

# Key Success Factors of Online Food Ordering Services in Indore City

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**Abstract – Food Industry has always been a profitable industry not only for manufacturers but also for the users and distributors. The online food delivery system is the need of an hour because of the recent changes in the industry and the increasing use of the internet. The foundation of study was based on both primary as well as secondary data. For primary data collection the survey was conducted for a purposeful analysis of the study on around 168 respondents. The research is concentrated on study and analysis of data collected from all those users who are already using the online food delivery services. Factor analysis identified 5 key factors namely app quality, service quality, social influence, food quality and promotion which are important for success of online food ordering services. Further, t test was applied to find out the factor which have significant impact on the success of online food ordering services.**

**Key Words: Online Food Ordering Services, Factor Analysis, One Sample T Test.**

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## INTRODUCTION

Well, Indore is a city of “**POHA AND JALEBI**” (traditional and the most populous food of Indore) or can call Indore as the **street food capital of INDIA**. Simultaneously Indore is also famous for being only city in INDIA having both IIM AND IIT (India’s premier institute for management and engineering respectively) and also the education hub of India with having renowned education institutes. Combining both the facts, one can arrive at the conclusion that the city has the population with young blood and developed taste buds for traditional food. Now, the question arises that with the inception of online food ordering services, the food industry has witnessed a revolution from people moving out for traditional food to people ordering food from restaurants and enjoying at home and work places, as online food ordering service providers has captured a good market share in the city. Technology has been the biggest contributor in this revolution. It has contributed to the changes in consumer inclinations as their ease of using technology has encouraged them to do everything online including getting cooked meals delivered to their doorstep. Convenience is the leading factor to the consumers, as to place an order is as simple as few clicks on any mobile devices. The acceptance of online food ordering and delivering services is growing progressively and so does users expectations. This research paper aims to investigate key success factors of online food ordering services. This paper will help the service

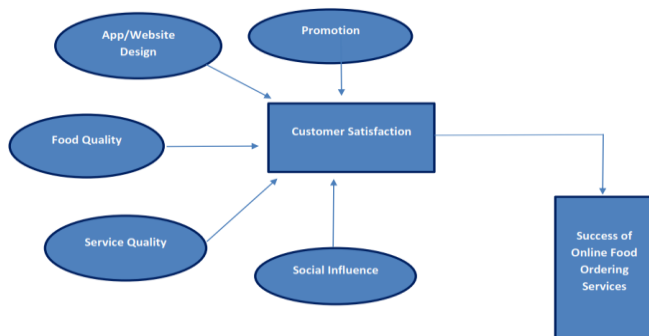
providers to understand the consumers’ preference, needs and viewpoints on the basis of the result of a survey. To commence this discussion, a look at the relevant literature, chiefly in relation to the online food ordering and delivering services has been termed below. The survey and its results will help the service providers to develop better strategies to satisfy their customers.

## LITERATURE REVIEW

The last decade has observed wide-ranging literature on website quality as an indication for customer satisfaction; a factor that drives purchase intention. Website quality comprises factors like website design, customization, care, cultivation, choice, community, character and convenience (Srinivasan et al. 2002); information quality, connectivity playfulness, learning and interactivity (Chiu et al. 2005); appearance, content quality, specific content and technical adequacy (Liao et al. 2006); website design, , order fulfilment, security/privacy, promotion and merchandising (Jin and Park, 2006); and, transaction speed, information quality security and user-friendliness(Shih and Fang, 2006). Among all these factors, customers generally expect three website qualities to assist their online encounters, i.e., system quality, information quality, and service quality (Shih, 2004). A number of efforts have been made to group website’s numerous attributes (Dholakia and Zhao, 2010). The average time

taken by online shopper to view website is 30 seconds before he moves to another website (Brohan, 1999). The website must be tantalizing (Dawson and Kim, 2010) because its cues lead to sentimental and cognitive internal conditions (Robert and John, 1982) compared with outmoded retail stores with tactile and olfactory cues (Eroglu et al. 2003). In recent times, a number of researchers have conducted empirical study on website quality namely Dickinger and Stangl (2013), Rahimnia and Hassanzadeh (2013) and Liu, Li and Hu (2013). Therefore, the foregoing discussion proposes four crucial elements of website quality, namely information quality, website design, security and payment system. Information is a precondition to trust (Flavian et al., 2006; Wang and Emurian, 2005). Yoon (2002) in a related study examined the relationship of website properties such as width of product, accuracy of online information, to website trust and found that website properties have a significant relationship with website trust. Also, some research suggests that website design comprises of emotional appeal and aesthetics of the website which includes color, shapes, photography or even the font style and established the positive association between trust and aesthetic beauty of the websites (Garrett, 2003). However, intention to purchase a product from the website is affected by the level of trust on the website. Hence, security has been derived as the primary concern among online consumers (Flavian et al. 2006). Mukherjee and Nath (2007). It has been also found that ease of availability of desired food at any time and at the same point of time easy access to internet are the key reasons for using the services.

**Conceptual Framework**



**OBJECTIVES OF THE STUDY**

1. To find out the various factors which play role in success of online food ordering services.
2. To analyze the impact of key factors on success of online food ordering services.

**RESEARCH METHODOLOGY**

Considering the objectives of study Empirical research design is used which supports the nature of

study. Empirical research design deals with the use of working hypothesis that can be tested using experiment and observation. Research approach was based on quantitative and qualitative technique for design. This combination was used to measure characteristics in terms of quantity which were collected by using survey method, i.e. self-administered questionnaire which was distributed to 200 respondents out of which 168 were found suitable for analysis whereas various other sources like reports, magazines, journals etc. were used for secondary data collection. Following that data reduction tool (factor analysis) and statistical tool one sample t test were applied for data interpretation and analysis and finally study terminates with the findings and fruitful suggestions.

**DATA INTERPRETATION AND ANALYSIS**

**Demographic profile of respondents**

To begin with, the demographic profile of the respondents was calculated. Demographic profile included age, gender, income, qualification and occupation. These characteristics are shown in table 1.

**Table 1: Demographic Profile of Respondents**

| S. No.        | Respondents Characteristics/Variables | % of Respondents |
|---------------|---------------------------------------|------------------|
| 1.            | Age                                   |                  |
|               | Below 20 Years                        | 18               |
|               | 20-30 Years                           | 60.5             |
|               | 30-40 Years                           | 20.3             |
|               | 40-50 Years                           | 1.2              |
| 2.            | Gender                                |                  |
|               | Male                                  | 57.6             |
|               | Female                                | 42.4             |
|               | Others                                | 0                |
|               | 3.                                    | Income           |
| Below 2 lakhs |                                       | 47.7             |
| 2-4 Lakhs     |                                       | 15.4             |
| 4-6 Lakhs     |                                       | 11.5             |
| 6-8 Lakhs     |                                       | 5.2              |
| 8-10Lakhs     |                                       | 5.6              |
| 4.            | Qualification                         |                  |
|               | 10 <sup>th</sup>                      | 3                |
|               | 12 <sup>th</sup>                      | 8.7              |
|               | Graduate                              | 57.6             |
|               | Post Graduate                         | 29.7             |
|               | Other higher degree                   | 1                |
| 5.            | Occupation                            |                  |
|               | Unemployed                            | .5               |
|               | Student                               | 60.5             |
|               | Service                               | 22.1             |
|               | Business                              | 16.9             |

**Age:** Respondent's age was divided into five age-groups i.e. Below 20 years, 20-30 years, 30-40 years, 40-50 years and 50 Years and above. Percentage analysis depicts that maximum respondents belongs to the category 20-30 years whereas no respondent fall under category 50 years and above.

**Gender:** Gender category was divided into three categories i.e. male, female and others. Percentage analysis shows that 57.6 percent respondent falls under category male, 42.4 percent

respondent falls under category female whereas no respondent falls under category others.

**Income:** Income category was divided into six categories i.e. below 2 lakhs, 2-4 lakhs, 4-6 lakhs, 6-8 lakhs, 8-10 lakhs, and 10 lakhs and above. Results depicts that maximum respondents falls under category below 2 lakhs whereas minimum no of respondents falls under category 6-8 lakhs.

**Qualification:** Qualification category was divided into five categories i.e. 10<sup>th</sup>, 12<sup>th</sup>, graduate, post graduate, other higher degree. Results shows that maximum no of respondents belongs to the category graduate whereas minimum no of respondents belongs to the category other higher degree.

**Occupation:** Qualification category was divided into four categories i.e. unemployed, student, service, business from which it is derived that maximum no of respondents belongs to the category student whereas minimum no of respondents belongs to the category unemployed.

**FACTOR ANALYSIS**

**Table: 2**

| KMO and Bartlett's Test                          |                    |  |         |
|--------------------------------------------------|--------------------|--|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    |  | .945    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square |  | 3.749E3 |
|                                                  | Df                 |  | 378     |
|                                                  | Sig.               |  | .000    |

KMO measures the sampling adequacy which should be greater than .5 for a satisfactory factor analysis to proceed. Above table shows that KMO value for sampling adequacy is .945 which reveals that sample is adequate and factor analysis can be applied.

| Rotated Component Matrix <sup>a</sup>               |      |      |      |      |      |
|-----------------------------------------------------|------|------|------|------|------|
| ITEMS                                               | 1    | 2    | 3    | 4    | 5    |
| Friends referrals                                   |      |      |      |      | .758 |
| Friends urges                                       |      |      |      |      | .618 |
| Website/app design                                  | .679 |      |      |      |      |
| Sufficient Information Provided                     | .645 |      |      |      |      |
| Time taken to order food                            | .802 |      |      |      |      |
| Trust regarding security                            | .531 |      |      |      |      |
| Convenience of multiple payment                     | .703 |      |      |      |      |
| Convenience of COD                                  | .669 |      |      |      |      |
| Delicious food                                      |      |      | .573 |      |      |
| Portion size                                        |      |      | .681 |      |      |
| Temperature of food                                 |      |      | .576 |      |      |
| Hygienic food                                       |      |      | .592 |      |      |
| Durable packaging                                   |      | .549 |      |      |      |
| Food reaches on time                                |      | .678 |      |      |      |
| Delivery executives behavior                        |      | .756 |      |      |      |
| Complaints and grievance resolution                 |      | .646 |      |      |      |
| Undamaged condition                                 |      | .675 |      |      |      |
| Delivers at remote places                           |      | .550 |      |      |      |
| Delivery fees is reasonable                         |      | .731 |      |      |      |
| Taxes charged                                       |      | .687 |      |      |      |
| Discounts                                           |      |      |      | .692 |      |
| Coupons                                             |      |      |      | .701 |      |
| Offers                                              |      |      |      | .640 |      |
| Membership                                          |      |      |      | .590 |      |
| Payment banks                                       |      | .567 |      |      |      |
| Competitive prices                                  |      |      |      | .646 |      |
| Convenient to throw a party                         |      |      |      |      | .592 |
| Time saving                                         |      |      |      |      | .620 |
| Extraction Method: Principal Component Analysis.    |      |      |      |      |      |
| Rotation Method: Varimax with Kaiser Normalization. |      |      |      |      |      |
| a. Rotation converged in 16 iterations.             |      |      |      |      |      |

The above table shows the loadings of twenty eight variables on the five factors extracted. The higher the absolute value of the loading, the more the variable contributes to the factor (We have extracted five factors wherein the 28 items are divided into 5 factors according to most important items with similar responses in component 1 than component 2 than component 3 and simultaneously in component 4 and 5). The gap (empty spaces) on the table represent loadings that are less than 0.5, this makes reading the table easier .We suppressed all loadings less than 0.5

The concept of rotation is to lessen the number of factors on which the variables under investigation have high loadings. Looking at the above table, we can see that website/app design, sufficient information provided, time taken to order food, trust regarding security, convenience of multiple payment, convenience of cash on delivery are substantially loaded on factor 1. Durable packaging, food reaches on time, delivery executives' behavior, complaints and grievance resolution, undamaged condition, delivers at remote places, delivery fees is reasonable, taxes charged, payment banks are substantially loaded on factor 2. Delicious food, portion size, temperature of food, hygienic food are substantially loaded on factor 3. Discounts, coupons, offers, membership are substantially loaded on factor 4 whereas friends' referrals, friend urges, convenient to throw a party, time saving are substantially loaded to factor 5. Further, we have done nomenclature of these 5 factors as –

Factor 1 - App/website design

Factor 2 - Service quality

Factor 3 - Food quality

Factor 4 - Promotion

Factor 5 - Social influence

**HYPOTHESIS TESTING**

H01- There is no significant Impact of Website/App quality on the success of online food ordering services.

**Table 3**

| One-Sample Statistics |     |        |                |                 |
|-----------------------|-----|--------|----------------|-----------------|
|                       | N   | Mean   | Std. Deviation | Std. Error Mean |
| VAR00010              | 168 | 3.6032 | 1.01892        | .07861          |

Table 4

| One-Sample Test  |        |     |                 |                 |                                           |        |
|------------------|--------|-----|-----------------|-----------------|-------------------------------------------|--------|
| Test Value = .05 |        |     |                 |                 |                                           |        |
|                  | T      | Df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |        |
|                  |        |     |                 |                 | Lower                                     | Upper  |
| VAR00010         | 45.199 | 167 | .000            | 3.55317         | 3.3980                                    | 3.7084 |

One sample t test was used for testing hypothesis no. 1. p value needs to be less than or equals to .05 to be termed as significant. Table 4 shows that, p value is .000 which is less than .05 and standard deviation is 1.01892 which reveals that there is significant impact of Website/App quality on the success of online food ordering services.

H02- There is no significant impact of food quality on the success of online food ordering services.

Table 5

| One-Sample Statistics |     |        |                |                 |
|-----------------------|-----|--------|----------------|-----------------|
|                       | N   | Mean   | Std. Deviation | Std. Error Mean |
| VAR00006              | 168 | 3.3720 | .94457         | .07287          |

Table 6

| One-Sample Test  |        |     |                 |                 |                                           |        |
|------------------|--------|-----|-----------------|-----------------|-------------------------------------------|--------|
| Test Value = .05 |        |     |                 |                 |                                           |        |
|                  | T      | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |        |
|                  |        |     |                 |                 | Lower                                     | Upper  |
| VAR00006         | 45.585 | 167 | .000            | 3.32202         | 3.1781                                    | 3.4659 |

One sample t test was used for testing hypothesis no. 2. p value needs to be less than or equals to .05 to be termed as significant. Table 6 shows that, p value is .000 which is less than .05 and standard deviation is .94457 which reveals that there is significant impact of food quality on the success of online food ordering services.

H03- There is no significant impact of service quality on the success of online food ordering services.

Table 7

| One-Sample Statistics |     |        |                |                 |
|-----------------------|-----|--------|----------------|-----------------|
|                       | N   | Mean   | Std. Deviation | Std. Error Mean |
| VAR00010              | 168 | 3.4382 | .91222         | .07038          |

Table 8

| One-Sample Test  |        |     |                 |                 |                                           |        |
|------------------|--------|-----|-----------------|-----------------|-------------------------------------------|--------|
| Test Value = .05 |        |     |                 |                 |                                           |        |
|                  | T      | Df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |        |
|                  |        |     |                 |                 | Lower                                     | Upper  |
| VAR00010         | 48.143 | 167 | .000            | 3.38824         | 3.2493                                    | 3.5272 |

One sample t test was used for testing hypothesis no. 3. p value needs to be less than or equals to .05 to be termed as significant. Table 8 shows that, p value is .000 which is less than .05 and standard deviation is .91222 which reveals that there is significant impact of service quality on the success of online food ordering services.

H04- There is no significant impact of promotion on the success of online food ordering services.

Table 9

| One-Sample Statistics |     |        |                |                 |
|-----------------------|-----|--------|----------------|-----------------|
|                       | N   | Mean   | Std. Deviation | Std. Error Mean |
| VAR00007              | 168 | 3.5321 | 1.03330        | .07972          |

Table 10

| One-Sample Test  |        |     |                 |                 |                                           |        |
|------------------|--------|-----|-----------------|-----------------|-------------------------------------------|--------|
| Test Value = .05 |        |     |                 |                 |                                           |        |
|                  | T      | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |        |
|                  |        |     |                 |                 | Lower                                     | Upper  |
| VAR00007         | 43.679 | 167 | .000            | 3.48214         | 3.3248                                    | 3.6395 |

One sample t test was used for testing hypothesis no. 4. p value needs to be less than or equals to .05 to be termed as significant. Table 10 shows that, p value is .000 which is less than .05 and standard deviation is 1.03330 which reveals that there is significant impact of promotion on the success of online food ordering services.

H05- There is no significant impact of social influence on the success of online food ordering services.

Table 11

| One-Sample Statistics |     |        |                |                 |
|-----------------------|-----|--------|----------------|-----------------|
|                       | N   | Mean   | Std. Deviation | Std. Error Mean |
| VAR00006              | 168 | 3.3155 | .95726         | .07385          |

**Table 12**

| One-Sample Test  |        |     |                 |                 |                                           |        |
|------------------|--------|-----|-----------------|-----------------|-------------------------------------------|--------|
| Test Value = .05 |        |     |                 |                 |                                           |        |
|                  | T      | df  | Sig. (2-tailed) | Mean Difference | 95% Confidence Interval of the Difference |        |
|                  |        |     |                 |                 | Lower                                     | Upper  |
| VAR00006         | 44.215 | 167 | .000            | 3.26548         | 3.1197                                    | 3.4113 |

One sample t test was used for testing hypothesis no. 5. p value needs to be less than or equals to .05 to be termed as significant. Table 12 shows that, p value is .000 which is less than .05 and standard deviation is .95726 which reveals that there is significant impact of social influence on the success of online food ordering services.

**FINDINGS AND SUGGESTIONS**

Products are not tangible, in an online shopping environment. Unlike the traditional shopping, consumers in the online shopping cannot taste, touch, smell, see or listen to the product. Rather, consumers evaluate the quality by relying on the picture and the given description of the goods or services in the web page. Hence, to maximize the degree of trust of the customer, clear and understandable information should be provided. Moreover, complete information with reasonable explanation should be given such as width and depth of offerings, ingredients used in preparations. In addition, to assist the customer to visualize the offer, demonstration of virtual product or service is also necessary.

The study also confirms affluent web page design is necessary to produce positive first impression among the visitors while the importance of content is secondary. Pleasant and comfortable webpage is the key to attract and maintain visitor's online shopping experience which ultimately increases purchase possibility and customer degree of trust. At the point of time of purchase, safe online environment, customers' privacy, financial security and confirm secure payment system are the prerequisite for online food service providers.

Online food ordering service providers should also guarantee the website facilitates time saving and convenient online payment. All of above mentioned factors will help the service providers to build the trust among their consumers which will lead to customer satisfaction and ultimately satisfied customer will make repeat purchase and recommendation to others. Next, deliciousness of food, prompt delivery and prompt response to customers' orders are crucial because order fulfilment can be overlooked by some online food ordering companies in Klang Valley. Apart from these factors, service quality has also shown significant impact on success of online food ordering services. Service providers need to control delayed delivery and also indifference to customers' concerns and inquiries will cause customer dissatisfaction as

the customers are busy professionals whose expectations are high. In the context of Klang Valley, the delivery service is exposed to risks such as traffic congestions, road constructions and bad weather. In cases of late delivery, a delivery executive must be able to respond to customer inquiries and solve problems promptly. However apart from website/ app quality, food quality and service quality there are other factors which also affects customer satisfaction towards online food ordering services namely, promotion and social influence. Study reveals that in an online shopping environment customer also expects discounts and promotion to adjust the effect of sacrifice of enjoying the food at outlet and consuming services.

**CONCLUSION**

In this study, attempt was made to identify the key success factors that lead to loyalty in an online food ordering services. Results suggest that online food ordering companies have to give emphasis to website/app quality, security/privacy, service quality, promotions and payment system towards their customers in order to enhance the customer satisfaction towards online food ordering services. Service providers can also be benefitted from continuous regular revenues from the loyal customers if they provide efficient delivery, and food quality and justifiable promotions.

**LIMITATIONS**

As the study only focuses success factors of online food ordering services, it cannot be generalized for use in other industries. As such, similar research in other online industries is needed to cross-corroborate the findings.

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