



EE489: Seminar in Industrial Economics

**Factors Influencing Consumers Frequency of Consumption and Intention to Purchase
of Starbucks Coffee Beverages in Bangkok**

Piangprae	Lertviriyavarangkool	5904640462
Wachirawit	Sittiyarnuruk	5904640728
Ekachart	Torsuwapun	5904641726

Semester 2/2019

Faculty of Economics, Thammasat University

Introduction

Coffee shop industry is one of the food and service industries that are now in growing trend as many consumers who are coffee drinkers have developed their tastes on coffee consumption. Moreover, coffee drinkers have also changed their preferences instead of only consuming coffee, they also prefer to enjoy their time at coffee shops. Therefore, many coffee shops also pay more attention to interior designs nowadays. As Euromonitor mentions, there is an increase in the number of coffee shops operated.

In 2018, there have been 8,025 coffee shops operated in Thailand and there has been an increase in percentage up to 4.6% in 2019.¹ When looking into the coffee segment market growth, it shows that the revenue amounts to US\$2,790m in 2020 and the market is expected to expand annually by 9.4% (CAGR 2020-2025). One of the well-known and leading coffee brands in Thailand that has an obvious growth that can be observed clearly is “Starbucks”.

Starbucks is a coffee brand, founded by Jerry Baldwin, Gordon Bowker, and Zev Siegel in 1971. Firstly, Starbucks started from only one coffee shop. However, today, it has had over 31,256 stores all over the world. According to the news from Bangkok Post, due to the higher demand in Thailand, the Starbucks management team is very optimistic about the well-going growth of premium coffee demand in Thailand. The brand has aimed to double its stores up to 400 stores for the next five years as the Starbucks coffee chain has become more competitive. It feels the need for expansion to compete with higher competition.

This was stated in 2018. Murray Darling, managing director of Starbuck Coffee (Thailand) mentioned the plan that they would like to open at least 30 more stores during 2014-2018; this was the fastest rate of growth in ASEAN. Not only the information that has been posted about Starbucks Coffee, but also, in reality, we can actually see many new stores of Starbucks where have recently been established. In comparison to other coffee brands, Starbucks Coffee has expanded its branches more quickly. Due to this fast expansion, it has sparked our curiosity to find

out more information on what factors influence the coffee drinkers to consume beverages and go to certain coffee shops, especially Starbucks Coffee.

Furthermore, there is a growing trend for a 24-hour lifestyle to answer the needs of urban citizens. From the information for 24-hour lifestyle trend mentioned by Line Today, Starbucks is one of many brands that try to answer the needs of customers who like staying up or working late at night as in the present, many of new generation workers decide to be freelancers doing work as they are hired from time to time. Therefore, many people search for places to stay up late to work at night. This 24-hour lifestyle trend is called Mega-Trend—a new working lifestyle that has changed due to the change of technology together with the growth of SMEs in Thailand around 8-10%. Due to the trend and the SME business growth, they have generated the idea of ‘co-working space 24hrs’ and coffee shops that provide '24hrs sit-in services’.

Starbucks also tries to catch up with this 24-hour lifestyle trend. According to Starbucks Thailand’s Facebook page, there are 24-hour Starbucks Coffee shops in Bangkok, such as branches in Don Mueang Airport (Inter), Don Mueang Airport Inter Land 3F, Food Villa, Jas Urban Srinakarin, Little Walk Bangna, Siam Future Ekkamai, Siam Future Ratchayothin, Suvarnabhumi Airport, Suvarnabhumi Airport: ConcourseB-Airside, The JAS Wanghin, The Nine Neighborhood Center, The Paseo Park Kanchanaphisek, The Rest Area at Prachachuen, The Scene Town In Town, The Street, and Thonglor2.

In addition, based on the information, our research team feels intrigued by the change of people’s lifestyle as it affects the coffee business and influences Starbucks to adjust itself to the trend. Jitpleecheep and Hicks (2019) mentioned that thirty years ago, there were not many choices for coffee drinkers in Thailand. There were limited choices to only Kafae Boran or instant coffee. However, at present, more consumers have developed their coffee preferences to have more various choices, especially freshly brewed. Moreover, based on Yu and Fang (2009), they investigated that income range is the factor that affects the fulfillment of self-actualization. People

with high incomes are willing to pay for experiences and have higher levels of needs, vice versa. Therefore, the main goal of our research is to study whether what factors are statistically significant that have their influences on consumers' frequencies on their consumption of Starbucks brand beverages per week.

The population of the interest is coffee consumers in districts of Bangkok with a sample group of 366 respondents through google online survey. Our hypothesis for this research are: 1) The demographic determinants, except frequency of consuming beverages from the other coffee brands' beverages, all have positive correlations to the frequency of purchasing Starbucks beverages, 2) People who have ever bought other Starbucks merchandise and believe that consuming Starbucks products help improve their social images are more likely to purchase Starbucks beverages, and 3) Price negatively correlates, while the other influential factors positively correlate to the frequency of purchasing Starbucks beverages.

Literature Review

Many industries try to generate value-added for customers to become the next source of competitive advantage (Yu and Fang, 2009). To understand what customers want and need, many companies do the voice of customers. They use Pine and Gilmore's theory which is the progression of economic value to divide into four stages.

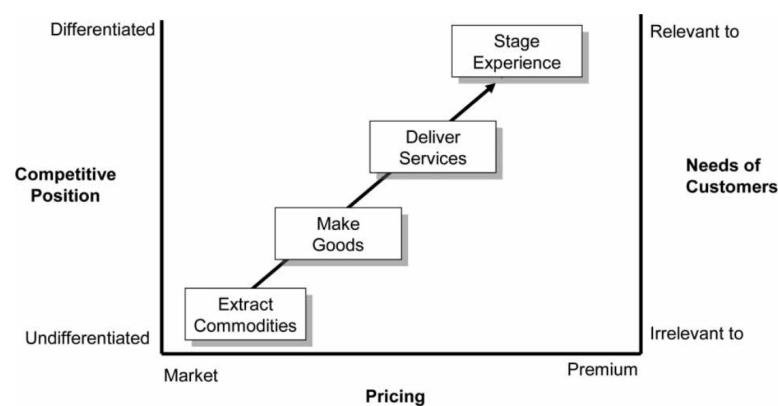


Figure 1 : Experience economy : progression of economic value
Source : Pine and Gilmore (1999)

To achieve the stage of experience, they investigated three determinants of customers' perceived value which are product quality, service satisfaction, and memorable experience. Product quality is measured by matching production specifications and customer's expectations. If the customers think that the specification of the product is enough to cover their needs, they will think this product is worthy. Service quality is the degree of customer satisfaction that they perceive by serving the service to reach their expectation. Lastly, the experiences of customers are from product quality and service satisfaction that customers judge their perception (Pine and Gilmore, 1999). So, customer's perceived value can be generated the model by using three determinants: product quality, service quality, and contextual experience.

Then, the positive feeling from the customer's perceived value will become customers' preferences. And positive customers' preferences will become the customer's intention to purchase and remind them to repurchase at the same place (Fishbein and Ajzen, 1975).

Moreover, they use Maslow's hierarchy of needs to understand a set of needs which are physiological needs, security needs, belongingness needs, esteem needs, and self-actualization needs. In this case, product quality is used for fulfilling physiological needs and security needs. Service quality is used for fulfilling belongingness and love needs and esteem needs. The customer's experience is used to fulfill self-actualization which is the highest-ranking on Maslow's hierarchy of needs model.

In Yu and Fang's (2009) paper, they set income distribution into two groups because of the assumption that customers with high incomes are willing to pay the price for an experience to satisfy the higher level of needs. Firstly, customers who have income less than US\$625 per month are a low-income group. Secondly, customers who have income higher than US\$625 per month are a high-income group.

In another paper, Suyanti Kasimin (2017), by using the decorative analysis method for the visitors' characteristic and doubled regression model on the number of visitors and profit in Banda

Aceh, Indonesia, stated that under the performances with consumers who are generally young, private company's employees and students with high education background, good interior and width of the store has significant and positive impact on the profits, while on the other hand factors of price in this analysis showed to negatively impact the profit of coffee store, which we want to investigate further in the case of Bangkok.

From Thongrawd and Rittboonchai's (2018) research of the personal characteristics and marketing mix based factors on the coffee consumers' behavior in Bangkok, they reported which factors that consumers recognize most based on the marketing 4Ps, the most important reason that consumers come to use coffee shop's service in the sample group, they also claimed to found that personal education characteristics affected the behavior of using the services at the coffee shops of consumers in Metropolitan Bangkok.

However, they were also unable to show any conclusions that show any information further analysis aside from summarized data and raw percentages from the questionnaire respondent since it was a research paper that based on marketing mix factors affecting consumers only and is what their methodology for research is solely relied on, except sample size estimation. In addition, as the writers stated themselves, the paper had some limitations which are the time and budget, some factors of each characteristic of consumers were not included in the variables such as consumers' taste of the coffee.

According to the results of Luntungan, Pangemanan, and Rumokoy (2018), from the independent sample t-test of 100 Starbucks customers in Manado, Indonesia, shows that there is no statistical significance between the gender male and female in repurchase intention based on the brand commitment and the trust in the brand.

Finally, as stated in the empirical study of space localization approach on brand attitude by Jun, Ma and Lee (2019), the effectively localized space identity creates positive space images of

stylishness, comfort, and uniqueness to the local consumers, which positively influences their space attitude and further positively affect their brand attitude.

Methodology

1. Data Collection

For this research paper, we collected data from both primary and secondary sources. The primary data collection is conducted between 29 March 2020 to 15 April 2020. through structured questionnaires with 366 respondents of the coffee shop's consumers to form the cross-sectional data via online survey service, due to the pandemic that limited our ability to conduct a paper-based survey. The respondents can be divided into approximately 71.86% female, 25.96% male, and 2.19% others. The secondary data was collected from past research papers, academic researchers, and internet sources.

The questionnaire was divided into 3 category sections based on the respondents' individual characteristics, Starbucks consumption behavior, and influential factors of consumers. First, the individual characteristics section will contain the question about consumer's personal demographic information including Bangkok district they live in, gender, age, education level, income level, and a number of beverages from coffee stores consumed per week from both Starbucks and the other brands. Next, the Starbucks consumption behavior section included the questions about whether on average, they stay inside the store to consume the beverage or order take home, if they stay in the store, how long they usually spend, what are the other coffee store brands that they consume, what brands would respondent consume if the Starbucks became unaffordable, what would be their response if Starbuck brand increases their menu price for 5 Baht and membership card usage. Finally, the influential factors of consumers are for measuring how much each individual value these factors before they make a decision to purchase the beverage from the coffee stores, influenced by the marketing 4Ps and structural equation modeling. This

survey part includes the product (taste and variety), price, place (location, space, and design), promotion, brand image, customer service, and 24-hour service.

The first and second sectors were constructed in the form of checkboxes that allow the respondents to select the options that are true to themselves.

Meanwhile, the influential factors of the consumer sector are in the form of 4 points Likert scale, ranging from the least important (0), less important (1), more important (2), and to the most important (3).

2. Sample Data

The population's sample of the questionnaire is the coffee store's consumers, aged between 13 to 75 years old who live in districts of Bangkok city. Further divided according to the respondent's preferred gender, age, education level, level of monthly income, and their historical beverages purchased from coffee stores.

3. Economic Models

In this paper, we use multiple ordered probit models to explain the results of the calculation since the dependent variable Y is the range of frequency of the Starbucks beverages, which was coded as 0, 1, 2, 3, 4 and 5 based on the amount they consume on average per week.

Ordered Probit Regression:

$$Pr(Y = j) = D_{ij}\beta_j^* + B_{ij}\gamma_j^* + F_{ij}\delta_j^* + \varepsilon_i \quad i = 1, \dots, 366, j = 0, \dots, 5$$

Where:

$Pr(Y = j)$ is the probability of consumers purchasing Starbucks beverages per week, where $j=0$ when consumers never consume Starbucks beverage, $j=1$ when consumer purchase Starbucks beverage 1-3 drinks per week, $j=2$ when consumers purchase Starbucks beverage 4-6 drinks per week, $j=3$ when consumers purchase Starbucks beverage 7-9 drinks per week, $j=4$ when

consumers purchase Starbucks beverage 10-12 drinks per week, $j=5$ when consumers purchase Starbucks beverage more than 12 drinks per week.

D_{ij} is the vector of demographic variables including gender, age groups, level of education, jobs, level of income and frequency of consumption on the other stores. Every component in these sectors are controlled as dummy variables, aside from their frequency of consumption. First, the gender variable: male is coded as 0, female is coded as 1 and the other preferred gender coded as 2. Age divided into 4 dummy variables, according to age generation including Gen Z: 13-24, Millennials: 25-39, Gen X: 40-54 and the Baby Boomer: 55-75 years old (Kasasa, 2019). In the similar fashion, the dummies of education level include lower than high school, high school and equal, undergraduate degree and equal, master degree and doctorate and above. Lastly, the income level is divided into: less than 10,000 Baht, between 10,001 to 20,000 Baht, between 20,001 to 30,000 Baht, between 30,001 to 40,000 Baht, 40,001 to 50,000 Baht and more than 50,001 Baht.

For the frequency of other brands beverage, similar to Y, categorized into 6 ranges when consumers never consume other brands beverage, when consumer purchases other brands beverage 1-3 drinks per week, 4-6 drinks per week, 7-9 drinks per week, 10-12 drinks per week and more than 12 drinks per week.

B_{ij} is the vector of Starbucks consumption behaviour including if the respondent stays in the store to consume the beverage, how long they stay in the store, if respondent has ever brought merchandises under the Starbucks brands, if respondent believes that by consuming Starbucks products, their public image will be better perceived and if respondent uses the Starbucks membership card when purchase from Starbucks.

F_{ij} is the vector of influential factors of consumers including taste, variety, price, location, space, design, promotion, brand image, customer service and 24-hour services.

The coefficient B_j^* represents the difference probability of demographic factors affecting consumer's purchase frequency. If the coefficient estimate is positive, implies that demographic factors have the higher probability of determining the customer's purchase intention, vice versa. Similarly, the coefficient γ_j^* and coefficient δ_j^* represent the different probability of Starbucks consumption behavior and influential factors of consumers affecting purchasing intention, respectively. If the coefficient estimate is positive, it implies that each category factors have a higher probability of determining the customer's purchase intention, vice versa. Finally, ε_i represents the error term in the equation.

4. Variable Definitions

Table 1: variable descriptions and type of data

Variable	Variable descriptions	Type of data
freq_buy_sb	Frequency that a respondent purchases glasses of beverages per week from Starbucks	never purchase = 0, between 1-3 = 1, between 4-6 = 2, between 7-9 = 3, between 10-12 = 4, more than 12 = 5
sex_male	If respondent is male	yes = 1, no = 0
sex_female	If respondent is female	yes = 1, no = 0
sex_others	If respondent is other	yes = 1, no = 0
four_age_dum1	If age of respondent is between 13 to 24	yes = 1, no = 0
four_age_dum2	If age of respondent is between 25 to 39	yes = 1, no = 0
four_age_dum3	If age of respondent is between 40 to 54	yes = 1, no = 0
four_age_dum4	If age of respondent is between 55 to 75	yes = 1, no = 0
edu0	Lower than highschool	yes = 1, no = 0
edu1	High school and equal	yes = 1, no = 0
edu2	Undergraduate degree and equal	yes = 1, no = 0
edu3	Master degree	yes = 1, no = 0
edu4	Doctorate and above	yes = 1, no = 0
job_student	Student	yes = 1, no = 0
job_company	Working for private company	yes = 1, no = 0
job_public	Working for government	yes = 1, no = 0
job_private	Private business	yes = 1, no = 0
job_other	Other jobs	yes = 1, no = 0
income0	Income less than 10,000 Baht	yes = 1, no = 0
income1	Income between 10,001 to 20,000 Baht	yes = 1, no = 0

income2	Income between 20,001 to 30,000 Baht	yes = 1, no = 0
income3	Income between 30,001 to 40,000 Baht	yes = 1, no = 0
income4	Income between 40,001 to 50,000 Baht	yes = 1, no = 0
income5	Income over 50,001 Baht	yes = 1, no = 0
if_otherstore	If the respondent has ever brought other brands drink	yes = 1, no = 0
freq_otherstore	Frequency that respondent purchases glass of beverage per week from other brands	never purchase = 0, between 1-3 = 1, between 4-6 = 2, between 7-9 = 3, between 10-12 = 4, more than 12 = 5
if_stay	Normally, if the respondent stay in the store to consume the beverage	yes = 1, no = 0
takehome	Normally, if the respondent order take home	yes = 1, no = 0
freq_stay	How much time respondent spends inside the store per service trip on average	less than 1 hour = 0, between 1-2 = 1, between 3-4 = 2, between 5-6 = 3, more than 6 = 4
priceup_same	Respondent would buys the same amount of beverage	yes = 1, no = 0
priceup_less	Respondent would buys less amount of beverage	yes = 1, no = 0
priceup_dontbuy	Respondent would not buys anymore	yes = 1, no = 0
if_goods	If respondent has ever brought merchandises under the Starbucks brands	yes = 1, no = 0
if_image	If respondent believes that by consuming Starbucks products, their public image will be better perceived	yes = 1, no = 0
if_used_card	If respondent uses the Starbucks membership card when purchase from Starbucks	yes = 1, no = 0
rate_taste	Taste of the coffee	0-3 influence level
rate_variety	Variety of the menu	0-3 influence level
rate_price	Price of the beverages	0-3 influence level
rate_location	Convenience of the store location	0-3 influence level
rate_space	Size of the store	0-3 influence level
rate_design	Interior design of the store	0-3 influence level
rate_promotion	Promotion	0-3 influence level
rate_brand	Brand image	0-3 influence level
rate_service	Customer services	0-3 influence level
rate_24hr	24-hour services	0-3 influence level

5. Model Specifications

Model 1

The first model consists of the dependent variable of the frequency of purchase from Starbucks and independent demographic variables, including: gender, age, education level, level of monthly income and their frequency of purchase from other coffee stores.

$$Pr(Y = j) = D_{ij}\beta_j^* + \varepsilon_i = 1, \dots, 366, j = 0, \dots, 5$$

Model 2

The second model consists of all variables from the model 1 with the addition of the respondents Starbucks consumption behavior variables includes if they order their beverages to consume inside the store or take home, their range of time spent inside the store on average, their belief on social image effect from consuming Starbucks, price sensitivity and purchase of other Starbucks merchandise and member card usage.

$$Pr(Y = j) = D_{ij}\beta_j^* + B_{ij}\gamma_j^* + \varepsilon_i = 1, \dots, 366, j = 0, \dots, 5$$

Model 3

The last model consists of all variables from model 1 and model 2, with the addition of influential factors of consumer variables, including rating of taste, variety, price, location, design, space, promotion, brand image, customer services, and 24-hour services.

$$Pr(Y = j) = D_{ij}\beta_j^* + B_{ij}\gamma_j^* + F_{ij}\delta_j^* + \varepsilon_i = 1, \dots, 366, j = 0, \dots, 5$$

Results

Table 2: Descriptive statistics of dependent variables

Variable	Obs	Mean	Std. Dev.	Min	Max
sex_male	366	0.26	0.44	0	1
sex_female	366	0.72	0.45	0	1
sex_others	366	0.02	0.15	0	1
four_age_dum1	366	0.26	0.44	0	1
four_age_dum2	366	0.32	0.47	0	1

four_age_dum3	366	0.35	0.48	0	1
four_age_dum4	366	0.07	0.26	0	1
edu0	366	0.00	0.00	0	0
edu1	366	0.07	0.26	0	1
edu2	366	0.63	0.48	0	1
edu3	366	0.29	0.45	0	1
edu4	366	0.01	0.09	0	1
job_student	366	0.23	0.42	0	1
job_company	366	0.27	0.44	0	1
job_public	366	0.25	0.43	0	1
job_private	366	0.14	0.35	0	1
job_other	366	0.12	0.32	0	1
income0	366	0.14	0.34	0	1
income1	366	0.17	0.38	0	1
income2	366	0.14	0.35	0	1
income3	366	0.12	0.33	0	1
income4	366	0.11	0.32	0	1
income5	366	0.31	0.46	0	1
freq_buy_sb	366	1.05	0.47	0	5
if_otherstore	366	0.98	0.14	0	1
freq_otherstore	366	1.55	0.85	0	5
if_stay	366	0.35	0.48	0	1
takehome	366	0.65	0.48	0	1
freq_stay	366	0.66	1.04	0	5
priceup_same	366	0.17	0.37	0	1
priceup_less	366	0.52	0.50	0	1
priceup_dontbuy	366	0.31	0.46	0	1
if_goods	366	0.57	0.50	0	1
if_image	366	0.50	0.50	0	1
if_used_card	366	0.47	0.50	0	1
rate_taste	366	2.63	0.57	0	3
rate_variety	366	1.95	0.80	0	3
rate_price	366	1.98	0.76	0	3
rate_location	366	2.10	0.81	0	3
rate_space	366	1.90	0.85	0	3
rate_design	366	1.81	0.90	0	3
rate_promotion	366	2.01	0.81	0	3
rate_brand	366	1.81	0.81	0	3
rate_service	366	2.49	0.64	0	3
rate_24hr	366	1.61	0.92	0	3

Table 2 explains the descriptive statistics of the sample group of 366 observations, which represent the mean value of each independent variable. The survey was conducted by gathering the 366 samples from the population of interest, which is coffee consumers in districts of Bangkok. The results from the survey indicated that there are 95 male respondents (25.96%), 263 female respondents (71.86%), and 8 other sex respondents. The respondents' age ranges were categorised into 4 categories as follows: 1. Generation Z: age 13-14 years old in total of 94 respondents (25.68%), 2. Millennials: age 25-39 years old in total of 118 respondents (32.24%), 3. Generation X: age 40-54 years old in total of 127 respondents (34.7%), and 4. Baby Boomer: 55-75 years old in total of 27 respondents (7.38%).

We divided education levels into 5 categories that are lower than highschool (edu0), highschool or equal (edu1), undergraduate degree and equal (edu2), master degree (edu3), and doctorate and above (edu4). The education level that has the highest response from the online survey is undergraduate degree and equal (edu2), which was answered by 231 respondents, accounted for 63.11%, followed by master degree (edu3) (28.69% or 105 respondents). For occupations, most respondents work for the companies (97 respondents or 26.5%), followed by respondents who work for government agencies (24.59% or 90 respondents), respondents who are students (22.95% or 84 respondents), respondents who have their private businesses (14.21% or 52 respondents), and respondents who work other jobs besides categories mentioned (11.75% or 43 respondents), respectively. The survey results show that for the income levels, income5 or income over 50,001 Baht has the highest number of respondents (31.42% or 115 people), followed by income1 (16.94% or 62 respondents), income2 (14.48% or 53 respondents), income0 (13.66% or 50 respondents), income3 (12.02% or 44 respondents), and income4 (11.48% or 42 respondents) (see the definitions of income0-5 in Table 1).

When we asked the question of whether the respondents consume beverages of Starbucks only or also consume other brands' beverages, the results show that 98.09% or 359 respondents

answered that they also consume other brands' beverages while 1.91% or 7 respondents answered that they only consume beverages of Starbucks. Our research team also included the rival beverage brands in question asked about choices of beverages that the respondents also consume. We included the brands such as TRUE Coffee, Amazon, Black Canyon, Coffee World, Inthanin, Chao Doi, Mazzo, Coffee Today, Coffee Club, Wake Up Coffee, Hollys Coffee, Au Bon Pain, S&P, After You, Bubble milk tea shops, and others in the questionnaire. In this question "What are other brands that the respondents also consume", the respondents could answer more than one brand. The 3 top highest chosen brands are Amazon (chosen by 286 respondents or accounted for 79.7%), followed by After You (chosen by 188 respondents or accounted for 79.7%), and others (chosen by 138 respondents out of 366 respondents or accounted for 79.7%).

For the question "What brands would you consume if Starbucks prices become unaffordable", the brand selected by most respondents was Amazon. (for further details obtained from online survey see in Appendix B)

Table 3: Descriptive analysis of dependent variables

freq_buy_sb	Freq.	Percent	Cum.
0	14	3.83	3.83
1	330	90.16	93.99
2	15	4.1	98.09
3	5	1.37	99.45
4	0	0	99.45
5	2	0.55	100
Total	366	100	

From Table 3, the summarized descriptive analysis of dependent variables, a frequency that a respondent buy glasses of beverages per week from Starbucks, shows that from the sample of 366 respondents, the majority of respondents answered that they usually purchase in between 1

to 3 glasses of beverages from Starbucks per week, while the least that was answered is between 9 to 12 glasses of beverages per week, selected by the total of 0 respondent, which we exempted this range of dependent variable from all further calculations.

Table 4: Specification 1, showing marginal effects (Std. errors in the parentheses)

	Frequency that respondent buy glass of beverage per week from Starbucks				
	0	1	2	3	5
	Never purchase	Between 1-3	Between 4-6	Between 7-9	More than 12
VARIABLES					
sex_male	-0.0332*	-0.112	0.0937	0.0366	0.0145
	(0.0170)	(0.0982)	(0.0635)	(0.0338)	(0.0193)
sex_female	-0.0498	0.00498	0.0333	0.00910	0.00240
	(0.0521)	(0.0292)	(0.0204)	(0.00664)	(0.00252)
four_age_dum1	-0.00398	-0.00360	0.00552	0.00161	0.000444
	(0.0182)	(0.0196)	(0.0273)	(0.00818)	(0.00231)
four_age_dum2	-0.00604	-0.00558	0.00847	0.00247	0.000686
	(0.0139)	(0.0161)	(0.0213)	(0.00661)	(0.00197)
four_age_dum3	-0.00349	-0.00288	0.00466	0.00134	0.000369
	(0.0139)	(0.0131)	(0.0196)	(0.00579)	(0.00159)
edu2	0.00837	0.00774	-0.0117	-0.00343	-0.000955
	(0.0143)	(0.0166)	(0.0222)	(0.00646)	(0.00199)
edu3	0.0198	0.00510	-0.0185	-0.00508	-0.00133
	(0.0254)	(0.00725)	(0.0190)	(0.00499)	(0.00152)
edu4	0.653**	-0.617**	-0.0277***	-0.00624**	-0.00139
	(0.270)	(0.271)	(0.00807)	(0.00318)	(0.00126)
job_student	-0.0249*	-0.0735	0.0661	0.0238	0.00848
	(0.0136)	(0.0705)	(0.0510)	(0.0225)	(0.0109)
job_company	-0.00721	-0.00757	0.0107	0.00317	0.000891
	(0.0149)	(0.0207)	(0.0254)	(0.00759)	(0.00243)
job_public	0.0338	-0.000418	-0.0250*	-0.00672	-0.00173

	(0.0290)	(0.0155)	(0.0134)	(0.00485)	(0.00164)
job_private	-0.00235	-0.00207	0.00323	0.000937	0.000258
	(0.0169)	(0.0172)	(0.0248)	(0.00724)	(0.00205)
income1	-0.0200**	-0.0632	0.0563*	0.0200	0.00696
	(0.00822)	(0.0419)	(0.0301)	(0.0137)	(0.00659)
income2	-0.0288***	-0.239**	0.152**	0.0758	0.0401
	(0.0106)	(0.118)	(0.0621)	(0.0468)	(0.0323)
income3	-0.0273***	-0.283*	0.168**	0.0901	0.0522
	(0.00999)	(0.171)	(0.0754)	(0.0670)	(0.0510)
income4	-0.0313***	-0.481***	0.221***	0.157*	0.134
	(0.0112)	(0.159)	(0.0568)	(0.0834)	(0.0834)
income5	-0.0748***	-0.275***	0.189***	0.101**	0.0602
	(0.0225)	(0.101)	(0.0549)	(0.0509)	(0.0421)
freq_otherstore	0.00526	0.00387	-0.00669	-0.00191	-0.000519
	(0.00579)	(0.00485)	(0.00756)	(0.00218)	(0.000557)
Observations	366	366	366	366	366
Standard errors in parentheses		*** p<0.01, ** p<0.05, * p<0.1			

According to the inferential analysis of the specification 1 in Table 4, reveals the marginal effects (standard deviation errors in the parentheses) of the ordered probit estimation for the sets of independent variables, such as demographic independent variables and consumption behavior (the frequency that a respondent buys a glass of beverage per week from other brands). Firstly, for the marginal effect of sex, being a male respondent has a negative relationship by 3.32 percentage points lower the probability of never purchasing Starbucks with a 10 percent significance level, while being a female shows no statistical significance. Also, the marginal effect of age shows no statistical significance. However, we received the results of the marginal effect of education, which shows that for edu4 or doctorate degree or above, it statistically significantly affects on a frequency that a respondent buys glasses of beverages from Starbucks per week.

A change in education variable from zero to one positively changes the probability of frequency that a respondent with doctorate degree or above is likely to have a higher chance of never buying the number of glasses of beverages from Starbucks per week by 65.3 percentage points with statistically significant at 5 percent significance level. Meanwhile, having a doctorate degree or above has the negative lower the possibility of buying between 1-3 glasses, between 4-6 glasses, and between 7-9 by 61.7 percentage points with statistically significant at 5 percent significance level., 2.77 percentage points with statistically significant at 1 percent significance level, and 0.624 percentage points with statistically significant at 5 percent significance level, respectively. These results on edu4 explained that the factor of having a doctorate or above education level is negatively statistically significant in reducing the number of purchasing beverages from Starbucks per week and increasing the chances that the respondents may not purchase any beverage from Starbucks at all per week. When we evaluated the frequency of a respondent consuming beverages from the other stores, the results are not statistically significant.

Changes in income 1, 2, 3, 4, and 5 variables from zero to one negatively change the probability of a frequency that a respondent is likely to have a higher chance of never purchasing the number of Starbucks beverages per week by 2.00 percentage points at 5 percent significance level, and 2.88, 2.73, 3.13, and 7.48 percentage points at 1 percent significance level, respectively. For purchasing in the frequency range of 1-3 Starbucks beverages purchased per week, changes in income 2, 3, 4 and 5, from zero to one negatively change the probabilities of this range frequency by 23.90 percentage points at 5 percent significance level, 28.90 percentage points at 10 percent significance level, 48.10, and 27.50 percentage points at 1 percent significance level. For purchasing in the frequency range of 4-6 Starbucks beverages purchased per week, changes in income 1, 2, 3, 4 and 5, from zero to one positively change the probabilities of this range frequency by 5.63 percentage points at 10 percent significance level, 15.20 and 16.80 percentage points at 5 percent significance level, and 22.10 and 18.90 percentage points at 1 percent significance level,

respectively. For purchasing in the range of 7-9 beverages, changes in income 4 and 5 change the probabilities of this range frequency by 15.70 percentage points at 10 percent significance level and 10.10 percentage points at 5 percent significant, respectively.

A change in freq_otherstore variable from zero to one positively changes the probability of a frequency that a respondent is likely to have a higher chance of never buying the number of glasses of beverages from Starbucks per week by 5.26 percentage points. Meanwhile, it changes a frequency that a respondent buys 1-3 glasses of beverages from Starbucks per week by 3.87 percentage points, negatively changes a frequency that a respondent reduces buying 4-6 glasses of beverages from Starbucks per week by 0.069 percentage points, reduces buying 7-9 glasses by 0.19 percentage points, and drops buying 10-12 glasses by 0.052 percentage points.

Table 5: Specification 2, showing marginal effects (Std. errors in the parentheses)

	Frequency that respondent buy glass of beverage per week from Starbucks				
	0	1	2	3	5
	Never purchase	Between 1-3	Between 4-6	Between 7-9	More than 12
VARIABLES					
sex_male	-0.00648	-0.0436	0.0383	0.00956	0.00224
	(0.00477)	(0.0483)	(0.0374)	(0.0123)	(0.00378)
sex_female	-0.00465	-0.00644	0.00903	0.00175	0.000312
	(0.00870)	(0.00696)	(0.0123)	(0.00255)	(0.000527)
four_age_dum1	0.00451	0.00600	-0.00857	-0.00165	-0.000293
	(0.0106)	(0.00705)	(0.0141)	(0.00272)	(0.000566)
four_age_dum2	6.88e-05	0.000164	-0.000188	-3.77e-05	-6.91e-06
	(0.00467)	(0.0110)	(0.0127)	(0.00254)	(0.000465)
four_age_dum3	-0.000851	-0.00220	0.00246	0.000499	9.25e-05
	(0.00406)	(0.0112)	(0.0122)	(0.00255)	(0.000473)
edu2	0.00329	0.0101	-0.0107	-0.00225	-0.000433
	(0.00357)	(0.0135)	(0.0136)	(0.00286)	(0.000681)

edu3	0.0110	0.00831	-0.0157	-0.00304	-0.000544
	(0.0119)	(0.00554)	(0.0105)	(0.00233)	(0.000609)
edu4	0.748***	-0.731***	-0.0140**	-0.00227	-0.000349
	(0.268)	(0.269)	(0.00550)	(0.00160)	(0.000399)
job_student	-0.00693	-0.0624	0.0518	0.0140	0.00356
	(0.00506)	(0.0655)	(0.0489)	(0.0167)	(0.00597)
job_company	-0.00358	-0.0148	0.0146	0.00318	0.000639
	(0.00369)	(0.0202)	(0.0184)	(0.00439)	(0.00116)
job_public	0.00580	0.00645	-0.01000	-0.00191	-0.000337
	(0.00785)	(0.00447)	(0.00883)	(0.00215)	(0.000455)
job_private	-0.00214	-0.00856	0.00851	0.00182	0.000359
	(0.00383)	(0.0221)	(0.0204)	(0.00457)	(0.00102)
income1	-0.00554*	-0.0586	0.0479*	0.0129	0.00326
	(0.00298)	(0.0369)	(0.0277)	(0.00984)	(0.00370)
income2	-0.00760*	-0.209*	0.140**	0.0552	0.0218
	(0.00398)	(0.111)	(0.0667)	(0.0384)	(0.0219)
income3	-0.00710*	-0.257	0.163*	0.0703	0.0309
	(0.00380)	(0.160)	(0.0835)	(0.0576)	(0.0359)
income4	-0.00863*	-0.494***	0.242***	0.153*	0.108
	(0.00497)	(0.168)	(0.0636)	(0.0847)	(0.0864)
income5	-0.0255**	-0.246**	0.169***	0.0714*	0.0312
	(0.0113)	(0.0955)	(0.0585)	(0.0405)	(0.0274)
freq_otherstore	0.00131	0.00312	-0.00358	-0.000719	-0.000132
	(0.00173)	(0.00414)	(0.00476)	(0.000937)	(0.000177)
if_stay	0.0103	0.0110	-0.0172	-0.00342	-0.000629
	(0.00876)	(0.00677)	(0.0106)	(0.00271)	(0.000682)
freq_stay	-0.00430*	-0.0103*	0.0118**	0.00237	0.000435
	(0.00256)	(0.00564)	(0.00596)	(0.00160)	(0.000468)
priceup_less	0.000452	0.00103	-0.00120	-0.000239	-4.37e-05
	(0.00255)	(0.00549)	(0.00648)	(0.00133)	(0.000236)
priceup_dontbuy	0.0677*	-0.0407	-0.0221***	-0.00413*	-0.000733
	(0.0362)	(0.0356)	(0.00704)	(0.00249)	(0.000770)
if_goods	-0.00175	-0.00390	0.00456	0.000913	0.000167

	(0.00266)	(0.00510)	(0.00625)	(0.00130)	(0.000219)
if_image	0.00171	0.00408	-0.00467	-0.000941	-0.000174
	(0.00253)	(0.00568)	(0.00643)	(0.00147)	(0.000305)
if_used_card	-0.00435*	-0.0111	0.0124*	0.00256	0.000486
	(0.00260)	(0.00754)	(0.00739)	(0.00202)	(0.000608)
Observations	366	366	366	366	366
Standard errors in parentheses		*** p<0.01, ** p<0.05, * p<0.1			

For the Specification 2, when we included the consumption behavior factors, such as if_stay, freq_stay, priceup_less, priceup_dontbuy, if_goods, if_image, and if_used_card into the model 1 to generate model 2, the results of edu4 or having a doctorate degree or above shows statistical significance, which a change in education variable from zero to one positively changes the probability of a frequency that a respondent who has a doctorate degree or above is likely to have a higher chance of never buying the number of glasses of beverages from Starbucks per week by 74.8 percentage points at 1 percent significance level. However, a change in education variable from zero to one negatively changes the possibility of buying 1-3 glasses of beverages from Starbucks per week, in which a respondent is likely to reduce buying 1-3 glasses of beverages from Starbucks by 73.1 percentage points at 1 percent significance level. For buying between 4-6 glasses, a change in education variable from zero to one negatively changes the probability of a frequency that a respondent with doctorate degree or above is likely to reduce buying between 4-6 glasses of beverages from Starbucks per week by 1.4 percentage points at 5 percent significance level. In the aspect of income variables, from the categories of income 1-5, every income range shows statistical significance at 1, 5, and 10 percent significance levels as appeared in Table 5.

Therefore, we concluded that the demographic factors that statically significantly have impacts on the frequency that a respondent buys glasses of beverage per week from Starbucks are education level, particularly for respondents who have a doctorate degree or above, and income levels.

When observing the results of consumption behavior factors, `freq_stay`, which refers to if a respondent stays in the store to consume a beverage in general, shows that a change in `freq_stay` variable from zero to one negatively changes the possibility of not buying/never purchasing a beverage from Starbucks per week at all by 0.43 percentage points at 10 percent significance level, and negatively changes the possibility of buying 1-3 glasses of beverages from Starbucks per week by 1.03 percentage points at 10 percent significance level. However, it positively changes the possibility of buying 4-6 glasses of beverages from Starbucks per week by 1.18 percentage points at a 5 percent significance level.

For the `priceup_less`, which means if price increases, a respondent buys fewer glasses of Starbucks beverages per week, is not statistically significant. For the `priceup_dontbuy`, it shows that a change in this variable from zero to one positively changes the possibility of not buying/never purchasing any Starbucks beverages per week by 6.77 percentage points at a 10 percent significance level. However, when the frequency of a respondent buys beverages from Starbucks per week is between 4-6 glasses and 7-9 glasses, they show the negative relationship that is if the price increases, the percentage that a respondent tends to buy beverages in between 4-6 glasses and 7-9 glasses would be reduced by 2.21 percentage points at a 1 percent significance level and 0.413 percentage points at a 10 percent significance level, but it is not statistically significant in the range between 10-12 glasses.

For `if_goods` and `if_image` variables, they show no statistical significance. However, `if_used_card` variable, a change in this variable from zero to one negatively changes the probability of a frequency that a respondent never buys a glass of beverage per week from Starbucks by 0.435 percentage points at 10 percent significance level and positively changes the probability of a frequency that a respondent buys 4-6 glass of beverage per week from Starbucks by 1.24 percentage points at 10 percent significance level.

When comparing specifications 1 and 2, we found that the edu4 variable increased by 9.50 percent points at a 5 percent significance level. This indicates that there is an increase in percentage when added consumption variables into the model. In the comparison of income 1-5 between specification 1 and 2, the negative impacts on never purchasing frequency have a small reduction trend. However, for the other ranges, it has both increases and decreases impacts. In terms of freq_otherstore, it also has both impacts on all ranges.

Table 6: Specification 3, showing marginal effects (Std. errors in the parenthesis)

	Frequency that respondent buy glass of beverage per week from Starbucks				
	0	1	2	3	5
	Never purchase	Between 1-3	Between 4-6	Between 7-9	More than 12
VARIABLES					
sex_male	-0.00419	-0.0385	0.0340	0.00728	0.00140
	(0.00314)	(0.0415)	(0.0331)	(0.00943)	(0.00244)
sex_female	-0.00530	-0.00682	0.0102	0.00165	0.000236
	(0.00752)	(0.00467)	(0.00906)	(0.00176)	(0.000344)
four_age_dum1	0.00736	0.00640	-0.0116	-0.00185	-0.000264
	(0.0126)	(0.00448)	(0.0103)	(0.00185)	(0.000402)
four_age_dum2	6.52e-05	0.000200	-0.000223	-3.73e-05	-5.50e-06
	(0.00318)	(0.00968)	(0.0108)	(0.00180)	(0.000265)
four_age_dum3	-0.000973	-0.00349	0.00373	0.000637	9.60e-05
	(0.00264)	(0.0105)	(0.0109)	(0.00197)	(0.000303)
edu2	0.00139	0.00515	-0.00547	-0.000940	-0.000143
	(0.00221)	(0.00928)	(0.00954)	(0.00165)	(0.000294)
edu3	0.00450	0.00659	-0.00937	-0.00151	-0.000217
	(0.00662)	(0.00448)	(0.00862)	(0.00147)	(0.000287)
edu4	0.738**	-0.726**	-0.0105**	-0.00142	-0.000178
	(0.298)	(0.299)	(0.00440)	(0.00105)	(0.000226)
job_student	-0.00571	-0.0958	0.0759	0.0205	0.00513
	(0.00414)	(0.0916)	(0.0652)	(0.0239)	(0.00885)
job_company	-0.00248	-0.0143	0.0138	0.00256	0.000423

	(0.00241)	(0.0179)	(0.0162)	(0.00337)	(0.000789)
job_public	0.00443	0.00580	-0.00866	-0.00138	-0.000195
	(0.00576)	(0.00376)	(0.00681)	(0.00147)	(0.000269)
job_private	-0.00103	-0.00473	0.00479	0.000843	0.000131
	(0.00255)	(0.0158)	(0.0151)	(0.00273)	(0.000477)
income1	-0.00291*	-0.0311	0.0272	0.00572	0.00107
	(0.00175)	(0.0261)	(0.0210)	(0.00569)	(0.00150)
income2	-0.00451*	-0.159	0.115*	0.0374	0.0115
	(0.00255)	(0.0991)	(0.0645)	(0.0308)	(0.0134)
income3	-0.00435*	-0.221	0.150*	0.0561	0.0201
	(0.00249)	(0.144)	(0.0831)	(0.0492)	(0.0252)
income4	-0.00546*	-0.472***	0.248***	0.143*	0.0865
	(0.00330)	(0.168)	(0.0678)	(0.0853)	(0.0711)
income5	-0.0179**	-0.230**	0.163***	0.0621*	0.0231
	(0.00872)	(0.0911)	(0.0581)	(0.0373)	(0.0213)
freq_otherstore	0.00117	0.00365	-0.00405	-0.000677	-0.000100
	(0.00116)	(0.00349)	(0.00389)	(0.000638)	(0.000112)
if_stay	0.00569	0.00889	-0.0123	-0.00202	-0.000299
	(0.00517)	(0.00611)	(0.00864)	(0.00171)	(0.000371)
freq_stay	-0.00260*	-0.00807*	0.00895*	0.00150	0.000222
	(0.00155)	(0.00475)	(0.00483)	(0.00106)	(0.000270)
priceup_less	0.000107	0.000325	-0.000362	-6.05e-05	-8.93e-06
	(0.00166)	(0.00496)	(0.00554)	(0.000931)	(0.000137)
priceup_dontbuy	0.0489*	-0.0287	-0.0171***	-0.00268	-0.000386
	(0.0278)	(0.0266)	(0.00612)	(0.00173)	(0.000460)
if_goods	-0.000462	-0.00140	0.00156	0.000260	3.84e-05
	(0.00169)	(0.00478)	(0.00542)	(0.000915)	(0.000125)
if_image	0.00103	0.00318	-0.00353	-0.000593	-8.80e-05
	(0.00152)	(0.00461)	(0.00499)	(0.000952)	(0.000171)
if_used_card	-0.00234	-0.00767	0.00835	0.00143	0.000218
	(0.00162)	(0.00612)	(0.00607)	(0.00130)	(0.000309)
rate_taste	-0.00252	-0.00784	0.00869	0.00145	0.000215
	(0.00210)	(0.00527)	(0.00566)	(0.00133)	(0.000282)

rate_variety	0.00169	0.00527	-0.00584	-0.000978	-0.000145
	(0.00146)	(0.00385)	(0.00415)	(0.000933)	(0.000178)
rate_price	0.00110	0.00343	-0.00380	-0.000636	-9.40e-05
	(0.00124)	(0.00334)	(0.00376)	(0.000673)	(0.000134)
rate_location	0.00184	0.00571	-0.00633	-0.00106	-0.000157
	(0.00147)	(0.00394)	(0.00428)	(0.000880)	(0.000201)
rate_space	-0.00116	-0.00359	0.00398	0.000667	9.86e-05
	(0.00133)	(0.00372)	(0.00413)	(0.000759)	(0.000153)
rate_design	0.000376	0.00117	-0.00130	-0.000217	-3.21e-05
	(0.000998)	(0.00281)	(0.00316)	(0.000565)	(8.43e-05)
rate_promotion	-0.000430	-0.00134	0.00148	0.000248	3.67e-05
	(0.000985)	(0.00291)	(0.00327)	(0.000531)	(8.97e-05)
rate_brand	-0.000430	-0.00134	0.00148	0.000248	3.67e-05
	(0.00103)	(0.00325)	(0.00356)	(0.000616)	(9.95e-05)
rate_service	-0.00172	-0.00536	0.00594	0.000995	0.000147
	(0.00161)	(0.00458)	(0.00500)	(0.000969)	(0.000199)
rate_24hr	-0.00108	-0.00337	0.00374	0.000626	9.25e-05
	(0.00104)	(0.00281)	(0.00299)	(0.000692)	(0.000131)
Observations	366	366	366	366	366
Standard errors in parentheses		*** p<0.01, ** p<0.05, * p<0.1			

From the influential variables marginal effects, a change in rate_price variable from zero to one positively changes the probability of a frequency that a respondent never buys any glass of Starbucks beverages per week by 0.11 percentage point and changes the probability of a frequency that a respondent buys 1-3 glasses of Starbucks beverages per week by 0.34 percentage point. While a change in rate_price variable from zero to one negatively changes the probability of a frequency that a respondent buys 4-6, 7-9, and more than 12 glasses of Starbucks beverages per week by 0.38, 0.068, and 9.40e-05 percentage points, respectively.

A change in rate_variety variable from zero to one positively changes the probability of frequencies that a respondent never buys any glass of Starbucks beverages per week and buys 1-3

glasses of Starbucks beverages by 0.17 and 0.53 percentage points. While a change in rate_variety variable from zero to one negatively changes the probability of frequencies that a respondent buys 4-6, 7-9, and more than 12 glasses of Starbucks beverages per week by 0.58, 0.10, and 0.01 percentage points, respectively.

A change in rate_space variable from zero to one negatively changes the probability of a frequency that a respondent never buys any glass of Starbucks beverages per week by 0.11 percentage point and changes the probability of a frequency that a respondent buys 1-3 glasses of Starbucks beverages per week by 0.36 percentage point. While a change in rate_space variable from zero to one positively changes the probability of a frequency that a respondent buys 4-6, 7-9, and more than 12 glasses of Starbucks beverages per week by 0.40, 0.07, and 9.86×10^{-5} percentage points, respectively.

A change in rate_24hr variable from zero to one negatively changes the probability of a frequency that a respondent never buys any glass of Starbucks beverages per week by 0.11 percentage point and changes the probability of a frequency that a respondent buys 1-3 glasses of Starbucks beverages per week by 0.34 percentage point. While a change in rate_24hr variable from zero to one positively changes the probability of frequencies that a respondent buys 4-6, 7-9, and more than 12 glasses of Starbucks beverages per week by 0.37, 0.06, and 9.25×10^{-5} percentage points, respectively. All influential rate variables are not statistically significant in this specification.

When adding influential factors (i.e. all the rates), if_used_card becomes a non-significant variable and priceup_dontbuy is not statistically significant at the frequency of 7-9 glasses of Starbucks beverages purchased per week. Meanwhile, the comparison between specification 2 and 3, income 1-5 variables in the frequency range of never purchasing has the same tendency as the comparison between specification 1 and 2 which is the reduction of impacts towards this range.

Finally, from the initial results of ordered probit regression (appendix C), we can see that from all specifications, the specification 3 that included all, demographic, consumption behaviour, and influential factor variables has the least negative pseudo-likelihood value of -110.6213, which makes its specification model results are the best ones out of three models and does not overspecify.

Conclusion

In this research paper, we intended to find the impacts of factors influencing consumers' frequency of consumption and intention to purchase of Starbucks coffee brand in Bangkok, divided into 3 categories of demographic, Starbucks consumption behaviour and the other influential factors.

From hypothesis 1, the result of the marginal effect contradicts the hypothesis as not every in the demographic categories variables is significant and positively affects Starbucks' frequency of consumption. While, the demographic variable of student and income levels show the positive effects, however, the education level of doctorate and above negative effects) implies that while being a student is more likely to purchase the beverage from Starbucks, once they reach the education level of doctorate and above, the consumer would less likely to purchase Starbucks beverages, contrasts to the income that positively affects the frequency of purchase per week in all levels. In addition, the frequency of other stores' beverage purchase per week actually follows the hypothesis expectation and negatively affects the probability of purchasing Starbucks beverage per week.

As the hypothesis 2 stated that people who have ever bought other Starbucks merchandise and believe that consuming Starbucks products help improve their social images are more likely to purchase Starbucks beverages, the result of the specification model 2 shows that while the factor of if a consumer has ever bought Starbucks goods is indeed increases the probability of the amount

frequency of purchase per week, the belief in the social image does not, thus, contradicts to the hypothesis. Both of the results also are not statistically significant.

Moreover, focusing on the influential factors category, the results also contrast with the 3rd hypothesis, while the increase in the importance of price factor one unit for the consumer does negatively affect the frequency of purchase, and some other variables such as space and 24-hour services do positively affect the frequency of Starbucks beverage purchase, some variable such as variety contradicts this hypothesis, it negatively affects the dependent variables, which implies that the increase in the variety of the beverage menu, reduces the probability that the consumers would purchase more beverages from Starbucks per week.

From the results of the specification 3, we can also see that they are consistent with the existing research results of Kasimin's literature (2017) that the width of the store positively impacts the profit and price negatively impacts the profits of the coffee store.

In summary, based on the results imply in this research, we would recommend the Starbucks brand to prioritize competitive strategies on the student consumers by improving their store spaces and 24-hour services to increase consumers time spending inside the stores on average which is statistically significant on multiple frequencies of purchasing ranges and has a positive effect on the frequency of purchasing Starbucks beverages.

Limitation

During the time that we were conducting this research, the global coronavirus pandemic has broken out and forced the society to social distance from each other, limited our ability to gather survey data in person, we were able to rely on an online survey only via Google Form as our information source, instead of our original plan to conduct the information gathering according to the geographical clustering in the multiple districts of Bangkok city, concentrate on the areas with high numbers of Starbucks stores.

References

- Coffee - Thailand: Statista Market Forecast. (n.d.). Retrieved April 3, 2020, from <http://www.statista.com/outlook/30010000/126/coffee/thailand#market-globalRevenue>
- Fishbein, M., & Ajzen, I. (1980). *Belief, attitude, intention, and behavior: an introduction to theory and research*. Reading, MA: Addison-Wesley.
- Jitpleechep, P., & Hicks, W. (2019, February 20). Wake up and sell the coffee. Retrieved April 20, 2020, from <https://www.bangkokpost.com/thailand/special-reports/1631922/wake-up-and-sell-the-coffee>
- Jun, Y., Ma, Y., & Lee, H. (2019, September 9). Empirical Study of Space Localization Approach on Brand Attitude: The Case of Starbucks in South Korea. Retrieved March 19, 2020, from <http://aodr.org/xml/21680/21680.pdf>
- Kang, J., Tang, L., Lee, J. Y., & Bosselman, R. H. (2011, October 18). Understanding customer behavior in name-brand Korean coffee shops: The role of self-congruity and functional congruity. Retrieved March 6, 2020, from <https://www.sciencedirect.com/science/article/abs/pii/S0278431911001617>
- Kasasa. (2019, July 29). Boomers, Gen X, Gen Y, and Gen Z Explained. Retrieved April 20, 2020, from <https://www.kasasa.com/articles/generations/gen-x-gen-y-gen-z>
- Kasimin, S. (2017). Coffee Shop's Characteristics and Factors that Influence the Number of Visitors and Profit Level of Popular Coffee Shops in Banda Aceh City. Retrieved February 25, 2020, from <http://jurnal.unsyiah.ac.id/AICS-Social/article/download/10356/8684>

- Luntungan, C. A. R., Pangemanan, S. S., & Rumokoy, F. S. (n.d.). COMPARATIVE ANALYSIS OF REPURCHASE INTENTION BASED ON BRAND TRUST AND BRAND COMMITMENT OF STARBUCKS IN MANADO BETWEEN MALE AND FEMALE. Retrieved March 22, 2020, from <https://ejournal.unsrat.ac.id/index.php/emba/article/view/19020/18582>
- Pine, B. J., & Gilmore, J. H. (1999). *The experience economy: work is theater & every business a stage*. Boston, Mass: Harvard Business School Press.
- Thongrawd, C., & Rittboonchai, W. (2018, September 25). Factors affecting coffee consumers' behavior: a case study of consumption in Metropolitan Bangkok. Retrieved March 24, 2020, from <https://tci-thaijo.org/index.php/jtir/article/download/167394/120664/>
- Waxman, L. (2006). The Coffee Shop: Social and Physical factors Influencing Place Attachment. Retrieved February 24, 2020, from <https://bork.hampshire.edu/~groundswell/transfers/hermens/coffee%20shop.pdf>
- Yu, H., & Fang, W. (2009). Relative impacts from product quality, service quality, and experience quality on customer perceived value and intention to shop for the coffee shop market. *Total Quality Management & Business Excellence*, 20(11), 1273–1285. doi: 10.1080/14783360802351587
- จับตาเทรนด์ "24 Hours Lifestyle" วิถีคนเมือง-สังคมคนนอนดึก! ดันธุรกิจเปิด 24 ชั่วโมงมาแรง: Marketing Oops. (2018, November 16). Retrieved April 15, 2020, from <https://today.line.me/th/pc/article/จับตาเทรนด์+“24+Hours+Lifestyle”+วิถีคนเมือง+สังคมคนนอนดึก+ดันธุรกิจเปิด+24+ชั่วโมงมาแรง-qykXRK>

สาขาที่เปิดให้บริการ 24 ชั่วโมง. (2019, March 22). Retrieved April 23, 2020, from

<https://www.facebook.com/notes/starbucks-thailand/สาขาที่เปิดให้บริการ-24->

ชั่วโมง/10157144267712509/

Appendix A: Questionnaire

แบบสอบถาม พฤติกรรมการไปร้านกาแฟของคนในกรุงเทพ

17/4/2563 BE 20:59

แบบสอบถาม พฤติกรรมการไปร้านกาแฟของคนในกรุงเทพ

17/4/2563 BE 20:59

แบบสอบถาม พฤติกรรมการไปร้านกาแฟของคนในกรุงเทพ

แบบสอบถามชุดนี้เป็นเอกสารประกอบการวิจัยของนักศึกษาระดับปริญญาตรี คณะเศรษฐศาสตร์ มหาวิทยาลัยธรรมศาสตร์ โดยมีวัตถุประสงค์เพื่อศึกษา พฤติกรรมการไปร้านกาแฟของคนในกรุงเทพ จึงได้ขอความร่วมมือในการตอบแบบสอบถามดังรายละเอียดที่ปรากฏ ในแบบสอบถามนี้ ผู้วิจัยขอความกรุณาให้ท่านกรอกคำตอบตามความเป็นจริง และขอขอบคุณท่านที่ให้ข้อมูลมา ณ ที่นี้

* Required

1. ท่านอาศัยอยู่เขตใด ในกรุงเทพฯ *

Mark only one oval.

- ☐ พระนคร
☐ ดุสิต
☐ ทองหล่อ
☐ บางรัก
☐ บางเขน
☐ บางกะปิ
☐ ปทุมวัน
☐ ป้อมปราบศัตรูพ่าย
☐ พระโขนง
☐ มีนบุรี
☐ ลาดกระบัง
☐ หนองจอก
☐ สัมพันธวงศ์
☐ พญาไท
☐ ธนบุรี
☐ บางกอกใหญ่
☐ ห้วยขวาง
☐ คลองสาน
☐ คลองเตย
☐ บางกอกน้อย

https://docs.google.com/forms/u/1d/1MczOFu8sXtq12Mbd3S1YWuJqeJKH0Dv3eKXKzw/printform

Page 1 of 11

https://docs.google.com/forms/u/1d/1MczOFu8sXtq12Mbd3S1YWuJqeJKH0Dv3eKXKzw/printform

Page 2 of 11

แบบสอบถาม พฤติกรรมการไปร้านกาแฟของคนในกรุงเทพ

17/4/2563 BE 20:59

แบบสอบถาม พฤติกรรมการไปร้านกาแฟของคนในกรุงเทพ

17/4/2563 BE 20:59

5. อาชีพ *

Mark only one oval.

- ☐ นักเรียน/นักศึกษา
☐ ชาวต่างชาติ/พนักงานวีซ่าที่
☐ พนักงานบริษัทเอกชน
☐ ธุรกิจส่วนตัว
☐ อื่นๆ

6. รายได้ต่อเดือน *

Mark only one oval.

- ☐ ต่ำกว่า 10,000 บาท
☐ 10,001-20,000 บาท
☐ 20,001-30,000 บาท
☐ 30,001-40,000 บาท
☐ 40,001-50,000 บาท
☐ 50,001บาทขึ้นไป

ส่วนที่ 2.1: พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

7. ท่านเคยบริโภคเครื่องดื่มของ Starbucks หรือไม่? *

Mark only one oval.

- ☐ เคย Skip to question 8
☐ ไม่เคย Skip to question 9

ส่วนที่ 2.2 : พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

https://docs.google.com/forms/u/1d/1MczOFu8sXtq12Mbd3S1YWuJqeJKH0Dv3eKXKzw/printform

Page 4 of 11

https://docs.google.com/forms/u/1d/1MczOFu8sXtq12Mbd3S1YWuJqeJKH0Dv3eKXKzw/printform

Page 3 of 11

- ☐ บางขุนเทียน
☐ ภาษีเจริญ
☐ หนองแขม
☐ ราษฎร์บูรณะ
☐ บางพลัด
☐ ดินแดง
☐ บึงกุ่ม
☐ สาทร
☐ บางซื่อ
☐ จตุจักร
☐ บางคอแหลม
☐ ปะวะวศ
☐ คลองเตย
☐ สวนหลวง
☐ จอมทอง
☐ ดอนเมือง
☐ รามเทวี
☐ ลาดพร้าว
☐ วัฒนา
☐ บางแค
☐ หลักสี่
☐ สายไหม
☐ คันนายาว
☐ สะพานสูง
☐ ร่มเกล้า
☐ คลองสามวา
☐ บางนา
☐ ทวีวัฒนา
☐ ทุ่งครุ
☐ บางบอน

ส่วนที่ 1 : ข้อมูลทั่วไป

2. เพศ *

Mark only one oval.

- ☐ ชาย
☐ หญิง
☐ อื่นๆ

3. อายุ *

4. ระดับการศึกษา *

Mark only one oval.

- ☐ ต่ำกว่ามัธยมศึกษา
☐ มัธยมศึกษา หรือ เทียบเท่า
☐ ปริญญาตรี หรือ เทียบเท่า
☐ ปริญญาโท
☐ ปริญญาเอก

โปรดกรอกข้อมูลตามความเป็นจริง

8. ความถี่ในการบริโภคเครื่องดื่ม Starbucks ของท่าน *

Mark only one oval.

- ☐ 0-3 แก้ว ต่อสัปดาห์
- ☐ 4-6 แก้ว ต่อสัปดาห์
- ☐ 7-9 แก้ว ต่อสัปดาห์
- ☐ 10-12 แก้ว ต่อสัปดาห์
- ☐ 12 แก้วขึ้นไป ต่อสัปดาห์

ส่วนที่ 2.3 : พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

9. ท่านใช้บัตรเครดิต เวลาท่านซื้อเครื่องดื่มหรือไม่? *

Mark only one oval.

- ☐ ใช่
- ☐ ไม่ใช่

10. ท่านบริโภคเครื่องดื่มประเภทกาแฟ, ชา, และน้ำผลไม้ จากร้านอื่นหรือไม่? *

Mark only one oval.

- ☐ บริโภคจากร้านอื่นด้วย Skip to question 11
- ☐ บริโภคแต่เครื่องดื่ม Starbucks Skip to question 13

ส่วนที่ 2.4 : พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

11. ความถี่ในการบริโภคเครื่องดื่มจากร้านอื่นของท่าน *

Mark only one oval.

- ☐ 0-3 แก้ว ต่อสัปดาห์
- ☐ 4-6 แก้ว ต่อสัปดาห์
- ☐ 7-9 แก้ว ต่อสัปดาห์
- ☐ 10-12 แก้ว ต่อสัปดาห์
- ☐ 12 แก้วขึ้นไป ต่อสัปดาห์

12. นอกจาก Starbucks ท่านบริโภคเครื่องดื่มประเภทกาแฟ, ชา, และน้ำผลไม้ จากร้านกาแฟที่มีที่นั่งหย่อนบ้าง? (เลือกได้มากกว่า 1 ข้อ) *

Check all that apply.

- ☐ ร้าน TRUE Coffee
- ☐ ร้าน Amazon
- ☐ ร้าน Black Canyon
- ☐ ร้าน Coffee World
- ☐ ร้าน Inthanin
- ☐ ร้าน Chao Doi
- ☐ ร้าน Mezzo
- ☐ ร้าน Coffee Today
- ☐ ร้าน Coffee Club
- ☐ ร้าน Wake Up Coffee
- ☐ ร้าน Hollis Coffee
- ☐ ร้าน Au Bon Pain
- ☐ ร้าน S&P
- ☐ ร้าน After You
- ☐ ร้านชาไข่มุกต่างๆ
- ☐ อื่นๆ

ส่วนที่ 2.5 : พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

15. หากท่านสั่งเครื่องดื่มเพื่อรับประทานภายในร้าน ท่านใช้เวลาอยู่ภายในร้านประมาณเท่าไร? *

Mark only one oval.

- ☐ น้อยกว่า 1 ชั่วโมง
- ☐ 1-2 ชั่วโมง
- ☐ 3-4 ชั่วโมง
- ☐ 5-6 ชั่วโมง
- ☐ มากกว่า 6 ชั่วโมง

ส่วนที่ 2.7 : พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

16. ถ้าหาก Starbucks ขึ้นราคา 5 บาท ต่อ 1 แก้ว จะมีผลต่อการซื้อเครื่องดื่ม Starbucks ของท่านอย่างไร

Mark only one oval.

- ☐ ซื้อเท่าเดิม
- ☐ ซื้อน้อยลง
- ☐ ไม่ซื้อเลย

17. ท่านเคยซื้อสินค้าจาก Starbucks หรือไม่? (เช่น แก้วน้ำ แก้วเก็บความเย็น) *

Mark only one oval.

- ☐ เคย
- ☐ ไม่เคย

13. หาก Starbucks เพิ่มราคาจนท่านอาจต้องหันไปซื้อเครื่องดื่มจากร้านอื่นมากขึ้น ท่านมีแนวโน้มที่จะซื้อเครื่องดื่มจากร้านใดบ้างต่อไปนี้? (เลือกได้มากกว่า 1 ข้อ) *

Check all that apply.

- ☐ ร้าน TRUE Coffee
- ☐ ร้าน Amazon
- ☐ ร้าน Black Canyon
- ☐ ร้าน Coffee World
- ☐ ร้าน Inthanin
- ☐ ร้าน Chao Doi
- ☐ ร้าน Mezzo
- ☐ ร้าน Coffee Today
- ☐ ร้าน Coffee Club
- ☐ ร้าน Wake Up Coffee
- ☐ ร้าน Hollis Coffee
- ☐ ร้าน Au Bon Pain
- ☐ ร้าน S&P
- ☐ ร้าน After You
- ☐ ร้านชาไข่มุกต่างๆ
- ☐ อื่นๆ

14. โดยปกติ ท่านซื้อเครื่องดื่มเพื่อรับประทานในร้าน หรือ สังกัดบ้าน (Take Home/Drive Thru) *

Mark only one oval.

- ☐ รับประทานที่ร้าน Skip to question 15
- ☐ สังกัดบ้าน (Take Home/Drive Thru) Skip to question 16

ส่วนที่ 2.6 : พฤติกรรมการบริโภคที่ Starbucks

โปรดกรอกข้อมูลตามความเป็นจริง

18. ท่านคิดว่า การดื่ม Starbucks ทำให้ภาพลักษณ์ของคนที่ดีมดุดขึ้นหรือไม่? *

Mark only one oval.

- ☐ ใช่
- ☐ ไม่ใช่

ส่วนที่ 3 : ปัจจัยในการซื้อเครื่องดื่ม

โปรดกรอกข้อมูลตามความเป็นจริง

19. ท่านให้ความสำคัญกับข้อความเหล่านี้มากน้อยเพียงใด *

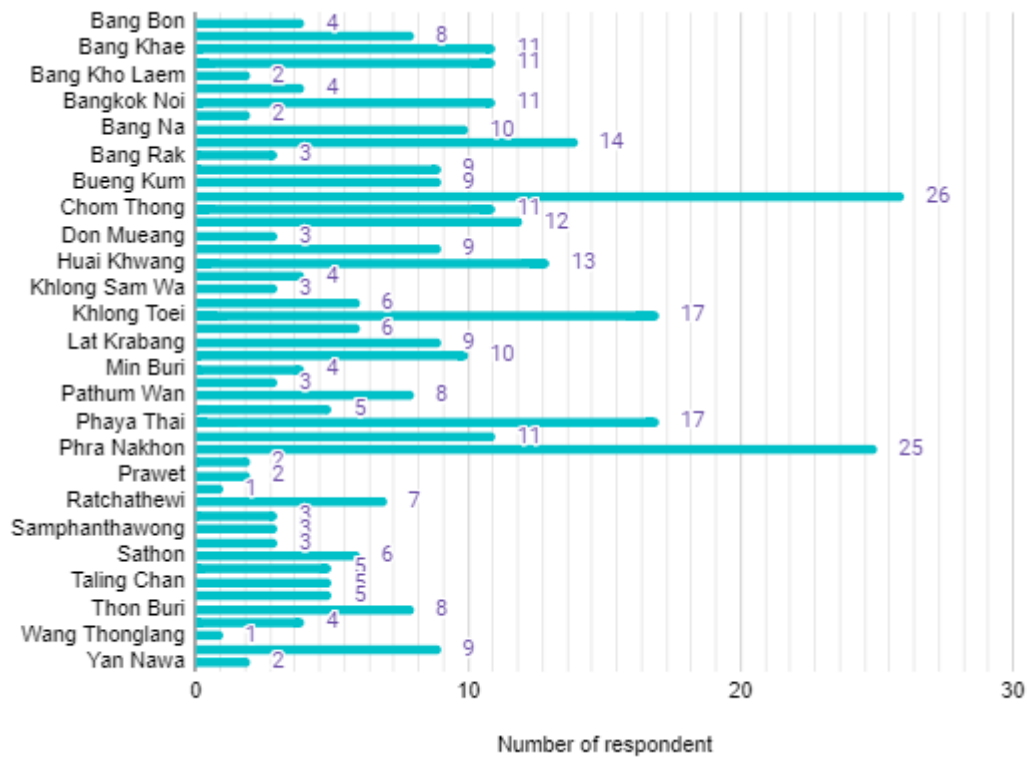
Mark only one oval per row.

	มากที่สุด	มาก	น้อย	น้อยที่สุด
ราคาไม่แพง	☐	☐	☐	☐
โปรโมชั่น โดนใจ	☐	☐	☐	☐
รสชาติอร่อย	☐	☐	☐	☐
เมนูหลากหลาย	☐	☐	☐	☐
แบรนด์มีชื่อเสียง มีมาตรฐาน	☐	☐	☐	☐
สถานที่ตั้งดี มีที่จอดรถ เดินทางสะดวก	☐	☐	☐	☐
พื้นที่ภายในร้านกว้างขวาง	☐	☐	☐	☐
ร้านตกแต่งสวยงาม บรรยากาศดี มีมุมถ่ายรูปสวยๆ	☐	☐	☐	☐
พนักงานยิ้มแย้ม ให้บริการดี	☐	☐	☐	☐
เปิดให้บริการ 24 ชั่วโมง	☐	☐	☐	☐

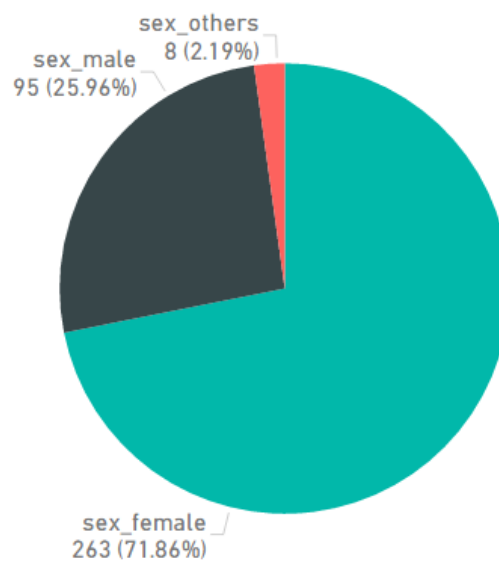
สิ้นสุดการทำแบบสอบถาม

Appendix B: Demographic results from the survey

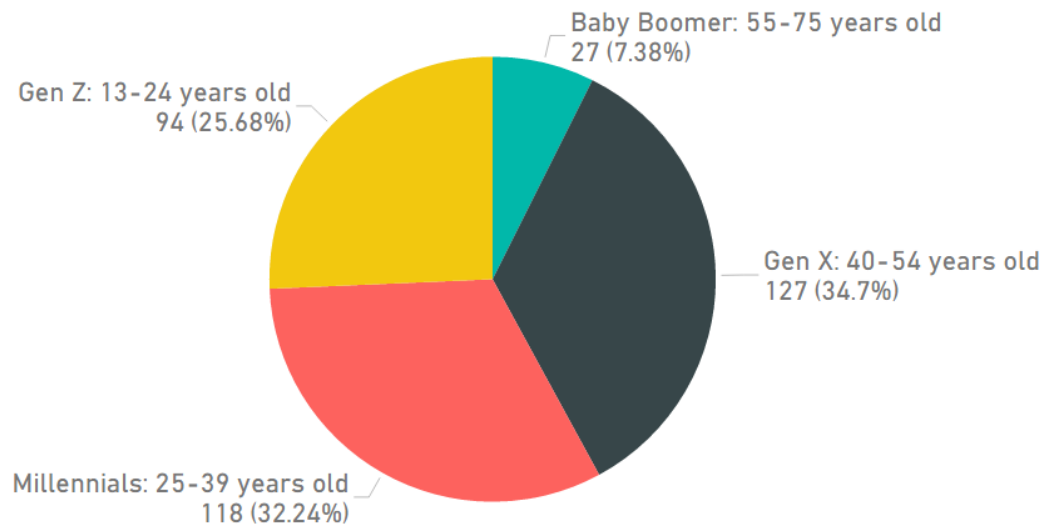
Districts



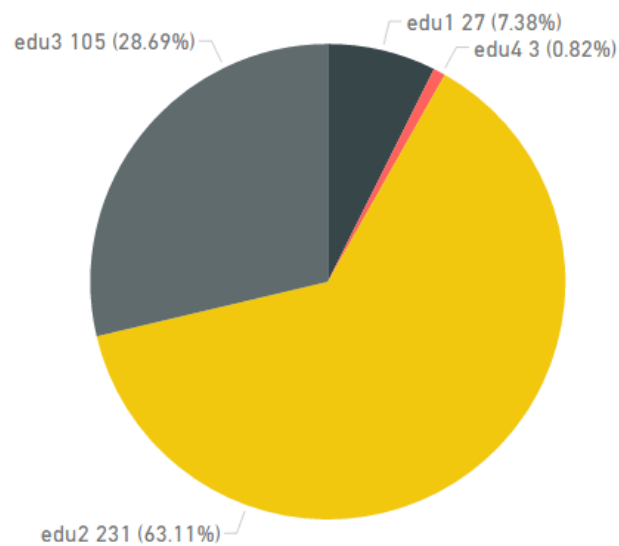
Gender



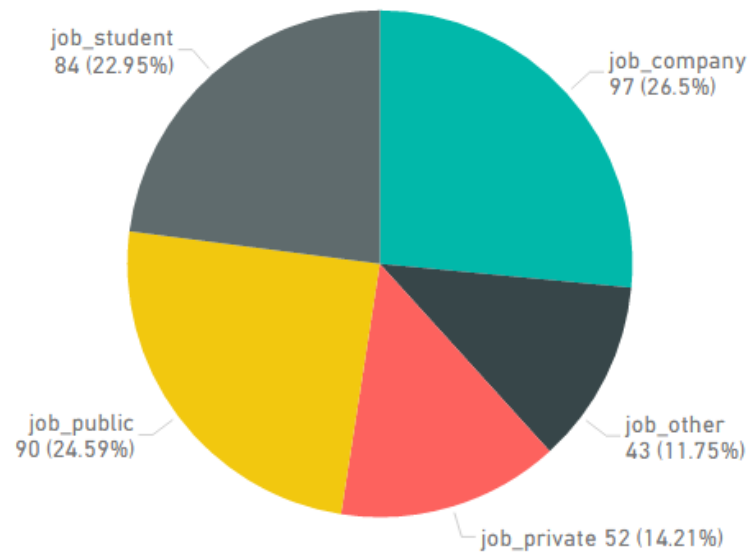
Age



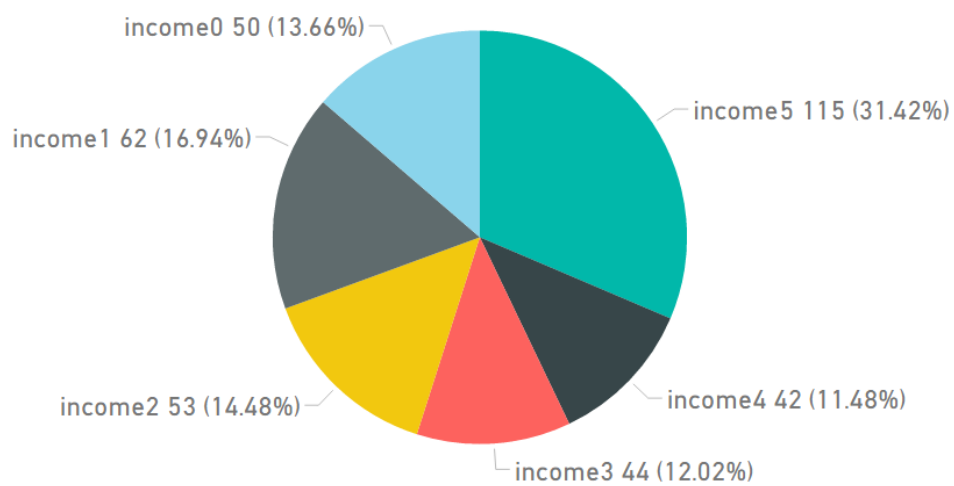
Education level

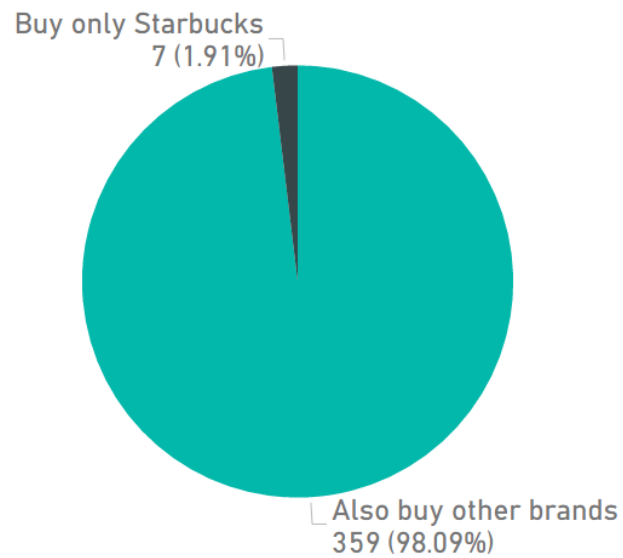
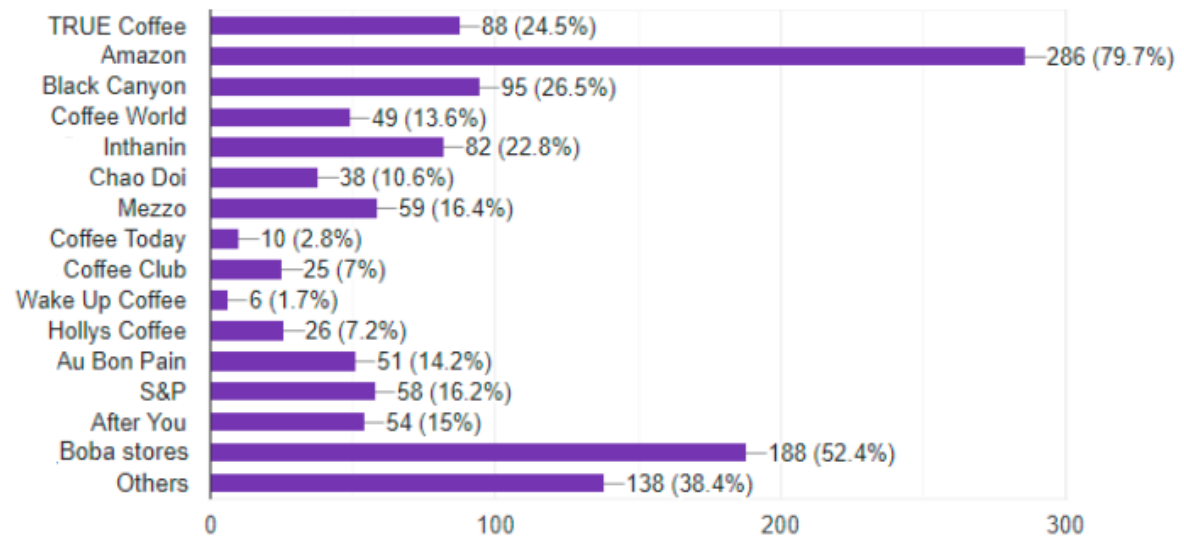


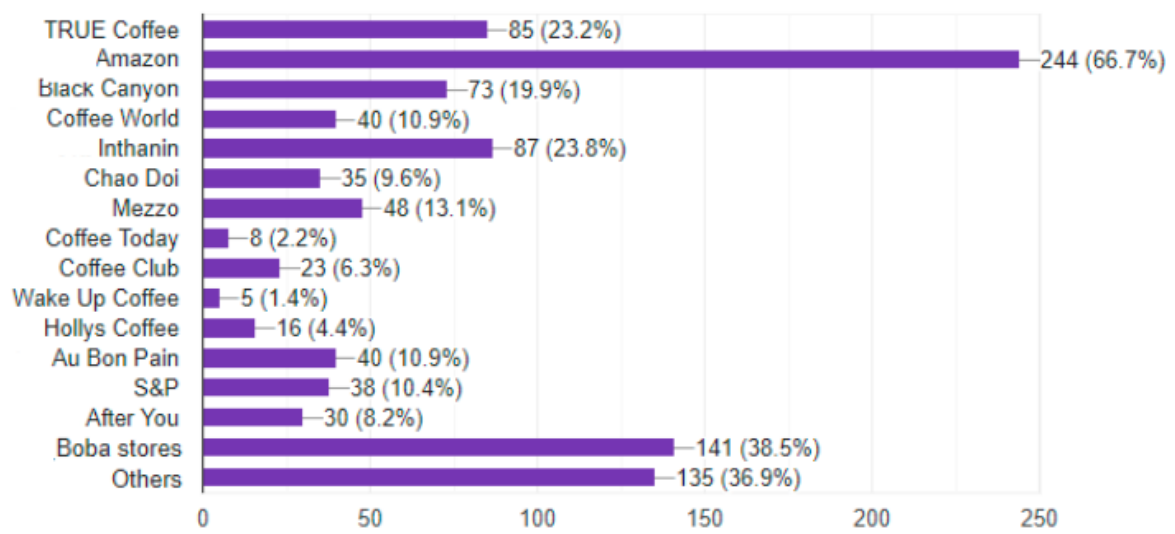
Occupation



Income level



Respondents who consume only Starbucks**Other brands that respondents consume (359 respondents)**

What brands would respondents consume if the Starbucks becomes unaffordable**(366 respondents)**

Appendix C: Ordered probit regression results

Specification 1:

Ordered probit regression	Number of obs	=	366
	Wald chi2(18)	=	46.51
	Prob > chi2	=	0.0002
Log pseudolikelihood = -134.69641	Pseudo R2	=	0.1564

freq_buy_sb	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
sex_male	1.135827	.5736374	1.98	0.048	.0115186	2.260136
sex_female	.7691212	.5535935	1.39	0.165	-.3159022	1.854145
four_age_dum1	.0968026	.4643215	0.21	0.835	-.8132508	1.006856
four_age_dum2	.1476244	.3657723	0.40	0.687	-.5692762	.864525
four_age_dum3	.0830431	.3450746	0.24	0.810	-.5932907	.7593769
edu2	-.2040466	.3621746	-0.56	0.573	-.9138959	.5058026
edu3	-.3800305	.4199675	-0.90	0.366	-1.203152	.4430907
edu4	-2.567674	.7873498	-3.26	0.001	-4.110851	-1.024496
job_student	.8483561	.4765824	1.78	0.075	-.0857283	1.78244
job_company	.1820626	.3957329	0.46	0.645	-.5935597	.9576849
job_public	-.5639845	.3784305	-1.49	0.136	-1.305695	.1777257
job_private	.0569132	.4208536	0.14	0.892	-.7679447	.8817712
income1	.7174458	.2764608	2.60	0.009	.1755925	1.259299
income2	1.48637	.413151	3.60	0.000	.6766085	2.296131
income3	1.585979	.5323029	2.98	0.003	.5426844	2.629273
income4	2.154153	.4707364	4.58	0.000	1.231527	3.07678
income5	2.130151	.4489703	4.74	0.000	1.250185	3.010117
freq_otherstore	-.1218001	.1332938	-0.91	0.361	-.3830511	.139451
/cut1	-.0522192	.7213948			-1.466127	1.361689
/cut2	3.8858	.7800808			2.35687	5.414731
/cut3	4.504093	.7704635			2.994013	6.014174
/cut4	5.06985	.7817566			3.537635	6.602065

Specification 2:

Ordered probit regression	Number of obs	=	366
	Wald chi2(25)	=	145.06
	Prob > chi2	=	0.0000
Log pseudolikelihood = -115.56919	Pseudo R2	=	0.2762

freq_buy_sb	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
sex_male	.8033186	.5238209	1.53	0.125	-.2233515	1.829989
sex_female	.3273156	.4819993	0.68	0.497	-.6173856	1.272017
four_age_dum1	-.3140368	.5840237	-0.54	0.591	-1.458702	.8306287
four_age_dum2	-.0059802	.4040855	-0.01	0.988	-.7979732	.7860128
four_age_dum3	.0764061	.3720078	0.21	0.837	-.6527158	.8055281
edu2	-.3116551	.3551107	-0.88	0.380	-1.007659	.3843491
edu3	-.6236162	.4274998	-1.46	0.145	-1.4615	.2142679
edu4	-3.369845	.9095909	-3.70	0.000	-5.152611	-1.58708
job_student	.959152	.5903294	1.62	0.104	-.1978724	2.116176
job_company	.3825818	.3940153	0.97	0.332	-.389674	1.154838
job_public	-.3799412	.371323	-1.02	0.306	-1.107721	.3478385
job_private	.2291818	.4594105	0.50	0.618	-.6712462	1.12961
income1	.8616765	.3212344	2.68	0.007	.2320686	1.491284
income2	1.640351	.4592042	3.57	0.000	.7403272	2.540375
income3	1.764718	.5626075	3.14	0.002	.6620281	2.867409
income4	2.466303	.4731458	5.21	0.000	1.538954	3.393652
income5	2.266669	.474208	4.78	0.000	1.337238	3.196099
freq_otherstore	-.1137838	.149529	-0.76	0.447	-.4068553	.1792877
if_stay	-.6334723	.3377675	-1.88	0.061	-1.295484	.0285398
freq_stay	.3746589	.1347683	2.78	0.005	.1105179	.6388
priceup_less	-.0386184	.2116242	-0.18	0.855	-.4533942	.3761573
priceup_dontbuy	-1.421856	.372302	-3.82	0.000	-2.151555	-.6921574
if_goods	.1474482	.201517	0.73	0.464	-.2475177	.5424142
if_image	-.1479361	.1944586	-0.76	0.447	-.529068	.2331957
if_used_card	.3773913	.2011916	1.88	0.061	-.016937	.7717196
/cut1	-1.040511	.6961214			-2.404884	.3238624
/cut2	3.780604	.7211749			2.367127	5.194081
/cut3	4.443608	.7205453			3.031365	5.85585
/cut4	5.041013	.734821			3.600791	6.481236

Specification 3:

Ordered probit regression	Number of obs	=	366
	Wald chi2(35)	=	144.83
	Prob > chi2	=	0.0000
Log pseudolikelihood = -110.6213	Pseudo R2	=	0.3072

freq_buy_sb	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
sex_male	.8460866	.5151014	1.64	0.100	-.1634936	1.855667
sex_female	.5077431	.4731967	1.07	0.283	-.4197054	1.435192
four_age_dum1	-.6171919	.6518269	-0.95	0.344	-1.894749	.6603653
four_age_dum2	-.0090519	.4395623	-0.02	0.984	-.8705781	.8524743
four_age_dum3	.1436711	.3987892	0.36	0.719	-.6379413	.9252835
edu2	-.2075151	.3367224	-0.62	0.538	-.8674789	.4524487
edu3	-.4537423	.4431895	-1.02	0.306	-1.322378	.4148932
edu4	-3.508976	.963438	-3.64	0.000	-5.39728	-1.620672
job_student	1.345323	.6708218	2.01	0.045	.0305364	2.66011
job_company	.4394165	.3971192	1.11	0.269	-.3389228	1.217756
job_public	-.4334845	.3756424	-1.15	0.249	-1.16973	.3027612
job_private	.169874	.4674142	0.36	0.716	-.7462409	1.085989
income1	.6724553	.3508591	1.92	0.055	-.015216	1.360127
income2	1.55277	.4803631	3.23	0.001	.611276	2.494265
income3	1.762721	.5565848	3.17	0.002	.6718354	2.853608
income4	2.528298	.4908925	5.15	0.000	1.566166	3.490429
income5	2.342161	.4716649	4.97	0.000	1.417715	3.266607
freq_otherstore	-.163782	.1573679	-1.04	0.298	-.4722174	.1446534
if_stay	-.5710286	.3446685	-1.66	0.098	-1.246567	.1045093
freq_stay	.3622953	.1420924	2.55	0.011	.0837994	.6407913
priceup_less	-.0147517	.2266305	-0.07	0.948	-.4589393	.4294359
priceup_dontbuy	-1.427424	.3602387	-3.96	0.000	-2.133479	-.7213688
if_goods	.0636568	.2234847	0.28	0.776	-.3743652	.5016787
if_image	-.1423113	.1871588	-0.76	0.447	-.5091358	.2245133
if_used_card	.3256284	.2094565	1.55	0.120	-.0848989	.7361556
rate_taste	.3516943	.2071262	1.70	0.090	-.0542657	.7576542
rate_variety	-.2364397	.1534488	-1.54	0.123	-.5371939	.0643145
rate_price	-.1537943	.1484041	-1.04	0.300	-.444661	.1370724
rate_location	-.2562422	.1534013	-1.67	0.095	-.5569032	.0444188
rate_space	.1611846	.1421825	1.13	0.257	-.117488	.4398572
rate_design	-.0524389	.126045	-0.42	0.677	-.2994826	.1946047
rate_promotion	.0599616	.1306582	0.46	0.646	-.1961238	.316047
rate_brand	.059971	.1410737	0.43	0.671	-.2165283	.3364703
rate_service	.2404187	.1859174	1.29	0.196	-.1239727	.6048101
rate_24hr	.1513046	.1172086	1.29	0.197	-.07842	.3810292
/cut1	-.1660879	.9067066			-1.9432	1.611024
/cut2	4.952141	.9238195			3.141488	6.762794
/cut3	5.64603	.9138803			3.854858	7.437203
/cut4	6.269296	.919659			4.466798	8.071795