Consumer willingness to use for roasted coffee: A Vietnamese case study

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Abstract: Coffee consumption in Vietnam has seen a significant rise in recent years. This study seeks to explore the determinants of coffee consumption in Vietnam with a specific focus on the roasted coffee trade and the consumer's behavior. In this study, 7296 customers were surveyed from 19 districts in Ho Chi Minh City of Vietnam in randomly selected places, and consumers' willingness to use (WTU) for roasted coffee was measured. This study uses an interval regression to investigate individual demographic and consumption characteristic impacts on WTU. Among the surveyed participants, 69.14% people use coffee. Results show that on average, consumers were willing to pay 78.49% more for roasted coffee compared with instant coffee. Unlike other chains, the consumers more often drink roasted coffee in the morning with friends or alone to relax. Most of them like to spend time to drink coffee at the quiet and nice place where they enjoy the view. The people usually chose coffee on the flavor (50.01%) and most of them prefer the price with 0.5US$/cup (56.79%).

Keywords: Roasted Coffee, Willingness to Use, Behavior, Vietnam

1. Introduction

In the present situation, the social development demands increasingly for the coffee consumption. To meet that demand, the managers and manufacturers have been approached and dominated the market to choose the reasonable method. Coffee may be seen as a western-style beverage to Vietnamese consumers. Roasted coffee sold in processed or prepackaged form is still rare in Vietnam. That's why the research on the roasted coffee consumption was done to find out the consumer willingness to use for roasted coffee in Ho Chi Minh City, Vietnam.

2. Data and Methods

The data used in this analysis were collected by a face-to-face survey in the Ho Chi Minh City of Vietnam. Ho Chi Minh City is the biggest and busiest city in Vietnam. The city is recognized as the political, economic, financial, cultural, educational, and transportation center of the South of Vietnam. The surveyors were random with different ages, sex, job, salary, but mostly over 18 years old.

The surveyed areas were in 19 districts of Ho Chi Minh City, such as: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, Tan binh, Tan Phu, Binh Thanh, Thu Duc, Phu Nhuan, Binh Tan and Go Vap.

Raosoft software was used to calculate the right sample amount for survey in each district with the acceptable of error rate lower than 5%, the confidence level from 95%.

The secondary data was collected from statistical Center of Ho Chi Minh City. The primary data was collected by a face-to-face survey with consumers.

3. Results and Discussion

Statistics analyze the characteristics of the surveyors.

The total of 7296 completed questionnaires were collected during September – December of 2013. Surveyors were 4196 male (57.51%) and 3100 female (42.49%), with different ages.

Table 1. The ratio age of the surveyors (%)

Age-group	< 18	18 – 25	26 – 35	36 – 45	46 – 55	56- 65	> 65
Ratio (%)	1.64	23.85	32.52	26.75	11.86	2.48	0.89

Surveyors were mostly at the age under 18, 18-25, 46-55, 56-65, and over 65 years old (more than 27%). The lowest amount of surveyors was at 26-35 and 36-45 years old (less than 11%). (table 1)

Most surveyors who are officer or worker have the ages from 18 – 45; who are retailer have the ages from 36 – 56; who are housekeeper have the ages from 36 – 56. The other surveyors like farmer, teacher, architecture, and engineering are not to be consisted of much in this study (table 2).

Table 2. The ratio of the job of surveyor via the age-groups (%)

Age-group	Officer	Worker	Farmer	Retailer	Teacher	Architecture	Engineering	House-keeper	Other
<18	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00	99.17
18-25	23.74	22.41	0.92	6.90	4.02	1.26	6.95	1.90	31.90
26-35	27.81	30.68	0.88	11.97	4.51	1.35	8.51	3.79	10.49
36-45	22.28	25.82	0.82	17.88	4.87	1.43	8.45	8.04	10.40
46-55	8.55	17.57	1.39	19.54	6.36	2.20	3.35	13.18	27.86
56-65	2.76	6.08	2.21	16.57	2.76	1.10	0.55	14.92	53.04
>65	1.54	0.00	1.54	7.69	0.00	0.00	1.54	3.08	84.62

The salary of most surveys is about 2 – 5 million VND (~100 – 250 US$)/month, especially at the ages from 18 – 25 and 26 – 35 (46 – 49%). That's why, the coffee consumption should be oriented to the human who are getting the salary higher than 2 million VND (~100 – 250 US$)/month and to the people group that's ages about 18 – 65 years who are beginning to get the good salary.

Table 3. The ratio of the salary of surveyor via the age-groups (%)

Age-group	Dependent	<2.000.000 VND	2-5.000.000	5-7.000.000	> 7.000.000
<18	68.33	6.67	14.17	5.83	5.00
18-25	22.13	5.40	46.03	20.57	5.86
26-35	2.87	2.44	48.21	34.39	12.09
36-45	7.33	0.82	33.61	44.52	13.73
46-55	12.60	1.85	33.76	36.30	15.49
56-65	22.65	3.31	31.49	24.31	18.23
>65	44.62	6.15	20.00	18.46	10.77

Table 4. The ratio of using coffee of surveyor via the age-groups (%)

Age-group	Roasted coffee	Instant coffee	Non drink coffee
<18	24.17	18.33	57.50
18-25	49.02	22.82	28.16
26-35	64.31	14.08	21.62
36-45	73.72	11.94	14.34
46-55	63.58	17.80	18.61
56-65	63.54	9.94	26.52
>65	41.54	9.23	49.23

The orientation of using coffee of each age group

As a case study, our result set an example of how Vietnamese consumers may treat and react toward roasted coffee through their habit to drink. Table 4 show that the people like the roasted coffee mostly from the age group 26 – 65 (more than 60%). The younger (< 25 years old) and older (> 65 years old) don't like to drink coffee much, if some one of those age group want to drink coffee, they like instant coffee more.

Most people who are under 65 years old like to use iced coffee (> 50%). But some also like to use hot coffee, most of them are older, such as the age from 56 – 65 (47.83%) and > 65 years old (70.37%). Only some people like to use both kinds of coffee (hot and iced), and less than 5%. (table 5)

Table 5. The ratio of coffee drinking habit of surveyor via the age-groups (%)

Age-group	Hot drink	Iced drink	Both
<18	27.59	68.97	3.45
18-25	27.32	66.82	5.86
26-35	21.89	73.66	4.46
36-45	10.08	85.34	4.59
46-55	27.64	69.64	2.73
56-65	47.83	50.43	1.74
>65	70.37	29.63	0.00

Table 6a. The ratio of drinking time of surveyor via the age-groups (%)

Age group	In the morning	In the noon	In the afternoon	In the evening	In the morning and noon	In the noon and after noon	In the noon and evening	In the morning and afternoon	In the morning and evening
<18	37.93	13.79	6.90	34.48	0.00	0.00	0.00	3.45	3.45
18-25	47.60	12.43	3.75	15.47	10.20	1.17	0.59	1.41	4.81
26-35	43.18	19.59	1.18	4.46	17.76	2.23	1.11	1.38	4.78
36-45	30.23	19.87	0.83	3.54	24.88	1.25	1.88	1.39	6.60
46-55	48.00	16.36	0.73	1.64	19.09	3.82	1.27	1.82	2.36
56-65	60.00	5.22	1.74	0.00	15.65	2.61	0.00	6.09	1.74
>65	44.44	11.11	3.70	0.00	25.93	0.00	0.00	14.81	0.00

Table 6b. *The ratio of drinking time of surveyor via the age-groups (%) (count.)*

Age group	In the noon and afternoon	In the morning and evening	In the noon and evening	In the afternoon and evening	All time a day
<18	0.00	0.00	0.00	0.00	0.00
18-25	0.00	1.41	0.00	0.00	1.17
26-35	0.33	2.42	0.00	0.39	1.18
36-45	0.42	7.37	0.14	0.28	1.32
46-55	0.91	1.64	0.00	0.73	1.64
56-65	1.74	0.00	0.00	0.00	5.22
>65	0.00	0.00	0.00	0.00	0.00

The result showed that almost the people want to drink coffee in every time in the day, but most of them like to use coffee in the morning (30 – 60%), because they want to fresh themselves after sleeping in the evening (table 6a, 6b). And part of them (10.2 – 25.93%) likes to drink coffee in the morning and noon because they want to keep fresh in all working time. The teenage (<18 years ole) want to drink coffee in the morning to freshmen (37.93%), but part of them want only to take coffee with their friends in the evening (34.48%) (table 6a).

Table 7. *The ratio of coffee type of surveyor via the age-groups (%)*

Age group	Milky Coffee	Black coffee	Light Milky Coffee	Others
<18	55.17	31.03	10.34	3.45
18-25	49.82	41.03	6.80	2.34
26-35	38.40	55.96	3.41	2.23
36-45	29.81	63.17	5.21	1.81
46-55	30.00	64.18	4.18	1.64
56-65	39.13	57.39	0.87	2.61
>65	44.44	51.85	3.70	0.00

The type of coffee that people like to drink in this survey mostly is black and milky coffee. Most people like to drink black coffee who's ages are between 26 – 35, 36 – 45, 46 – 55, 56 – 65 and over 65 years old (51 – 65%). The surveyors who like to use milky coffee are between 18 – 25 years old (49.82%), under 18 years old (55.16%) and over 65 years old (44.44%). The result can be see that the young and old human prefer milky coffee and other age group like black coffee (table 7).

The result from table 8 showed that the people who are over 56 years old (56-65 (25.22%), > 65 (66.67%)) like to go to drink coffee in the place where near their home. The age groups of 26 – 65 like to use coffee at the coffee bar, which is near their office. Most surveyors want to have a cup of coffee at the familiar places, such as near their home or their office. But young people also want to go everywhere that is convenient for them.

Table 8. *The ratio of coffee drinking place of surveyor via the age-groups (%)*

Age group	Near home	Near office	Familiar places	Convenient places
<18	20.69	3.45	31.03	44.83
18-25	15.47	18.64	30.48	35.40
26-35	8.39	34.73	30.28	26.61
36-45	10.15	37.67	26.48	25.71
46-55	16.00	36.91	26.18	20.91
56-65	25.22	26.09	23.48	25.22
>65	66.67	7.41	14.81	11.11

Most surveyors want to drink coffee one time a day (~37 – 64%). But some older people also like to have coffee more than 1 time a day (the age groups are over 36 years old). So the young people drink coffee less than older people (table 9).

Table 9. *The ratio of coffee drinking level of surveyor via the age-groups (%)*

Age group	1 time/ day	>1 time/ day	1 time/ week	> 1 time/ week	1 time/ month	>1 time/ month	other
<18	37.93	3.45	20.69	31.03	3.45	0.00	3.45
18-25	40.80	17.70	8.68	23.56	4.45	2.93	1.88
26-35	50.59	27.85	2.56	15.60	1.44	0.98	0.98
36-45	48.02	36.97	2.15	11.40	0.35	0.42	0.69
46-55	55.82	33.64	2.55	7.09	0.91	0.00	0.00
56-65	63.48	33.91	0.00	1.74	0.00	0.00	0.87
>65	51.85	40.74	3.70	3.70	0.00	0.00	0.00

Table 10. *The ratio of coffee drinking purpose of surveyor via the age-groups (%)*

Age group	Relax	Habit	Against sleepy	Cultural exchange	Working exchange
<18	34.48	24.14	10.34	17.24	13.79
18-25	33.76	30.36	13.36	15.47	7.03
26-35	36.70	35.45	11.53	9.76	6.55
36-45	31.20	46.77	9.73	7.30	5.00
46-55	25.09	52.18	14.55	4.91	3.27
56-65	15.65	69.57	6.09	4.35	4.35
>65	22.22	74.07	0.00	3.70	0.00

The coffee drinking becomes the habit of most people to increase from 22 to 74% depend on their ages; so more older people usually drink coffee by habit than younger. The second purpose of coffee drinking is relaxed (from 15 to 34%). The people also want to drink coffee when they want to relax themselves when they are become stress during working day; so more younger people like to relax with coffee than older.

Table 11. The ratio of coffee drinking candidate of surveyor via the age-groups (%)

Age group	Relatives	Friend	Lover	Partner	Alone	Other
<18	17.24	31.03	3.45	6.90	37.93	3.45
18-25	13.01	53.69	4.69	5.51	18.99	4.10
26-35	7.34	59.31	3.47	5.50	17.43	6.95
36-45	6.32	64.63	2.08	4.45	20.64	1.88
46-55	8.00	51.27	1.09	4.36	29.27	6.00
56-65	7.83	44.35	0.00	0.87	37.39	9.57
>65	29.63	37.04	0.00	0.00	29.63	3.70

Table 11 showed that, most people drink coffee with their friend (31 – 65%). Less people like to drink coffee with their lover. The old human mainly drink coffee with relative,

friend of keep alone. It is similar with young people who are under 18 years old.

Table 12. The ratio of coffee drinking environment of surveyor via the age-groups (%)

Age group	<18	18-25	26-35	36-45	46-55	56-65	>65
Silent	65.52	84.41	87.16	94.16	94.73	96.52	96.30
Noisy	34.48	15.59	12.84	5.84	5.27	3.48	3.70

The result also showed that, most surveyors like to use coffee at the calm places. Older people want to stay at the quiet place than younger. Some of younger human like noisy places (34.48%), but most of them still like quiet place. So the consumer ages affect much on the coffee drinking habit.

The people who are over than 56 years old usually read news paper or talk with their friend when they take a coffee. The younger people who's ages are about 18 – 55 years old always chose the coffee drinking place where they can see the sight like walking man in the street, the transportation of the cars or motorbikes (34 – 41%). That's why to build the good environment with good decoration will make more people choosing to consume coffee or other drink in the bar.

Table 13. The ratio of the other action of surveyor via the age-groups when drinking coffee (%)

Age group	Watch TV, listen to music	Sight seeing	Playing chess	Other
<18	24.14	34.48	10.34	31.03
18-25	25.32	39.86	5.74	29.07
26-35	15.47	34.27	4.65	45.61
36-45	11.05	41.00	3.82	44.13
46-55	11.82	35.45	6.00	46.73
56-65	18.26	18.26	4.35	59.13
>65	33.33	11.11	0.00	55.56

Table 14. The ratio of coffee flavor evaluation of surveyor via the age-groups (%)

Age group	Very important	Important	Non Important
<18	27.59	31.03	41.38
18-25	42.79	27.32	29.89
26-35	61.21	24.38	14.42
36-45	68.45	19.39	12.16
46-55	52.73	27.45	19.82
56-65	44.35	34.78	20.87
>65	59.26	18.52	22.22

The effect of sensory evaluation of coffee of each age

group

According to the survey on the habit of coffee flavor, we can see that, the people who are older than 18 years age take attention on the coffee flavor than other (table 14). So the young people who are under 18 years old use coffee less than older. Otherwise, the people who have stable job always take attention to the coffee flavor.

The survey result showed that most consumers want to have the coffee that is suitable or less sweet. Very few people like very strong sweet coffee (< 7%). The old people like the coffee that is sweeter than young people (Table 15).

Table 15. The ratio of coffee sweetness evaluation of surveyor via the age-groups (%)

Age group	Non sweet	Less sweet	Suitable sweet	Strong sweet	Very strong sweet
<18	3.45	41.38	41.38	6.90	6.90
18-25	6.45	37.63	39.39	14.30	2.23
26-35	5.57	36.17	40.30	15.99	1.97
36-45	3.54	36.00	41.07	18.55	0.83
46-55	6.00	48.73	32.36	12.00	0.91
56-65	2.61	45.22	44.35	6.96	0.87
>65	0.00	33.33	37.04	29.63	0.00

The price of the cup of coffee that the consumers want to pay for

Respondents were asked how much more they would be willing to pay for a cup of fair trade coffee (of the same size) above the regular price. The survey presented them with 6

categories from 5000 VND, and up to > 25 000 VND (table 16). Respondents could mark one category as an indication of their willingness to pay. Table 16 shows the distribution of those reported roasted coffee for a cup of fair trade coffee. About 31 – 71 % of the respondents in each age group were

willing to pay a price premium for fair trade coffee (10 000   VND).

Table 16. *The ratio of price of the cup of coffee of surveyor via the age-groups (%)*

Age group	5,000 VND	10,000VND	15,000 VND	20,000VND	25,000VND	> 25,000VND
<18	10.34	34.48	31.03	20.69	3.45	0.00
18-25	5.28	42.32	36.23	12.31	2.70	1.17
26-35	2.10	59.44	28.18	7.40	1.57	1.31
36-45	1.04	71.44	21.06	4.38	0.97	1.11
46-55	2.91	65.82	20.73	8.55	0.55	1.45
56-65	10.43	57.39	17.39	12.17	1.74	0.87
>65	11.11	66.67	3.70	7.41	11.11	0.00

4. Conclusion

This study investigated Vietnamese consumers' coffee consumption and willingness to pay for roasted coffee using a survey implemented in Ho Chi Minh City, Vietnam. The key objective was not just to ascertain Vietnamese consumers' willingness to pay for roasted coffee, but also to contribute to the habit of drinking and some sensory evaluation to offer grounds for comparison with different age groups.

Our results do recognize that Vietnamese consumers are willing to show their appreciation of roasted coffee through their stated willing to pay: about 34.48 – 71.44% (depend on the age group) of respondents would like to pay the price of 10,000 VND for a medium cup of regular coffee.

As pointed out previously, the coffee market in Vietnam is a potentially high growth market, yet there have been no significant studies addressing Vietnamese consumers' preference and habit to drink for roasted coffee in different age groups. Although coffee, including roasted coffee, is not a primary commodity in Vietnam yet, this study gives an idea of how firms can approach the Vietnamese coffee market. First, this study shows that roasted coffee will likely incur a people habit to drink everyday with demanded price. Coffee marketers should recognize the price premium and adjust their marketing strategies to capture the most profit for each age group and people job.

Second, the results show that not all consumers would be willing to drink the same kinds of roasted coffee. Depending on their demographic features and past experience with coffee, consumers may be classified into different groups; each may have a different range of way to drink. Marketers can also adopt corresponding marketing strategies to focus on the target groups, while relevant policy makers can use proper management tools to facilitate this rapidly expanding market. An extension of the current study may be to conduct a cluster analysis of consumers to determine market segmentation.

Finally, the survey sample consisted primarily of every age group from under 18 to over 65 years old with 57.51% male and 42.49%female of surveyors. So from this result, it will not be difficult to imagine an oriented growth way in Vietnamese coffee consumption.

Acknowledgements

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