



# The Effectiveness of Starbucks' Loyalty Program Across Different Culture (UK: Edinburgh; China: Kunming)

Jiarui Zhang<sup>1,\*</sup>, Yanlin He<sup>2</sup>

<sup>1</sup>School of Economics, University of Edinburgh, Edinburgh, EH8 9AB, United Kingdom

<sup>2</sup>Cuthbert's Society, Durham University, Durham, DH1 3LE, United Kingdom

Dinah.Zhangjiarui@outlook.com\*, ckzh85@durham.acuity

**Abstract.** This paper is invented to investigate the effectiveness of Starbucks' loyalty program across different cultures United Kingdom and China are the main research targets. Based on the literature reviews about the marketing strategy of Starbucks and its positioning in China and the United Kingdom, two hypotheses are designed to sufficiently represent this survey's objective. Hypothesis 1: Starbucks' loyalty program in China is more effective than Starbucks' loyalty program in the UK. Hypothesis 2: Consumers in China have more repurchase intentions than consumers in the UK. The survey is quantitative which is based on 6 multiple choice questions and investigated 50 people separately in two cities: Kunming (China) and Edinburgh (UK). According to the data collected and integrated the outcomes support two hypotheses. Chinese consumers have stronger purchase intentions compared to UK consumers, and the loyalty program has a better impact on the Chinese coffee market. compared to UK consumers, and the loyalty program has a better impact on the Chinese coffee market.

**Keywords:** Loyalty program, Starbucks, Survey.

## 1 Introduction

With the latest advances in information technology created, a new generation of CRM strategy tools is being offered by marketing managers. This tool has been considered and adopted by countless companies, which is the customer loyalty programme [1]. Loyalty programmes are used in a wide range of sectors such as restaurants, airlines, hotels, retail, telecoms, fashion, automotive and so on. Uncles, Dowling and Hammond proposed that customer loyalty programmes can build brand-customer relationships and maintain existing customers, in addition to increasing sales revenue within a certain product range. However, in established competitive markets, it is difficult to fundamentally change customer behaviour as a result of a loyalty programme [1] and it adds to the operating costs of the company. And in a highly competitive environment such as the restaurant industry, attracting more customers has always been the goal of restaurants. Chesnokova, Radina and Serdyuk, 2014 presented that the satisfaction of served customers with the need to increase and further maintain satisfaction is the key to the

profitability of a restaurant business [2]. The loyalty program plays a critical role in maintaining the relationship with consumers. Much of the literature on Starbucks loyalty exists online, and You in 2020 investigated Starbucks loyalty in the Chinese coffee industry and obtained the result that loyalty programmes do not play a significant role in people's choice of coffee shop. And there is literature on Starbucks' loyalty programme in the UK which states that the company brings more benefits than it gives to its customers and that loyalty programmes can help Starbucks track its customers [3]. But there is no relevant literature on Starbucks loyalty surveys. To illustrate whether the loyalty program has a sufficient impact on customers' choices and preferences it is worthwhile to examine how consumers from different countries react under such program. This paper will investigate the consumers' responses to the Starbucks Rewards program in UK and China, by conducting a questionnaire survey of the consumers in Starbucks. The purpose of this paper is to compare the survey results from UK and China, thereby finding out whether the Starbucks Reward program is more effective in China or UK. Although the effectiveness of the same loyalty program might not vary significantly between regions, different cultures and consumption patterns might influence consumers' behaviour towards the Starbucks Rewards program.

## 2 Literature Review

### 2.1 Effectiveness of Starbucks rewards program across different cultures (UK/China)

In this chapter, the Starbucks loyalty program will be discussed in the following sections, including the relationship between the repurchase rate and its “third space” concept, the use of Maslow's Hierarchy of Needs to the loyalty program, and the current loyalty program in the UK and China. At last, the hypothesis was developed based on the literature review [4].

**Loyalty program: Starbucks rewards card [5].** The rewards card is a successful marketing strategy and loyalty program for Starbucks, it boosts Starbucks's revenue by 7% in 2019 [6]. Consumers could register a Starbucks card and become a member easily. Consumers could save money on the card and use it to pay for the coffee and in the meantime collect stars when they make a purchase. They could receive a free drink when they accumulate 150 stars. There are also various grades of membership based on the number of stars the consumer has collected which means the consumer who has a higher level of membership could receive advanced benefits [7]. Starbucks always improve its reward system and make it more attractive to consumers and motivates them to become loyal customers.

**The marketing strategy of Starbucks and its Third Space concept.** Starbucks well-developed its marketing strategy based on four dimensions: segmentation, targeting, positioning, and differentiation. For segmentation, Starbucks targets their customers who have a high income or teenagers who belong to a decadent family. The positioning

and targeting strategy of Starbucks are well-known for its outstanding customer service and in-store experience which offers them a significant advantage in the coffee shop industry [3].

As Starbucks' unique positioning strategy, it thus forms an idea of "third place" which is a public place other than home or workplace for people to have a relaxing time with friends or stay alone to enjoy their own time. This idea was developed by Ray Oldenburg an urban sociologist who brought up the concept of an informal gathering place [8].

## **2.2 Theory utilized to evaluate the effectiveness of Starbucks loyalty program: Maslow's Hierarchy of Needs**

As stated in part 2.1.2, Starbucks targets their customers who have decent jobs and higher salaries and teenagers who belong to the high-income family. This concept can be adapted to Maslow's Hierarchy to do further analysis of Starbucks's loyalty program and the consumption behaviour of consumers. There are five levels of needs in Maslow's Hierarchy of Needs, which are physiological, safety, love and belonging, esteem, and self-actualization [4]. When people achieve one level they will approach to next level. Starbucks can be categorized into levels of esteem since its positioning is quite different from ordinary drinks. In level of esteem, people desire acknowledgment from others and wish to be valued by others [9]. With the special positioning of Starbucks, people might feel being a repeat customer could bring them the feeling of being valued and recognized by others. People might place Starbucks coffee as a luxury because of its strong branding strategy and brand effect. Therefore, when people stratified their psychological, safety, love, and belonging levels they move into esteem, and purchasing Starbucks could bring them the feeling of esteem [10].

## **2.3 Hypothesis development on Starbucks rewards program across different culture (UK: Edinburgh /China: Kunming)**

**Starbucks in China.** China has had a tea culture for thousands of years before the arrival of coffee. This is why Starbucks entered the Chinese market by combining Chinese food preferences and Chinese habits.

Starbucks is culturally adaptable in China. It adjusts its menu to suit Chinese tastes or invents new and appropriate recipes. Shepherd suggested in 2016 that Starbucks didn't enter the Chinese market by just shoving it down people's mouths [11]. Throats, but by using sweet drinks containing a tea base to attract Chinese consumers. Nevertheless, Starbucks has maintained his trademark culture and vibe on top of that. The brand has released products with Chinese culture like ICY DUMPLING, green tea Frappuccino, red bean muffins and mooncakes.

For every new Starbucks in China, the location has to be in the most prominent part of the premises, such as the entrance to a shopping centre, near a famous attraction, in the foyer of a skyscraper or in a business district. This is because Starbucks' market position in China is wealthy, sophisticated, and modern [12]. And the pricing is high,

using uniform pricing at branches. Li and Su's research in 2007 suggests that the purchase of luxury goods or high consumption is a way for certain Chinese people to maintain and save face owing to the strong impact of Confucianism on a collectivistic society. Over time, this has increased rather than declined in China with the development of society, with many people on low incomes also engaging in less frequent high or luxury spending. So Starbucks has positioned itself as a high-end, affluent associate. And by consuming its products, Chinese consumers can convey their identity, or the identity they wish to express, and gain the status that Starbucks represents.

Furthermore, Starbucks in China is not just a place to get your daily caffeine fix, but can also be a social space or a work area. It provides a 'third space' outside of the home and workplace and represents the value of 'active work and enjoyment of life' [13].

**Starbucks in UK.** The latest figures from Statista in 2022 show that the top three dominant coffee in the UK are Costa Coffee, Greggs and Starbucks. The figures show that Costa Coffee is also in the lead when it comes to revenue and has the highest number of shops in the UK, but Starbucks is the only non-UK company in the rankings. And Starbucks has fewer shops in all other European countries than it does in the UK.

In the UK, well-educated and wealthy people between the ages of 18-49 are their target customers, with major customer groups such as university students or professionals. In contrast to competitors such as Costa Coffee, Starbucks grows and selects its coffee beans carefully and is very selective about the preparation of its coffee, tasting it time and time again. Likewise, a purchase is equally a welcoming experience of the environment and service at Starbucks in the UK [14]. Therefore, based on the above, the researchers developed the hypotheses as follows:

**H1: Starbucks loyalty program in China has more effectiveness compare with Starbucks loyalty program in UK.**

**H2: Consumers in China have more repurchase intentions than consumers in UK.**

### 3 Methodology

In this study, quantitative is used as the main method of investigation. Quantitative research is conducted by collecting a series of quantitative numerical data and thus conducting research, quantitative information can be collected by researchers performing simple to extremely complex statistical analysis of data [15]. By using quantitative research to observe a certain phenomenon or event. Quantitative research has two methods such as surveys, experiments, collecting data through online surveys, questionnaires and so on. Surveys are chosen as the research method in this study and questionnaires are used to collect the required data.

This survey investigated how Starbucks' loyalty programme plays a different role in both China and the UK. Included in the questionnaire are six multiple choice questions, which will be distributed to 50 people in each of the two countries. The questions were divided into these six questions, firstly asking how long the member had used the gift

card, then whether the membership should increase the frequency of Starbucks purchases and choose Starbucks over other coffee brands, as well as the percentage of spend and frequency of purchase compared to other brands, and finally whether they would recommend or give the gift card to others. The survey was then followed by an open-ended question to the 20 people in the survey, with three main questions. How they felt about Starbucks drinks compared to other coffee shops, whether or not they are happy to spend a price premium on the product and what they think of the gift card. Once the data is collected, what is done is to consolidate the data, tallying each option chosen as a percentage for comparison, and the comparison will be presented in a graphical format. The graphs are then used for analysis.

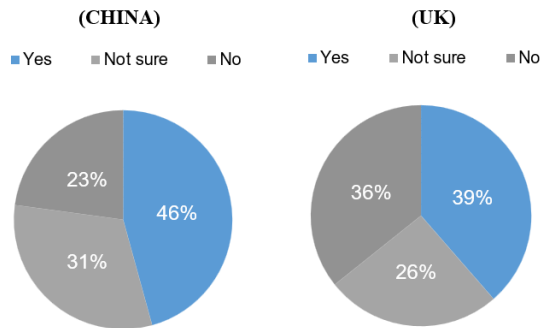
## **4 Findings and Analysis**

### **4.1 Introduction**

This chapter of the paper aimed to examine the data collected from the surveys in China (Kunming) and United Kingdom (Edinburgh), and it will be split into 4 components and will be discussed based on the survey questions in order. The first component was about how consumers react to the Starbucks loyalty program and frequency of consumption. In the second component it will discuss how consumers choose between Coffee brands. The third component will further develop the percentage of consumption of Starbucks to other brands. The last component will present a further analysis to the findings.

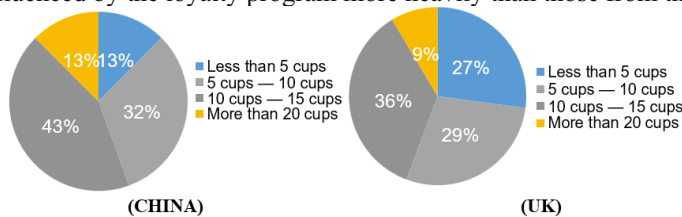
### **4.2 Reaction and behaviour of consumers to Starbucks loyalty program**

Based on this survey, in China, 45.71% of consumers stated that they have increased their frequency of buying Starbucks after they owned a Starbucks Reward Card. In comparison to the UK, only 38.57% of consumers increase their buying frequency. There is a slight difference between the two countries which indicates that only a number of consumers' purchasing behavior is influenced by this loyalty program. Nevertheless, the effectiveness is still distinct to some extent. As figure 1 presents, results from UK consumers are distributed uniformly, but results from China are more dispersed. This suggests that consumers in China are more susceptible to loyalty programmes in terms of purchase frequency. Similarly, take a close look at the percentage of the consumers who choose "No", there is an apparent difference between the UK and China. In the UK nearly 36% of consumers deny the fact that they will not increase their consumption patterns even if there is a Reward card which can give them additional benefits based on their consumption. However, as a result, in China, there are less proportion of people who choose to not increase their frequency of consuming Starbucks compared to the UK which signifies that a large population of Chinese consumers' behavior are impacted by the loyalty program. So far, only based on a single result this section is unable to state whether Starbucks' loyalty program is effective or not, but the result supports H2 that Chinese consumers have more repurchase intention than UK consumers.



**Fig. 1.** Have you increased your frequency of buying Starbucks coffee after having a Reward Card? (China&UK)

**Frequency of consuming Starbucks in a month.** Investigation of the number of cups of coffee each consumer purchases in a month can be used to elaborate more on the frequency of buying Starbucks from 4.2. As the investigation from figure 2 illustrates that there are 43% of consumers from China purchase 10 cups — 15 cups of Starbucks in a month and compared to the UK there are only 36%. In contrast to 10 cups — 15 cups, the consumers who purchase less than 5 cups per month, the UK takes 27% and China takes 13%. These data again helps enhance the assumption that consumer from China is influenced by the loyalty program more heavily than those from the UK.

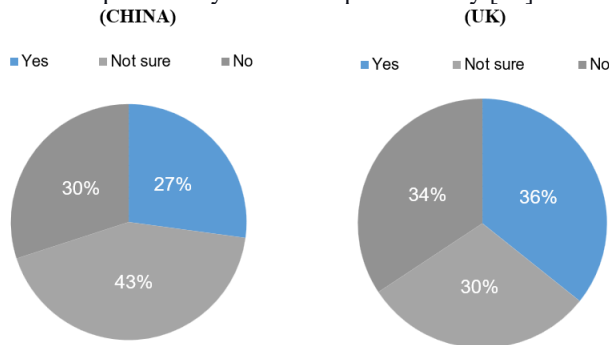


**Fig. 2.** How frequently do you purchase Starbuck in a month? (China&UK)

**4.3 Consumer choice between Starbucks and other coffee brand based on those who have Reward card**

From another perspective to illustrate the effectiveness of Starbucks loyalty program between the UK and China, the results show that only 27% of consumers in China will choose Starbucks over other brands, but in the UK there are 36% consumers. Previous survey results are showing that Chinese consumers are more loyal to Starbucks, but this section provides a slightly different result compared to others. According to the data from the Statista website that in China there are 140,902 coffee shops [16], and there are 25,486 coffee shops in the UK [17] which can be a reason that explains why there is the fewer percentage of consumers in China. Consumers in China will confront with more choices of Coffee brands such as Lucking, and they might not give up other brands because of having Starbucks Reward card. From the graph, it can be obtained that more

people in the UK would choose Starbucks over other coffee shops because of the Starbucks Reward card. 36% of people in the UK chose the 'YES' option on the questionnaire, while in China the proportion of the 'YES'. This is the only question in the survey where data from the UK is higher than that from China. However, the 'No' option was also 4% higher in the UK than in China, at 34% and 30% respectively. The remaining option is 'Not sure', which is almost half as popular in China, at 43%, whereas this figure is only 30% in the UK. One of the major factors due to this figure is that the coffee industry in China is more competitive. Starbucks has been leading the coffee industry in China. According to data, Starbucks has reached 5358 stores in China in 2021 [16]. In China, apart from Starbucks coffee, costa coffee, Pacific coffee, Lukin coffee, Manner coffee, and others also occupy a major part of the Chinese coffee market. Apart from costa coffee and others, local coffee brands in China bring a lot of competition to Starbucks. Lukin Coffee has opened more than 6,000 shops in China by 2021 [18], which has already surpassed Starbucks in terms of the number of shops and poses a significant threat to Starbucks in other areas as well. In addition, the coffee industry is very visible in Shanghai, China, which is also a strong rival for Starbucks in China. According to a report by China daily in 2021, Shanghai has more than 7,000 coffee shops for choice, compared to 3,233 in London, just 1,591 in New York and 3,826 in Tokyo [19]. In the UK, the only major competitors to Starbucks are costa coffee, Greggs and Caffè Nero, and Starbucks is the only non-UK company among them, and owns more UK shops than any other European country [20].



**Fig. 3.** Do you often choose Starbucks over other brands because of Starbucks Reward card (membership benefits)? (China&UK)

#### 4.4 Consumer's percentage of consumption of Starbucks to other brands

According to the survey, in China, there are 43% of consumers purchase 71% — 90% of their total coffee consumption from Starbucks, and in the UK there are only 36% of consumers. The survey was based on the consumers who have reward cards which demonstrate that Chinese consumers purchase more coffee from Starbucks than UK consumers. From the category of 51% — 70%, Chinese consumers take 36% and UK consumers 30% which again proves that more Chinese consumers purchase Starbucks in a month than in the UK. For 100% both UK and China have very similar results

which means not many consumers only purchase Starbucks, most of them still buy other brands. Overall, Chinese consumers purchase more Starbucks than UK consumers. Compare the result from figure 4 to figure 3, although most Chinese consumers did not choose Starbucks over other brands because of the Reward card, they still purchase most of their coffee from Starbucks. This can be explained by the assumption that in China, Starbucks coffee is ranked as their first choice, but they still purchase other coffee not only stick with one brand. Based on this outcome, it is reasonable to say that the Starbucks reward card in China works more effectively than in the UK, but it is hard to say there is a significant difference between UK and China. It is undeniable that the data collected from the survey shows that the Starbucks loyalty program works better in China, but the deviation between the two countries is not heavy.

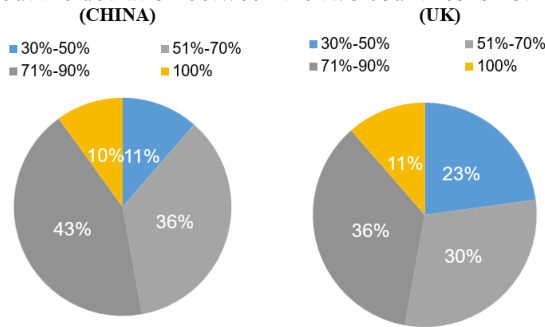


Fig. 4. Compare to other coffee brands, what is the ratio of your consumption at Starbucks? (China&UK)

4.5 Further analysis

Based on the research about the coffee history in China, coffee was first introduced by the French in the late 19th century, and until today the coffee is still in the growth stage of its product life cycle in China [21]. In 2021 Chinese coffee consumption per capita was about 9 cups [22], compared to the UK average per person per day was 2 cups [23], China which is far behind the UK. Again, this can be concluded that although average Chinese coffee consumption is less than the UK, a large proportion of the coffee is consumed at Starbucks.

5 Conclusion

The findings of this study indicate that Chinese customers are more devoted to Starbucks than British consumers. For Chinese customers, For people who want to be seen as petit-bourgeois by associating with their new status Starbucks represents the West, Starbucks is an easy method to do this. Despite being a Western enterprise, Starbucks arguably does not reflect a true Western coffee culture. It is the reason why consumers in the United Kingdom have less brand loyalty to Starbucks, because people in the United Kingdom already live in a western society and don't need an American firm to market it to them.



Starbucks had to continue to adapt to Chinese culture to remain attractive to its customers. Starbucks offers a mix of Chinese and Western coffee culture by offering special drinks and traditional Chinese food tailored to the preferences of the Chinese. Currently, consumers in China are spending money on a brand that has been 'globalised' in order to establish a closer connection with local consumers.

Some survey respondents felt that Starbucks was positioning itself as a premium brand to win consumer interest in the Chinese market. Some survey respondents felt that Starbucks was positioning itself as a premium brand to win consumer interest in the Chinese market. One participant went so far as to highlight a report in China recently that Starbucks had deliberately raised costs to increase the appeal of its products as luxury goods. Despite rising prices, Starbucks' popularity in China continues to grow. Starbucks has positioned its brand as a concept associated with luxury, and Chinese consumers continue to consume its products in an effort to gain the status that Starbucks represents.

Many Chinese people identify with and aspire to the Western way of life, and the results of this survey indicate the extent to which Western civilisation has influenced Chinese culture. Whether this could be related to nationalistic beliefs and how Chinese consumers strike this balance between Western and local culture will determine the interaction of their Western cultural influence further down the line.

## Appendix

1. How long have you been using Starbucks Reward Card/App?

- 1) less than 1 year
- 2) 1-3 years
- 3) More than 3 years

2. Have you increased your frequency of buying Starbucks coffee after having a Reward Card?

- 1) Yes
- 2) Not so sure
- 3) No

3. Do you often choose Starbucks over other brands because of Starbucks Reward card (membership benefits)?

- 1) Yes
- 2) Not so sure
- 3) No

4. Compare to other coffee brands, what is the ratio of your consumption at Starbucks?

- 1) 30% — 50%
- 2) 51% — 70%
- 3) 70% — 90%

- 4) 100%
5. How frequently do you purchase Starbuck in a month?
  - 1) Less than 5 cups
  - 2) 5 cups — 10 cups
  - 3) 10 cups — 15 cups
  - 4) More than 20 cups
6. Would you recommend your friend to register a Reward card or give them a Starbuck gift card?
  - 1) Absolutely
  - 2) So-so
  - 3) Not so sure
  - 4) No

## Reference

1. Dowling, G.R. and Uncles, M., 1997. Do customer loyalty programs really work?. *Sloan management review*, 38, pp.71-82.
2. Chesnokova, A.V., Radina, O.I. and Serdyuk, R.I., 2014. Consumer loyalty as a factor of establishing the competitive advantages in a company under the market conditions. *Asian Social Science*, 10(23), p.255.
3. Haskova, K., 2015. Starbucks marketing analysis. *CRIS-Bulletin of the Centre for Research and Interdisciplinary Study*, 1, pp.11-29 [Accessed 20 September 2022].
4. Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>.
5. Starbucks Rewards (2022). Retrieved June 16, 2022, from Starbucks Rewards.
6. Su, I., 2020. Scale success story: Starbucks Rewards program - LoyaltyLion. [online] LoyaltyLion. Available at: <<https://loyaltylion.com/uk/blog/scale-success-story-starbucks-rewards-program>> [Accessed 20 September 2022].
7. Starbucks.co.uk. 2022. Rewards | Starbucks. [online] Available at: <<https://www.starbucks.co.uk/rewards>> [Accessed 20 September 2022].
8. Pps.org. 2022. Ray Oldenburg. [online] Available at: <<https://www.pps.org/article/roldenburg>> [Accessed 20 September 2022].
9. Hopper, E., 2020. Maslow's hierarchy of needs explained. *ThoughtCo*, ThoughtCo, 24.
10. Garcia, T., 2022. Starbucks is an 'affordable luxury,' according to coffee pricing research. [online] MarketWatch. Available at: <<https://www.marketwatch.com/story/starbucks-is-an-affordable-luxury-according-to-coffee-pricing-research-11650576262>> [Accessed 20 September 2022].
11. Shepard, W., 2016. Is This The Recipe For Starbucks' Continued Success In China?. [online] Forbes. Available at: <<https://www.forbes.com/sites/wadeshepard/2016/02/06/is-this-the-recipe-for-starbucks-success-in-china/?sh=288079973f1b>> [Accessed 19 September 2022].
12. Zakkour, M., 2017. Why Starbucks Succeeded In China: A Lesson For All Retailers. [online] Forbes. Available at: <<https://www.forbes.com/sites/michaelzakkour/2017/08/24/why-starbucks-succeeded-in-china-a-lesson-for-all-retailers/?sh=3a0757e07923>> [Accessed 19 September 2022].

13. Yueyi, M., 2020. A study on brand positioning strategies of Starbucks(China). *International Journal of Business and Management Invention (IJBMI)*, Volume 9 Issue 8 Ser. V, pp.PP 39-43.
14. Starbucks Coffee Company. 2022. Coffee Quality | Starbucks Coffee Company. [online] Available at: <[https:// www.starbucks.co.id/coffee/ethical-sourcing/coffee-quality](https://www.starbucks.co.id/coffee/ethical-sourcing/coffee-quality)> [Accessed 20 September 2022].
15. Watson, R. (2015). Quantitative research. *Nursing standard: official newspaper of the Royal College of Nursing*, 29(31), 44-48. <https://doi.org/10.7748/ns.29.31.44.e8681>.
16. Agne, B., 2022. China: number of Starbucks stores | Statista. [online] Statista. Available at: <<https://www.statista.com/statistics/277795/number-of-starbucks-stores-in-china/>> [Accessed 21 June 2022].
17. Statista. 2022. UK coffee shop count 2019 | Statista. [online] Available at: <<https://www.statista.com/statistics/978010/coffee-shop-numbers-united-kingdom-uk#:~:text=In%202019%2C%20there%20were%2025%2C892,independent%20operators%20and%20non%20specialists.>>> [Accessed 21 June 2022]
18. Globaltimes.cn. 2022. Luckin Coffee surpasses Starbucks in number of outlets in China - Global Times. [online] Available at: <[https:// www.globaltimes.cn/ page/ 202203/ 1256853.shtml](https://www.globaltimes.cn/page/202203/1256853.shtml)> [Accessed 21 June 2022].
19. YI, X. (2021) Shanghai found to be city with most coffee shops in the world, *China-daily.com.cn*. Available at: [https:// www.chinadaily. com.cn /a/202103/ 30/ WS6062d885a31024ad0bab2906.html](https://www.chinadaily.com.cn/a/202103/30/WS6062d885a31024ad0bab2906.html) (Accessed: 11 September 2023).
20. Statista. 2022. Leading coffee shop chains UK 2022 | Statista. [online] Available at: <<https://www.statista.com/statistics/297863/leading-coffee-shop-chains-in-the-united-kingdom-uk-store-number/>> [Accessed 20 September 2022].
21. Duhno.com. 2022. The expansion of coffee in China. [online] Available at: <<https://www.duhno.com/blog/the-expansion-of-coffee-in-china>> [Accessed 30 June 2022].
22. Ma, Y., 2022. Topic: Coffee market in China. [online] Statista. Available at: <<https://www.statista.com/topics/7311/coffee-market-in-china/>> [Accessed 30 June 2022].
23. Roastandpost.com. 2022. Consumption Facts | Finest Quality Coffee | Roast and Post. [online] Available at: <[https:// www.roastandpost.com/coffee-encyclopedia/trivia/consumption-facts/#:~:text=Britain%20consumes% 202.8k% 20of, those% 20over% 2072%20years%202.2.>](https://www.roastandpost.com/coffee-encyclopedia/trivia/consumption-facts/#:~:text=Britain%20consumes%202.8k%20of,those%20over%2072%20years%202.2.>)> [Accessed 30 June 2022].

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

