EXPLORING BUSINESS OPPORTUNITY AND PRODUCT MIX FOR A FAST FOOD CHAIN IN DHAKA

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ABSTRACT

The purpose of this paper is to explore business opportunity for the Fast Food Corporation by determining the frequency of consumption of fast food by customers and preferences of the customers regarding the offerings of this firm for the city of Dhaka. A survey has been carried out among prospective customers and their preferences regarding type of burger, flavour, spiciness etc has been determined. Also, the price they are ready to pay for the same has been ascertained. The results suggest that most customers prefer spicy food, BBQ, grill and masala flavours and chicken and beef are favourites. The value of this paper lies in the fact that by determining customer behavior regarding fast food consumption, it will help the firm to offer a menu which is to the liking of the local people in Dhaka and also within the price range that the customers are prepared to pay.

Key Words : *Fast food, Burger, Flavour, Spiciness, Price, Dhaka*

INTRODUCTION

The Fast Food Corporation is one of the world's largest chain of fast food restaurants, spread across more than a hundred countries and headquartered in the United States. Most of the restaurants of Fast Food Corporation worldwide are owned and operated by independent local men and women who work as franchisees. These franchisees have modified the core product of the company according to their own regional food habits and culture. Unfortunately, Fast Food Corporation does not have any franchisee in Bangladesh while many other internationally famous fast-food chains are already operating in Bangladesh through franchises.

It is believed that the modern system of fast food franchising was started in the mid 1930s when Howard Johnson franchised his second location to a friend in order to expand operations during the Great Depression. The term "Fast Food" was added to the Merrion-Webster dictionary in 1951 and U.S. fast food companies are now franchised in over 100 countries. In the U.S. alone there are over 200,000 restaurant locations.

Dhaka City is centrally located in Bangladesh, in the southern part of the district of Dhaka. Area of Dhaka City is 815.8 sq Km. It has the Buriganga river in the south; the Balu and the Shitalakhya rivers in the east; Tongi Khal in the north and the Turag river in the west. According to the 2011 Census the size of Dhaka's population is 12,043,977 of which 6,555,792 are male and 5,488,185 are female. This makes Dhaka a megacity. The population growth of Dhaka stands at 41.5% in the last decade, which is very high. This means that during the last decade the city's population has grown by 3,532,749 *(Bangladesh Bureau of Statistics, Community Report Dhaka*

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Zila, June 2012). The number of the Dhaka City's young population is relatively high due to age selective rural-urban migration for education, jobs, small to middle investment business. This has resulted in a Westernizing trend in Dhaka which seems likely to continue.

SURVEY OF LITERATURE

Dout (1984) tried to investigate the factors affecting productivity in fast food restaurants in US. Ownership type did not have a significant influence on productivity but labor and capital investment had important effects upon productivity. Jones (1985) has discussed the growth prospects of fast food operations in Britain including the planning issues and policies affecting this. Krueger (1991) has tried to compare the compensation of employees between company owned and franchise owned fast food restaurants. Compensation of former was found to be slightly greater than the latter. Jeffery & French (1998) have studied the association between TV viewing, fast food eating and Body Mass Index. Fast food meals and TV viewing were positively associated with energy intake and Body Mass Index in women but not for men. Seok-hoon, Yong-pil Kim, Hemmington & Yun (2004) have proposed a new model for competitive service quality improvement and applied it to the fast food industry. They have used the current quality levels and competitive performance indices simultaneously. Øgaard, Larsen & Marnburg (2005) have explored the relationship between organizational culture and the performance of managers in the restaurant.

It was found that cultural variables are related to performance variables like cost and additional sales. Stewart & Davis (2005) have examined the spatial variation in price and accessibility of fast food across in the District of Columbia and suburbs. It was found that spatial differences in costs and demand caused variation in number of firms operating in the market which in turn affects prices. Binkley (2006) has studied the effect of demographic, economic and nutrition factors on the frequency of food, specially fast food, away from home. Mattson & Helmersson (2007) have studied the attitude of high school students toward eating fast food in Sweden. The findings indicate that , indicate that high-school students in Sweden are well aware of the good and bad attributes of fast food. Thomadsen (2007) has examined the optimal product positioning strategies of asymmetric firms in the context of retail outlet locations in the fast food industry.

Oyewole (2007) studied the frequency of visits to fast food restaurants of the African American consumers, the criteria and demographic factors which determine the evaluation of service. "Hygiene and reliability," "expeditiousness," "availability," and "courtesy" were found to be the most important factors in service quality. Sheely (2008) studied the adoption of convenience foods globally. Variables which affected consumption were possession of color TV sets, possession of microwaves and median age of population. Seubsman, Kelly, Yuthapornpinit & Sleigh (2009) have explored the cultural influences on fast food intake for non metropolitan adolescents in North East Thailand. Three quarters of sampled youth were aware that fast food causes obesity and half of them knew of the link to heart disease. Half of them consumed fast food regularly, induced by the appeal of 'modern' lifestyles, social events and marketing, as well as by the convenience, speed and taste. Chang & Nayaga Jr (2009) have examined the effect of children's TV viewing and fast food consumption on childhood obesity. It was found that these two activities positively contribute to children's body weight and increased risk of being overweight. Dunn (2010) has tried to investigate the effect of fast food availability on weight outcomes by geographic location, gender and race/ethnicity. It was found that availability does not affect weight outcomes but does tend to increase Body Mass Index among females and non whites in medium density countries. Bougoure & Neu (2010) have tried to assess service quality of Malaysian fast food industry using DINESERV model. Lucan, Barg & Long (2010) have tried to identify promoters and barriers to fruit, vegetable and fast food consumption among African Americans in

Philadelphia state. Taste was found to be promoter and cost a barrier to all foods. Fast food consumption was promoted by convenience, cravings and preferences.

Dhar & Baylis (2011) have studied the effect of banning advertisement of fast food in the Canadian province of Quebec. They conclude that the ban reduced fast food consumption by USD 88 million per year. Marlow and Shiers (2012) have tried to hypothesize a link between obesity and fast food by examining data on all states in US over the period 2001-2009 and they conclude that fast food is not a significant causal factor behind substantial weight gain by US population. Han & Powell (2013) have tried to determine the association between ban on fast food and Body Mass Index (BMI). They found that a 10% increase in price of fast food was associated with a 0.9% and 0.7% lower BMI for low income women and women with children respectively.

Harun, Ahmed & Maniruzzaman (2013) have tried to identify the factors affecting customer hospitality in the fast food industry in Bangladesh. Most important factors were found to be greetings, sitting arrangement and speed of service. Tabassum & Rahman (2012) have used a multi-attribute attitude model to find out differences in consumer attitude towards selected fast food restaurants in Bangladesh. Islam & Ullah (2010) have tried to identify factors affecting consumer perferences for fast food in Bangladesh. This study suggests that the brand reputation, nearness and accessibility, similarity in taste, and cost and quality relationship are important for the university students preference towards for fast food items in Bangladesh.

No researcher has tried to study the taste preferences for fast food customers in Bangladesh. Hence, this study fills a definite gap regarding fast food behavior of customers in Bangladesh.

OBJECTIVES OF THE STUDY

This study has the following objectives :

1. To determine frequency of consumption of fast food by customers in Dhaka, which is an indicator of business opportunity.
2. To understand the choices of customers to arrive at the correct product mix to be offered.
3. To find the price that consumers are willing to pay for food offered by the company.

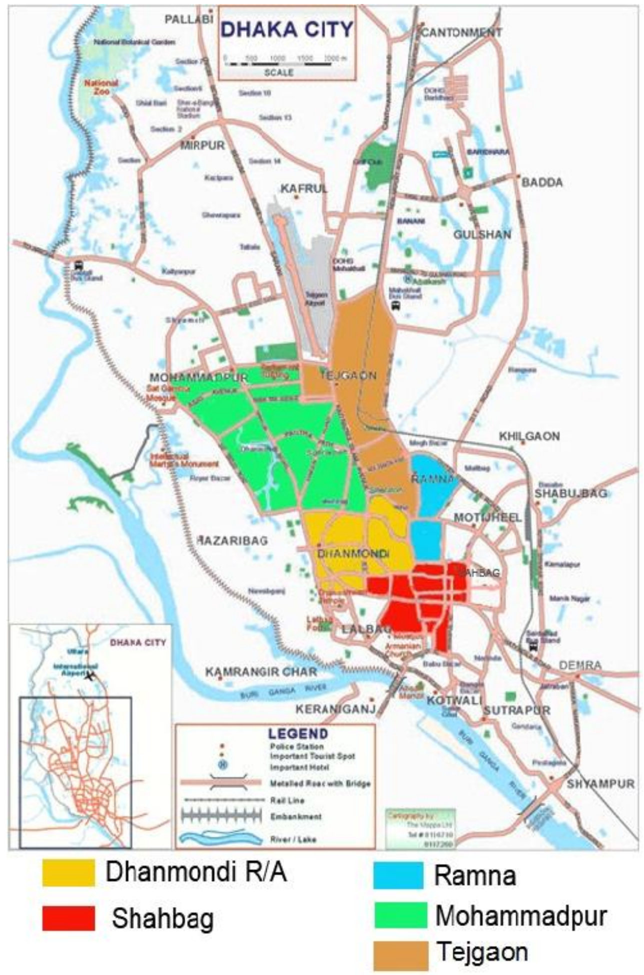

Figure-1 : Survey Area in Central Dhaka

METHODOLOGY

The study was conducted in five sub-districts in Dhaka City of Bangladesh which have been selected using judgment sampling. These sub-districts are followings :

- Dhanmondi (Mostly residential area with few shopping malls)
- Mohammadpur (Residential area)
- Tejgaon (Commercial Area and Industrial area)
- Shahbag (Educational Area)
- Ramna (Mostly residential area with few shopping malls)

These areas are situated in the Central part of Dhaka city and this is shown in Figure 1. The people here are mostly middle class and upper middle class to higher class of society. They are quick in adopting western life style and are also very much aware of new trends and fashion. Therefore, this portion of the population seems to be the most likely customer for Fast Food Corporation.

The method of survey used is online survey as a high percentage of population (about 78%) of Dhaka city people use internet. The respondents have been selected randomly from these areas based on employment, income, religion. Data were collected through a structured questionnaire made on Google Document and sent by e-mail. A total number of 178 responses was collected.

This research assumes that the sample is representative sample of the selected population of central Dhaka. By analyzing the primary data through frequency charts the study attempts to determine the demographic profile of the target segment, preferred features of introductory product of Fast Food Corporation and price range expected by target group of customers. Chi Square test has also been applied to determine if any correlation exists between demographic variables and fast food habits of the people. This has been done using SPSS.

DATA ANALYSIS

Frequency analysis

The following sections discuss simple frequency analysis carried out to understand customer behavior and preferences for fast food being offered by the company.

Age and gender profile of respondents

Age profile of respondents is given in Figure 2. It is evident that most of the respondents belong to the age group 18 to 40. This is actually the target segment for Fast Food Corporation who are likely to be customers for a fast food restaurant. About 78% respondents were males and 22% were females. About 72% of respondent are between 18-30 years of age in which 18% are female, they are the young people of the Central Dhaka. Also the 22% of respondents lies in 31-40 years group.

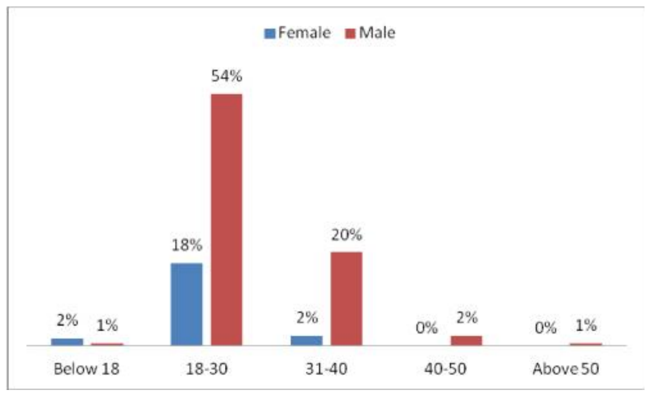

Figure-2: Age profile of respondents

Job profile of respondents

It was found that about 40% respondents are students and 52% are service holders as shown in Figure 3. Of the service class people 29% took fast food and 48% of students take fast food for lunch. In total, 37% of total respondents is taking fast food as a lunch.

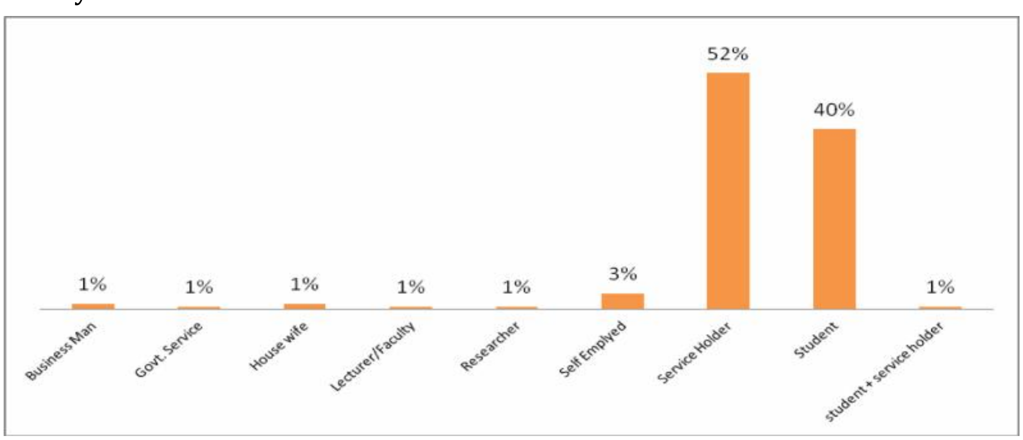

Figure-3: Job profile of respondents

Income levels of respondents

Most of the respondents have monthly income level above 20000 BDT (Bangladesh Taka). This study also found about 19% belonged to high income level above 50000 BDT. The income levels of the respondents are given in Figure 4.

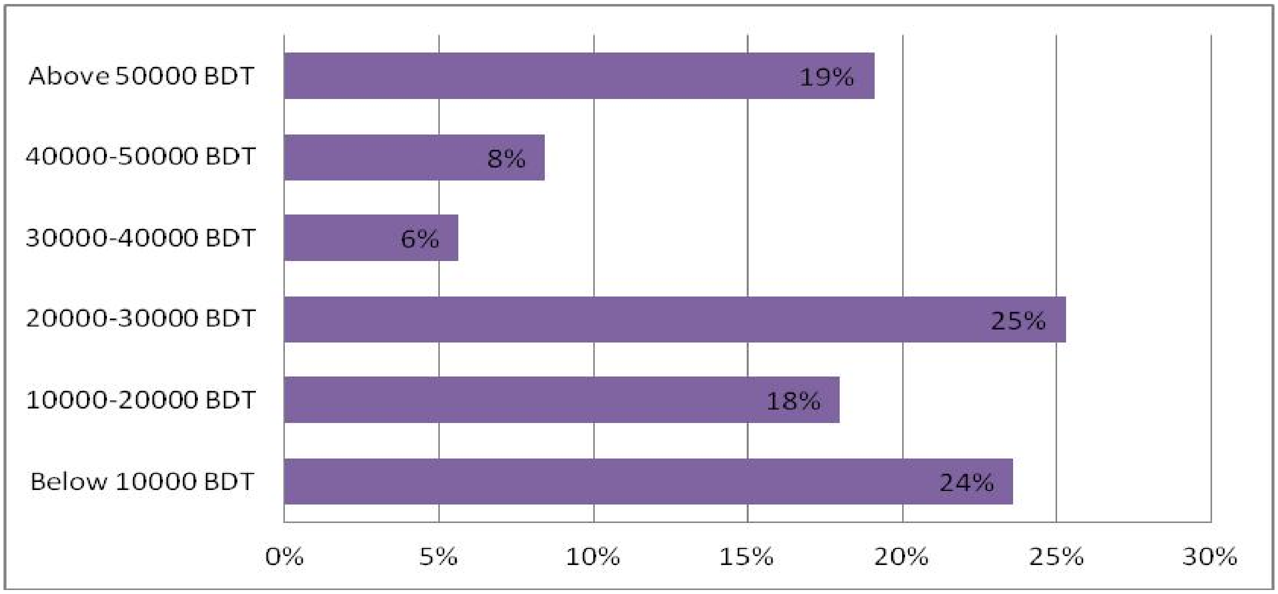

Figure-4: Income levels of respondents

Vegetarian vs. non-vegetarian

The breakup of vegetarian and non-vegetarian respondents is provided in Figure 5. About 95.50% of the respondents were found to be non-vegetarian and only 4.5% were vegetarians.

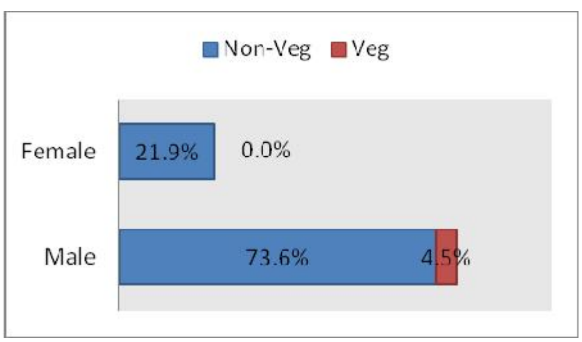

Figure-5: Break up between vegetarian and non-vegetarian customers

Frequency of taking fast food

The frequency of consumption of fast food and taking fast food for lunch is given in Figure 6. It shows that 40% respondents take fast food 2-3 times in a week and 34% once in a week, 12% 0f respondents express that they take fast food more often than 2-3 times a week . Clearly, target group has substantial consumption of fast food.

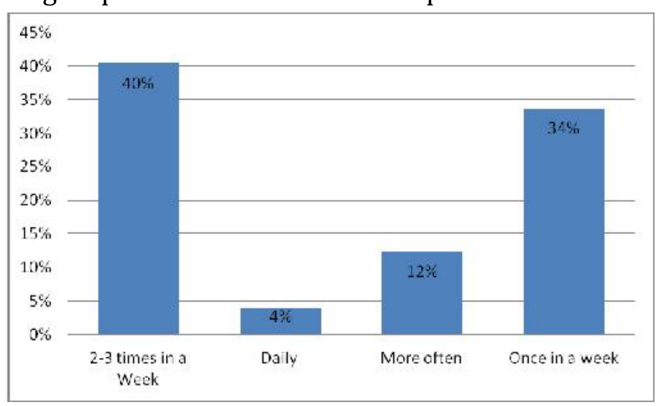

Figure-6: Frequency of taking fast food

Expected price of food items offered

About 26% of respondents want their burger at 50-100 BDT , 37% at 100-150 BDT and 28% at 150-200 BDT (Fig-7). So, Fast Food Corporation should keep their price range

in between 50-200 BDT and should target low and mid income groups. There also high income group which constitute about 19% of the total respondents. But 80% the high income group also (above 50000 BDT) expect at price range within 50-200 BDT. As far as occupational groups of respondents are concerned, 94% students and

88% of service holders expect the burger at price range within 50-200 BDT.

Choice of burger

The choice of burger varies quite a bit among the respondents. Some respondents give more than one option. Highest percentage of respondents (65.7%) chose chicken burger followed by 56.7% respondents who want beef Burger. Fish burger is preferred by 23.6% people while 15.7% prefer vegetable burger and 13.5% like egg burger All Hindu respondents prefer Chicken. Of the Islam respondents, 63.5% prefer chicken and 60% prefer beef.

Of the female respondents 72% love chicken and 38.5% prefer Beef. 62% of age group 18-30 years of age like chicken and 55% like Beef. For age group 31-40 the number is 82.5% and 52.5% respectively.

Flavours

Respondents had clear cut preferences for flavours of the burger. Of the total respondents, 33% chose BBQ flavor while 21% chose Grilled flavor. Masala and Fried flavour was preferred by 19% and 16% respectively. This is depicted in Figure 7.

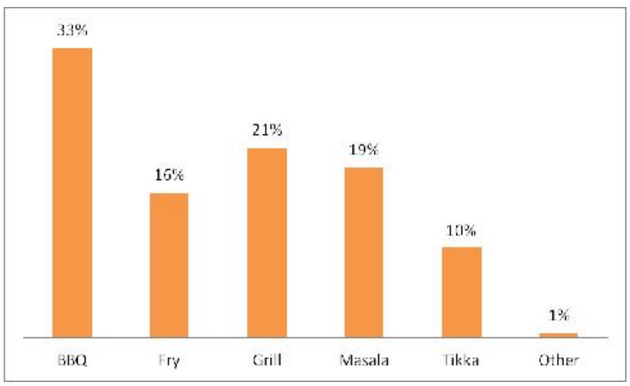

Figure 7: Flavour preferences for burger

Spiciness

About 53% of respondents want their burger spicy while 28% want it very spicy. Together, this makes up 81% of the respondents... And it is also observed that 1% of respondent want non spicy food. The results are shown in Figure 8.

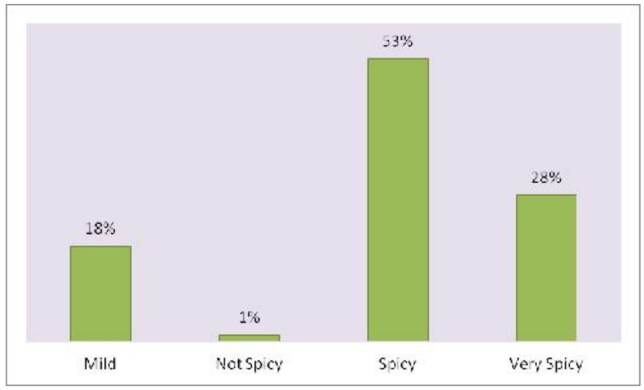

Figure 8: Preference for spiciness

Other products

Preferences for products others than burgers is shown in Figure 9. Wraps and Rolls seem to be the most popular other items.

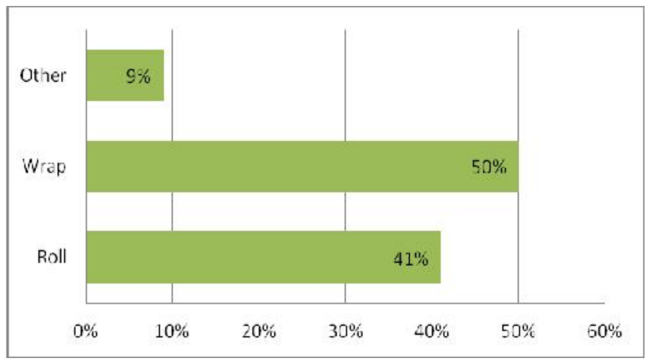

Figure 9: Preferences for other products

Statistical analysis

The frequency analysis can be further strengthened by statistical analysis. Chi square test has been carried out to understand customer behavior regarding fast food consumption. The following sections show cross-tabulations regarding customer behavior and preferences.

Age vs. frequency of eating fast food

The relationship between age and frequency of consuming fast food is given in table 1. Respondents in the age group uptil 30 years eat fast food most frequently followed by those in the age group 31 to 40. The results are valid for 95% confidence level as p value is much less than 0.05.

Table 1: Age vs. frequency Cross tabulation

Age (years)	Frequency					Total	P value
	Never	2-3 times in a week	Daily	Less than once a week	Once in a week		
Upto 30	11	58	7	12	42	130	0.016
31-40	5	8	0	9	18	40	
Above 40	1	6	0	1	0	8	
Total	**17**	**72**	**7**	**22**	**60**	**178**	

5.2.2 Age vs. price expectation : There is a definite relationship between age and the expected price of food by customers. This is given in Table 2. Most respondents expect a price range of BDT 50--200 for the burgers. This is again significant at 95% confidence with a p value below 0.05.

Table 2: Age vs. price Cross tabulation

Age	Price					Total	P Value
	100-150 BDT ($1.25-$1.75)	150-200 BDT ($1.75-$2.50)	200-250 BDT ($2.50-$3.00)	50-100 BDT ($0.6-$1.25)	Above 250 BDT ($3.00)		
Upto 30	49	34	7	38	2	130	0.044
31-40	14	13	3	8	2	40	
Above 40	2	2	1	1	2	8	
Total	**65**	**49**	**11**	**47**	**6**	**178**	

Age vs. spiciness of food

Most respondents prefer spicy or very spicy food. This is shown in Table 3. The results are significant at 90% confidence level with a p value of 0.1. More than 50% of people in the age group uptil 40 prefer spicy food. However, about 19% of respondents uptil 30 also like mild spicy food.

Table 3: Age vs. spiciness Cross tabulation

Age	Spiciness				Total	P value
	Mild	Not Spicy	Spicy	Very Spicy		
Upto 30	25	0	69	36	130	0.10
31-40	4	2	23	11	40	
Above 40	3	0	3	2	8	
Total	**32**	**2**	**95**	**49**	**178**	

Gender vs. frequency of eating fast food

Table 4 provides the relationship between gender and frequency of consumption of fast food. Approximately 87% females took fast food at least once a week while only about 71% males took fast food at least once a week. The results are valid for at least 90% confidence level with a p value between 0.05 and 0.1.

Table 4: Gender vs. frequency Cross tabulation

Gender	Frequency					Total	P value
	Never	2-3 times in a Week	Daily	Less than once a week	Once in a week		
Female	0	21	0	5	13	39	0.062
Male	17	51	7	17	47	139	
Total	**17**	**72**	**7**	**22**	**60**	**178**	

Gender vs. flavour of burger

The choice of flavour was found related to the gender of respondents. This is shown in Table 5. About 50% females preferred BBQ flavour while only about 27% males preferred this flavour. About 25% males preferred Grill flavour while only about 10% females liked this. The results are valid for a confidence level of 95% with a p value of 0.007.

Table 5: Gender vs. flavor Cross tabulation

Gender	Flavour					Total	P value
	BBQ	Fry	Grill	Masala	Tikka		
Female	20	8	4	7	0	39	0.007
Male	38	21	35	27	18	139	
Total	**58**	**29**	**39**	**34**	**18**	**178**	

Earning or non earning vs. fast food for lunch: The percentage of people who have fast food for lunch is related to the fact whether respondents are earning or non-earning. It seems that non-earning people are more likely to have fast food for lunch. This is shown in Table 6. About 49% non earning respondents took fast food for lunch while only about 29% earning members did this. The results are again valid at 95% with p value of 0.007.

Table 6: Occupation vs. fast-food for lunch Cross tabulation

Earning or Non Earning	Fast food for lunch		Total	P value
	No	Yes		
Earning	74	30	104	0.007
Non earning	38	36	74	
Total	**112**	**66**	**178**	

DISCUSSION

The data analysis provides some useful guiding points for Fast Food Corporation for starting business in Dhaka.

- *Vegetarian vs. Non-vegetarian:* People living in Central Dhaka are largely non-vegetarians. Most of them are Muslims but small percentage are Hindus. As such, Fast Food Corporation should offer a non-vegetarian menu for its customers.
- *Business opportunity:* Respondents in the age groups: 18-30 and 31-40 are most frequent consumers of fast food. These are largely either students or service class people. Almost 50% of them have habit to take fast food 2-3 times in a week. Fast Food Corporation should target this age group of people. Marketing strategies must be aimed at this segment of the population.

  About 37% of the respondents take fast food for lunch. This would be a sizeable fraction of the fast food customers in Central Dhaka. Greater percentage of non earning respondents (students, housewives etc) took fast food for lunch. Hence, Fast Food Corporation should offer lunch in its menu also and attempt to attract this target segment specially. All this represents a good business opportunity for the company.
- *Price expectation:* The monthly income level of Central Dhaka is BDT 20000+ for 58% of the people. Most of the people expect a price range of BDT 50-200 for the fast food items to be offered. Fast Food Corporation should keep this in mind while finalizing prices.
- *Spicy vs. non-spicy food:* Most of the people of Central Dhaka seem to be spice lovers with 81% of them liking either spicy or very spicy food. In fact, only 1% of the respondents said they did not want any spice in the food. Needless to say, the company has to necessarily offer spicy variety of burgers. They may offer three varieties: mildly spicy, spicy and very spicy versions.
- *Burger preferences:* Chicken burger seems to be most popular type of burger among the respondents followed by beef burger. Fast Food Corporation should introduce both Chicken and Beef Burger first and later introduce fish, vegetable and egg burger products which will be required only in small quantities. Sourcing and inventory management will largely be focused on chicken and beef as majority of respondents prefer this.
- *Flavour:* The most popular flavors were BBQ, Grilled and Masala. Hence, the following offerings are likely to be most popular.
- *Product Mix:* Based on the burger preferences and flavors, the following are the suggested product mix for Fast Food Corporation. Chicken burger, mildly spicy, spicy and very spicy. This can be made available in BBQ/ Grilled/Masala flavors. Beef burger, mildly spicy, spicy and very spicy. This can again be made available in BBQ/Grilled/Masala flavors. Apart from burgers, respondents also showed a liking for Wraps and Rolls. Fast Food Corporation should include these in their menu as 91% of the respondents showed a liking for these two items combined.

IMPLICATIONS TO THE FIRM

This paper has attempted to understand customer preferences for fast food in general and burgers in particular in the region of Central Dhaka in Bangladesh. It has helped the firm in understanding customer fast food eating behavriour in terms of frequency of consumption and preferences not only in terms of flavors and ingredients but also in terms of price expected. Frequency of consumption is an indication of the business opportunity for fast food in Dhaka. Customer preferences can be a useful guiding tool for Fast Food Corporation in offering a menu which is liked by the people of Dhaka at a price which thery are ready to pay, thus, helping the firm in making a successful launch in the city. It can also formulate a marketing strategy aimed at the age group of 18-30 and 31-40 years as they represent the major target segment for fast food.

LIMITATIONS OF THE STUDY

The number of respondents has not been very large. A larger size of sample can give more accurate understanding of preferences. Also, there are not many respondents of the older generation. Most respondents are upto 40 years of age. But this is justified as target segment of fast food normally lies within this age group. More female respondents need to be included in the survey too.

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