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Online Food Delivery: How Do Service Failures Impact Behavioral Loyalty?

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Abstract

When consumers order restaurant food delivery through a mobile phone application like Uber Eats or DoorDash, they order from a company that is part of a global phenomenon, Online Food Delivery (OFD). Globally, this market is expected to exceed $85 billion in revenue by 2024 (Statista, 2019). The expected growth of restaurant delivery platforms creates the need for a better understanding of how the business model affects existing players in the restaurant industry. In this study, we will use an experiment to investigate the influence of OFD services on behavioral loyalty toward restaurants. Specifically, we will examine how consumers react to service failures with a third-party OFD involved. The results will help members of the respective academic and industry communities gain a better understanding of the restaurant delivery market and fuel a desire for further investigation.

Keywords

Restaurants, online food delivery, behavioral loyalty, service failure, service recovery

Introduction

$53.79 billion was spent globally on Online Food Delivery (OFD) orders in 2019. This emerging market, which is expected to exceed $85 billion in revenue globally by 2024, includes companies such as UberEats, Grubhub, and DoorDash (Statista, 2019). Such companies provide third-party, independently contracted food delivery services for restaurants that may not have delivery services otherwise. OFD presents a new level of convenience to consumers and drastically expands its food delivery options. With expanded consumer options, many restaurants can now appeal to a new market of consumers who prefer their food delivered. This opportunity has led to the development of new partnerships between OFD providers and restaurants. However, little is known about this novel phenomenon and how these business-to-business relationships impact customer behaviors and loyalty.

Globally, Statista (2019) predicts the average annual growth rate of OFD between 2019 and 2024 to be 9.9%. Comparatively, International Monetary Fund (2019) projects the global inflation rate during the same time frame to be 3.5%. With this high growth, the market has become highly competitive. A mere four companies (Grubhub, DoorDash, UberEats, and Postmates) have a stronghold of the United States market, only allowing other competitors a 2% market share (Rieck 2020). In the United States, DoorDash has 42% market share, Grubhub has 28%, UberEats has 20%, and Postmates has 9%. However, market shares across cities vary greatly. Grubhub leads New York City, New York in market share (62%) while DoorDash is the leader in San Francisco, California (65%) and UberEats has most of the market in Miami, Florida (56%) (Rieck 2020).

Due to the rapid growth of this market, many restaurant managers that did not previously offer delivery are faced with a challenging decision. They must decide whether to partner with an OFD service. If they choose

not to do offer delivery through a third-party OFD, they risk losing customers to competitors that have active OFD offerings. However, if they begin to offer OFD, they can lose a large portion of revenue to the OFD service. Some restaurants must also alter their business models to optimize their product offerings for delivery. One example of this is Chipotle. Before OFD became popular, locations primarily offered in-person ordering. Once its OFD and pickup business started increasing, Chipotle added a second food preparation station to many locations. Now, it is further changing its business model to add drive-through lanes to its location. By adding "Chipotlanes" to locations, the company hopes to prepare for the projected increase in pickup and delivery orders (Chipotle, 2020).

OFD services hire independently contracted drivers to deliver food to consumers who cannot or choose not to travel to a restaurant or cook at home. In most cases, drivers choose their hours, use their cars, and can work for as many delivery services as they desire. Because of this, they can be considered contractors within the sharing economy. Those drivers deliver a restaurant's food to consumers who cannot or choose not to drive to the restaurant themselves.

Like in most other business-to-consumer industries, service failures occur during OFD orders. Unlike other industries, however, the agent responsible for service recovery can be unclear. For example, if food is delivered cold, did the restaurant prepare the food too soon? Did the delivery driver take a wrong turn when delivering the food? Or did the delivery app software wait too long to notify the driver that the food was ready? The numerous possibilities can leave consumers confused. Due to service failures like this, it is important to understand how the failure impacts the consumer's loyalty to the restaurant so that business models and strategies can be adjusted accordingly.

Existing OFD research investigates consumer experiences, attitudes, and behaviors, perceptions, collaborative consumption (i.e. when consumers coordinate the acquisition of goods), and current issues with OFD (Yeo et al. 2016; Pegatto et al. 2016; Correa et al. 2018; Hong at al. 2016). Some important, unanswered questions include: How does a customer's behavioral loyalty toward restaurants differ when they begin an OFD order from an OFD service as opposed to the restaurant? In the event of a service failure (e.g., receiving cold food), who does the consumer blame, the OFD, the delivery driver, or the restaurant? To address these unanswered questions, this study will use a 2 x 3 experimental design to measure restaurant behavioral loyalty and then measure how a service failure impacts this relationship.

Background

There is little research regarding OFD. However, there are still a few studies analyzing this emerging market. Yeo et al. (2016) analyze the relationship between consumer experiences, attitudes, and behavior and OFD services. The study found that a consumer's attitudes toward OFD services, behavioral intention toward the OFD service, convenience motivation, and post-usage usefulness were all endogenous predictors of a consumer's intention to use OFD services. Correa et al. (2018) investigated collaborative consumption and OFD in Colombia's capital, Bogotá. Their study found that during peak travel times in the city, the quality of OFD diminished. However, the authors point out this study needs to be replicated to provide insights to other population-dense areas. Pigatto et al. (2016) also investigate South American OFD, except their study focuses on Brazilian OFD services. In Hong et al. (2016), many of the negative comments about OFD services are discussed. The study suggests that about 70% of negative comments on ingredients were about the restaurant's vegetables and meat. The authors of this study also discuss issues of long delivery distances, low-quality transportation methods, and food packaging. Despite the current research efforts, there has yet to be any studies comparing behaviors of the OFD service and restaurants. Additionally, the implications of the negative comments on food delivery are unknown. This study will help provide insights into both unclear areas.

The sharing economy is, as defined by Eckhardt et al. (2019 p. 3), "a scalable socio-economic system that employs technology-enabled platforms that provide users with temporary access to tangible and intangible resources." Because restaurant delivery services typically utilize delivery drivers on a mobile platform to provide their services to consumers, this market lies within the criteria. Chen and Wang (2019) argue that the unique environment provided in the sharing economy creates new challenges for consumers and firms and brings innovation to marketing in these markets.

When considering research regarding branded mobile phone applications (e.g., McDonald's, DoorDash) and their impact on decision-making, Smith and Chen (2018) find that consumer decision-making can be

positively influenced through brand experience and flow on a branded app. In other words, if consumers lose track of time using a branded app, they are more likely to stay in the app longer and revisit the branded app more often.

Literature regarding customer loyalty also has implications for OFD. Harris and Goode (2004) find that the consumer's perceived value and trust in a brand are both statistically significant drivers of loyalty. To build trust, Harris and Goode (2004) find that service quality and perceived value are critical. This provides tremendous implications to firms in the restaurant industry as it provides a formula for building trust and loyalty in a highly competitive market. Jones and Taylor (2007) find that repurchase intentions, switching intentions, and exclusive purchasing to be outcomes significantly impacted by behavioral loyalty. These findings are significant as they provide insight into the managerial implications of increasing brand loyalty in a service context.

Service failure is another area of research that has valuable, applicable insights for the restaurant delivery market. When a service provider fails to meet the expectations of the consumer, consumers react to this situation in a variety of ways. Fairness theory (McColl-Kennedy and Sparks 2003) assesses the negative perceptions of fairness that stem from procedural, interactional, and distributive justice. McColl-Kennedy and Sparks (2003) describe that the customer seeks to determine who is to blame and the motives and intentions of that party. The authors claim "accountability, therefore, is fundamental to fairness theory" (McColl-Kennedy and Sparks 2003). Vaerenbergh et al. (2019) address how companies respond to service failures through a service recovery journey. This journey is a critical decision made by firms and is composed of prerecovery, recovery, and postrecovery. This study discusses the importance of service recovery as it can end, continue, or improve future interactions between the customer and firm (Vaerenbergh et al. 2019).

The literature on the sharing economy, branded mobile applications, customer loyalty, and service failure research all share valuable insights. However, the emerging market of OFD services offers a new lens through which to view issues of customer loyalty, consumer use of mobile applications, and the wider phenomenon of the sharing economy. Restaurant delivery has brought a unique business-to-customer environment. Previously, transactions in the restaurant industry involved two agents: the restaurant and the consumer, which is the relationship that current research investigates. For instance, Harris and Ezeh (2008) provide insights into service industries with findings suggesting how service quality impacts trust and how that trust impacts loyalty. This study, like others, assumes a single firm interacting with the consumer. With third-party delivery, the OFD service, and its branded online platforms (e.g. mobile application and website) bring a new, additional firm to these transactions. Thus, OFD services surface a variety of questions unanswered in current research. In Harris and Ezeh (2008), one of these unanswered questions is: which company builds more trust, and thus more loyalty, from high service quality? Research on this dilemma and its implications were not found in extant research.

Hypothesis Development

When a customer orders from an OFD service, they begin their order in one of two places: an OFD platform (e.g. mobile phone application or website) or a restaurant platform. According to Finneman (2017) "brand selection happens most often at initial consideration." Therefore, whichever brand is in the customer's initial consideration set (i.e. the original set of brands the customer thinks of at the beginning of the decision-making process) is likely the platform in which the customer begins. And since brand selection occurs in these early stages, the consumer will likely purchase from that brand, influencing their behavioral loyalty. Because of this, the platform in which consumers begin their transactions will likely lead to higher levels of behavioral loyalty. If a consumer begins his/her transaction on the restaurant app and a service failure occurs, restaurant loyalty will decrease, regardless of which agent is to blame for the service failure. With this, Hypothesis 1 (H_1) can be described as:

> H_1: In the event of any type of service failure (restaurant app, OFD app, or the delivery driver) where the consumer started the transaction on the restaurant app, loyalty towards the restaurant will decrease.

When consumers start their order on the OFD platform, it is assumed that they began with the delivery service in mind. In this situation, consumers would likely blame the service failure on the delivery platform.

Therefore, the effect impact on the restaurant's loyalty would be minimal. This is outlined in hypothesis 2 (H_2):

> H_2: In the event of any type of service failure (restaurant app, OFD app, or the delivery driver) where the consumer started the transaction on the OFD platform, the restaurant's loyalty will NOT significantly decrease.

To test these hypotheses, this study will investigate the following questions: (1) In an OFD transaction, how does the platform in which consumers begin their order impact their loyalty toward the restaurant? (2) How does a service failure during an OFD transaction impact the relationship between restaurant loyalty? The study will be tested using the framework illustrated in Figure 1.

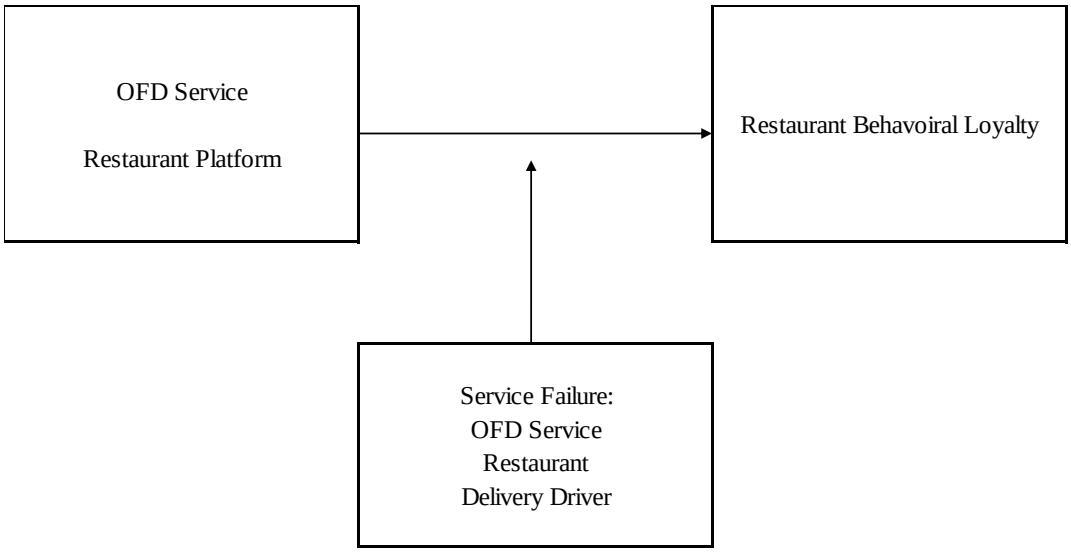

Figure 1. Conceptual Model

Methodology

This study will use a between-subjects 2x3 experimental design to test loyalty and the impact of service failures as explained in the hypotheses. The experiment will be administered online via Qualtrics and participants will be randomly assigned to one of six conditions. First, they will view a scenario in which a food delivery order is placed through a restaurant app or OFD app. Then they will read about a service failure attributable to the restaurant app, OFD app, or the delivery driver. The service failure will be described in the same way, varying only which entity is to blame for the incident.

We will use three measures of behavioral loyalty: switching intention, exclusive purchasing, and repurchase intention (Jones and Taylor 2007). Behavioral loyalty, relative to other types of loyalty (e.g., cognitive loyalty), can have a greater practical impact on companies in the industry (Vaerenbergh et al. 2019).

Conclusion

Overall, this research will have implications for both academic researchers and restaurant managers. In academia, the publication of this research will contribute to a relatively new field. This will allow researchers to gain a better understanding of a rapidly growing, disruptive market.

This study builds on a previous model of service loyalty developed by Jones and Taylor (2007) by expanding it to a new, modern service phenomenon. Current service failure research is thorough but has not accounted for the innovations in service delivery that stems from this new industry. In particular, the study will provide insights for the understanding of different types of service failure in the OFD setting.

Practical contributions include a better understanding of consumer behaviors regarding restaurant delivery providers and restaurants. This would help restaurant managers make appropriate decisions based on the

impact of different service failures. For example, restaurant managers deciding to offer food delivery services have the challenge of deciding whether to place their restaurant on an OFD app. When a service failure occurs, the restaurant can better know the likely results of that failure on customer loyalty and thus better assess their risk.

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