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CUSTOMER SATISFACTION WITH ONLINE FOOD ORDERING

PORTALS IN QATAR

BY

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ABSTRACT

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Title: Customer Satisfaction with Online Food Ordering Portals in Qatar

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The recent boom in online food ordering and delivery in Qatar has led to increased competition among service providers within the industry. Identifying the lack of research in the context of Qatar's online food industry, this study aims to determine the key success factors that lead to customer satisfaction and loyalty, as well as customers' satisfaction levels with their respective service providers.

Data was collected from 263 random customers through an online questionnaire and analyzed to test the hypotheses of the research model and answer the research questions. By applying multivariate regression analyses to assess the proposed model, this study confirms that while restaurant quality has no direct effect on customer satisfaction and loyalty, service provider quality does. Moreover, this study sheds light on the mediation role of customer satisfaction on the relationship between service provider quality and loyalty. Overall, the study provides valuable insights for the successful operation of online food ordering services in Qatar.

Keywords: Online food ordering, online food delivery service, food m-commerce, Qatar.

DEDICATION

I dedicate this research to my dad, mom and sister who have been constant pillars of

support throughout my life.

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CHAPTER 1: INTRODUCTION

1.1 Background Information

The emergence of relatively economical and user-friendly digital infrastructure over the past five decades has led to the development of several trends in technology. The lifestyles and working culture of individuals, organization of company business operations and structure of entire industries have been transformed by digital infrastructure (Fichman, Santos & Zheng, 2014). The coupling of mobile communication and the internet induced a plethora of potential opportunities in wireless data communication and significantly changed the way that human beings communicate and work (Scornavacca, Barnes & Huff, 2006; Balasubramanian, Peterson & Jarvenpaa, 2002).

Over the years, businesses have used mobile services as a key medium in interacting with customers and are briskly strategizing their business goals by incorporating the technology of mobile services. Businesses can benefit from an online environment as it provides a platform for personalized and interactive marketing (Burke, 2002). Customers can bolster their purchase decisions by collecting inputs from friends and other e-customers through social networking channels (Herring et al., 2005) and also compare a company's products with those of its competitors in order to meet their expectations of the product (Singh, 2002).

Like many other countries, Qatar is also experiencing a rapid increase in online shopping, a paradigm shift created due to availability of mobile services. Consumers in the country are eagerly embracing the online culture that includes an increasing preference of

e-services, simply because it is easier and faster. An example is the food and beverages industry in Qatar that has seen a tremendous rise in m-commerce activity, which is the focus of this research paper.

Online food ordering satisfies the needs of individuals living in urban areas who are busy for longer portions of the day and require their meals to be delivered to their respective location. This has been possible by the internet which acts as an impetuous channel for everyday shopping activities. Moreover, the ability of consumers to conveniently search and compare prices of food online through either websites and apps of restaurants or service providers has been greatly boosted by the evolution in internet technology (Kitsikoglou et al., 2014).

In the online food ordering business, restaurant quality and service provider quality are two significant factors that influence the purchase decision of a customer. The restaurant is defined as an entity that prepares/makes the food as per the online order, while the service provider is defined as the entity that provides a platform for placing an online order and in some cases delivers the order to the customer's location.

1.2 Purpose of the Research

Focusing on the online food ordering and delivery business in Qatar, this study investigates the following two research questions:

1. What are the key success factors that lead to customer satisfaction and loyalty in the online food ordering and delivery business?

2. What are customers' satisfaction levels with their respective service providers for online ordering and delivery of food?

In addressing these issues, the study intends to inform the audiences and stakeholders in Qatar's economy on various matters concerning online food ordering and delivery service. In this regard, it understands the preferences of customers and provides insights to service providers as in how they can improve their services to satisfy the majority by focusing on the key success factors identified.

1.3 Scope of the Study

The study's scope includes all residents above the age of 18 in Qatar who use online food ordering services. With respect to the service providers, the study focusses on the four main service providers operating within the country, namely, Carriage, Rafeeq, Talabat and Zomato. These companies provide tablet and mobile apps through which customers can browse through a variety of food options and make their orders, in addition to user-friendly websites.

1.4 Motivation behind the Study

Qatar has experienced a boom in online food ordering over the past year. Although this is already widely practiced in other parts of the world, a slow start to the Qatar market has turned into rapid growth for such services. Through online ordering, people get to choose their food items from a plethora of options and do not have to worry about traveling to a restaurant or preparing food themselves. This rapid growth has led to new entrants in the market and the level of competition is ever increasing. It is critical for a service provider

to ensure satisfaction of all of its customers, else in this kind of industry it is very easy to lose a customer to a competitor. Being a person who orders food online himself, and not having come across any similar type of research conducted for the Qatar market, I believe this research will shed some light on key factors that influence a customer's satisfaction and loyalty towards a particular service provider.

1.5 Benefits of the Study

The research gap identified in the existing literature in the context of online food ordering services in Qatar is the causal relationship between customer satisfaction and the combination of both restaurant as well as service-provider quality.

Therefore, this study posits that restaurant quality (consisting of 6 items namely taste of food, hygiene and freshness of food, brand name of restaurant, price of food, availability of multiple food options and value for money) together with service-provider quality (consisting of 11 items namely on-time delivery, offers/discounts, customer feedback, presentation, secure packaging, payment options, information quality, cuisine variety, functionality, location accuracy and privacy) are critical to satisfy the customers and increase their loyalty towards the online food ordering operators. By understanding these factors, service providers can work on their respective strengths and weaknesses and devise strategies to improve their businesses and sustain in a competitive environment. Moreover, policy makers can understand the perceptions of customers and bring in new regulations to control the delivery of food items.

1.6 Structure of the Study

Based on the above mentioned rationales, this study formulated and tested a conceptual model with three hypotheses. The following chapters of the paper present the literature review (chapter 2), followed by the methodology undertaken to perform this study (chapter 3) which includes the key determinants of the conceptual model and hypotheses development, data analysis and results (chapter 4), the discussions and practical implications (chapter 5) and finally conclusion and lessons learned (chapter 6).

CHAPTER 2: LITERATURE REVIEW

2.1 Mobile Commerce

M-Commerce technology has brought about a significant change in the way organizations conduct their businesses (Faqih & Jaradat, 2015). While some researches viewed it as merely an extension of e-commerce (Wei et al., 2009; Ngai & Gunasekaran, 2007), others considered it to be a revolution that had its own business models which were different from those used in e-commerce (Chong, 2013; Feng et al., 2006). One definition of M-commerce is that it is a conglomeration of internet-based services and applications that uses mobile phones or devices to perform transactions (Sadeh, 2002). It can also be interpreted as a doorway for organizations and individuals to carry out their daily business activities using mobile phone technology in a customized and convenient manner (Keen & Macintosh, 2001). M-commerce allows for various activities to be carried out such as transactions in the form of payments, shopping and banking; entertainment in the form of social media, music, instant messaging and games; and content delivery in the form of maps, weather, sports and news (Dai & Palvia, 2009). It is also primed to be an upcoming trend in the retail industry (Lee & Wong, 2016; Liang & Wei, 2004; Lin, 2012; Thakur & Srivastava, 2013).

The popularity of the internet and extensive usage of mobile devices has proclaimed M-commerce as the new service frontier. A platform like this acts as a medium for shopping that allows customers to effectively compare the prices among different products, shop conveniently at their leisure and have the product delivered to them within the shortest

duration (Yeo et al., 2017; Chang et al., 2014). Understanding how mobile users adopt mobile shopping and what factors have effect on their mobile shopping adoption are of critical importance (Saidon, Musa & Shahid, 2018). The introduction of new opportunities for enhancing their shopping experiences influenced customers' buying habits and their expectations. Customers are becoming more demanding and less loyal to a company or brand, because technological developments provide more detailed and timely information about products and services. Thus it is imperative for retailers to keep track of the emerging needs and expectations of their customers.

Although the customer base for mobile subscribers is ever increasing, the overall M-commerce activities remain to be low in developing countries. Chong, Chang and Ooi (2011) claimed that the usage of M-commerce related services such as carrying out mobile transactions for goods and services remains low because mobile phone customers are more engaged in using their phones for entertainment purposes like browsing the net, watching videos and listening to music. Khan, Talib and Faisal (2015) stated that this is in line with the findings in Qatar, where although the adoption rate of smartphones is increasing quickly, just about 10.2 percent of overall online spending is carried out through mobile phones.

2.2 Online Food Ordering and Delivery

The technology used in the food industry was perceived merely as technology that focused on manufacturing, processing and preservation of food items. However now it is changing. In today's scenario, the food technology industry has extended its reach to

include delivery and aggregation online (Bagla & Khan, 2017). The recent boom in m-commerce and the availability of online platforms has made food readily available, especially in populated cities and this progress in technology has changed the behavior of both customers and firms. Not only has m-commerce given rise to middlemen or service providers that act as online food ordering portals, it has also revolutionized the restaurant industry, which was in a saturated market, by offering online platforms that enable the industry to increase productivity, improve order accuracy, enhance customer relationship (Kimes, 2011), as well as extend their market reach (Yeo et al., 2017; Ng, Wong & Chong, 2017).

The notoriously fickle nature of the food service industry has forced itself to keep abreast with changes in fashion, taste and accessibility. The substantial growth in wireless communication technology and ever increasing penetration rate of the Internet have driven businesses to depend on technology as a marketing tool and major source of information. Online food ordering and delivery apps on mobile phones have become increasingly popular with customers chasing speed and convenience. Half a decade ago, Chang et al. (2014) stated that recent development has shown that food, among other online shopping products, is one of the most sought after products, and has an expected growth rate of 12% per year. This development can be considered as an opportunity as well as a challenge for restaurants. The increased popularity of food delivery apps has increased the competitive dynamics of the food delivery market and it is of paramount importance for online business firms to have loyal customer in this challenging environment (Pee, Jiang & Klein, 2018).

The process of using a web page or mobile application to order food online from a local restaurant is called online food ordering. Many of these mobile apps allow the customer to create an account by signing up for free while making their first order and continue to use the details provided during the registration for future orders thereby making it more convenient for the customer, restaurant and service provider, just like the online consumer goods industry. The ordering process includes searching for restaurants within the vicinity, filtering based on different cuisine types, and choosing a delivery location or pick-up option. There are usually two options for the payment of services, either through cash or electronically. The restaurant usually gives a percentage of the order value to the service provider or pays a fixed fee based on number of orders. The online food ordering portals offer a wide range of food options, reviews and ratings and provide a more efficient handling of the order. The tech-savvy generation has welcomed these emerging online food portals. Bagla and Khan (2017) noted that there is a fast growth in the food takeaway and delivery market, with the rapid increase in online ordering which is facilitated by the high penetration rate of m-commerce. Digitization in terms of food menus as well as discovering food options has become fundamental to consumers.

The online food ordering and delivery business is not a relatively new field as many studies have been conducted on this previously. Gupta and Paul (2016) claimed that the customers of online food ordering services in Eastern countries such as Malaysia and China concentrated more on what service providers can offer with reference to time-saving and convenience. Pigatto et al. (2017) observed that there is a rapid growth of online food ordering services in Western nations like Brazil, as these services are easily accessible by

the public, thanks to the pervasiveness of mobile internet phones and devices. Correa et al. (2018), in their paper, scrutinized the effect of traffic conditions on the key performance indicators of the online food ordering and delivery services. They claimed that the evaluation of customer experiences through posting reviews and rating the quality of the service were essential in enhancing their knowledge.

M-commerce has transformed the food industry by enabling online food ordering and delivery services. It has led to the creation of 'middlemen' for restaurant businesses, such as the food ordering and delivery companies. While many fast-food giants have their own online ordering and delivery services, the small and medium sized outlets have grasped the opportunity of using intermediaries to do the same (Correa et al., 2018). Upon establishing relationships with restaurants, these middlemen list the partnered restaurant on their online platform such as websites or mobile applications, where customers can easily place their orders from. These middlemen generate income from either delivery fees charged to customers, commission fees charged to restaurants, or in some cases both. This model is being widely adopted by companies looking to venture into this industry. Qatar's market already has three major players namely Carriage, Talabat and Zomato. The world renowned Uber Eats and a local start-up named Rafeeq are two other companies that are expected to enter the market and begin services in 2019. The fact that more players are entering this industry is because Qatar's e-commerce market is expected to grow by three times; an increase from $1.3 bn in 2017 to $3.2 bn by 2022 (Alagos, 2018).

However, a few authors pointed out the drawbacks of this kind of food trading. Lee et al. (2012) pointed out that the conventional one-to-one approach provides an opportunity

for customers to personally distinguish the quality of food products and hygiene level. Moreover, since self-advertisement is the most common way of providing food products related information on the internet, verifying the veracity of the information on food traceability, processing of food, and trader permit identification becomes difficult (Dang et al., 2018).

2.3 Restaurant Quality

The quality of the restaurant is pivotal in influencing a customer's decision to order food online. There are numerous studies that talk about the importance of multiple factors in determining restaurant quality. The factors used to describe restaurant quality and mentioned below:

Taste of Food: Brunso, Fjord and Grunert (2002) stated 'taste of food', a hedonic dimension, as one among four major food quality dimensions. The taste of food is considered as an expected quality characteristic before purchase and an experience quality characteristic after purchase.

Hygiene and Freshness: In addition to taste of food, authors like Ha and Jang (2010) and Namkung and Jang (2007) used other important attributes such as food temperature, nutrition, freshness and food presentation in determining the quality of food.

Brand Name of the Restaurant: Research in the past has demonstrated that the online shopping behavior of consumers has an important forerunner – the consumer online brand trust (Brodie et al. 2013; Ha 2002; Ha & Perks 2005; Ruparelia et al. 2010).

According to He, Li and Harris (2012), once the expectations of the purchaser are met by the performance of the brand, the consumer is satisfied.

Price of Food: Price is another significant aspect. From consumer's viewpoint, price functions as an indicator to determine consumer experience with goods or service (Mattila & O'Neill, 2003). Customers are more inclined to base their purchase decision on price factor than on anything else (Khan, 2011). Andaleeb and Conway (2006) suggested that the style of the restaurant also impacts the cost or price associated with the restaurant.

Availability of Multiple Options of Food: The availability of multiple food options, or in other words variety on the menu, is essential in offering wholesome nutritional value of a meal and plays an important role in determining satisfaction and adequacy of food items (Mohalijah et al., 2014). Authors such as Ryu, Han and Kim (2008), and Namkung and Jang (2007) identified menu items variety as significant attribute that customers look for while selecting restaurants.

Value for Money: The decision to purchase or not is usually determined by a customer's perception of the value for money of a particular product or service (Teng & Chang, 2013). In the restaurant context, Voon (2012) found that the most important factor determining youth loyalty is the value for money. Alonso et al. (2016) captured the perceptions of different stakeholder groups through their detailed study on the value of money and the restaurant experience. Soriano (2002) acknowledged that restaurateurs should go beyond providing high quality food and service and should focus on providing additional value to the customer in order to attract and retain customers.

2.4 Service Provider Quality

Similar to the restaurant quality, the quality of service providers plays a significant role in influencing a customer's decision to order food online. Past literature shows plenty of studies done on identifying factors that determine the quality of online service providers and they are as follows:

On-time Delivery: Kedah et al. (2015) stated that the time taken to deliver food is crucial in satisfying and retaining e-commerce customers. Dholakia and Zhao (2010) found that the relationship between customer satisfaction and online store attributes are highly influenced by timing. Furthermore, their research revealed that customer satisfaction is significantly and positively influenced by delivery time.

Offers / Discounts: Customers order food from apps and websites on the basis of factors like offers and discounts, variety of options in the menu available, free home delivery, app-user friendliness, and cash payment options (Sathiyaraj, Santosh & Subramani, 2015). By providing high quality customer service, online businesses can build loyalty among customers which helps in retaining them. A few ways of doing this include providing promotional offers, special discounts and membership cards that offer exclusive service for members that persistently shop with them (Bagla & Khan, 2017).

Customer Feedback: Customer feedback helps develop performance of the entity collecting the feedback, to a higher level, by dealing with underperformance in a constructive way. By doing so organizations can focus on improving their strengths, eliminating their weaknesses and ceasing opportunities that come their way. Barnard

(2002) found that service effectiveness is positively affected by customer feedback seeking behaviors.

Presentation: Srinivasan et al. (2002) proved that in order to create loyal customers, website design effectiveness is imperative. Titus and Everett (1995) claimed that visual complexity of the website is a basic indicator of the ability of an individual to process information and Mai et al. (2014) found it to be an important factor in designing online shops. On the other hand, Namkung and Jang (2010) defined presentation as the attractiveness with which food is presented and in a dining scenario, and Kivela et al. (1999) stated that the way food is presented is an important attribute in developing customer satisfaction and loyalty.

Safe and Secure Packaging of Food: The most important function of packaging is protection and preservation from external contamination. Other functions include identification of any tampering activities on the product packaging, traceability of the product and controlling the portion or quantity of the product (Marsh & Bugusu, 2007). There is also an increasing trend toward the development of innovative packaging options and delivery models. One such development is the 'active packaging' which results in improved safety and sensory attributes, the maintenance of product quality and an extension of shelf-life (Dainelli et al. 2008).

Payment Options: Just because an order is placed online, it is not necessary that the payment is also done online. The hesitation of customers to use online payment portals is justified with the risk involved in online transactions. It is necessary that customers are

also provided with an option to pay cash on delivery of the food order. Kedah et al. (2015) stated that along with website design and information quality, security and payment system is significant in determining customers' trust in their online experiences.

Information Quality: Tarute, Nikou and Gatautis (2017) proved that high perceptions regarding the quality of information available through mobile applications result in a positive impact on consumer engagement. Timely and relevant information about an organization's products and services is one the main contributing factors of using mobile applications (Kennedy-Eden & Gretzel, 2012). The availability of more extensive information on the product leads to better decision making regarding purchase of the product and enhances customer satisfaction (Park & Kim, 2003).

Cuisine Variety: The availability of different cuisines and variety of food options allows the service provider to target a wider audience with mixed cultures and ethnicities. Consumers prefer variety in their menu choices (Bernstein et al., 2008) and changing the menu would help increase variety for customers. With more number of restaurants available on the online food portal, the variety is more and customers are likely to return to try out different options.

Functionality: Mobile application functionality can be defined as an action that can be performed by the user (Adukaite et al., 2013). It represents the perception of consumers' toward various functions within the application. Nickerson et al. (2009) stated that apart from the basic functions, perceived functionality of mobile applications mostly relies on location awareness, augmented reality and instant mobile commerce. Additionally, it can

be said that a user's decision on not using a mobile application or deleting it, in the context of mobility, mainly depends on poor usability of the application.

Location Accuracy: Being able to deliver the order to the correct location is essential to save time and increase efficiency of the delivery process. Customers gain access to the information about the services using location-based services on their mobile phones (Khan, Talib & Faisal, 2015) and this helps the service provider pin point the location of the customer for delivery. However there is always an option for the customer not to share their location and type in the address for delivery instead.

Privacy: Two of the most critical factors in operating e-commerce models are privacy and data security (Furnell & Karweni, 1999). A long debated topic concerning the use of m-commerce is the privacy of data which acts as an hinderance to the expansion of online trading through mobile phone applications (Feng et al., 2006). Moreover, unlike traditional e-commerce, the tendency of mobile computing to collect personal data from users such as the current location of the user even while the user is not using the particular application raises situational privacy concerns in addition to general privacy concerns among users (Dai & Chen, 2015).

2.5 Customer Satisfaction and Loyalty

The most important objective of customer relationship is to keep the customer satisfied. Oliver (1999) stated that customers are satisfied when they sense a pleasurable fulfilment of some of their desires, needs or goals. Suhartanto, Brien, Sumarjan and Wibisono (2018) mentioned that satisfaction is a subjective evaluation of the performance

of a product associated with the prior expectation of the customer. As long as the customer's experience is better than the expectation, the customer is found to be satisfied. The satisfaction level of a customer can be captured as a positive feeling, indifference, or a negative feeling based on a post evaluation of the customer's experience with a product or service (Devaraj et al., 2002). Customer satisfaction eventually leads to customer loyalty (Kedah et al., 2015).

Although the notion of customer loyalty has been acknowledged for several years, the empirical validation of customer loyalty in the m-commerce context has not been extensively addressed (Lee & Wong, 2016). Literature suggests that the profit of a firm can increase through loyalty of its customers. For instance loyal customers tend to purchase more than a one-time or newly acquired customer, help in referring new customers to the firm, enroll in membership packages, pay premium prices and lower the overall cost of operations (Kim et al., 2009). Harris and Goode (2004) claimed that loyalty is of more significance and is a difficult objective to attain for firms in the operating in the online environment compared to offline retailing. Kim et al. (2009) acknowledged that it is costlier to develop online loyalty than traditional loyalty, but the presence of online loyal customers can boosts the profit growth of the firm. One way to turn a one-time customer to a loyal one is to provide services that exceed the expectations of the customer (Fandos & Flavian, 2006).

In the electronic setting, Anderson and Srinivasan (2003) and Pee et al. (2018) suggested that e-satisfaction influences e-loyalty. If customers are satisfied with both the delivered food and service, they might continue to place orders in the same restaurant

through the same service provider. Furthermore, customers can recommend good service providers and restaurants to others thereby bringing in new customers and helping the business grow. On the contrary, a dissatisfied customer may voice negative remarks about the service and is less likely to repurchase from the service provider or restaurant again. This situation is apt for the online food ordering and delivery business as customer satisfaction plays a major role in determining customer loyalty (Suhartanto et al., 2018).

2.6 Related Work

There have been previous studies conducted on similar topics to that of this research. Bagla and Khan (2017) performed research on identifying the factors that were responsible for an increase in popularity of online food ordering and delivery in India, the expectations of customers and their levels of satisfaction with major online food ordering apps in the country. In the context of online food delivery services in Indonesia, Suhartanto et al. (2018) examined the direct effect of food quality and e-service quality on customer loyalty along with their indirect effect through the mediation of customer satisfaction and perceived value. Similarly in other South-East Asian countries, Kedah et al. (2015) conducted an empirical study to determine the key success factors of online food ordering services in Malaysia and Dang et al. (2018) studied the consumer preferences and attitudes regarding online food products in Hanoi, Vietnam. Pigatto et al. (2017) characterized the performance of Brazilian online food delivery companies and analyzed the website content of these companies in order to use them as a platform for performing business transactions. Yeo et al. (2017) assessed consumer experiences, attitudes and behavioral intentions toward online food delivery services.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Model and Hypotheses Development

Parasuraman, Zeithaml and Berry (1988) define service quality as a customer's attitude that reflects the perceived excellence and overall superiority in the service provider's processes and outcomes. Extending to the electronic setting, Santos (2003) defined service quality in the virtual market place as the all-inclusive perception of excellent and quality electronic service offerings. Furthermore, Gummerus et al. (2004) stated that a consumer's interaction with the electronic channels of a service provider plays a significant role in evaluating the quality of the service provider. Electronic channels in this context refers to multiple services that are performed online.

Meeting customer needs and expectations is one of the most common challenges that organizations face in a competitive market. The reputation of an organization for service quality is formed through the cumulative experiences of multiple individuals and there is no substitute for interactions between an organization's services and customers. Landrum et al. (2008) strengthens this statement by mentioning that "service quality impacts customer loyalty, satisfaction, and business performance".

There is a plethora of academic based researches on service quality measurement in an electronic setting. Alnaser et al. (2014) highlight few of the measurement instruments that are used to assess the e-service quality such as SiteQUAL, E-S-QUAL, QES (quality of electronic services) and UPWQ (user-perceived web quality).

For the purpose of this study, the research model developed focuses on two aspects of quality – the restaurant quality (which consists of 6 items) and the service provider quality (which consists of 11 items), that lead to customer satisfaction, which in turn increases loyalty. The restaurant quality is specific to the entity that prepares the food, while service provider quality refers to the entity that provides a medium for ordering food online. The variable 'quality' is split into two because a customer's perception of overall service quality would depend on both factors, and in most cases the items of measurement of each factor are independent from the other. Therefore based on the literature review, the three hypotheses developed are:

H1: Restaurant quality has positive impact on customer satisfaction

H2: Service provider quality has positive impact on customer satisfaction

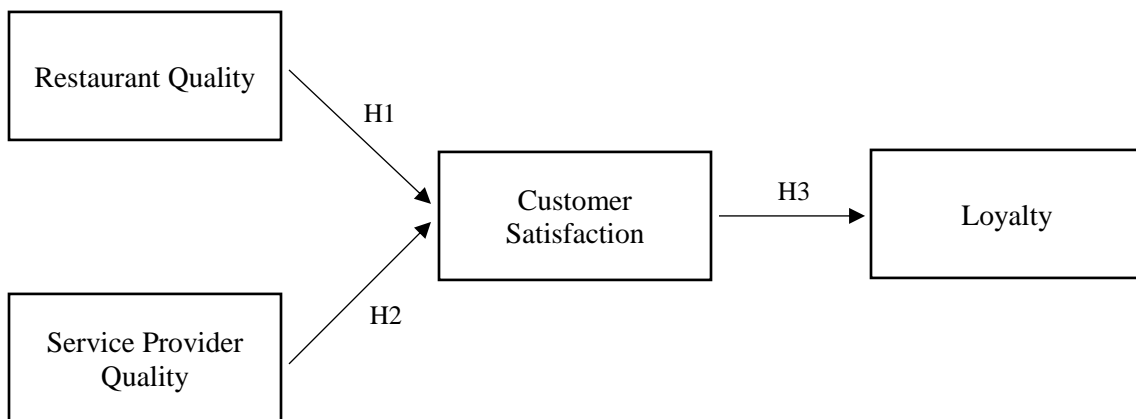H3: Customer satisfaction has positive impact on loyalty

Figure 1. Research model

3.2 Research Approach and Design

This research intends to identify the key success factors that lead to customer satisfaction and loyalty in the online food ordering and delivery business in Qatar, and capture the satisfaction levels of customers with their respective service providers. As depicted in the research model in the previous section, the survey aims to collect customer perceptions regarding both the independent variables (restaurant quality and service provider quality) as well as the dependent variables (customer satisfaction and loyalty).

One common questionnaire was designed with two main categories, the first part addressing the demographics of the sample and the second focusing on the study variables and their ratings. The factors that formulate the independent variables were carefully selected based on an extensive literature review and through primary research conducted by inquiring with over twenty users.

3.3 Sample and Data Collection

The survey was prepared in the English language on a surveying software called 'Qualtrics' and distributed electronically via a link to all potential respondents in the State of Qatar. The link was sent via email, social media platforms and text messages in an attempt to reach maximum amount of respondents. The self-administered online survey was part of a cross-sectional study and was available for a total of 17 days, starting from the 27th of March 2019 until the 12th of April 2019. The advantages of a web-based survey outweigh those of paper-based surveys and thus this type of survey was chosen. It enabled real-time viewing of data and responses, ease of transfer of results, flexible analysis and

reporting mechanisms, carried no costs and served as a portal to access the general public. The survey was designed in a way that allowed respondents to answer the questions within 5 to 6 minutes, so as to reduce the nonresponse rate due to the time factor. Further efforts to reduce the nonresponse rate included promising confidentiality and anonymity for the respondents and also a voluntary provision to receive the results of the study if it interests them.

The sampling technique used was based on a census sample as the target population included all residents in Qatar. The census sample was chosen since it was feasible and easily accessible through the mass broadcasting of the survey link. Consent was obtained from every respondent as the survey clearly stated that their participation was completely voluntary and anonymous, thus reducing bias.

3.4 Data Sources

The research relied on two complementary sources of data – primary and secondary. The primary data was collected through an online questionnaire. Respondents were demographically classified by their nationality, age, gender, education level, monthly remuneration and marital status. Post the demographics section, the survey asked about the mode, frequency, reasons for ordering food online and their most preferred service provider in the market. Following this were questions for each of the four variables of the research model. Respondents were asked to rate their agreement/disagreement levels with each of the factors/items that constitute these variables using a 5-point Likert scale ('1' = strongly disagree, '2' = somewhat disagree, '3' = neither agree nor disagree, '4' = somewhat agree,

'5' = strongly agree). The survey questionnaire used to collect the primary data for this study is presented in Appendix A. The research also incorporated secondary data generated from previous studies, scientific journals, books and electronic websites.

3.5 Validity of the Questionnaire

The QU-IRB Committee verified and reviewed the questionnaire to ensure the validity and integrity of the instrument. The committee approved the questionnaire because it met all the ethical conditions and requirements. It received the ethical approval number of QU-IRB 1043-E/19.

3.6 Statistical Methods

Based on the results from these surveys, the most widely preferred service provider and the most common reasons for ordering food online were identified. The data collected from the demographics section provided insights on classification of results based on a specific category if required. The descriptive statistics tool was used to determine measures of central tendency (mean), measures of dispersion (range, standard deviation, variance, minimum and maximum) for the demographic variables, the mode, frequency and reasons for online ordering, and the research variables.

The correlation coefficient and significance levels of all factors that constituted the research variables were calculated to understand the extent to which they were linearly related.

Construct reliability was tested using Cronbach's Alpha. In context of this study, content validity is strong since the independent variables were developed from past literature and through primary research conducted by inquiring with over twenty users.

Bivariate and multivariate regression analyses were performed to find out the direct and indirect impact of the respective independent variables on the dependent variables as part of the path analysis.

Finally one-way ANOVA tests were performed on all the demographic variables to identify if there is any significant difference between the conditions in each variable while predicting the variables Restaurant Quality (RQ), Service Provider (SP), Customer Satisfaction (CS) and Loyalty (LY).

CHAPTER 4: DATA ANALYSIS AND RESULTS

The sample of the research consisted of a total of 321 respondents. All the responses were complete as the online questionnaire only recorded completed responses and disregarded any partially filled surveys. Out of the 321 surveys collected, there were 43 respondents who answered that they do not order food online. The remaining 278 responses were considered and linear regression was performed between the variables in the study to find out the outliers. The criteria for outlier was set at 3 standard deviations. Out of the 278 responses, 15 outliers were found and removed as part of the data cleaning process. Therefore the final count of surveys was at 263, and these were used for further analyses.

4.1 Frequencies and Percentages

Descriptive statistics was used to find out the frequency of responses for the demographic variables as shown in Table 1. The study included respondents irrespective of their nationality, gender, education levels, monthly incomes and marital status. However with respect to age, only respondents above the age of 18 were considered. Non-Qataris made up 68.8% of the total responses when compared to 31.2% of Qataris. With respect to age, the maximum number of respondents were from the 25-30 years category accounting for 38% of the total, followed by 32.7% in the 18-24 years category and 29.3% in the above 30 years category. The number of female respondents (57.8%) were more compared to males (42.2%). The Diploma/Bachelor degree holders constituted the highest response category in terms of education level at 58.9%. The data also shows that 25.9% of respondents were not employed, 30.4% earned less than 10,000 QR a month, 19% earned

between 10,000 to 20,000 QR and 24.7% of the respondents earned a monthly income of more than 20,000 QR. Of the 263 respondents, 39.5% were married while the remaining 60.5% were single.

Table 1. Response percentages based on demographics

Variable	Frequency	Percentage
Nationality		
• Qatari	82	31.2
• Non-Qatari	181	68.8
Age		
• 18-24 years	86	32.7
• 25-30 years	100	38.0
• Above 30 years	77	29.3
Gender		
• Male	111	42.2
• Female	152	57.8
Education		
• High School	24	9.1
• Diploma/Bachelor Degree	155	58.9
• Master Degree or above	84	31.9
Monthly Income		
• Not employed	68	25.9
• Less than 10,000	80	30.4
• 10,000 to 20,000	50	19.0
• More than 20,000	65	24.7
Marital Status		
• Single	159	60.5
• Married	104	39.5

The mode and frequency of ordering food online along with the respondents' most preferred service provider in the market was analyzed in Table 2. The majority of respondents used mobile apps to order food. The other two options of tablet apps and pc/websites were used by less than 12% of them. The frequency of ordering food online 2-5 times a months was the highest at 44.9%, followed by once a month at 22.4%, 6-10 times a month at 19.8% and more than 10 times a month at 12.9%.

Table 2. Response percentages based on mode, frequency and preference

Variable	Frequency	Percentage
Preferred device for online ordering of food		
• Mobile app	232	88.2
• Tablet app	18	6.8
• PC/website	13	4.9
Frequency of ordering food online		
• Once a month	59	22.4
• 2-5 times a month	118	44.9
• 6-10 times a month	52	19.8
• More than 10 times a month	34	12.9
Most preferred Service Provider		
• Carriage	62	23.6
• Rafeeq	4	1.5
• Talabat	152	57.8
• Zomato	39	14.8
• Others	6	2.3

Among the various service providers operating in Qatar in the field of online food ordering and delivery, Talabat was found to be the most preferred service provider with 57.8% of respondents choosing it, followed by Carriage at 23.6%, Zomato at 14.8% and Rafeeq the lowest at 1.5%. Although Rafeeq is a Qatari-owned company, its recent entrance and lack of awareness in the market are probably the main reasons for a very low market share.

The reasons for ordering food online were examined and results are in Table 3. Respondents were allowed to choose multiple options for the reasons and hence a total of 388 selections were made by 263 respondents. Most respondents chose the reasons 'convenient to experience variety without physically going to the restaurant' and 'lack of time to cook/prepare food'.

Table 3. Response percentages based on reasons for online ordering of food

Variable	Frequency	Percentage
Reasons for online ordering of food		
• Lack of time to cook/prepare food	136	35.1
• Convenient to experience variety without physically going to the restaurant	153	39.4
• Ordering food online is economical and more convenient	36	9.3
• No other feasible option available	19	4.9
• Many offers/discounts/coupons available	44	11.3
Total responses	**388**	**100**

4.2 Online Food Ordering Dimensions

The items used in the survey represent the factors contributing to four major dimensions that describe the status of the study. This study tried to answer the research question using a set of statements that describe how subjects perceived the process of online ordering and delivery food. Hence the means and standard deviations of the set of items constituting the four dimensions were calculated. In the discussion around the status of a scale value when using a 5-point Likert scale, social sciences research adopted the classification as shown in Table 4.

Table 4. Mean scale and criteria

Mean	Criteria
1.00 – 2.33	Low agreement with statement
2.33 – 3.66	Moderate agreement with statement
3.66 – 5.00	High agreement with statement

The item descriptive statistics were calculated individual for each set of items constituting the four variables. The data in Table 5 indicates that all the items under Restaurant Quality were perceived highly except for item RQ3 (Brand name of restaurant) which was perceived moderately. The high values support the importance of Restaurant Quality in online ordering of food. The standard deviations for the items were all very close to 1.0 except for RQ2 which had a SD of 1.1.

Table 5. Item descriptive statistics for Restaurant Quality (RQ)

Code	Item Description	Min	Max	Mean	SD
RQ1	Taste of food	1	5	4.30	0.952
RQ2	Hygiene & freshness of food	1	5	4.29	1.1015
RQ3	Brand name of restaurant	1	5	3.59	0.992
RQ4	Price of food	1	5	3.76	1.044
RQ5	Availability of multiple options of food	1	5	3.92	1.044
RQ6	Value for money (quantity served for price charged)	1	5	3.92	1.060

Table 6. Item descriptive statistics for Service Provider Quality (SP)

Code	Item Description	Min	Max	Mean	SD
SP1	On-time delivery of food (no delays)	1	5	4.03	1.157
SP2	Offers/discounts available (combos, promotions etc.)	1	5	3.55	1.124
SP3	Customer feedback (collected for every order)	1	5	3.36	1.170
SP4	Presentation (images of food)	1	5	3.75	1.057
SP5	Safe and secure packaging of food (to avoid tampering/getting spoilt)	1	5	4.22	0.949
SP6	Payment options (online/on-delivery payment)	1	5	4.28	0.901
SP7	Information quality (accuracy and detailed information)	1	5	4.05	0.954
SP8	Cuisine variety (multiple restaurants to choose from)	1	5	4.04	0.942
SP9	Functionality (ease of use of website/app for customer)	1	5	4.30	0.863
SP10	Location accuracy (accurate delivery to mentioned location)	1	5	4.25	0.961
SP11	Privacy (personal details/location etc. kept secure)	1	5	4.19	0.909

The second dimension analyzed was the Service Provider Quality as shown in Table 6. Two items, SP2 and SP3 respectively were moderately perceived while all the

remaining items demonstrated a high level of agreement. The highest perceived item was Functionality (SP9) and this also had the lowest standard deviation among all items.

Table 7 shows the items that constitute Customer Satisfaction. Except for item CS3 which showed moderate level of agreement, the other three items indicate a high perception among respondents. The same table also shows the difference in standard deviations between the items. It is important to comment on standard deviation, where for the third factor, the moderately perceived item is associated with the highest standard deviation, which indicates a dispute among the sample.

Table 7. Item descriptive statistics for Customer Satisfaction (CS)

Code	Item Description	Min	Max	Mean	SD
CS1	I am satisfied with content available through online ordering portals	2	5	3.91	0.849
CS2	I am satisfied with the quality of food delivered using online portals	2	5	3.95	0.780
CS3	I did not face any problems (issues) when using the online portals	1	5	3.24	1.247
CS4	I am satisfied with the overall process of online ordering of food	1	5	3.90	0.897

The means of the various items that constitute the determinant Loyalty are all in the 'high agreement' category as shown in Table 8. The majority of responses were of a high degree of agreement regarding continuing to order food online in the future (LY1) and the sample shows less variation in the data obtained for this with standard deviation at 0.788.

Again, the highest value of standard deviation was the item with the lowest mean (LY2) which aligns with our previous claim.

Table 8. Item descriptive statistics for Loyalty (LY)

Code	Item Description	Min	Max	Mean	SD
LY1	I will continue to order food online in the future	1	5	4.30	0.788
LY2	I am committed to using online food ordering portals	1	5	3.78	1.035
LY3	I will recommend others to use online food ordering portals	1	5	3.94	0.955
LY4	I will continue to use the same service provider that I am currently using for future orders	1	5	3.89	0.949

Finally, the total mean of the items included in the survey under each dimension (example, the mean of RQ dimension included the mean of the following items: RQ1-RQ6). The estimates are shown in Table 9, where the means of all the four dimensions were in the high category. Table 9 estimates of the standard deviation show that all of them were low in value that means more consensus on the agreement.

Table 9. Variable descriptive statistics (means of all included items)

Code	Item Description	Min	Max	Mean	SD
RQ	Restaurant Quality (RQ)	1.83	5	3.965	0.639
SP	Service Provider Quality (SP)	1.91	5	4.002	0.617
CS	Customer Satisfaction (CS)	1.75	5	3.750	0.693
LY	Loyalty (LY)	2	5	3.977	0.737

4.3 Reliability Test

To measure the reliability of the study's main dimensions, Cronbach's Alpha was calculated as shown in Table 10. The internal reliability for all dimensions was found to be acceptable, giving an alpha value between 0.693 and 0.835, which are all above the acceptable threshold of 0.60. These results indicate that in conducting the statistical analysis the instrument and all its dimensions were reliable and consistent.

Table 10. Results of reliability test

Variable Description	Cronbach Alpha
Restaurant Quality (RQ)	0.693
Service Provider Quality (SP)	0.835
Customer Satisfaction (CS)	0.694
Loyalty (LY)	0.796

No. of items used: RQ (6), SP (11), CS (4), LY (4);
No. of responses, N = 263.

4.4 Correlation Analysis

In order to check the linear relationship between the four determinants used in the study, a correlation test was performed and results obtained in Table 11. From the analysis it can be concluded that all the determinants were significant at the 0.01 level, with the strongest correlation of 0.615 between RQ – SP, followed by correlation coefficient of

0.567 between CS – LY. The weakest correlations were between RQ – SP and RQ – CS at 0.314 and 0.315 respectively.

Table 11. Correlation matrix

	RQ	SP	CS	LY
RQ	1			
SP	0.615**	1		
CS	0.314**	0.395**	1	
LY	0.315**	0.406**	0.567**	1

**. Correlation is significant at the 0.01 level (2-tailed).
Note: RQ = restaurant quality, SP = service provider, CS = customer satisfaction, LY = loyalty.

4.5 Bivariate Regression Analysis

To determine the causal relationships between the dependent variables (CS and LY) and independent variables (RQ and SP), bivariate regression analyses were performed. First CS was regressed on the two independent variables RQ and SP independently and then LY was regressed on all three variables independently. Therefore a total of 5 single regressions were performed and the results are shown in Table 12. All the relationships were found to be significant with CS → LY having the highest beta value of 0.567 and t-value of 11.115. The weakest relationships are between RQ → CS and RQ → LY. These results are identical to the ones obtained in the correlation analysis performed earlier, as the single regression betas are the same as the correlation matrix.

Table 12. Bivariate regression analysis

Relationship	Standardized Coefficient (Beta)	t-value	Significance
RQ → CS	0.314	5.345	0.000
SP → CS	0.395	6.945	0.000
RQ → LY	0.315	5.367	0.000
SP → LY	0.406	7.186	0.000
CS → LY	0.567	11.115	0.000

4.6 Path Analysis

In the next step, two multivariate regression analyses were performed to see the effect of the independent variables, while taken together, on the dependent variables. First CS was regressed on the both independent variables RQ and SP together and then LY was regressed on all three variables (RQ, SP and CS) together. Two equations were obtained as follows:

$$LY = 0.05 \, (RQ) + 0.477 \, (CS)^{**} + 0.187 \, (SP)^{**} + E_1$$

$$CS = 0.114 \, (RQ) + 0.325 \, (SP)^{**} + E_2$$

(*Note:* ** *Significant at the 0.01 level*)

The above equations and figure 2 indicate that determinant SP is significant in determining both CS and LY, determinant CS is significant in determining LY, whereas determinant RQ is not significant in determining CS or LY.
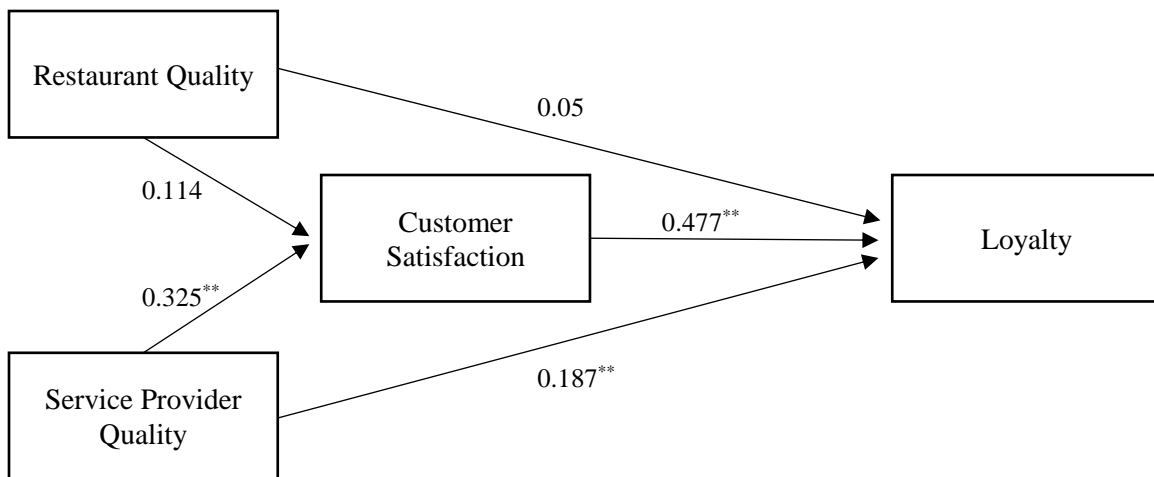
Figure 2. Path diagram

The total direct effect of each variable on 'Loyalty' was calculated by multiplying the path coefficients of all the steps in the path between the two variables, and then adding that value to the direct path value. For example, to find the total direct effect of RQ on LY, the path coefficients of RQ → CS (0.114) and CS → LY (0.477) were multiplied, and then added to the direct path of RQ → LY (0.05), i.e., Total effect RQ → LY = (0.114 * 0.477) + 0.05 = 0.104

Similarly, to find the total direct effect of SP on LY, the path coefficients of SP → CS (0.325) and CS → LY (0.477) were multiplied, and then added to the direct path of SP → LY (0.187), i.e., Total effect SP → LY = (0.325 * 0.477) + 0.187 = 0.342

Table 13 summarizes the calculations of direct effect.

Table 13. Path analysis and direct effect of variables on Loyalty

Relationship	Path Description	Total effect
RQ → LY	RQ → LY = 0.05 RQ → CS → LY = 0.114 * 0.477 = 0.054	0.104
CS → LY	CS → LY = 0.477	0.477
SP → LY	SP → LY = 0.187 SP → CS → LY = 0.325 * 0.477 = 0.155	0.342

The bivariate relationships obtained in the previous analysis were significant and this supports the first impression of the research model. However after performing multivariate regression, it is found that RQ has no effect. The probably reasoning to this is that when considered independently, RQ does have a positive impact on CS and LY respectively. However when considered along with SP in the context of online food ordering and delivery process, customers do not seem to give a lot of importance to the restaurant quality, and instead are inclined more towards the quality of the service provider. As customers are not dining in the restaurants, they depend more on the service provider's image in making their choices. Therefore, the null hypothesis for the first case cannot be rejected, and hypothesis 1 (H1) cannot be supported.

In the case of the second hypothesis, it is evident that CS positively impacts both CS and LY. A mediation effect also exists in this case as both SP → CS and CS → LY are significant, which means CS is a significant mediator of SP → LY. The direct effect of SP on LY is 0.187 is stronger than the indirect effect of SP on LY through CS at 0.155. Hence

the null hypothesis in the second case can be rejected, and hypothesis 2 (H2) is supported – Service provide quality has a positive impact on customer satisfaction.

Finally, the third case is straight forward as CS significantly affects LY with a beta value of 0.477. This is in line with our literature which suggests that e-satisfaction influences e-loyalty (Anderson & Srinivasan, 2003; Pee et al., 2018). Therefore the null hypothesis in case is rejected and hypothesis 3 (H3) is supported – Customer satisfaction has a positive impact on loyalty.

4.7 Different Perceptions

To identify whether there is a significant difference between the means of the various demographic variables used in the study, ANOVA one-way tests were performed on all the demographic variables, including the mode, frequency and preferred service provider in the context of online food ordering and delivery. The intention was to utilize the data collected and try to explore if any differences are accounted to certain category. In variables where there were more than two categories and required post hoc analysis, Scheffe's test was used to find out which of the categories contributed toward the overall significance. Table 14 shows the results of the tests.

Table 14. ANOVA one-way tests results

Variable	Categories	Significance
RQ	Nationality (Qatari & non-Qatari)	0.001
SP	Nationality (Qatari & non-Qatari)	0.007
RQ	Education levels (high school & master degree and above)	0.027
LY	Frequency of ordering food online (once a month & 2-5 times a month)	0.001
LY	Frequency of ordering food online (once a month' & '6-10 times a month')	0.002
LY	Frequency of ordering food online (once a month' & 'more than 10 times a month)	0.001

The results obtained show that there is a statistically significant difference between the following:

- The two groups of nationality 'Qataris' and 'non-Qataris' in terms of the variables RQ and SP respectively.

- The education levels 'high school' and 'master degree or above' in terms of the variable RQ.

- The frequencies of ordering food online 'once a month' & '2-5 times a month'; 'once a month' & '6-10 times a month'; and 'once a month' & 'more than 10 times a month' in terms of the variable LY.

The differences between these condition 'Means' are not likely due to change and are probably due to the independent variable manipulation.

CHAPTER 5: DISCUSSION AND IMPLICATIONS

The statistical data analysis and results obtained in the Chapter 4 reveal quite a bit about regarding the study. Results show that nearly 13.4% of respondents did not order food online. Of the remaining 86.6%, the majority were non-Qataris and this makes sense since the number of Qataris is significantly lower than the expat population in Qatar. Females were more, most of the respondents had a bachelor level of education, and a majority of respondents were not married.

Users preferred using mobile apps for ordering food and maximum responded that they order food online 2-5 times a month. Most respondents used Talabat as their service provider, followed by Carriage and Zomato. Of the 191 respondents who chose Talabat and Zomato, only 37 were Qataris (19.37%). However in the case of Carriage, 41 of the 62 respondents were Qataris (66.13%). This shows that being a premium service provider, the overall costs of ordering from Carriage are higher compared to the others and this is mainly preferred by the locals who on average have a higher standard of living than expats. On the contrary, the data collected shows that out of 65 respondents who earned more than QAR 20,000 a month, 44 (67.7%) chose Talabat as their service provider (of which Qataris were only 13), while only 12 (18.5%) chose Carriage (of which there were 10 Qataris). These analyses indicate that although Talabat is the leading service provider in the online food ordering and delivery industry in Qatar, it is not the most preferred one among the locals. Qataris prefer Carriage over any other service provider.

The findings of this study show that the two main reasons for ordering food online are the lack of time to prepare/cook food and the convenience in experiencing various cuisines without having to physically visit restaurants. These findings are in line with those of Bagla and Khan (2017).

The means of all items that constitute their respective determinants were found to be in 'high agreement' category except for one item in restaurant quality (RQ3), two items in service provider quality (SP2 and SP3) and one item in customer satisfaction (CS3) which were in the 'moderate agreement' category. None of the items showed disagreement toward their respective determinant which they were a part of. 'Taste of food' and 'hygiene & freshness of food' were rated the highest among the Restaurant Quality items, and 'functionality', 'payment options' and 'location accuracy' were the top 3 perceived items in Service Provider Quality. This points out that not only is the quality of food important, but the ability to easily make an order and get it delivered correctly are also key to customer satisfaction. As service providers have minimal control on the quality of food prepared in the restaurants, they need to focus on other parameters to maintain and retain a strong customer base.

The regression analyses provide a good insight into the matter. The bivariate regression analyses show that all relationships between the four variables used in the study (RQ, SP, CS and LY) are significant. This is because these variables are taken independently. On the other hand, the multivariate regression analyses show that Restaurant Quality has no significant effect on either of the dependent variables – Customer Satisfaction or Loyalty. This is interesting to know since the data shows that customers are

giving more importance to their experiences with the service of ordering and delivery, than the actual restaurant that prepares the food. This can seem to be logical given the fact that almost all restaurants are linked to more than one service provider, and customers can make the same order from the same restaurant using multiple service providers, including self-delivery of the restaurant if available.

The mean values of Qataris and non-Qataris towards the determinant RQ are 3.78 and 4.05 respectively, towards the determinant SP are 3.85 and 4.07 respectively, towards the determinant CS are 3.72 and 3.76 respectively, and towards the determinant LY are 3.97 and 3.98 respectively. While the perceptions of Qataris and non-Qataris are similar in the case of Customer Satisfaction and Loyalty, Qataris have a slightly lower level of agreement when it comes to rating the items that constitute Restaurant Quality and Service Provider Quality mentioned in this study.

To answer the second research question stated in this study, the average of the means of all respondents were calculated for the variables CS and LY. Customers of Carriage were found to be the most satisfied with a mean of 3.89 and customers of Zomato and Talabat had means of 3.72 and 3.71 respectively. Similarly, the loyalty means were calculated and customers of Carriage again had the highest loyalty with a mean of 4.12, followed by Zomato and Talabat with means of 3.95 and 3.94 respectively. The study did not consider Rafeeq as part of answering this research question since it had only 4 respondents, which is too less to generalize.

CHAPTER 6: CONCLUSION

This study utilized an online survey as the major tool to answer the research questions related to the online ordering and delivery of food among residents in Qatar. They survey probed perceptions of respondents in terms of their levels of agreement with respect to various items that formulated the research variables used in the study.

6.1 Implications and Recommendations

The first research question focused on the key success factors in the online food ordering and delivery business from a customer's point of view. The answer to this comes from two major areas – the hypotheses tests; and the means of the four online food ordering dimensions including the various items under them. The study fails to support the first hypothesis (restaurant quality has a positive impact on customer satisfaction). However, the other two hypotheses (service provide quality has a positive impact on customer satisfaction; and customer satisfaction has a positive impact on loyalty) are supported by the study. The second research question measured customers' satisfaction levels with their respective service providers for online ordering and delivery of food. Results for this were obtained by comparing the means of the Customer Satisfaction and Loyalty determinants between the multiple service providers.

Service providers can gain significant value from this research if they evaluate themselves based on the findings of this study and equally focus on their strengths and weaknesses to build a strong customer base. Knowing that customers pay more attention to the quality of the service provider rather than the restaurant that they order from, it is

critical that these service providers ensure effective and efficient services that benefit the customers. A few ways of doing this could be by developing a more user-friendly app, ensuring that food is delivered as per promised timings, always being able to accept payments electronically or through cash, providing offers and discounts on a regular basis and so on. The findings of this study could also be valuable to potential entrants as it gives them a good understanding of the market in terms of market segmentation, customer preferences and satisfaction levels. Potential entrants can compare the operational activities of each of the firms included in the study and adopt the best practices.

6.2 Limitations and Future Work

There were a few limitations that hindered the quality of this research. One limitation was the time available to collect data and perform analysis. Since the ethical approval from the university's review board took longer than expected, the researcher could not conduct personal interviews with the Country Managers of the respective service providers mentioned in the study. This would have added value to the study as the perspectives of each of the four firms would be taken into consideration. Another significant limitation was the sample size used for analysis. Although the target audience was the general public and an online questionnaire was being used, the researcher found it difficult to collect sufficient data. Of the 321 responses collected, only 263 were used in the analysis. This number was below the expected minimum of 300.

This research study is considered to be a foundation for future studies with respect to online food ordering and delivery business in Qatar since it is the first of its kind. Future

studies can be carried out using much bigger sample sizes of 500 or more to prove or challenge the results obtained in this study. They could add other data collection methods such as interviews and focus groups to provide qualitative data that would give deeper insights about the topic. Other types of test could be performed to find out differences in customer perceptions based on demographic variables such as nationality, age, income etc.

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APPENDIX

APPENDIX A: ONLINE QUESTIONNAIRE

1/21/2019   Qualtrics Survey Software

Block 1

Dear Respondent,

I, Parameshwar Ganapathi, an MBA student in Qatar University would like to invite you to participate in my research study as part of my Graduation Project in MBA.

The purpose of the study is to identify customer satisfaction with online food ordering portals in Qatar. This study involves surveying residents of Qatar who use mobile applications / websites to order food online.

The survey should not take more than five minutes of your time. The information collected will be kept strictly confidential. Your participation is completely voluntary and anonymous. If you would like to obtain the results of the study, you may provide your e-mail address at the end of the survey, however this is entirely optional. You may withdraw from this study at any time.

If you have any questions you may contact me at:
Email: pg1513100@qu.edu.qa (MBA Student, Qatar University)

Please indicate that you have read, understood and if you agree to participate, kindly click on 'NEXT' to start the survey.
If you do not wish to participate, kindly close the window to exit.

Thank you for your valuable time.

Block 2

Do you order food online?

○ Yes
○ No

Nationality

○ Qatari
○ Non-Qatari

Age

○ Below 18 years
○ 18-24 years
○ 25-30 years

○ Above 30 years

Gender

○ Male

○ Female

Education

○ High school or below

○ Diploma / Bachelor degree

○ Master degree or above

Monthly Income

○ Not employed

○ Less than QAR 10,000 per month

○ QAR 10,000 – 20,000 per month

○ More than QAR 20,000 per month

Marital Status

○ Single

○ Married

Preferred device/platform for online ordering of food

○ Mobile app

○ Tablet app

○ PC/laptop website

Frequency of ordering food online

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○ Once a month

○ 2-5 times a month

○ 6-10 times a month

○ More than 10 times a month

Reasons for ordering food through online portals (you may choose multiple options)

☐ Lack of time to cook/prepare food

☐ Convenient to experience variety without physically going to the restaurant

☐ Ordering food online is economical and more convenient

☐ No other feasible option available

☐ Many offers/discounts/coupons available

Most preferred service provider (choose only one)

○ Carriage

○ Talabat

○ Zomato

○ Others – Please mention:

    [_____]

Block 3

To answer the next question, please read the following two definitions:

Restaurant – The entity which prepares/makes the food that is ordered

Service Provider – An online platform that is used to place orders across a wide range of restaurants and ensure delivery of the order to the customer's location

Please rate the following items with respect to your agreement / disagreement level in the context of online ordering and delivery of food.

Restaurant Quality – The following factors are important in determining the quality of a restaurant for ordering food online:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Taste of food	○	○	○	○	○
Hygiene & freshness of food	○	○	○	○	○
Brand name of restaurant	○	○	○	○	○
Price of food	○	○	○	○	○
Availability of multiple options of food	○	○	○	○	○
Value for money (quantity served for price charged)	○	○	○	○	○

Please rate the following items with respect to your agreement / disagreement level in the context of online ordering and delivery of food.

Service Provider Quality – The following factors are important in determining the quality of a service provider for ordering food online:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
On-time delivery of food (no delays)	○	○	○	○	○
Offers / discounts available (combos, promotions etc.)	○	○	○	○	○
Customer feedback (collected for every order)	○	○	○	○	○
Presentation (images of food)	○	○	○	○	○
Safe and secure packaging of food (to avoid tampering/getting spoilt)	○	○	○	○	○
Payment options (online/on-delivery payment)	○	○	○	○	○
Information quality (accuracy and detailed information)	○	○	○	○	○
Cuisine variety (multiple restaurants to choose from)	○	○	○	○	○
Functionality (ease of use of website/app for customer)	○	○	○	○	○
Location accuracy (accurate delivery to mentioned location)	○	○	○	○	○
Privacy (personal details/location etc. kept secure)	○	○	○	○	○

Please rate the following items with respect to your agreement / disagreement level in the context of online ordering and delivery of food.

Customer Satisfaction and Loyalty

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree

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	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I am satisfied with content available through online ordering portals	○	○	○	○	○
I am satisfied with the quality of food delivered using online portals	○	○	○	○	○
I did not face any problems (issues) when using the online portals	○	○	○	○	○
I am satisfied with the overall process of online ordering of food	○	○	○	○	○
I will continue to order food online in the future	○	○	○	○	○
I am committed to using online food ordering portals	○	○	○	○	○
I will recommend others to use online food ordering portals	○	○	○	○	○
I will continue to use the same service provider that I am currently using for future orders	○	○	○	○	○

Block 4

Extra comments (optional):

If you would like to receive the results of this study, please provide your email address below (optional):

Please click NEXT to complete the survey. Thank you.

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APPENDIX B: AUTHOR BIOGRAPHY

Parameshwar Ganapathi is currently pursuing his Master's in Business Administration at Qatar University. With a bachelor degree in Mechanical Engineering from SRM University in India, Parameshwar chose to enhance his management knowledge and skills by enrolling in the MBA program. He holds a 4.0 GPA and expects to publish two research articles by the end of 2019. His interests primarily lie in strategic planning and management and he is keen on developing his expertise even further by pursuing his doctorate studies in the field of Strategy Management. Parameshwar also has over five years of corporate experience in Qatar, working in the roles of Management Consultant and Quality Assurance Engineer.