Article can be accessed online at http://www.publishingindia.com

Study of Trends in Quick Service Restaurants

Sameer Koranne*, Sachin Borgave**

Abstract

Changing socio economic environment has brought phenomenal developments in food service industry in India and quick service restaurants segment is front runner in this growth story. This study is an attempt to ascertain the trends and popularity of QSR amongst Indian masses and the catalysts of the widespread acceptance. A brief of customer opinions have provided some significant trends in customer preferences of places for eating out. The attributes of QSR that influence a customer perception and magnetize it to QSR and a particular brand is estimated in focused market. A descriptive research with cross functional analysis is presented in the most appropriate manner.

Keywords: QSR, Growth, Customer Preferences, Food Service Industry

INTRODUCTION

Indian food service industry has witnessed large scale development and the study of trends in quick service restaurants in India is very much essential as the growing QSR market is a major contributor to Indian economy. Many multinationals have entered India where a tiny part of populations used to eat out with very little number of branded eateries. The changing trends in shopping and entertainment have also fueled the growth of the segments as it has become a essential part of entire shopping experience. This industry has somehow succeeded to answer the questions on its credibility and has convinced the market by satisfying the Indian taste-buds. Better supply chains and cold storage infrastructure has helped the industry to spread across entire nation and equal growth is witnessed in tier 2 and 3 cities and ASSOCHAM has estimated growth at a 25% CAGR & likely to touch Rs 25,000 crore mark by 2020.

Thousands of outlets and hundreds of Indian and international brands has captured the fancy of growing youth market. Even though the number of multinational brands of quick service and casual dining restaurants is comparatively petite, a marginal chains account for the bulk of restaurants. Indian food service companies are also expanding through franchisee model and opening multiple restaurants, establishing outlets at best of the public places. Food court layouts at malls, multiplexes and airports has given much demanded space at very competitive costs, concessions and better experience in logistics of sourcing have benefitted the QSR industry.

The present study is an attempt to understand the dynamics of QSR industry at summarize its growth through extensive review of available literature and facts. A brief survey with well structured questionnaire is conducted to understand the significant factors that influence customer perception about QSR and most important factors that attract a customer to a specific brand. Data analysis is carried out with appropriate statistical tools and inferences are drawn.

Scope: Geographical Scope of the study was twin cities of Pune- PCMC with its major tourist attractions, business centers and educational hubs. Since these cities boasts cosmopolitan characteristic, it has a mix of ethnicities, educational-social-professional backgrounds.

Problem Statement: Despite being a popular segment abroad, Indian market happens to be critical about accepting QSR as mainstream food service segment. Adoption of branded fast food was also a new phenomenon. Seeing the growing popularity of QSR segment, it becomes imperative to understand the growth dynamics of this industry along with the significant reasons to substitute it for traditional eateries. It is also essential to know the critical factors that play a greater role in brand attractiveness in this industry.

* Assistant Professor, Sinhgad Institute of HMCT, Lonavala, Maharashtra, India. Email: spkoranne@gmail.com
** Director, Sinhgad Institute of Business Administration & Computer Application, Lonavala, Maharashtra, India.

Objectives: The specific objectives of the study are -

1. To explore the dynamics and growth of Indian QSR industry.
2. Understand customer preference to QSR as main-stream eating place.
3. To know the critical factors that attracts customers to a brand of QSR.

LITERATURE REVIEW

The National Restaurant Association [NRA] defines the restaurant industry as that which encompasses all meals and snacks prepared away from home, including all takeout meals and beverages. A quick service restaurant is fast-food outlet: Pay at the counter, Offers food that is ready to eat quickly after ordering, Minimal service, Mostly Requires that customer pays for food prior to consumption.

Main items include entrees such as pizza, submarines, burgers, sandwiches and also do include donut, snack, coffee or other specialty foods unless they serve entrees on their menu.

The brief market segmentation of the food service industry is illustrated as:

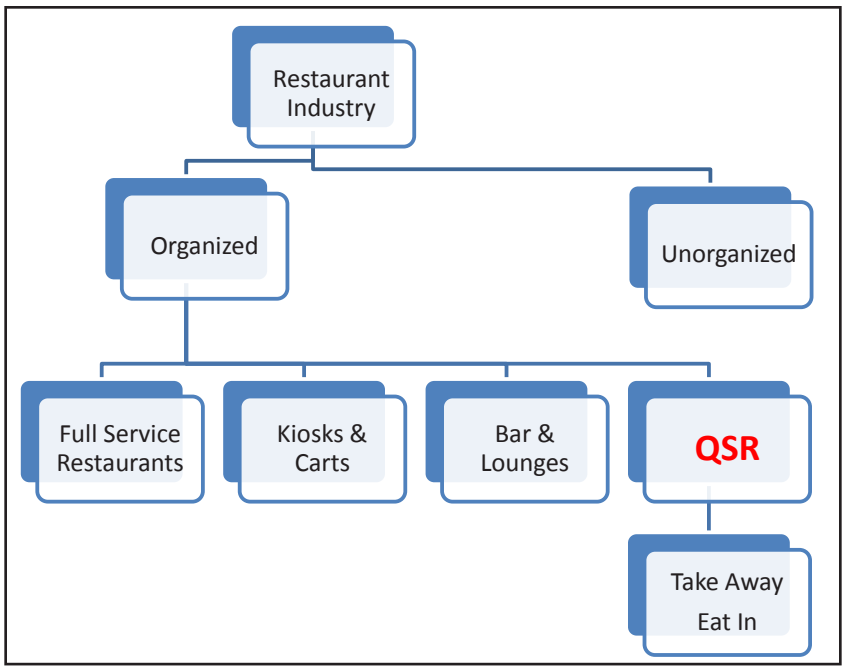

Fig. 1: Market Segmentation of the Food Service Industry

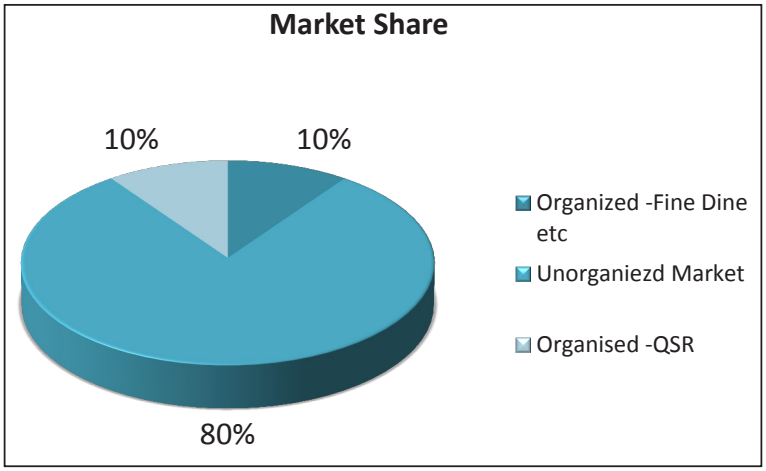

Fig. 2: Composition of Indian Food Service Industry

Major part of food service industry is composed of unorganized eat outs whereas organized sector is only up to 20% out of which QSR comprises half. It includes all the types of eateries offering varieties of snacks and other fast foods. It is further divided as illustrated below.

Table 1: Composition of Indian QSR Industry

Cafes	*Pizza*	*International Fast Food*	*Ice-Creams*	*Indian Fast food*	*Confectionaries*
44%	23%	15%	10%	6%	2%

The QSR industry has grown in all the parts of country with presence of various branded and non branded outlets, some of them have their foot hold in specific part of country whereas most of the brands have pan India presence.

The size of the Indian food service industry is projected to grow at 11-16% by 2018 and Indian fast food market is growing at an annual rate of 25-30 percent. The foreign fast food chains are aggressively increasing their presence in the country. The market is dominated by global brands like McDonalds, KFC and Dominos, currently occupies 60% due to sophisticated technology, large store size and Brand Image, and would be about 40% of new stores in future. As per RJ Whitehead, the QSR is expected to grow by 26% CAGR to reach Rs117bn by 2017.

Table 2: Leading QSR Brands in India

NORTH	*SOUTH*	*EAST*	*WEST*
Nirula's Haldiram's Bikano Chat Slice of Italy Kent's Fast Food Wimpy	Pizza Corner Chicking Taco Bell Bangs Fried Chicken Shiroz	The Great Kebab Factory Kathi Zone	Papa Jones Garcia Falafel Jumbo King Spaghetti Kitchen Copper Chimney Gelato Italiano China Town Noodle Bar Bombay Blue
PAN INDIA			Local Giants
International Mc Donalds KFC Sub Way Pizza Hut Domino's US Pizza Smokin Joes'	Specialty Dosa Plaza Yo China Tibbs' Frankei Kailash Parbat	– Coffee Barista CCD Costa Coffee	Goli Vadapav Jumbo King Joshi Vadewale

QSR industry has witnessed phenomenal growth in the last couple of years and has surpassed other industries.

Table 3: Approximate Industrial Growth in India

Managed Services	*Education*	*Recreation*	*Transportation*	*Health Care*	*Lodging*	*Organized Food Service*	*Unorganized food Service*
1%	4.4%	3.3%	3.8%	2.3%	2.7%	20%	8%

NOVONOUS estimates that the organized fast food market in India is expected to grow at a CAGR of 27% by 2020. CNBC estimates the QSR market to grow double in next five years and McDonalds to add 250 stores in next five years. McKenzie has approximation of Chain food service to grow from Rs 5500Cr to 16785Cr in 2018 whereas HVS survey suggests thatQSR to Grow by 16-18% for next 2-3 year. Organized modern formats like malls, multiplexes and food-courts have also become a favored destination. Larger companies are teaming-up with small franchisors to set-up their brand.

QSRs started with big metros, but are now building their presence in Tier 2 cities like Pune, Ahmadabad, Surat Chandigarh, Jaipur, Trichy and Bangalore.

Table 4: Growth of QSR in Indian Cities

TIER I Cities	2010 (5500 Cr)	30%CAGR	2013 (6780Cr)	35% CAGR	2017 (19260 Cr)
TIER II Cities	2010 (2520 Cr)	108%CAGR	(5260Cr)	28.5% CAGR	2017 (18300Cr)

The major GROWTH CATALYSTS are summarized as Market conditions, Expanding middle class, Urbanization, Nuclear families, Youth spending, Mall & Multiplex boom and Better logistics.

Some important findings about the Indian market have suggested that 25% of Populations Eats out at least twice in each month with average bill of Rs. 150- 300. As reported by CRISIL, almost 50% of the Indian population is eating out at least once in every three months.

ASSOCHAM finds that on an average, an individual eats eight times in every month in bustling metros as compared to US (14 times), Brazil (11 times), Thailand (10 times) and China (9 times).In 2020 it is expected that 35% of India's population will be in urban areas, RJ Whitehead (2015) study expects that increased Eating Out -fuelled by the arrival of more international chains and strengthening of local players as well.

Changing patterns of Indian population is illustrated as below:

Table 5: Changing Patterns of Indian Population

Total Population of Gen Next 13 to 25 Age	*30 Crore +*
Total Population of Gen Next Living in Urban Areas	~30% or 9 Crore +
Key Areas of Spending	Clothing, Fashion, Entertainment, Food & Beverages, Durables
Spending Power	Rs. 3000 to 40000 per month
Urban Youth Behavior	Socially Active, Hangs out late Spends time in Malls & Multiplex Prefers to be seen at right place Express Identity Brand Conscious
Awareness	TV, International FM, Social Media

RESEARCH METHODOLOGY

Methodology accepted for present study is

- The conceptual framework of quick service restaurant industry and allied issues.
- The study of growth of quick service restaurant industry.
- Qualitative discussion and inputs from QSR operations staff.
- Brief questionnaire survey of tourists and locals.
- Data analysis, drawing inferences and conclusion.

Sampling and sample size: An exclusive and scientific study is carried out with an aim to reach correct number and most appropriate forms of respondents. It was decided to find at least a representative of each segment of market; some parameters of sampling were gender, age group, income, residence for guests. Due to time and resource constraints, Standard convenience sampling method was used for collection of data. Total sample size calculated was 130 and total Questionnaire filled were 142, however only 127 to be found valid for further study.

DATA ANALYSIS AND DISCUSSION

This research on QSR industry required multiple methods of data sourcing. With the objectives clearly set in the mind, data collection is broadly divided in two parts as Primary data and Secondary data.

Primary Data: Major sources of primary data include responses of Tourists, hotel guests, shoppers and locals at different locations. There is a specific questionnaire used for collecting information. Demographic data is collected with multivariate questions and preferences section of questions with five point likert scale. The objective of the study is well discussed with the every contributor and the information provided by these sources is arranged for further analysis with appropriate statistical tools.

Secondary Data: Research includes extensive literature review on QSR and consumer behavior from relevant research journals, newspapers, proceedings of the conferences, dissertations at the pre-doctoral and doctoral level, published & unpublished texts and cases as well as renowned data bases such as Ebsco, Emerald inside etc. are used effectively.

Statistical tools and techniques: Appropriate statistical test such as Ordinal regression analysis and Kruskal Wallis test is performed with the help of IBM SPPS latest versions. The data and results are presented in charts and tables.

DATA ANALYSIS AND DISCUSSION:

The collected data has provided opinions of mixed respondents with good mixture of age, gender, education, income, marital status, family status and preferences about places of eating out. The data sets Gender, Age, Income, Marital status, Family Status and preferred eating outside are ordinal type and categorical. To predict and analyze causation in the preferred eating habits on the basis of independent variables, Ordinal regression analysis is applied.

In the studies of statistics, ordinal regression or ordinal classification is a kind of regression analysis that is used for predicting an ordinal variable, that means those variable whose value subsist on an arbitrary scale where only the relative ordering between different values is significant. It is an intermediate problem between regression and classification. Ordinal regression is frequently used in the social sciences even for modeling of human levels of preference. Ordinal regression may also be called ranking learning

ORDINAL REGRESSION ANALYSIS

Case Processing Summary			
		N	*Marginal Percentage*
Preferred eating out	QSR	94	74.0%
	Fine Dine	32	25.2%
	No Preference	1	0.8%

Gender	Male	79	62.2%
	Female	48	37.8%
Age	Below 20	44	34.6%
	21-40	58	45.7%
	40 Plus	25	19.7%
Education	SSC	84	66.1%
	Graduate	43	33.9%
Income	Low Income	39	30.7%
	Middle Income	36	28.3%
	High Income	52	40.9%
Marital Status	Single	82	64.6%
	Married	45	35.4%
Family Status	Nuclear Family	80	63.0%
	Joint Family	47	37.0%
Valid		127	100.0%
Missing		1	
Total		128	

Model Fitting Information				
Model	*-2 Log Likelihood*	*Chi-Square*	*df*	*Sig.*
Intercept Only	113.703			
Final	96.526	17.177	8	.028
Link function: Logit.				

Goodness-of-Fit									
	Chi-Square	df	Sig.						
Pearson	139.271	106	.017						
Deviance	76.317	106	.987						
Link function: Logit.									
Parameter Estimates									
		Estimate	*Std. Error*	*Wald*	*df*	*Sig.*	*95% Confidence Interval*		
			Lower Bound						
			Upper Bound						
Threshold	[Preferred eating out = 1]	1.928	.804	5.758	1	.016	.353	3.503	
	[Preferred eating out = 2]	5.928	1.286	21.266	1	.000	3.409	8.448	

Location	[Gender=1]	-.338	.645	.275	1	.600	-1.602	.926
	[Gender=2]	0[a]	.	.	0	.	.	.
	[Age=1]	-1.476	.735	4.033	1	.045	-2.916	-.035
	[Age=2]	-.916	.667	1.884	1	.170	-2.224	.392
	[Age=3]	0[a]	.	.	0	.	.	.
	[Eucation=1]	.911	.629	2.100	1	.147	-.321	2.144
	[Eucation=2]	0[a]	.	.	0	.	.	.
	[Income=1]	.829	.591	1.967	1	.161	-.329	1.986
	[Income=2]	1.083	.569	3.628	1	.057	-.031	2.198
	[Income=3]	0[a]	.	.	0	.	.	.
	[MaritalStatus=1]	-.257	.500	.264	1	.608	-1.236	.723
	[MaritalStatus=2]	0[a]	.	.	0	.	.	.
	[FamilyStatus=1]	1.286	.538	5.722	1	.017	.232	2.340
	[FamilyStatus=2]	0[a]	.	.	0	.	.	.
Link function: Logit.								
a. This parameter is set to zero because it is redundant.								

Test of Parallel Lines[a]				
Model	*-2 Log Likelihood*	*Chi-Square*	*df*	*Sig.*
Null Hypothesis	96.526			
General	.000[b]	96.526	8	.000
The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.				
a. Link function: Logit.				
b. The log-likelihood value is practically zero. There may be a complete separation in the data. The maximum likelihood estimates do not exist.				

Analysis: The Model fitting information table shows the significant value of 0.28 this indicates the ordinal regression model for the data set is fit and suitable. The goodness of fit is also significant at 0.017 Pearson sig value. However, the deviance is not significant at 0.987(>0.05), this indicates that the deviations are not considerably high and are likely similar.

In parameter estimates, threshold value for preferred eating outside in QSR and Fine dine are on higher side. While in locations Age (below 20), middle income group, and nuclear family are showing higher estimates and there ratio is substantially high, these groups are showing significant value. Hence we shall consider that people in lower age groups are quite inclined towards eating outside similarly middle income groups are also have preferences towards eating outside in quality restaurant and fine and dine. The nuclear families are quite obvious to indicate the significant values for preferring to eat in QSR and fine and dine. The preferences for finedine and QSR are significant however the threshold value for finedine is considerably high than that of QSR.

In the test of parallel lines, logit is applied as link function, since the data has small intervals and is expected as location parameters are same across response categories. The table shows significant value, this expresses that we reject the null hypothesis and consider that there is influence of independent variables on preferred eating outside. The independent variables like Age in lower categories (youngsters), Middle income group (juggling in jobs and house) and nuclear families are most important factors causing the changes in preferred eating outside, especially in fine dine and QSR.

The specific data about customer preference to QSR over other typical restaurants and for a particular brand is on five point likert scale. It is analyzed with Kruskal Wallis Test. It is also referred as one-way ANOVA on ranks, is a rank-based nonparametric test that is used to determine the statistically significant differences between two or

more groups of an independent variable on a continuous or ordinal dependent variable. It is understood as the nonparametric alternative to the one-way ANOVA and also as an extension of the Mann-Whitney U test that allows the comparison of more than two independent groups. To find out the prime reasons for preferring Quick service restaurants, a variance test is applied. Since the data set is ordinal a Kruskal Wallis test is applied.

Kruskal Wallis Test-

Test Statistics[a,b]	
	Rating
Chi-Square	78.104
df	9
Asymp. Sig.	.000
a. Kruskal Wallis Test	
b. Grouping Variable: Reasons	

Ranks			
	Reasons	*N*	*Mean Rank*
Rating	1	98	600.26
	2	98	371.66
	3	98	620.07
	4	98	459.07
	5	98	392.80
	6	98	546.23
	7	98	491.39
	8	98	436.82
	9	98	506.69
	10	98	480.01
	Total	980	

Descriptive Statistics					
	N	*Mean*	*Std. Deviation*	*Minimum*	*Maximum*
Rating	980	3.23	1.398	1	5
Reasons	980	5.50	2.874	1	10

A non-parametric method for one-way analysis of variance used to determine if three or more samples originate from the same distribution. The Kruskal-Wallis test essentially a standard one-way analysis of variance, with ranks assigned to the data points replacing the data points themselves, and is similar to the Mann-Whitney U test, but applicable to more than two sample groups.

The test is significant and indicates that there are differences of opinions towards preferences of quick service restaurants. However, if we compare the mean ranks of the reasons, following are the prime identified reasons to opt quick service restaurants

1. Preferred Staple meals
2. No. time for cooking
3. Enjoying the Branded restaurant meals
4. Trying the recommended restaurants

To identify the most prominent attributes of quick service restaurants a non parametric test Kruskal Wallis is adopted for processing data regarding a particular brand of QSR.

Kruskal Wallis Test-

Test Statistics[a,b]	
	Scale
Chi-Square	10.587
df	9
Asymp. Sig.	.305
a. Kruskal Wallis Test	
b. Grouping Variable: Reason	

Ranks			
	Reason	*N*	*Mean Rank*
Scale	1	98	457.55
	2	98	526.78
	3	98	440.27
	4	98	498.23
	5	98	491.37
	6	98	469.41
	7	98	498.10
	8	98	532.45
	9	98	515.94
	10	98	474.91
	Total	980	

Descriptive Statistics					
	N	*Mean*	*Std. Deviation*	*Minimum*	*Maximum*
Scale	980	3.25	1.446	1	5
Reason	980	5.50	2.874	1	10

The test is not significant, since p value is 0.305 which is greater than 0.05. This represents that all the mentioned attributes are important and the variance is less explained. There are negligible differences in opinions in rating of attributes. However, comparison of mean ranks explains

the prominent attributes to consider are

1. QSR provides a meeting point, intimacy and privacy
2. Accurate/ appropriate billing and
3. QSR Using modern technology

Industry stalwarts like Amit Jatia of McDonalds has stated that Localized menu, not just seen as an international brand, but one which the people of India feel comfortable. As found by Arvind Singhal of KFC, more young people in workforce , growing economy, a rising female work force, and increased mobility, more diverse menu fuelling growth. As per MD of Jumboking, easier adaptability to the cold storage format and their quick-to-serve nature, Indian food is also doing incredibly well in QSR. Moreover, Indian consumers view pizza as a meal replacement, and not just a snack as said by Ajay Kaul of Dominos.

CONCLUSION

It is observed that the QSR has become a well established section of Indian food service industry and has further potential for growth through-out the country. It is expanding by leaps and bounds with many national and international brands expanding by franchisee models. The industry has successfully established fast food as a suitable substitute for traditional meals and has been adopted widespread. The data analysis with appropriate statistical test have suggested that irrespective of demographics of the market, there is a growing preference for eating out and majority of it are desire to eat out in a QSR. The adoption of QSR is largely possible because of the fact that majority f the people understand that QSR provides staple meals and they enjoy food of well known branded restaurant. Other reasons that have contributed to the growth of QSR is the convenience it offers since changing family and working patterns, there is less time available for cooking food at home. There is increased preference for QSR as it is mostly recommended by peers and friends. The most significant factors that provide a competitive edge to a particular brand over competition are accurate billing and use of modern technology. It shows that people prefer modern technology in the service industry and they find it more reliable in terms of transactions with the restaurants. To add to this the intimacy and privacy provided at most convenient locations is one of the most important aspect while preferring a brand of QSR.

REFERENCES

Deloitte. (2010). *Hospitality 2015: Game changers or spectators?*

FnBnews.com

Govt. of India. (2015). Consolidated FDI policy. Retrieved from http://dipp.nic.in/English/policies/FDI_Circular_2015.pdf

http://www.hotelassociationofindia.com/

http://www.norusis.com

https://statistics.laerd.com/spss-tutorials/kruskal-wallis-h-test-using-spss-statistics.php

Jashani, P. (2013). Report: India's Quick Service Restaurant Sector Growing. Retrieved from http://gain.fas.usda.gov/Recent%20GAIN%20Publications/India%E2%80%99s%20Quick%20Service%20Restaurant%20Sector%20Growing_New%20Delhi_India_6-10-2013.pdf

Lapsiwala, D., & Desai, S. (2013). Ernst & Young report on Hospitality Industry - Typical Key indirect tax issues. Retrieved from https://www.wirc-icai.org/material/icai-presentation-27413-formatted-revised.pdf

Maple Capital Advisors Report. (2011). India Food Service Story. Retrieved from http://maple-advisors.com/India%20Food%20Services%20Story%20Maple%20Capital%20Advisors.pdf

http://www.fhrai.com/

Whitehead RJ report (2015).