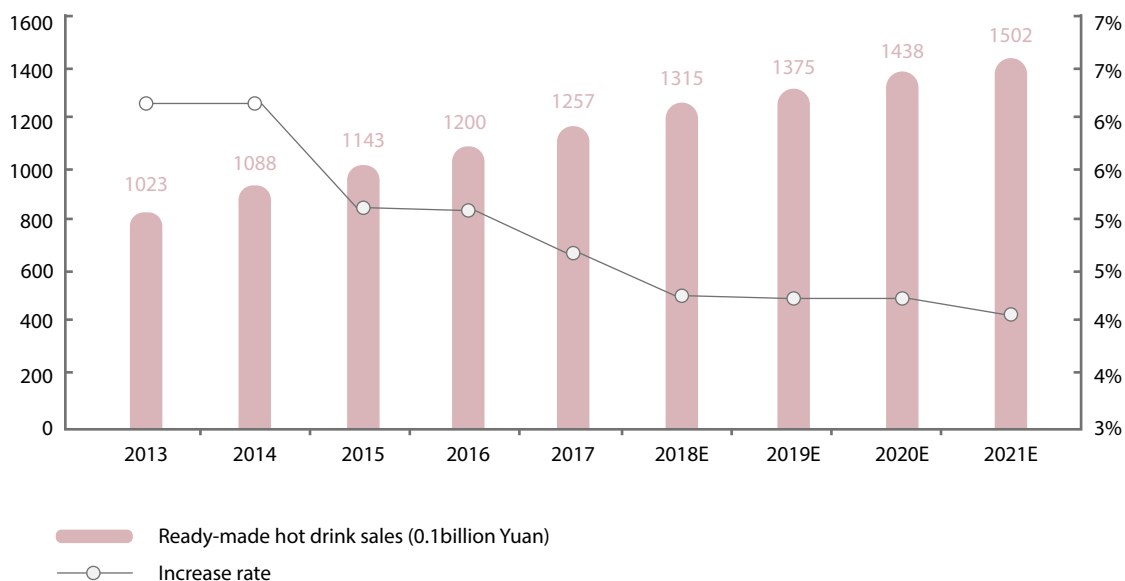


In 2017, the sales of beverage in various stores (sweet shops, various types of water bars, traditional tea shops, traditional tea houses, new Chinese teas, etc., excluding coffee shops) reached to 47.2 billion yuan, a year-on-year increase reached 14.29%. It is expected that in 2019 the sales of integrated beverages be to exceed 60 billion yuan. According to projections, the potential market for “new Chinese tea” is around 400-500 billion yuan.

Research

Market Analysis

Year-on-year growth chart
of ready-made hot drinks sales

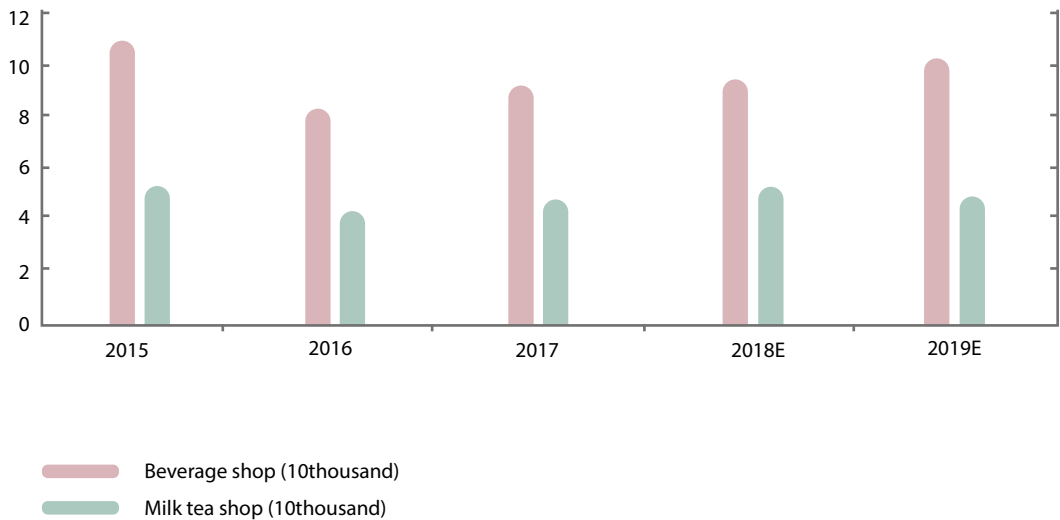


Recently, with the upgrade of consumption, young people have a passion for the brewing drinks, and the sales of those beverage increase steadily. According to forecasts, the market for brewing hot drinks is expected to reach more than 140 billion yuan in 2021, with a compound annual growth rate of 9.8% in 2016-2021. Among them, the sales of other beverage stores reached 78 billion yuan, with a compound annual growth rate of 13.5% in 2016-2021.

Research

Market Analysis

Number of new stores in China's milk tea and beverage in 2016-2018



In recent years, the scale of the milk tea industry has expanded rapidly, and the store has continued to increase. The competition in the industry has become increasingly fierce. Since 2016, the nationwide milk tea and juice line stores have been expanding at a high level. In the first half of 2018, there were 100,000 beverage stores in the country, and 45,000 in the tea juice store.

Research

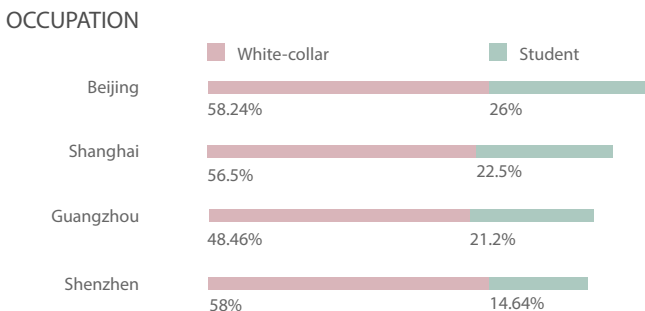
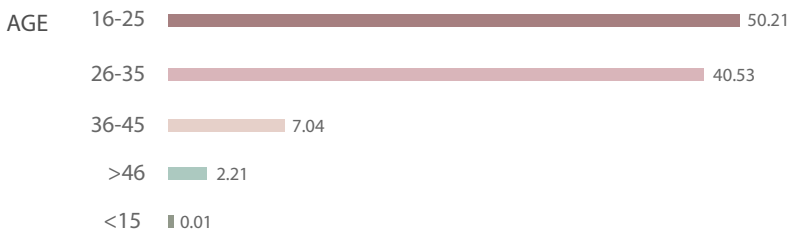
Target group

Composition

In the user research section, I selected the sales of the two most representative milk tea brands in China in four first-tier cities, and analyzed the three aspects of user composition, user characteristics and consumption characteristics.

There are more female fans, and the proportion of young people is over 90%.

The main occupational composition of consumers in the four cities is not much different. Young white-collar workers are a label for consumers, and students also have a certain proportion.

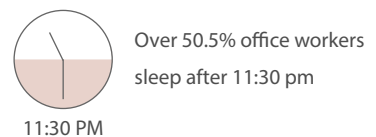
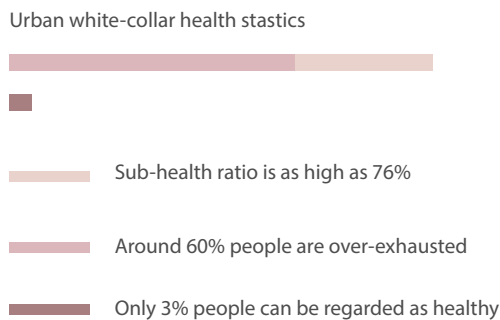
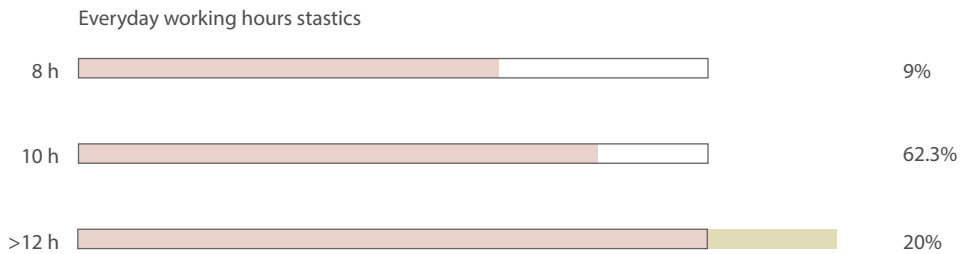


Research

Target group

Pressure of modern life in city

Office workers may be the most tired group in China, from 9:00 am to 9:00 pm, 6 days a week) to 7:16 (16 hours a day, 7 days a week), the work system constantly refreshes the exhaustion of humans. According to a survey conducted by the Chinese Academy of Social Sciences, the average leisure time per day for Chinese in 2017 is only 2.27 hours. In comparison, the leisure time of the United States, Germany and other countries is about 5 hours per day, more than twice that of the Chinese.



Research

Target group

Pressure of modern life in city

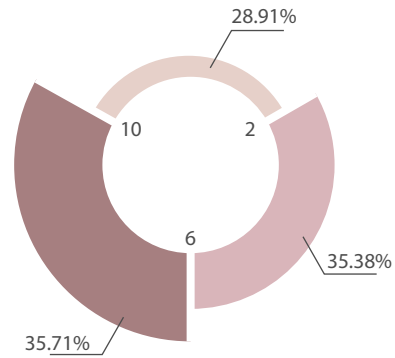
Besides, according to statistics, the prevalence of depression in China is 6.1%, and the incidence rate has increased year by year in recent years. The causes of the above phenomena are different, but combined with the social reality of 996 work system, high housing prices, low fertility rate, etc., it is not difficult to be reminiscent of the pressure faced by young people. The reality shows that Chinese society is also entering an era of pressure on young people.

Huge pressure on life makes it more and more difficult for contemporary young people to experience great happiness. Therefore, Japan's "small fortune", the "hygge" of Denmark and the "lagom" of Sweden have gradually been promoted and pursued by the younger generation.

More and more young people enjoy the time tasting milk tea with friend, just like the "Fika time" in Sweden.

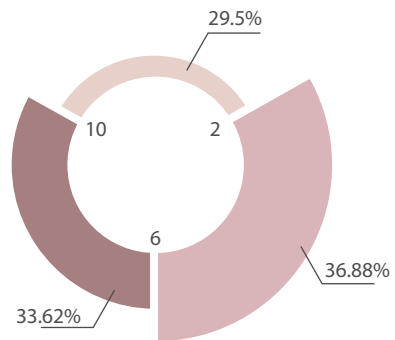


- WEEKDAYS
Shanghai



- WEEKEND
Shanghai

- 10:00-14:00
- 14:00-18:00
- 18:00-22:00



Represented by a city, this table counts passenger traffic from 10 am to 10 pm on weekdays and weekends. The conclusion that can be reached is there are more customers who enjoy a cup of milk tea after lunch, whether on weekdays or weekends. In contrast, more people choose to spend the afternoon in the tea shop on weekends.

Research
percentage of
passenger traffic
in different periods



Research

Food Safety Issue

In August 2017, the Shanghai Consumer Protection Committee issued a "milk tea comparison test" briefing, and the "assessed" tea shop included many brands that consumers often drink.

In this test, a total of 51 samples of milk tea were purchased in 27 tea shops in Shanghai. The selection rule was mainly to inquire and purchase the best-selling milk tea in each store, including a normal sweetness. And a sugar-free or least sugar-free tea with no ice.

Among the 51 samples, there were 6 pieces of milk topping and 45 pieces without; 27 pieces of normal sweetness, 4 pieces of less sugar / low sugar / sugar removal, and 20 pieces of "sugar-free" declared; prices range from 7 yuan to 32 yuan, and basically cover the best-selling products of the mainstream dairy tea brands on the market.

The testers commissioned the Shanghai Nutritional Food Quality Inspection Station to test the sugar, fat, trans fat and caffeine in the milk tea.

Research

Food Safty Issue

Coffeine

The test found that the caffeine content of 51 samples averaged 270mg / L, the highest reached 828m g / L. Among them, there are 4 samples with a caffeine content of more than 300 mg per cup, and the highest cup content is as high as 428 mg.

In terms of total content, a cup of American coffee (middle cup) has a caffeine content of 108 mg, and a can of red bull drink has a caffeine content of 50 mg. The caffeine content of some milk teas is so terrible that a brand of sugar-free handmade tea contains caffeine equivalent to 4 cups of American coffee or 8 cans of red bull

Caffeine is generally found in beverages such as coffee and tea, and the maximum amount of adult intake should not exceed 200 mg. Pregnant women and children should not be overtaken, otherwise it will cause symptoms similar to anxiety, such as palpitations, tremors, sleep disorders.

However, among the 27 tea shops, only one had a vague suggestion that "pregnant women should not drink too much", and all the other milk teas did not give any hints about the caffeine in the milk tea.

Research

Food Safty Issue

Sugar

In 27 normal sweetness milk teas, the sugar content is between 11 grams and 62 grams per cup, and the average sugar content is 34 grams per cup. This comparative trial also purchased 24 milk teas that were declared “less sugar”, “low sugar”, “de-sugar” or “no sugar”. The “no sugar” does not mean that there is no sugar. 20 samples that claim to be sugar-free have all been tested for sugar. The average sugar content is 2.4g/100ml, and the lowest is 1.2g/100ml.

However, the “Chinese Dietary Guidelines 2016” stipulates that “the daily intake of sugar does not exceed 50g, preferably under 25g”, and most of the milk tea products on the market are not up to standard. For the “sugar-free” sample, although the government has no current standard for sugar-free drinks for ready-to-serve beverage, refer to the “GB28050-2011 Prepackaged Food Nutrition Labelling General Principles”, the sugar content of sugar-free beverages should be less than or equal to 0.5g/100ml, and 20 samples are not matched.

Research

Food Safty Issue

Milk

In the protein test, 19 samples had significantly lower protein content; while in a test for trans fat, it was also shown to be significantly too high.

It is well known that excessive intake of trans fatty acids can affect health and the Chinese Dietary Guidelines recommend no more than 2 grams per day. The test found that trans fat in four samples from two different brands exceeded this standard. In this regard, the expert analysis believes that the imbalance between these two indicators indicates that the merchant may not use "real material", and the raw materials of milk may be replaced by creamer or the like.

Research

Package waste



According to the 2016 China Marine Environment Bulletin of the State Oceanic Administration, monitoring results for 45 sea areas show that 84% and 68% of the floating and beach waste in the sea are plastics, and according to the monitoring of 12 non-governmental organizations in China's 12 coastal cities (including Shanghai and Shenzhen) in 2016, four of the five kinds of garbage left on the beach are plastic waste. Among them, plastic shopping bags ranked first.

As a populous country, China's consumption and waste of plastic products is very considerable.

Take a popular milk tea brand as an example. According to online statistics, the sales volume of a single store in a mall is as high as 2,000 cups per day. While domestic first-tier cities such as Shanghai are full of more than 30 stores, the brand can sell 60,000 cups of milk tea in Shanghai in one day. Because of cost and other reasons, the plastic bags and plastic cups used in milk tea packaging are mostly non-degradable, which means that a large amount of plastic garbage is born within one day due to milk tea.



Ideation

Concept 1

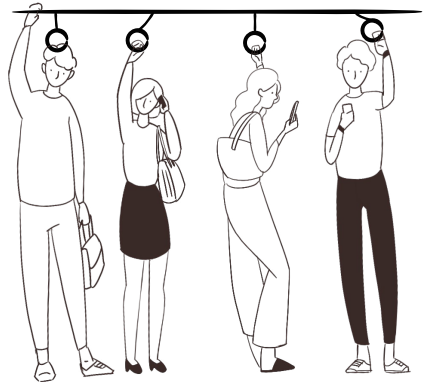
Portable cup

Based on the research above, my first idea is portable milk tea cup.

The target group for this concept are those who cannot or aren't willing to queue in a line for a cup of milk tea because of longtime commuting or busy work or late work hours, etc.

On the other hand, though the delivery industry is very mature in China, the milk foam might melt into the milk tea just like ice cream when it arrived.

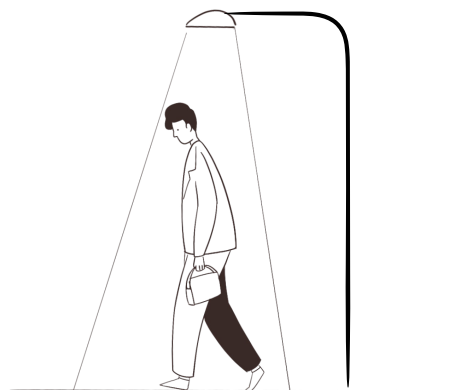
A portable milk tea cup might meet their demands.



7:00 AM



12:00 PM



23:00 PM

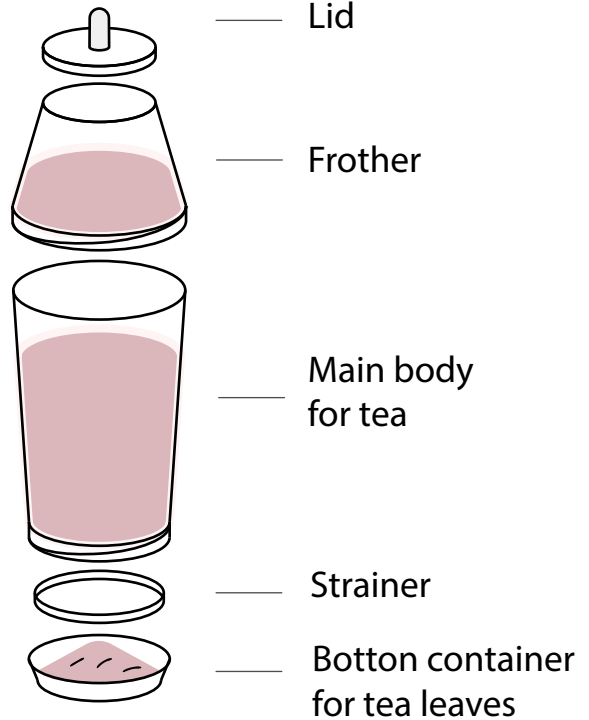
Concept 1

Portable cup

Details

This portable tea cup consists of two parts, the upper part is for the milk foam and the lower part is for the milk tea. The upper and lower parts are not connected to each other.

In the lower part, the bottom of the cup can be removed. It is a small-capacity vessel, separated from the main body of the cup by a strainer, and it is convenient to clean the cup while drinking tea.



cream
+
sugar

hot tea
+
milk

tea leaves



Step1

prepare the ingredients



Step2

shack it!



Step3

pour the milk foam into the tea and enjoy it

Concept 2

“Fika Set”

After investigating my target group deeper, I have the 2nd idea.

The transformation in the Chinese milk tea market illustrates the change in the mentality of Chinese young people. Milk tea is no longer a street food that only solves thirst. It begins to develop like a new Chinese tea and becomes a representative of a slow life feeling. Like "Small fortunate", in the night, made a cup of milk tea for yourself, and the tiny happiness was magnified.

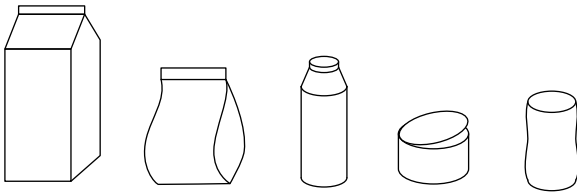
Therefore, targeting the Chinese market and target audiences represented by the younger generation in China, concept 2 opposes “fast food milk tea” and I decided to make it into a tea set, which is a combination of making tea and tasting tea, suitable for friends gathering or relaxing alone.

Concept 2

“Fika Set”

After comparing various milk tea formulas online, I summed up a recipe that the most common and easy to use.

INGREDIENTS

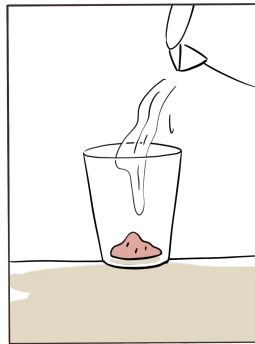


MILK
TEA
WHIPPING
CREAM
CONDENSED
MILK
SALT

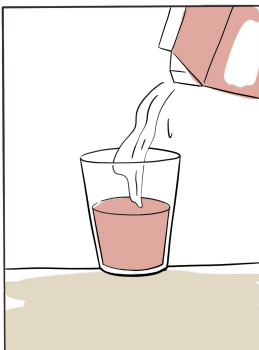
HOW TO DO



Step1
shake milk foam



Step2
brewing tea



Step3
add milk



Step4
add milk foam

ENJOY!

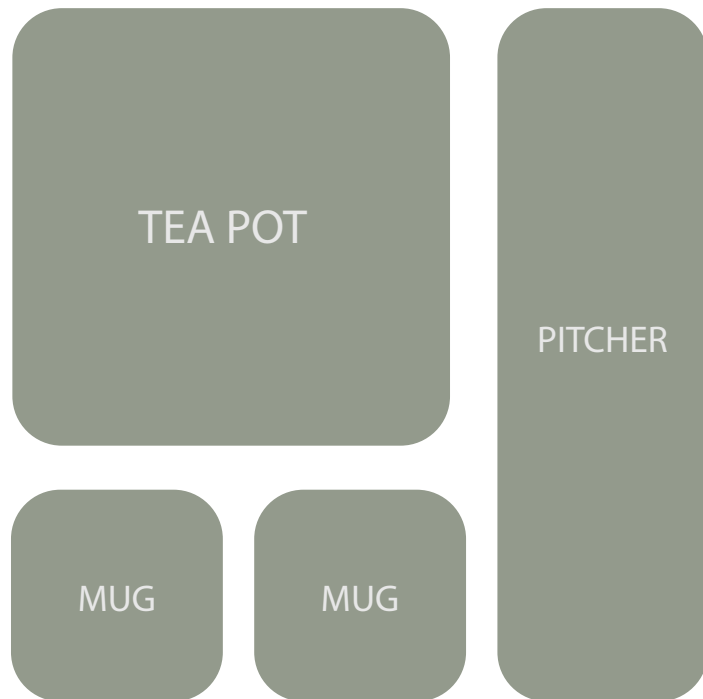
Concept Comparison

Both concept1 and concept2 are able to adapt contemporary milk tea environment. The difference is concept1 serves the group of fast-paced work and life, while concept2 applies more casual occasions. Based on the analysis of the transformation of milk tea in Chinese market and the booming new Chinese tea culture, I choose the 2nd one as my concept.

Besides, in terms of production cost, because of the portability, concept 1 is more costly and difficult to produce taking issues such as sealing and lightness into account.

Referring to traditional tea set and milk tea recipe, I confirmed the composition of my milk tea set.

Concept 2 “Fika Set”



Combining the Chinese traditional tea set, I designed the concept 2 as 4-pieces set. They are tea pot, pitcher and mug \times 2 .

The set of tools is suitable for 1-3 people, and the usage time is more than 20 minutes. They can be used for friends gathering or relaxing alone.

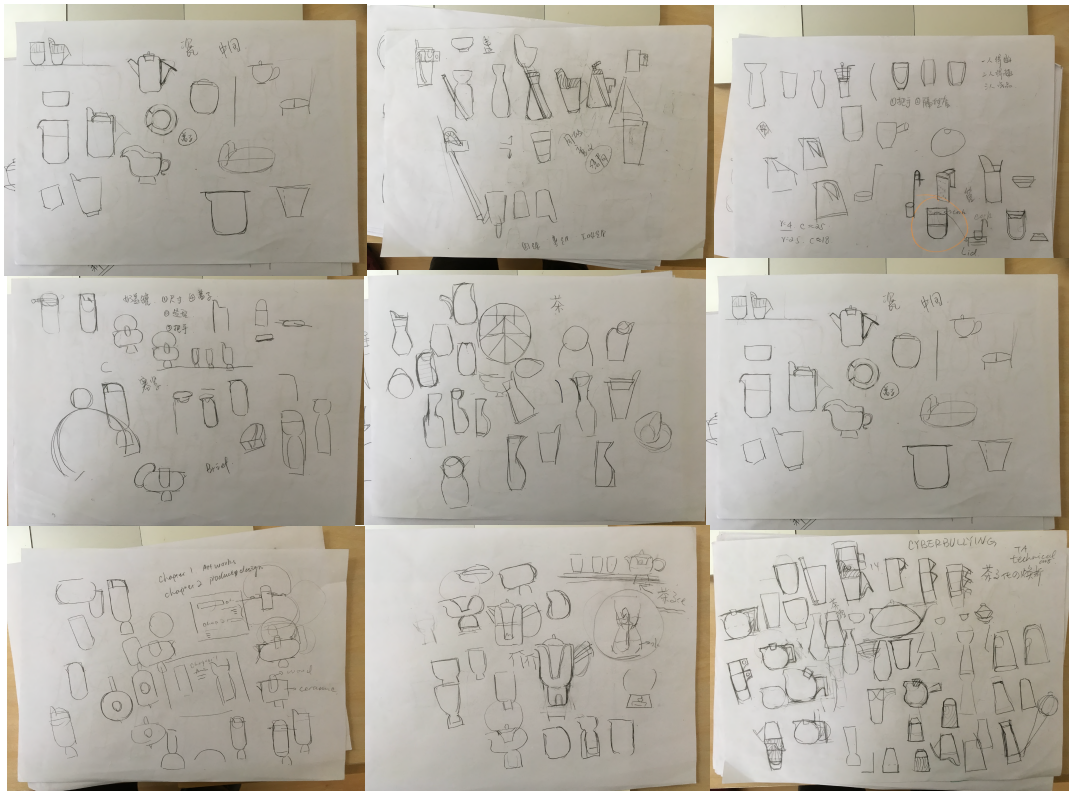
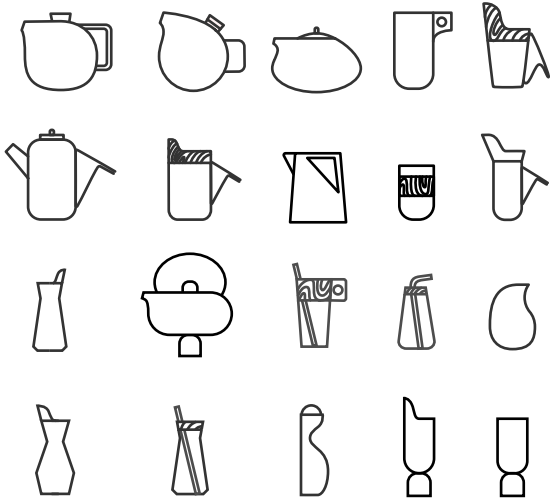
Ideation

Based on the above background and basic research, I think that in order to meet the needs of users for healthy and refined life, homemade milk tea is a good choice - providing a slow process of making milk tea while ensuring healthy ingredients, which is a veritable new expression of Chinese traditional tea culture in the young age.

Ideation reference

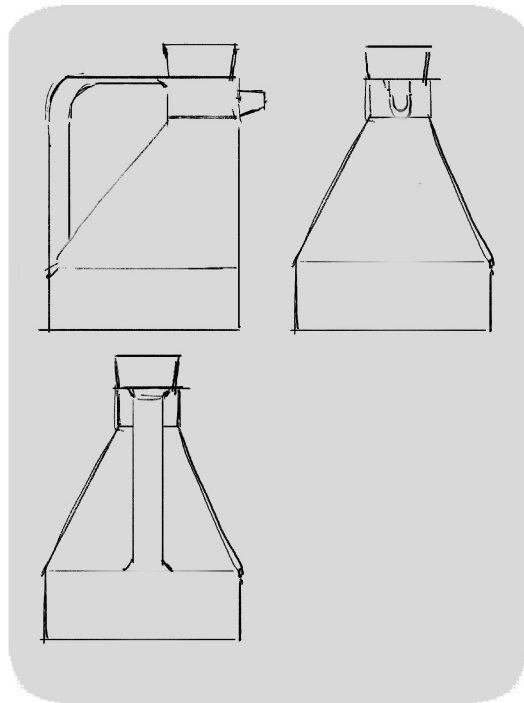
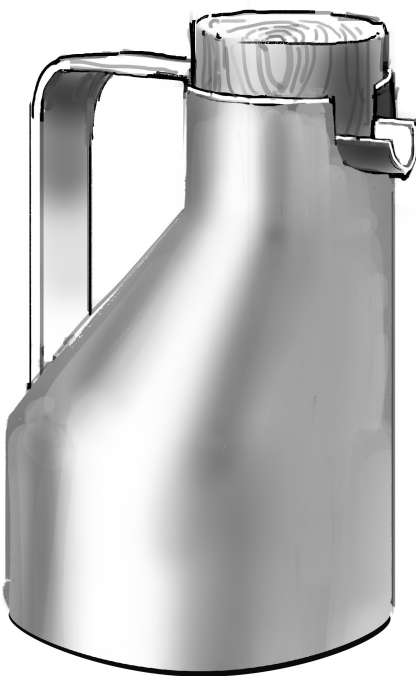


Sketch various shapes



Sketch final choice

Pitcher

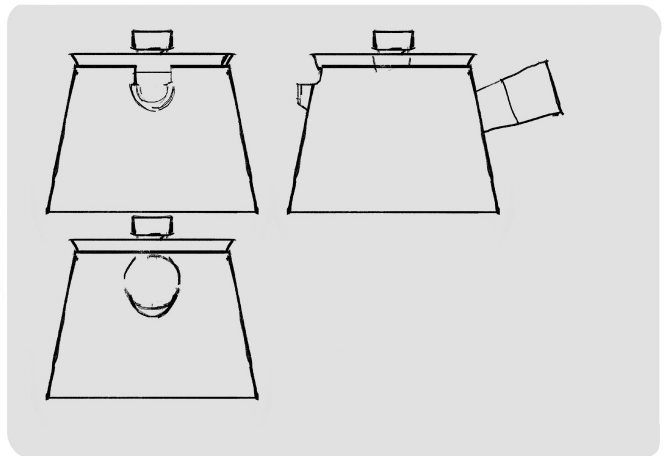


Basically, it takes 5-6 minutes to make frother for one person by hands.

Therefore, the design requirements of the milk pitcher are "light, easy to grasp, and can be operated with one hand".

Sketch final choice

Tea pot



At the same time, based on the Chinese cultural background, I prefer a more traditional style of the teapot. Tasting milk tea with a traditional tea set is also an interesting result of the collision between the old culture and the new era.



Physical prototype

Physical prototype



After the idea was over, I started working on the model. With the help of the workshop teacher, I went through a 4-month production process.

Physical prototype



Starting from the first 3D model, to 3D printing, lime molds, blanks, firing, and glazing, I realized my idea step by step. Except for the matte glaze - I tried a lot but there is no way to buy it - the rest is what I expected exactly.

Physical prototype



Conclusion

As China has entered a new era, traditional Chinese cultural symbols have also had their own "evolution". Through this project, I seem to see a process of transformation, the older generation guards the tradition, and the young people innovate the tradition. This is the vitality of a new generation of China and a new generation of society.

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Thank you!

