

An Innovative Business Model of Chinese Herbal Medicine in Handmade Tea Beverage Market in China

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ABSTRACT

This study aims to start up an innovative business model of handmade beverage market based on Chinese herbal medicine in China. This follows the Chinese ancient 24 solar terms to create a series of herbal beverages to meet the healthy need, of which any of the 24 solar terms in traditional Chinese lunar calendar is perceived to match a particular natural phenomenon. This business owns plenty of experiences in the manufacturing of herbal medicine and also the distinguished service system in Taiwan. As new business model in the beginning, it shapes high quality images of healthy and environmental concern in China. The core value proposition about “living with nature” in this business model may lead a new trend of the handmade beverage market in China and then worldwide in the future.

Keywords: Business model, Chinese herbal medicine, Handmade tea beverage market, 24 solar terms

1. INTRODUCTION

Kosuke [1] proposed that consumer in China become more health-conscious these years. While sales of sweets and ice cream fell more than 11% in 2015, the sales of yogurt jumped 20.6% and those for functional beverages were up 6%. Companies need to consider this trend, as well as their own strengths in developing products that meet market needs.

Among the functional beverages, Chinese medicine and tea plays an important role of healthy image among Chinese people. The market of traditional Chinese medicine is rapidly developing. According to the survey conducted by Helmut Kaiser Consultancy [2] in 2010, it increased 24%. The net yield and profits of traditional Chinese medicine production is much higher than the average for the country's medical industry. The total traditional Chinese medicine market in China will rise to EUR 96.2 billion in 2025. In many western countries, traditional Chinese medicine herbals are sold as nutrition and those are successful and legal. China is the country which is rich in medicinal resources with more than 6,500 Chinese herbs determined. Since the Chinese medicine cannot be sold except by doctor and pharmacist in China, this herbal medicine is called both medicine and food, so it can be sold by anyone. Herbalism has a long tradition of its use outside of conventional medicine. It is becoming more main stream as improvements in analysis and quality control along with advances in clinical research show the value of herbal medicine in treating and preventing diseases [3].

On the other hand, tea is also another most popular beverage both in China and worldwide. Tea is said to have originated in Southwest China as a medicinal drink. China is the world's largest tea producer. According to the study among

tea industry in China [4], the global tea production amounted to approximately 5.2 million metric tons in 2015 and the global tea beverage market is estimated to be worth around 73.1 billion U.S. dollars in 2024. Chinese people consumed approximately 626 thousand metric tons of tea in 2015, around nine times more than coffee. As people become increasingly aware of tea benefits to health and are willing to pay more for a better quality tea, Chinese tea retail sales value, production, and consumption are forecasted to grow in the next few years.

As the Chinese herbal medicine and tea market flourishes, this paper proposes an innovative business model for tea in China that combines Chinese herbal medicines in order to guide consumers to implement the concept of long-term health and wellness of Chinese herbal medicine in daily tea. In combination with China's 24 solar-terms concept, different beverages will be launched in different seasons. This study is conducted in China as a demonstration field which will provide a feasible reference for the globalization of Chinese herbal beverages.

2. LITERATURE REVIEW

2.1. Chinese Herbal Medicine Market Analysis

Herbal medicine market is such a rapid developing industry in the world. Over the next five years, the herbal medicine market will register a 6.9% CAGR (Compound Average Growth Rate) and in terms of revenue, the global market will reach US\$ 180 billion by 2024, from US\$ 120 billion in 2019. In consumer market, Europe and Asia Pacific are the mainly consumption regions due to the bigger demand of downstream applications. In 2017, these two regions occupied 72.36% of the global consumption volume in total [5].

2.2. Handmade Tea Beverage Market

Li [6] pointed that new Chinese-style tea drinks use high quality ingredients to introduce premiumisation to the tea drinks category, and by this way, has attracted much attention in recent years making headlines all over the world as well as flooding social media channels.

Championed by Heytea and Nayuki in China, the new Chinese-style tea drink appeals to young consumers along with the introduction of new flavours, on top of using high quality ingredients. It's a far cry from the traditional tea drink, originating from street milk tea which relied on low quality ingredients and artificial flavourings. In response to the premiumisation trend, which sees Chinese consumers on the lookout for better quality and healthier products, a new style of tea beverage is emerging. Premium tea, fresh milk and fresh fruits are being used, creating the impression of being trendy and premium. The retail price has doubled or even tripled the traditional milk tea price, coming at around RMB 20-30 per drink. The market is growing quickly and being backed by investors.

The total sold of the Chinese beverage market in 2015 was RMB 673.4 billion, and the compound annual growth rate was 12.6% during 2011-2015 [7]. The sales of fruit and vegetable juice account for the largest proportion of beverages sold in China, in which it accounts for 23.8% of the market share, and also indicates a compound annual growth rate of 13.2% during 2011-2015. In comparison, the annual growth rate of China's carbonated beverages in 2011-2015 was only 4.6%, while the market share in the beverage industry has dropped from 17.5% in 2011 to 13.0% in 2015 [7]. The market demand for beverages will continue to increase as China's overall economy develops. In 2017, the market size of China's beverage industry has grown to RMB 829 billion.

Similar to the industrial trend of the snack food market, the demand for fruit and vegetable-juice beverages and vegetable-protein and milk-containing beverages is expected to continue to grow at a compound annual growth rate of 14.0%-14.2% respectively in 2016-2020 due to being more health-conscious. Carbonated beverages will grow at a low compound annual growth rate about 6.0% from 2016-2020 due to it is considered not so healthy.

2.3. China's Consumption Trends

Consumer trends in China are changing rapidly and shaped by a unique combination of the old and the new traditions and lifestyle, due to the growing middle-class and rapid progress in technology. Chinese consumers are seeking out ways to enhance their lives, one of the means is improving their food experiences. One of the major trends is the healthier the better, that will play-out in the food and drink market during the coming year. The consumption upgrade in China is shown by the growing pursuit for health, food safety and premium products. Safety and healthiness are the two most important factors that influence the consumer purchasing decisions. As the urbanization continues in China, the price is no longer as important as the quality and healthiness. The middle-class population is growing, the

quality of life is improving, and young people are becoming the major consumers. Therefore, food professionals should seize this opportunity to adjust their marketing strategy according to this trend [8].

2.4. Five Elements Theory and 24 Solar Terms

The five-element theory assumes that the universe is composed of five elements including metal, wood, water, fire and earth. These elements, when acting individually, possess traits to boost up or tone down another certain element. Everything flourishes as long as they're in harmony, while the excessive breedings will lead to disproportion (or imbalance). Therefore, moderate restraint is needed.

The 24 solar terms, based on the sun's position in the zodiac, were created by farmers in ancient China to guide the agricultural affairs and farming activities. The 24 solar terms reflect the changes in climate, natural phenomena, agricultural production, and other aspects of human life, including clothing, food, housing, and transportation. The 24 solar-terms play important roles and have greatly influenced people's basic needs in life, and they still have important functions nowadays.

The terms consist of 12 pairs of major (sectional) and minor (middle) solar terms interlaced with each other, namely the 24 solar terms that embody a complete circle of the sun and divide the circle into 24 segments, with each segment being about half a month long. Along with the lunar and solar calendars, the Gregorian calendar date of each solar-term is basically fixed, with minor differences of within one or two days.

2.5. Innovative Business Model

Zott et al. [9] proposed that the terminology of business model was first appeared in 1957, and in the late 1990s, many scholars continued to evaluate the advantages and disadvantages of business model during the emerging internet business. Many scholars also have many definitions of business models, and the most representative of which is defined as "business model generation".

Ostrwalder & Pigneur [10] regarded business model as the way to describe how an organization creates value, delivers it to customers, and makes money from it. Their book describes the business model of the company with nine components. It has also become the main reference for academic and practical applications in recent years. Those nine components are: value proposition, target customer segments, channels, customer relationships, key partners, key activities, key resources, cost structure, and revenue streams.

3. RESEARCH METHOD

This research is a case study of a single enterprise. Entrepreneurship is a multi-faceted, cross-disciplinary and highly dynamic topic, so qualitative research methods are adopted. Its function is to help researchers to understand the research case including the socio-economic environment,

viewpoints and history [11]. The case study method is an empirical research method, which is an experience-based survey method that studies the current social phenomena and real life in-depth [12]. The case study method is also a research strategy that focuses attention on various changes that may occur in a single environment and is essentially an exploratory study [13].

This study mainly explored the Chinese herbal medicine beverage industry through in-depth and meticulous analysis, and come down with the application results of actual investment and entrepreneurship. The research object used a typical and single case as the material to display the innovative business model scenarios and development process in a complete way to understand and discuss strategies and problems. Therefore, this study will use the "case study method" to conduct the research.

4. INNOVATIVE BUSINESS MODEL

Osterwalder & Pigneur [10] proposed that business model is the way to describe how an organization creates value, delivers it to customers, and get profit from it. The company used in this study is the first case of a beverage business that uses the Chinese herbal medicine as a raw material to implement the 24 solar terms of health concept in daily life. Only the corresponding beverages are sold in different solar terms, and they are not oriented to cater to the needs of consumers, forcing and educating consumers to properly maintain healthy drinks.

In this entrepreneurial case, "solar term herbs" is the brand name, with 24 solar-term functional beverages as the main product in order to promote the concept of living along with it. The concept of homologous Chinese herbal medicine is truly implemented in life. With the solar tea drinking gives people the *yin* and *yang* of sky and earth, and the consistent five-elements of health care is conveyed to the consumers, and it is important to balance the body and mind, giving the public the most natural and pure natural herbal drink. Table 1 shows the business model analysis architecture of this study.

Table 1 The business model analysis architecture

Key partners (KP)	Key activities (KA)	Value proposition (VP)	Customer relationship (CR)	Customer segments (CS)
Good manufacturing practice (GMP) of Chinese herbal medicine processing brewing manufacturer	Innovative product development Operational service system	Provide daily herbal health drinks according to seasonality	Personal face-to-face service Online community management	Females and aged 25-40 and the early stage
	Key resources (KR) 30 years of production and quality control experience of Chinese herbal medicine		Channels (CH) Physical store Online community	Family member in mid-term stage
Cost structure (CS) Direct cost - herbal tea bag Indirect costs - rent, salary and operating expenses			Revenue stream (RS) Sales revenue	

4.1. Value Proposition

Osterwalder et al. [14] indicated that the value proposition must be catered to customer pains and gains. It means that good value proposition must be pain relievers and gain creators to fit customer pains and gains. The value proposition is the most important core of an organization

and the starting point of an innovative business model. The gain creators in this entrepreneurial case are health in daily life and pains reliever is not convenient to solve the painfulness of Chinese herbal medicine.

Therefore, the value proposition of the summary of this entrepreneurial case is to provide daily living and healthy herbal teas during the 24 solar terms, and to implement the value of Chinese herbal medicines in daily life.

4.2. Customer Segments

The customer is separated from the target audience, and the early stage is a young office worker who is oriented towards the pursuit of healthy fashion. The age range is 25-40 years old, and is dominated by female ethnic groups. After the market matures, they gradually spread to their family members. According to market research, young people have an increasingly acceptable trend for brands and products that are healthy and fashionable.

4.3. Channels

The direct physical store is the main channel, and the brand value is established through the network and community management. In the first year, we opened ten directly operated stores in Hangzhou, China. Targeting street-side stores or places with high customer base. After three years, we will start franchise and distribution agents.

4.4. Customer Relationship

Customer relationships are ways of describing how you interact with customers. When this entrepreneurial case enters the market, it adopts a personalized face-to-face service to provide a corresponding healthy drink according to the customer's personal life characteristics. With Minghe ancient town, which is the birthplace of Chinese herbal medicine in China as the main field, it constructs a professional brand image of Chinese herbal medicine and therapeutic food, which creates customers' price perception and improves loyalty as well as repurchase rate. This stage is mainly to deepen the relationship with young customers, and is not eager to expand the market. After three years, the personal operation towards the customers will be extended to the overall health of the family members.

4.5. Key Partners

China's control over the sale of Chinese herbal medicines is stricter than those in many countries. We are not a physician pharmacist, so we can only sell medicines of the same category. For the sources of materials (China provinces have different medicinal plants, because the climate soils are different, so the provinces have different medicinal materials) and safety is that we have to check. Therefore, the raw materials must pass through the local GMP certification. The predecessor of the material is the agricultural product, that can be used as traditional Chinese medicine after proper technological process. The decoction piece from a factory is to supply the product after the correct

processing work, which is breaking or slicing the medicine. In addition to controlling the authentic medicinal materials, the qualified GMP factory also needs to test the pesticide residues and heavy metal content of the medicinal materials, and is responsible for the standard medicinal materials that provide safety standards.

The decoction studios also need to pack 24 different beverages into tea bags. In order to meet the requirements of standard operating procedures, the shredded thickness of each medicinal material with different contents must be made according to our standards. At present, only Lingnan Pharmaceuticals Co., Ltd. in Guangzhou is cooperating, because this certification is recognized by all provinces in China. Only a few GMP decoction factories in China are applicable to all Chinese region. Others can only provide services in their own provinces.

4.6. Key Resources

The key resources are the resource capabilities that must be possessed in order to provide customers with a good value proposition when constructing a business model. The major key resource for this case is the pharmaceutical factory that has been in operation for 30 years in Taiwan. It has a profound academic foundation for Chinese herbal medicine and has certain tolerance for the production and quality control of it. Therefore, it is enough to negotiate and even guide with key partners in China. Furthermore, Taiwan's service system and quality have reached a certain level in the world. With the host company's 30 years of experience in Chinese herbal medicine market in Taiwan, it can be an important asset for the development in China and to the world.

4.7. Key Activities

The key activities are the activities necessary to use key resources, in this case is the product development activities. Because the general Chinese herbal medicines need time-consuming of cooking in order to make each store's taste close to and maintain the health effect of the utility tea, it is necessary to develop each medicine to be properly meshed. So, the store can use the super soothing tea machine to make a compound drink within 2 minutes.

This entrepreneurial case creates the technical threshold for compound drinks and takes a considerable amount of time to adjust the taste. The long-term investment and integration of these resources has created this entrepreneurial case to have strong core values and key resources of enterprises that are not easily imitated. Another key activity of this entrepreneurial case is the continuous construction of a quality operating service system.

4.8. Cost Structure and Revenue Stream

The cost structure of this business case is mainly based on the physical store operation and this structure is divided into direct and indirect cost. The direct cost is Chinese herbal tea bags and packaging materials, which accounts for about 27% of the turnover and do not fluctuate with it. The

indirect costs are calculated on a standard store (approximately 160 square meters), and the rent, basic salary, performance bonus and operating expenses are calculated at a total of RMB 40,000. The share of this portion is related to the turnover.

As shown in Table 2, assume the average customer unit price is RMB 20. The break even point of a single physical store is about 2,700 transactions per month. If the transactions amount is 5,000 per month, then the indirect costs can be reduced to 43% and profits can reach 30%. If the transaction amount reaches 7,500 per month, then the indirect costs can be reduced to 37% and profitability can reach 35%.

Table 2 The cost structure analysis

Transactions per month	2700		5000		7500	
	RMB	percentage	RMB	percentage	RMB	percentage
Sales per month	54,000	100%	100,000	100%	150,000	100%
Direct costs	14,823	27%	27,450	27%	41,175	27%
Indirect costs	39,346	73%	42,965	43%	56,049	37%
Profit per month	-169	0%	29,585	30%	52,776	35%

5. CONCLUSION

This study provides practical entrepreneurial cases to observe and understand the innovative business model building structure. This case combines the pharmacy foundation of Chinese herbal medicine and applies it to the living Chinese tea market in order to promote health, natural and health care combined with the 24 solar terms to launch 24 different series of drinks, and only sell different types of products in different solar terms.

Applying China's natural health concept provides the healthy drinks that correspond to different organs of the body as well as to create a new healthy beverage market in China and also has the potential for internationalization. In Chinese beverage market, this has gradually turned into a healthy and high-value product, and is introduced to the market at mid-price level in order to gain a quick recognition from young female community, and strategically adjust the market at slow speed to construct a high integrity of the direct selling and franchise chain system. When the time has come, we will occupy the Chinese market with high speed and high price, and spread to the global market by using this brand value.

This is an actual operation case. It does not only list the complete operational model, but also lists the corresponding cost structure and operational strategy. It is of great reference and learning review value for developing practical applications.

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