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Online Food Delivery Platform Use By Restaurants

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ONLINE FOOD DELIVERY PLATFORM USE BY RESTAURANTS

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Doctoral Program in Business Administration

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Jessica Felix Martinez

2023

Dedication

I dedicate this work to my parents, boyfriend, friends, colleagues,
and mentors who gave me unconditional support.

ONLINE FOOD DELIVERY PLATFORM USE BY RESTAURANTS

by

JESSICA FELIX MARTINEZ, MBA

DISSERTATION

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Abstract

During the COVID-19, many restaurants were forced to adopt online food delivery platforms such as Door Dash, Uber Eats to serve their clientele. In this dissertation, I examine the following research question: what challenges and benefits did restaurant managers consider to adopt online food delivery platforms during the COVID-19 pandemic? To answer this question, I present three essays. In the first essay, I reviewed the existing academic and practitioner literature on the research context, identified the major players in the food delivery industry, and summarized the challenges that restaurants faced during the pandemic.

In the second essay, I identified what restaurant managers consider to be the major drivers of adoption of food delivery platforms. To this end, I employed a theories-in-use approach. Specifically, I conducted 15 qualitative interviews with restaurant managers in El Paso, Texas. An iterative analysis of the data revealed that the main drivers of adoption of food delivery platforms fall within four groups: complementarities, uncertainties, relationship quality, and level of customer interaction.

In the third essay, I hypothesized and tested the impact of complementarities, uncertainties, level of customer interaction, and perceived relationship quality on the restaurant's intention to continue the use of food delivery platforms. I also proposed that perceived value mediates such effects. I collected survey data from 278 restaurant managers to test the model. The findings showed that complementarities and level of customer interaction positively influence perceived value while uncertainties do not directly influence perceived value. At different values of relationship quality, however, uncertainties can influence perceived value. In turn, perceived value negatively influences managers' intention to discontinue use of an online food delivery platform. The present research will hopefully provide points of focus for both

online platforms and sellers in working together and creating value. I find that online platforms may benefit from focusing on providing value beyond delivery and establishing relationships with sellers. Sellers may focus on evaluating common factors contributing to added value for the business and on identifying biasing factors in their decision making. Research limitations, implications, and future research are discussed.

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Chapter 1: Introduction

1.1 Research Context

In this dissertation, I examine restaurant adoption of online food delivery platforms. An online platform refers to a web-based digital service that facilitates economic exchanges between two or more sets of users. Online platforms include marketplaces (e.g., Amazon), payment systems (e.g., Venmo), sharing platforms (e.g., Airbnb), delivery (e.g., Uber Eats), creative content (e.g., YouTube), App Stores (e.g., iTunes), Software as a Service (SaaS) (e.g., Netflix), among others. Typically, online platforms charge a fee (to one or both sets of users) to facilitate transactions, offer supporting services, and manage interactions.

Online platforms are expected to play an increasing role in the global economy. The global pandemic accelerated the adoption of online platforms that supported consumption during strict lockdown restrictions. Particularly, online platforms grew in importance in the restaurant industry with food delivery applications such as Uber Eats, DoorDash, and Grubhub. The restaurant industry had to work around difficult obstacles while operating during a worldwide pandemic, pushing restaurants to adopt more technologically-driven alternatives.

Online food delivery platforms bring customers and restaurants together, usually through a mobile application. During lockdown restrictions, customers were not allowed to visit restaurants and, in some cases, could not leave their homes. After lockdown restrictions were lifted, some people remained skeptical about leaving their homes and eating out at restaurants. Online food delivery platforms brought restaurants the opportunity to offer delivery to those

customers that did not feel safe leaving their homes or that liked the convenience of using a delivery app.

While customers saw online food delivery platforms as a convenient alternative to going to a restaurant, restaurants had to adapt to an intermediary that took a piece of their profits. At the beginning of the pandemic and the restrictions, restaurants saw online food delivery platforms as a way to make sales and remain open. After the toughest restrictions were lifted, however, many restaurants had to continue the relationship with a third-party delivery partner because customers got used to it. Businesses started to feel the strain of having a party between the customer and the restaurant. Implications not only include the sharing of profits, but also giving up control over an important part of the customer's experience with the restaurant, the actual delivery. These factors complicate the relationship between the online food delivery platform and the restaurant.

Specifically, the context of this dissertation is a business relationship between restaurants and online food delivery platforms.

1.2 Business Problem

I chose to examine the current context of restaurants and their adoption of online food delivery platform due to how the COVID-19 pandemic acted as a catalyst for platform adoption.

Specifically, business reports offer conflicting counts of the impact that online food delivery platforms had on restaurant performance. During the first year of the COVID-19 pandemic, digital orders for delivery grew by over 142% and orders through third-party apps, specifically, grew by 207% (NPD 2021). Uber Eats saw a 152% increase in revenues from 2019

to 2020 (Curry 2022). DoorDash, Uber Eats, Grubhub, and Postmates generated about \$5.5 billion in combined revenue from April to September in 2020, more than double from the previous year (Wetzler 2021). The figures suggest that online food delivery platforms performed a much larger role after the pandemic than they ever did before it.

The other side to the success story of online food delivery platforms is the restaurant industry. Restaurants have had to partner with these platforms, first out of necessity due to the pandemic, and post-pandemic, due to the customer base that restaurants have built around the platforms. Restaurants have tried to convince customers to order directly to the store to avoid the high commission rates that platforms usually charge. Restaurants have gone to the media and have even included notes in orders from delivery platforms to encourage people to order directly through the restaurant (Pu 2020). Several cities imposed caps on delivery app commissions, suggesting pressure from the restaurant industry to diminish the impact of these on smaller restaurants (Pu 2020). It appears that restaurants were struggling to maintain a balance between offering food delivery and making enough margins.

The use of online food delivery platforms is unique because it represents a technologically driven alternative to integrating the delivery function. Restaurants do not always have the resources to deliver directly, so these platforms offer a convenient way to offer customers delivery without a big investment. These platforms offer restaurants a new place to compete. Restaurants can take advantage of the pool of customers subscribed to a particular app that might not otherwise have access or been exposed to the restaurant.

The restaurant industry, then, faces the challenge of balancing the additional revenue coming from online food delivery platforms and the high commissions and issues that come with partnering with these powerful platforms.

1.3 Research Questions

In this dissertation, I examined restaurant adoption of online food delivery platforms. The COVID-19 pandemic drove widespread adoption of online food delivery platforms by restaurants. As restrictions eased, however, some restaurants kept working with these platforms while others actively avoided them. This context provided the opportunity to observe the experience of sellers working with online platforms in a situation where continued use as well as attrition were common. Specifically, I addressed the following research question:

1. What explains and predicts the variance in restaurant usage of online food delivery platforms?

Three essays attempt to answer these questions. The objective of Essay 1 was to explore the current context in which restaurants are working with online food delivery platforms. Based on the review, I identified the four most important online food delivery platforms and the current issues restaurants face in working with these apps. The purpose of Essay 2 was to identify the overall themes of the experience of restaurants partnering with online food delivery platforms. Essay 3 aimed to identifying the drivers of online food delivery platforms by restaurants and tested these relationships.

1.4 Theoretical Contribution

This dissertation contributes to the literature on platforms by focusing on a relevant context and by using a discovery approach to identify the overall themes of the nature of the relationships between restaurants and online food delivery platforms. Extant research has focused on the customer-platform perspective, exploring customer migration (Xu, Venkatesh, Tam, and Hong), platform adoption (Min, So, and Jeong 2019), and the consumer journey (Kim,

Jiang, and Bruce 2021). Research has also explored the implications for platforms in terms of multihoming (Landsman and Stremersch 2011), cross-network effects (Chu and Manchanda 2016), and strategic approach (Cennamo and Santalo 2013). Some research has been done exploring the relationships with the delivery agent involving peer-to-peer dynamics (Costello and Reczek 2020) and platform exploitation (Zhou, Allen, Gretz, and Houston 2021). Research on the online platform-seller perspective, however, has been given less attention. The focus on this context allows for the analysis of the phenomenon from the seller perspective.

Online food delivery platforms have struggled to become profitable and this study provides insights into relationships that both restaurants and platforms might be overlooking. The research will hopefully help platforms work with, as opposed to against, restaurants to offer the best possible service to customers while remaining profitable.

1.5 Organization

The dissertation is divided into a three-essay format. The first chapter of the dissertation is the introduction. Chapter 2 (Essay 1) explores the context in which online food delivery platforms and restaurants operate. The first essay explores the particular characteristics of the main online food delivery platforms and identifies the main source of conflict in the restaurant-platform relationship.

The third chapter of the dissertation (Essay 2) explores the major themes in restaurants' experience partnering with online food delivery platforms. The study, based on qualitative interviews, explores the experience of restaurants using online food delivery platforms and the issue of conflict in these relationships.

The fourth chapter of the dissertation (Essay 3) uses survey data to explore the different drivers of online food delivery platform adoption by restaurants. This study suggests that adoption is driven by key factors embedded in the relationship and the service; and identifies different factors that both restaurants and platforms must consider when entering into these partnerships.

Chapter 2: The Context of Restaurant and Food Delivery Platform Relationships

2.1 Introduction

The use of technology has introduced the use of new types of intermediaries that may be both a blessing and a curse for businesses. Technology has been increasingly influencing how we do business and the covid-19 pandemic accelerated business adoption of diverse technologies that facilitated day-to-day business, given health concerns and government policies. Companies, for example, were forced to use tools such as Zoom to connect their employees when faced with lockdown policies (Molla 2020). Other businesses, however, were faced with the difficulty of reaching the end consumer. Physical stores were forced to shut down temporarily and so focused on online commerce (Perez 2020). Restaurants were also forced to close their doors, making it difficult to deliver the product and the experience. Restaurants focused on drive-thru and curbside pick-up, but a lot of restaurants decided to work with online food delivery platforms to continue doing business (Forman 2021). With the addition of an intermediary to their day-to-day business, however, restaurants have struggled to find the balance between reaching the consumer and keeping their business profitable.

An online platform refers to a web-based digital service that facilitates economic exchanges between two or more sets of users. Online platforms include marketplaces (e.g., Amazon), payment systems (e.g., Venmo), sharing platforms (e.g., Airbnb), delivery (e.g., Uber Eats), creative content (e.g., YouTube), App Stores (e.g. Apple's App Store), Software as a Service (e.g., Netflix), among others. Typically, online platforms charge a fee (to one or both sets of users) to facilitate transactions, offer supporting services, and manage interactions. Online

food delivery platforms, usually online apps, act as intermediaries between a restaurant and the consumer.

During the pandemic, whenever a consumer wanted to “eat out”, they would have to go to their preferred online food delivery app, such as Uber Eats or DoorDash, and look at the available options and menus. After searching, the consumer would choose the items they wanted to order from a particular restaurant and place the order, paying within the app. The consumer is then able to track their order from preparation to delivery. From the restaurant’s point of view, however, this means that the online food delivery app is charging a commission for connecting the consumer and the restaurant, cutting into the restaurant’s margins. Alternatively, the consumer could call or go to the restaurant’s website to order directly through the restaurant and then pick up the food themselves. The pandemic, then, drove many consumers and restaurants to adopting the use of online delivery platforms.

While online food delivery platforms provided restaurants, both big and small, with an alternative way to reach customers during the period of strict lockdown restrictions, research must look at both sides of the story. These platforms existed before the pandemic and not all restaurants used them. Additionally, the volume of orders coming through these online food delivery platforms must have changed. This may bring debate to the role that online food delivery platforms are playing with increased adoption. This paper explores the new context in which the relationships between restaurants and online food delivery platforms are operating.

2.2 Platforms

An online platform is an intermediary that acts as a host of transactions between a seller/supplier and a buyer conducted through the internet, generally for a commission or fee (Eisenmann, Parker, and Van Alstyne 2011). Platforms such as Amazon host exchanges between buyers and sellers while charging sellers a fee for every product sold. On the other hand, Netflix will offer consumers a wide array of movie offerings for a fee, while paying production companies for the rights to stream their content. Some platforms, such as Uber Eats and AirBnB, host exchanges of service offerings for a fee. A key characteristic of online platforms is the presence of a third-party seller or supplier and of an end user that engage through a particular host.

Applications are the most common way for a platform to create the bridge between consumers and sellers. Most commonly, a customer will download the platform's application on their mobile phone, allowing them access to an array of businesses at their fingertips. Sellers must choose whether they want to operate in a platform and, if so, which one. Businesses may join one or more platforms at once and must consider that deciding not to join any platforms may have important implications in the current market. Platform applications, then, provide a convenient avenue for buyers and sellers to engage in exchange.

The COVID-19 pandemic accelerated the adoption of platforms that facilitate the procurement of not only products, but also services. Lockdown restrictions limited businesses' ability to reach the customer in traditional, brick-and-mortar, settings. Particularly, restaurant businesses were faced with the challenge of trying alternatives to the in-store experience. While

alternatives such as drive-thru and phone orders were already present in most restaurants, some businesses began the use of online food delivery platforms for the very first time.

The restaurant industry experienced an increase in online ordering through third-party apps of about 207% during the first year of the pandemic (NPD 2021). This increase suggests that businesses had to adapt to using online food delivery platforms at a faster rate than in previous years. The number of unique restaurant listings in online food delivery platforms increased by more than 200,000 restaurants from December 2019 (pre-pandemic) to December 2020 (during the pandemic) (Forman 2021). About 200,000 restaurants, then, adopted online food delivery platforms for the first time during the pandemic and experienced high volume of orders through it.

Online food delivery platforms saw an increase in users and revenues in 2020. In the US, users of online food delivery apps went from 95 million in 2019 to 111 million in 2020 while revenue went from \$22 to \$26.5 billion (Curry 2022). Average individual consumer spending for DoorDash, Uber Eats, Postmates, and Grubhub increased during second quarter of 2020 and the increased has remained through 2021 (Perri 2022). Worldwide, revenues from online delivery platforms are expected to reach \$215 billion in 2022 and \$242 billion in 2023 (Statista 2022). While revenues of online delivery platforms were positively impacted by the pandemic, these platforms remain unprofitable (Rana and Haddon 2021). Consumers, however, are using these platforms and restaurants must make the important decision of whether it is worth sharing a piece of their profit pie.

Platforms differ not only across industries, but also within an industry. Online food delivery platforms perform differently and provide slightly different services to restaurants and customers. The four most popular online food delivery platforms in the United States are

DoorDash, Uber Eats, Grubhub, and Postmates and they account for 99% of the food delivery services market share (Coppola 2022). While each of these platforms operates differently, one thing they all have in common is that each transaction consists of an interaction among the platform, the customer, the restaurant, and a driver. An overview of the main online food delivery platforms follows.

2.3 Literature Review

Research has explored the dynamics of platforms from several perspectives. The platform ecosystem is not a simple dyad but is composed of multiple parties. The ecosystem includes the platform owner, the customer, the delivery agent, and the seller (Adner and Kapoor 2010). The most common perspective in research explores the different strategies that platform owners may use when dealing with users and sellers (Chu and Manchanda 2016). Consumer behavior has also explored the use of platforms and the different implications of platform strategies on issues such as multihoming and platform migration (Xu, Venkatesh, Tam, and Hong 2010). Research from the delivery agent perspective explores the implications of peer-to-peer dynamics in the shared economy context (Costello and Reczek 2020) as well as platform exploitation (Zhou, Allen, Gretz, and Houston 2021).

Research from the platform owner's perspective focuses on the different strategic approaches present in online platforms. Two-sided markets have the characteristic feature that the benefit of joining a platform for either consumers or sellers depends on the number of agents on the other side of the platform (Chu and Manchanda 2016). Due to platforms' two-sided nature, cross-network effects have been found to have a positive effect on both the seller side and

the consumer side of the platform (Chu and Manchanda 2016). Winner-takes-all strategies have also been explored and have been found to not be universally successful for platforms despite the presence of network effects (Cennamo and Santalo 2013). Research has also focused on multihoming, which refers to sellers and consumers using more than one platform at a time, and has found that seller-level multihoming has a bigger impact on platform performance than the number of sellers using the platform (Landsman and Stremersch 2011). Platform literature in all contexts has heavily focused on pricing strategies and on how to distribute profits in two-sided markets (Eisenmann, Parker, and Van Alstyne 2006). Research from the platform's strategic perspective, then, has been explored extensively but research from the business counterpart perspective, the seller, has been neglected.

Research from the consumer perspective has focused on the different implications of the context and the dynamics of online platforms. Some research has focused on the interplay between platform complementors and the effects that this has on consumer migration between platforms (Xu, Venkatesh, Tam, and Hong 2010). Research has also focused on the different innovation and technology drivers of consumer adoption (Min, So, and Jeong 2019). Research has also focused on the delivery agent, which is generally hardware or an individual delivering the product or service. Costello and Reczek (2020) explored the implications of the peer-to-peer dynamic in the shared economy and the implications this may have for consumers and the platform owner. Zhou, Allen, Gretz, and Houston (2021) explored platform exploitation and the implications of consumers and delivery agents forging the platform's intermediation. The online platform literature has also focused on the unique case of the "prosumer," which refers to consumers' role in both consuming and producing a service through the platform and how easy it is for consumers to change roles (Eckhardt, Houston, Jiang, Lamberton, Rindfleisch, and Zervas

2019). The online platform context offers a unique perspective to the consumer behavior literature. Research from a platform seller's perspective, however, has not been explored.

2. 4 The Online Food Delivery Platforms

DoorDash

DoorDash held about 55% of the online food delivery market share as of March 2021 (Coppola 2022) and features 340,000 restaurants in 600 cities in the U.S. (Lucas 2020).

DoorDash can be accessed through a web browser or an app available both in Android and Apple devices.

Consumers download the app, choose items from a restaurant registered to DoorDash in their area, and checkout directly on the app. The consumer will generally pay for a delivery fee and a service fee that vary per restaurant, increasing the amount paid per order. In some regions, DoorDash offers a "DashPass" for \$9.99, which is a subscription that waives a consumer's delivery fee and reduces the service fee (DoorDash 2022). The DashPass is limited to use in eligible restaurants and has a spending minimum. Consumers, then, may decide upfront what type of fees they are willing to incur while ordering food through DoorDash.

Restaurants may have several agreements with DoorDash, according to the characteristics of a transaction. A restaurant can receive and deliver orders through DoorDash for a 15% commission. The restaurant may also use their own delivery drivers for orders made through the DoorDash app for a flat fee of \$2.40 per order. The restaurant may also receive and deliver orders through DoorDash's Storefront, which allows them to design their own page, for a 2.9% plus \$.30 fee. Finally, the restaurant may receive orders through its own website or app and

deliver it through DoorDash for a flat fee of \$8. DoorDash may list non partner restaurants in the platform but most orders come from partner restaurants and a restaurant can opt out of being listed (Dawson 2020). Restaurants then have several options depending on what their needs and preferences are.

It is important to note that DoorDash claims that they not only deliver food but also help businesses boost incremental sales, increase online presence, create efficiencies, and offer powerful analytics (McCarthy 2022). DoorDash offers a business relationship beyond being a delivery app by offering additional services that help restaurants' decision making.

Uber Eats

Uber Eats has a 22% market share in the online food delivery service industry (Coppola 2022) and works with over 100,000 restaurants in the US and Canada (Sallenave 2020). Uber Eats may also delivery groceries and other items from stores. Uber Eats services can be accessed by customers through a website or an app on their mobile phone. As of 2020, Uber Eats was the most downloaded food delivery app with 24 million installs (Dazeinfo 2020).

Uber Eats charges may charge the customer a delivery fee, service fee, small order fee, delivery adjustment fee, and, as of recently, a CA driver benefits fee (Uber 2022). Uber offers a subscription service, Uber Pass, which gives customers \$0 delivery fees on select restaurants, discounts, free grocery delivery over a certain amount, and deals in rides for \$9.99 a month (Uber 2022). The fees vary per order and restaurant, allowing the customer to access different options at different price points.

Restaurants may choose to work within three different tiers in Uber Eats (Fantozzi 2021). The first tier, Lite, offers restaurants the opportunity to appear on app searches for 15%

commission, but does not offer any promotions or inclusion in Uber Pass. The second tier, Plus, allows a restaurant to be promoted on Uber Eats' home page and be included in Uber Pass for a 25% commission, but does not include any extra promotions. The last tier, Premium, allows restaurants to appear in the app's homepage, be included in Uber Pass, and will offer to match extra expenditures on adds up to \$100. Uber Eats may list non-partner restaurants in the platform but this is not as common as in Grubhub and Postmates and restaurants may opt out (Dawson 2020).

Uber Eats, similar to DoorDash, also claims to help restaurants increase their efficiency, streamline their delivery, access data, and expand their customer reach (Uber 2022). Uber Eats offers well-rounded services that should provide restaurants with much more than simply delivery.

Grubhub

Grubhub holds approximately 17% of the food delivery service market share (Coppola 2022). and features more than 300,000 restaurants in over 4,000 cities in the U.S (Grubhub 2022). Customers can access Grubhub through the website or the app.

Grubhub appears to operate differently than DoorDash and Uber Eats. The customer pays a delivery fee set by the restaurant that can range from \$4 to \$8 (Elder 2019). The restaurant may establish a minimum spending threshold that waives the fee (Grubhub 2022). This means that a lot of the decision making pertaining the customer is delegated to the restaurant. The customer is also charged a service fee. Grubhub has Grubhub+, a subscription service that for \$9.99 waives delivery fees of some restaurants and gives customers extra perks (Grubhub 2022). Similar to the other apps, the fees that customers pay vary by restaurant.

A partner restaurant pays a 10% delivery fee, a 20% marketing fee, and a 3.05% plus \$.30 processing fee for every order received through Grubhub (Grubhub 2022). Grubhub also has different packages for restaurants (basic, plus, and medium) that differ mostly on the tools available such as promotions, participation in Grubhub+, and the ability to respond to ratings and reviews. The one thing that distinguishes Grubhub from the other two, bigger, online food delivery platforms is that about half of Grubhub's restaurant listing is not partnered with the platform (Fisher 2020). This means that a restaurant need not agree to work with Grubhub for the app to deliver product on behalf of the company. About half of the restaurants in Grubhub were non-partnered at the start of the pandemic in 2020 (Fisher 2020). The fees normally charged on restaurants are then placed on the customer.

Grubhub helps partner restaurants with their marketing efforts while solely providing delivery services to non-partner restaurants. This exemplifies the added value that online food delivery platforms can offer restaurants.

Postmates

Postmates was acquired by Uber Eats in 2020 (Etherington 2020) but continues to operate as its own, separate business. Postmates holds about 5% of the food delivery service market share and offers delivery from over 600,000 restaurants and stores (Postmates 2022). Postmates may be accessed through a website or through a mobile app.

Similar to Grubhub, Postmates may also delivery for restaurants that have not explicitly partnered with the delivery platform. Customers are charged delivery and service fees and these may vary not only by restaurant, but also by whether the restaurant is partnered up with Postmates or not (Helling 2022). Postmates offers lower delivery fees for partnered restaurants.

Postmates offers a subscription service, Postmates Unlimited, that waives delivery fees and offers a discount for \$9.99 a month. The customer may make a decision based on fees but does not know whether a restaurant is partnered with the platform or not.

Postmates offer the same services and tiers to restaurants than Uber Eats. Subscribing to Uber Eats means the restaurant is also subscribing to Postmates and vice versa. Postmates has been listing non-partner restaurants in the platform for years, unlike other platforms who have only recently started doing it (Dawson 2020). Uber Eats acquisition of Postmates translated into both platforms having very similar operations and offerings.

2.5 The Role of Platforms

The pandemic placed restaurants, big and small, in a difficult position as lockdown restrictions created harsh conditions to make business in. Online food delivery platforms, while already existing, stayed at the forefront as one of the newest resources used by restaurants to stay open. Food delivery platforms offered restaurants an attainable way of offering delivery. Economically, it was not feasible for a lot of businesses to offer their own delivery when their profits were suffering from a global pandemic. There has been debate, however, on whether online food delivery platforms are as good as they seem.

Online food delivery apps note that their platforms helped restaurants stay open during the pandemic. DoorDash (2020) claims that 73% of restaurants believe that third-party delivery is good for the industry and 75% of restaurants agree that the platform has helped them reach new customers. According to DoorDash (2020), 57% of restaurants say they would have closed during the COVID-19 crisis if it was not for DoorDash. Additionally, DoorDash (2020) claims

that restaurants partnering with DoorDash are 8 times more likely to stay in business than those that do not. Uber Eats waived delivery fees for more than 100,000 independent restaurants in the U.S. and Canada during the pandemic and promoted local restaurants in the app and through email (Sallenave 2020). This suggests that apps were working with restaurants to help them stay afloat during the pandemic.

The main issue comes when restaurants must pay a percentage of an order to the delivery platform. This fee can be as high as 30%, reducing the margins of already struggling restaurants (Wiener-Bronner 2022). Proprietary technology and market consolidation contribute to delivery platforms' power over restaurants by controlling the service and the necessary technology (Follmer 2022). Legislators even placed caps on the commissions that food delivery apps could charge restaurants. For example, San Francisco permanently capped commissions charged by food delivery platforms to restaurants to 15% (Sheldon 2021). High commissions may have different implications for small restaurants trying to stay open post-pandemic and Restaurants must weigh whether offering delivery services through delivery platforms is feasible, given platform commissions.

After the sudden increase of online food delivery platforms by both customers and restaurants, research must look at the implications of such a sudden and forced change in the restaurant industry. Differences may exist in the experiences of small restaurants, franchisees, and chain restaurants dealing with delivery platforms. Restaurant adoption by restaurants must be explored to understand the path of the restaurant industry's interaction with online delivery platforms.

Chapter 3: Restaurant Experience in Working with Online Food Delivery Platforms

3.1 Introduction

The pandemic forced consumers to change the way they experience a lot of services and products, including the restaurant experience. Businesses were forced to find alternatives to meet the consumer halfway while diverse health policies prevented business as usual. The world saw restaurants shifting their focus to their drive-thru business more than ever before and saw them innovate to accommodate things such as curbside pickup. If a restaurant was not offering an alternative to in-store ordering and consumption, then the restaurant was not in business. Online food delivery platforms had been around for years before the pandemic, but the unique situation that the covid-19 pandemic put the world in accelerated both business and consumer adoption (Curry 2022).

Online food delivery platforms bring restaurants and the consumer together in a particular place over the internet. A consumer installs the food delivery platform's mobile application on their cellphone or access the platform's website and starts browsing for restaurants that deliver to their particular area. The consumer can then make a decision and choose items, pay for it within the app, and then, finally, tracks their food until it is delivered. The restaurant on the other hand, makes the decision to offer delivery through a particular platform and signs up. The restaurant then provides a menu and sets up a way to receive orders from customers. The restaurant and the consumer, then, are connected through the internet by simply joining this platform. All this comes at a price, however. Consumers pay delivery and service fees every time they place an

order. Restaurants, on the other hand, pay a commission per transaction done through the platform. Both buyers and sellers, then, pay a fee to meet at the platform.

The commissions charged to restaurants have been subject of debates due to the effects that the pandemic has had on the restaurant industry. States, including California and New York, have implemented caps on the commissions that online delivery platforms can charge restaurants (Forman 2021). Small restaurants have expressed their discomfort with platforms' high commissions and have even placed flyers in delivery bags asking customers to order directly through the restaurant (Taliaferro 2021). Restaurants appear to be facing the challenge of deciding between reaching the customer through online delivery platforms and saving their margins. Restaurants must then consider the different implications and factors affected when using online delivery platforms and what the tradeoffs are when not using them.

RQ1: Why do restaurants use online food delivery platforms?

To answer this question, I conducted a series of interviews with restaurant owners and managers. This paper explores restaurants' adoption of online food delivery platforms from the perspective of owners and managers and identifies recurring themes and factors influencing restaurants' decisions. An interpretative analysis reflects that restaurant owners and managers view delivery as an attractive option to customers, particularly after the pandemic. Most businesses suggested that the COVID-19 pandemic emphasized the importance of having the delivery option for the sake of customers' health and safety. All interviewees showed concern for the cost of having their own delivery personnel and vehicles and viewed online food delivery platforms as viable alternatives. Downsides to the use of these online platforms included

commissions and loss of control over delivery. Most owners and managers consider that their business would not stop the use of online food delivery platforms, despite the ups and downs of their experience.

Decisions to adopt and continue use of online food delivery platforms are of great importance to restaurants, particularly small restaurants, due to the importance of offering delivery as part of customer service. Restaurants perceive delivery to be a necessity now but not all have the opportunity to deliver themselves. Managers and owners suggested they feel they are missing out on sales if they do not use online food delivery platforms. Additionally, online food delivery platforms offer an online presence that would be difficult to replicate. The decision to use or drop these platforms, then, has strategic and cost implications for restaurants.

3. 2 Method

The purpose of this study was to learn about restaurants' first-hand experience using online food delivery platforms, particularly during and after the toughest parts of the pandemic. I used a theories-in-use approach (Zeithaml, Jaworski, Kohli, Tuli, Ulaga, and Zaltman 2020) to explore the restaurant managers' experience in interacting with online food delivery platforms and to conceptualize the determinants of adoption and use of these platforms. The theories-in-use approach suggests that those experiencing the phenomenon are the theory holders and that their ideas provide the basis for further theory building. Hence, I decided to interview restaurant managers to obtain their perspective for further theory development. Next, I used a discovery-oriented approach (Anderson, Rayburn, and Sierra 2019) to do a systematic analysis of the qualitative data obtained through interviews, to identify emerging concepts. An iterative process

of analysis allowed for the comparison and identification of themes and concepts (Goulding 2005). This inductive approach allows us to transition from raw data to parsimonious and rich descriptions of this phenomenon (Silverman and Marvasti 2008).

A purposive sampling approach (Silverman and Marvasti 2008) was used in order to obtain relevant input from restaurant owners and managers. The study intended to collect qualitative data from sources directly involved with the phenomenon of interest in order to capture the true themes and issues in this particular context. Fifteen semi-structured interviews were conducted face-to-face and through zoom. A snowballing technique, in which interviewees as well as customers were asked to name people that could contribute to our study, was used and owners and managers were contacted. The interviews were conducted both during periods of high COVID-19 cases (Late December and January) and periods of low COVID-19 cases (October, November, and early December) until saturation was reached. The interviews range from 15 minutes to an hour long depending on how important online delivery platforms were for the business. Interviewees were guaranteed anonymity and confidentiality. The names of both the managers and the restaurants were changed to protect participants. Interviewees did not consider the information provided to be of a sensitive nature and efforts were taken to ensure they felt comfortable enough to share their true experiences. Ten primary questions were part of the interview, leading to a discussion covering from businesses' adaptation to the pandemic all the way to the positives and negatives of using online food delivery platforms. All participants were asked the same set of basic questions but the interviews were conducted in a flexible manner to allow for elaboration, probing, or follow-up questions. Recordings, notes, and transcripts were used during the process of analysis.

Table 3.1 presents respondent profiles. The ages of the respondents range from 23 years old to 62 years old, providing a wide range of perspectives from the different age groups that may be involved in owning or managing a restaurant. The respondents were a mix of owners and managers because we expected both parties to provide a rich perspective on what it is like to deal with delivery platforms both in terms of the partnership and the day-to-day operations. Four of the respondents work for or own a restaurant that is part of a bigger corporation while eleven of the respondents work for or own a small or local business. I expected the experiences of chain or franchised restaurants to be similar to each other and to differ from those of small businesses. I expected smaller businesses to have a range of different and unique experiences, resulting in a bigger focus on interviewing smaller restaurants. Three of the restaurants sell fast-food, two of the restaurants sell coffee and/or desserts, and the rest consider themselves to be sit-in restaurants ranging from American food to Japanese food. I wanted to have a range of not only type of restaurant but also type of food, suspecting that differences in the composition of the food (cold vs warm food, etc.) would impact restaurants' experience. Only two restaurants had experience operating with only one delivery platform, while the rest had experience using more than one at a time.

Table 3.1: Respondent Profiles

Respondent Profiles						
Pseudonym	Age	Gender	Role	Type of Business	Type of Restaurant	Platform Used
1. Manuel	62	Male	Owner	Small Business	Sit-in	Favor
2. Mike	53	Male	Owner	Franchise	Fast food	DooDash, Uber Eats, Grubhub, Postmates
3. Guillermo	40	Male	Owner	Franchise	Fast food	DoorDash
4. Kim	40	Male	Manager	Small Business	Sit-in	Uber Eats, DoorDash, Grubhub
5. Mark	25	Male	Manager	Small Business	Sit-in	DoorDash, Grubhub
6. Carlos	42	Male	Manager	Chain	Sit-in	Uber Eats, DoorDash, Grubhub, Postmates, Favor
7. Jim	36	Male	Manager	Small Business	Sit-in	DoorDash, Favor, Postmates
8. Joe	33	Male	Manager	Franchise	Fast food	Uber Eats, Grubhub, Favor
9. Sara	31	Female	Manager	Chain (Local)	Sit-in	Uber Eats, DoorDash, Chownow, Grubhub, Favor
10. Kevin	47	Male	Owner	Small Business	Sit-in	Uber Eats, DoorDash, Grubhub, Postmates,
11. Marco	57	Male	Owner	Small Business	Fast food	Uber Eats, DoorDash, Grubhub
12. Roberto	44	Male	Owner	Small Business	Sit-in	Uber Eats, Favor
13. Alejandra	23	Female	Manager	Small Business	Sit-in	Uber Eats, DoorDash
14. Alberto	49	Male	Owner	Small Business	Sit-in	Favor
15. Taylor	40	Female	Manager	Small Business	Sit-in	DoorDash, Favor

Most interviews were conducted in English except two. The two interviews conducted in Spanish were translated using back translation. The interview transcripts were translated from Spanish to English and a bilingual third party translated the English transcript back to Spanish to ensure consistent meaning (Brislin 1970). The data was analyzed through the constant comparison method (Goulding 2005). Each transcript from the interviews was analyzed line by line and themes and concepts were identified. In a reiterative process, the analysis of each transcript was then compared to the others in order to match the overall, common themes. Lastly, these themes were organized according to concepts that offered higher order explanation (Goulding 2005). Four overall concepts with subthemes emerged from the analysis of the qualitative data collected in the fifteen interviews.

3.3 Themes of Platform Adoption

The restaurants interviewed had interactions with online food delivery platforms and had experience using the services of at least one of the platforms. Most restaurants use more than one

online food delivery platform. The owners and managers appeared to have strong feelings towards online food delivery platforms and considered these to be relevant considerations in the future of their business. Managers and owners were quick to express the benefits and issues they see in using delivery apps, suggesting that platforms occupy an important role in the day-to-day activities of the business. The experiences shared ranged from considering the platforms to be of great help to considering these platforms to be less than ideal, but necessary. Most owners and managers suggested that the COVID-19 pandemic resulted in online food delivery platforms performing a more central role in their restaurants. All respondents emphasized that the pandemic caused an unprecedented struggle that pushed them to adapt to constant changes at a fast pace, suggesting that restaurants were put in a vulnerable position in the present context. Four concepts with subthemes emerged from the analysis of the qualitative data collected in the fifteen interviews. The overall concepts that emerged from the analysis of the interview data were complementarities, uncertainties, relationship quality, and level of customer interaction.

Complementarities

Restaurant owners and managers' main concern was the cost of using online food delivery platforms such as Uber Eats, Grubhub, DoorDash, and Favor. Online food delivery platforms charge a commission that can range from 9 to 30 percent of the total ticket. Managers emphasized that restaurants' margins are already small and that high commissions for delivery were not justified. Restaurants, however, varied on what they considered the platforms to do for the business and what they were actually paying for.

Mike, the owner of three franchise restaurants, believes restaurants are given different commissions based on size but that the commission is still not justified:

15-30% in fees. 15% being a good one and 30 being a very high one. So that can be expensive. I would imagine, too, that they probably wouldn't want it to be open but big places can probably negotiate to get the percentage down and that's why they have the range. But it is very expensive for someone doing nothing but picking it up and taking it to somebody, to be having a 30% fee.

While this extra cost was of concern to all interviewees, the commission rate and the owners' ability to negotiate with the platform varied. Franchisees, through corporate negotiation, were more likely to have commission rates lower than 20%. Small businesses all had a commission of 30%, except for those using Favor. Small restaurant owners expressed they tried to negotiate a lower commission rate but were unsuccessful.

Mike expresses how being part of a big corporation benefits their dealings with online food delivery platforms:

So [the chain] sets up the premise, sets up the contract, sets up everything and then sets it up for all stores to be treated equally.

Kevin, owner of a small restaurant selling American food, suggests that they have tried more than once to negotiate their rate with several of the online food delivery platforms:

It depends, we're always trying to re-negotiate. That's my job, I try to renegotiate, but they don't. They don't want to, cause they're making so

much money. They don't want to take away part of their profit, they don't want to take their profit. They're big corporations and we're a local business and we have to deal with that, to get our product out there.

On the other hand, restaurants with high traffic and stronger corporate support enjoy lower commissions and face better negotiation conditions. Guillermo, owner of two national brand franchise restaurants, shares how his restaurants get preferential treatment:

Other thing unique with [this restaurant], which would probably be helpful, because of those sales and they were so impressed with how [profitable] this restaurant was and they were getting a piece of that cake, they accommodate a lot of our requests.

We have the best deal probably in the nation with them, the lowest fee, but compared to anyone it is really low and they are responsible for any mistakes. We don't get charged for that.

Some restaurant owners, however, view the payment of the commission not only as a fee for delivering their food but also as a marketing or promotion fee. Restaurants are not only paying for delivery but for exposure on delivery apps. When a customer is browsing for food to order on an app, they are shown a list of restaurants available along with their menu. This gives the restaurant exposure in an online context. Mike suggests that the commissions can be thought of as a marketing fee:

And also, with third party you have to look at it a little bit like advertising.

You're trying to analyze, how do I allow 15 to 30% fees, well if you think of the cars, you think of the insurance, you think of the employees, and then you have to think of advertising. Your name is out there to thousands more people than you could ever access and now you can access it.

While the cost of using online food delivery platforms is high in the minds of all restaurant owners and managers, there is disparity in how these restaurants are treated. Restaurants that receive support from national brands or big corporations tend to be able to negotiate lower rates while small restaurants are forced to face commissions as high as 30%. Additionally, the commission rate was often the reason restaurants dropped a particular platform, particularly Uber Eats.

The COVID-19 pandemic placed restaurants, both big and small, in a difficult situation in which they had to adapt or close. Most restaurant managers and owners expressed that the pandemic created a need for food delivery that they could not afford to integrate, so relying on online food delivery platforms was the next best thing.

Alberto suggests that even for their upscale restaurant, delivery is now part of providing good customer service and they have learned to rely on Favor for that:

I think it's part of the necessity, part of the customer service. I think, it's just giving more options to the customer as part of the customer service. Since we're not going to deliver it ourselves. I think it's good to have that kind of

answer to the customer. We don't deliver per se but you can go through this company and they can delivery for you. Of course, they pay a little extra fee but for the convenience of getting delivered. I think today it's more a necessity that you really have to have. If we didn't have Favor, then we would probably have to look for another company.

Some restaurant managers and owners keep an open mind about online delivery platforms because these provide an alternative to delivering themselves during a time when people may not feel comfortable going into the restaurant. They consider it a way to recover a sale that would have never happened without delivery:

It's always, good to have another option for sales. That's why we're here, it is my job, to drive sales, build the brand and things like that. And the more exposure the better, of course. It does give us that element of delivery, which we do not offer here in store. We do not have a delivery service, so for the guests that can't make it out or for some reason can't make it to the building physically, they have an outlet to still get our food.

Other restaurants see online food delivery platforms as a way of adding a new customer base to their restaurant. These platforms increase the restaurant's exposure to customers that might not come in store otherwise. Mike suggests that online food delivery platforms bring in a new type of customer and that if you don't participate with these platforms, you are missing out on sales:

But they say that most third-party delivery orders, and that is another reason why people bite the percentages, most of those people are not going to go in the lobby. So, this guy is sitting at home and you decide to not offer him third-party, cause you think he's going to come into your store. No, he went to another third-party delivery, third-party delivery has become its own beast and it's for people that aren't going to come in.

Despite all the issues that most owners and managers see with using online food delivery platforms, most interviewees noted that they do not see the restaurant dropping the apps. The delivery aspect of restaurants has become very important and most restaurants, particularly franchisees and small restaurants, do not have the resources to integrate delivery. Offering delivery entails the purchase of vehicles, payment of insurance, hiring of additional employees, and management of online orders. Online food delivery platforms offer an alternative to all those costs.

Uncertainties

Restaurant owners and managers emphasized how they must accept that the delivery process, and sometimes the ordering process, is completely out of their hands. Once the food leaves the restaurant, the delivery to the customer entirely depends on the platform's driver. The driver and online delivery platform are responsible for any issues in the delivery of the food. Restaurants, however, often receive calls from customers complaining about delivery-related issues, placing the burden of initial contact on the restaurant. Restaurants are also unable to

determine important factors that influence their offering to customers such as promotions and the ability to deliver to a particular area. Additionally, some restaurants do not have explicit agreements with online food delivery platforms but still receive orders from these sources. These situations make it difficult for a restaurant to be in control of providing the customer with a quality product. This loss of control creates uncertainties for restaurants.

Mike tells how his restaurant tries to make a clear distinction between their service and the platform's service:

You would hope that the customer has enough sense to distinguish between us and them. If it is getting there 40 minutes late, sometimes you get the call of the customer "hey I still haven't gotten my order yet" and we tell them that we made it and it is ready and so we draw the distinction to let them know we've done our part.

Not only do restaurants do what they can to ensure the customer understands that delivery is the platform's responsibility, but they must also deal with complaints about the food's quality. Jim, manager at a local American food restaurant, explains that it is hard to ensure that the customer receives a quality product:

People are not understanding when it comes to the quality of the food. For the most part, we deliver a quality product every single time. It is just a matter of getting from point A to point B. You know, once they pick it up it's out of our hands. The driver could mess with the food, the driver could go the

wrong way, he could experience some traffic, and then at the end of the day they'll leave a bad review like "oh the food is cold, it was this and that." And yes, it's freshly made when they take it, but by the time it gets there, and by the time they actually open it to eat it. You know there's two elements there, one is the driver there and the other is that they don't open it right away. Put those two times together and it'll make an hour. Especially in our food, 80% of my food comes out of a fryer.

Just like restaurants are unable to control the delivery process, the restaurant can't make decisions for in-app promotions or radius of delivery. The platform generally has a one-size-fits-all approach to offering promotions for restaurants to boost their sales. Similarly, restaurants are limited by the platform to a particular radius of delivery, meaning that customers that fall outside that radius cannot order from the restaurant. Marco, owner of two pizzerias that rely solely on takeout and delivery, shares how online food delivery platforms limit his ability to make business:

Is that you can do promotions with them for whatever reason you want, to increase the ticket average, to push the sales on one day or sometimes, or whatever. And when you try to do it, we're talking about food, there's only three main ways to do it. It's buy one get one free, I'll give you discount for x amount, or I'll give you a free item in your ticket. To do that I want to select you, my customer, in terms of saying for to-go give 10% discount or give a pepperoni pizza for free if your ticket is above \$50. And I cannot do it

because they recommend that is for 45 or 35... So, my point with them was why do I want to make an offer for a free pizza for somebody that will spend \$35 on a ticket, when my average ticket, my actual average ticket with you is \$57? Just tell me why! If I want to increase, I want to be able to put \$100 and then make a discount.

Some restaurants receive orders from platforms they have not previously agreed to work with. The platform's drivers simply call the restaurant and place the order on behalf of the customer. Generally, restaurants are able to handle these orders as just another takeout order. Alberto, owner of an upscale local restaurant, explains the distinction between having and not having an established agreement with platforms:

The thing is, the other delivery companies like Grubhub, we also get orders from them even though we are no, we don't have a signed contract. We get orders for Grubhub. I think the way it works is that when you sign a contract, it is a commission based on the sales. And they promote your business and you have a different exposure, so that's why you're paying that fee. But when you don't have an agreement, they still can deliver... They don't charge us for anything, I guess everything they get the money from the customer. They provide a service and probably the customer pays a delivery fee. So, we get Grubhub too. Again, we don't have any agreements with them but we get orders from Grubhub. And I notice that sometimes from Grubhub there are a little bit more mistakes or situations...

While having a platform deliver for a restaurant without an established agreement saves the restaurant payment of a commission, communication appears to be an issue. Restaurants suggest that these platforms often have incorrect menus, preventing them from delivering correct orders to customers. Taylor, manager at a local Japanese restaurant, expressed her frustration with platforms:

Business wise, it can be helpful but in the other hand, because of those we cannot deliver great orders to customers. Because those companies don't know the correct menu. They don't have correct menu, even though one put order for customer, they don't know what they are ordering. When they come in they don't know what they ordered for customer. Because of that, I think we have some conflict before. Even sometimes the credit card doesn't work, so they have to go back and come back. Of course, the food, the quality is not there for the customer. The customer, their experiences affects to us.

Restaurants face challenges in managing the value of the product being offered. The value of the product includes the delivery experience, yet the restaurant has no control over it. Customers may have difficulty separating their delivery experience from the food experience and owners and managers feel that may be affecting their brand.

During the period when COVID-19 lockdown restrictions were at their strictest, restaurants relied on online food delivery platforms, in addition to drive-thru and curbside pickup, to remain open. Customers wanting food from a particular restaurant had limited options

so restaurants were receiving orders from only a few avenues. Restaurants implemented curbside pickup, intensified their focus on drive-thru, set up direct online ordering and continued phone ordering, and signed up for online food delivery apps. Once lockdown restrictions became more lenient, however, businesses faced an increase in orders. People were now able to order in-store in addition to all other alternatives used during the restrictions. Restaurants then faced the challenge of managing all the different orders while keeping good customer service. Some restaurants were not working with these many sale avenues and were challenged once the world returned to a new normal.

Alejandra, manager at a chain Mexican restaurant, explains how the addition of online delivery platforms was brand new for the personnel and how they were able to adapt:

It was a little bit difficult when we first started. Because it was more of a, it was something new. So you know, our kitchen was used to a certain rush, and you also have these online orders coming in. It becomes kind of tough because sometimes you do have to prioritize it, because they're on a time limit. When the people show up to pick it up, I know that it's very, delivery guys they try to stay on a certain time. That improves your tips. So, we try to be positive with this new thing that we have going on. So, we export those out very quickly. It can be a little rush for the kitchen when we have our regular lunch and then we have orders coming in. But they have become really good at it.

After asking why their business has a couple of apps but not Uber Eats, Mark explains that they have to limit the online platforms they work with due to the volume of sales:

We don't, because of the same reasons. We just get a lot of orders through those and then plus the people ordering in person, so it's a lot of work to have like an extra app... The size of the orders. Sometimes they order more than 3 drinks and two or three food items. So, for us here to deal with that with the other apps and then with the in-person, it's a lot...overwhelming. So we prefer to provide good service for everybody, we try to keep it that way.

Kevin suggested that having the online delivery platforms can be both a challenge and a benefit by allowing a lot of orders to come in at once:

It's kind of a double-edged sword when that happens because if we get flooded with online orders, the guest that's here doesn't see that it's real busy in the kitchen. But it's busy in the kitchen and it could be in a slow period out here and it's just like "Why is my food taking so long?" While there might be 20 orders in the kitchen of online orders.

Roberto recalls that sometimes, when it gets busy, they do not wish to have the tablet working, but that they are pressured by the platform to receive orders through the app:

And even Uber call us in the morning at around 11 to see if we have on the tablet. They call us constantly when we have [it] off, when we turn off the Uber. They keep calling and calling. To turn it on. Sometimes it gets busy, a lot of orders are coming out, and we have to put like a pause, and they keep calling.

Alberto suggested that the type of business might influence how overwhelming online delivery orders are for a restaurant. His business is more upscale, meaning the orders being made in the kitchen are more complex than those at fast food restaurants, resulting in a harder time managing extra online orders. He notes that, in that case, he would consider having a dedicated person in charge of managing online orders:

... I can see, if we needed to increase the takeout and have another company. It might create a difficult situation for us because takeout has never been the main thing, so it's challenging, almost like to have one person in charge to do takeout. Taking orders, making sure that everything is packed. It can create a situation in which you have too many orders and your business is not really ready for takeout, again maybe there are other businesses that are used to the takeout. For us, we would probably have to have a person just taking takeout orders, arranging the takeout orders, and making sure that everything goes in there.

While online food delivery platforms helped restaurants stay open while strict lockdown restrictions were common, these orders appear to be piling on orders placed in-store. This represent a challenge for restaurants that were not initially equipped to manage many orders at once. Most restaurants, however, don't see themselves dropping online food delivery platforms completely. This leaves restaurants with the challenge of managing these platform-created uncertainties.

Relationship Quality

Most restaurants suggested that they have little to no contact with the actual platform, unless there are issues. Most owners and managers expressed that they do not currently have a designated representative in the online food delivery platforms to help them with their day-to-day operations. They also suggested that the process of contacting someone at the platform, particularly during busy business hours, can become taxing and time consuming. Others mentioned that the only way they can reach out to the platform is through the website, making the process even slower. Whether the communication was done through phone or online, online food delivery platforms' customer service appears to be poor or hard to reach.

Marco relies fully on takeout, including orders through food delivery apps, and he notes that the customer service is not mindful of the pace of the business:

I call you from the phone at my restaurant and you have the restaurant in rush hour at 6pm in a Friday. And the girl answers you a complete speech “good evening how are you, how can I help you today, can you please verify...?” and I'm calling you from there, don't you have an ID? I have to verify the

last 3 numbers from the last 5 orders. No! I have 5 more orders, I have to move to go to the tablet. Those are the same trouble from all of them. Really annoying and that really hurts the business because one customer that is not satisfied because the driver didn't arrive, is going to affect everyone...

Carlos, manager at a chain sit-in restaurant, suggests that the interface of the delivery platforms makes it difficult for the restaurant to reach out to the customer if there is an issue with an order. Carlos also notes that the process is inconvenient given the fast pace of the restaurant at rush hours:

So that's one of the things that I don't like. That when there is an issue, it is difficult to get a person on the phone. It doesn't happen very often but when it does it's always on a Friday night in the middle of the dinner rush... And it is not anyone that is worse than the other, it is just all. There isn't a streamline, they need to manage the relationship process a little bit better. Something where you can chat directly with the guest. Some of them have where you can message the person but some of them you have to call, some of them you have to get an ID number off of the app and then call the hotline and give them the ID number and then they connect you with the person... as merchants, the interface is a little "clunky".

Joe, manager at a chain dessert store, remarks that whenever they place a complaint on a driver to the delivery platform, they do not get a follow-up:

We can tell Uber and complain about this driver. But as far as us knowing that something actually happened no...Once the complaint comes in we'll let Uber know but as far as whether that driver is going to continue driving or is going to not be able to drive for us, or what the circumstances are after that, we have no idea.

Some restaurants have decided to use an added service that streamlines all orders from online food delivery platforms. A company may help restaurants consolidate all their third-party platforms and facilitate things such as sending orders straight to a restaurant's point of sale and updating the menu on the different apps. While this company helps restaurants manage their day-to-day operations, restaurants still need a platform's customer service to deal with things such as order mistakes and delivery issues. Restaurant owners and managers avoid relying on the different platforms' customer service due to its inefficiency, but issues still arise.

Customer Interaction

The online food delivery platform is an intermediary between the customer and the restaurant, this means that communication from the customer to the restaurant must first go through the platform. Restaurants feel that interference in the connection with the customer.

Mike suggests that he does not feel that the person ordering is the customer, the customer is the online food delivery platform:

All their complaints go to uber, to Postmates. We don't have any contact with the customer, whatsoever. The contact is with the third-party not with them because, the one really ordering from us is the third-party and then they are delivering it to their customer. So that customer has been removed from our hands.

Mike emphasizes that it is still important to try to keep the customer happy, even if it is harder to come in contact with them:

If they're mad with you, whether it was through here or through third-party, they're going to go somewhere else. We still try to keep our customer service as controlled as possible, we want it to be good cause you're not looking for one shot, you want them to come back.

Carlos remarks that part of the issue is that sometimes the restaurant is very busy and there is not an opportunity to let the customer know that their order may take longer:

What's frustrating about this is that, when you call to a restaurant and you want to place the order, they tell you "we're going to take your order but it is going to take two hours, we're extremely busy right now" you know? You can have that conversation and interaction in which you speak to a person. Whereas these online orders, they come in and the uber driver just shows up...

Guillermo suggests that they don't usually have the complete information to help the customer in the case they need service recovery:

And I'm just like "I'm sorry can I get the order" and "oh, it was through DoorDash, you have to call DoorDash." And they said it was the restaurant, but the order was not placed through our restaurant, it was placed through DoorDash. You paid DoorDash you didn't pay us. So, I don't have the information, I only see the name.

While the online food delivery platform helps customers and restaurants meet, it also keeps restaurants from engaging directly with the customer. This loss of interaction makes it harder for restaurants to communicate, build relationships, and offer service recovery to the customer. Figure 3.1 presents the four themes that emerged

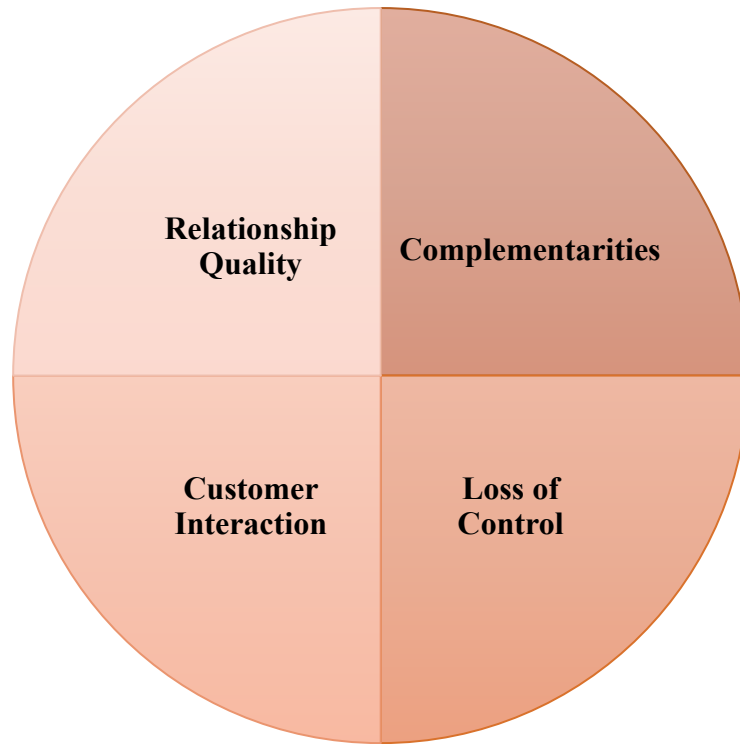


Figure 3.1: Four Themes of Platform Adoption

Chapter 4: To App or Not to App: Determinants of Perceived Value in Online Food Delivery Platform Use

4.1 Background

The COVID-19 pandemic intensified consumer adoption of different technologies that replaced the way businesses reach their customers. Lockdown restrictions accelerated the adoption of technology such as streaming services, consumers brought entertainment home in time when leaving the house was not an option (Sheth 2020). Shopping habits were also affected and the consumer brought shopping into their households by purchasing goods and services, including food, online (Sheth 2020). Consumer adoption of technology translates into business adoption of these technologies to offer products and services. The issue is that as lockdown restrictions ease and the pandemic subsides, consumer adoption of technology remains and, as a consequence, business adoption of these technologies continues.

Businesses, then, are making decisions every day on the different channels that they use to make their products available to the consumer. While the pandemic acted as a catalyzer of this adoption out of need, continued use or further adoption of technology such as platforms needs to be explored. The restaurant industry was heavily affected by the pandemic and restaurants had to quickly adapt to new ways of doing business. Online food delivery platforms became crucial for restaurants when the customer could not leave their home.

Businesses' adoption of platforms is simpler than ever. Businesses can easily sign up to offer their products through online platforms and can easily decide to drop them. The implications of leaving a platform, however, are important. Restaurant adoption of online food delivery platforms involves a simple process, and a restaurant may easily sign up or exit the

platform. This decision, however, comes with additional costs to making business. Businesses have to make layout changes to accommodate drivers from platforms, buy special packaging such as stickers to seal containers, make adjustments to staff, and adjust operations to include online orders from platforms. Additionally, the decision to drop a particular platform has customer reach and exposure implications for the restaurant.

4. 2 Gap

Research on the adoption of technologies and change in habits after the pandemic has heavily focused on the consumer. Research, however, has been slow to explore the business implications of these changes brought about by the pandemic, but that are persistent after a return to the new post-pandemic normal. Particularly, research has not focused on platform adoption on the seller side and on the variation in adoption across businesses. Why is there variation in adoption and use of online food delivery platforms by restaurants?

Business-to-business (B2B) relationships have been previously explored but the online platform context has introduced new dynamics to these relationships. Research has explored B2B relationships in the context of channel of distribution (Weitz and Jap 1995), the antecedents and mediators of relational exchanges (Palmatier, Dant, Grewal, and Evans 2006), as well as the transactional aspect of these relationships (Rindfleisch and Heide 1997). Research, however, has not extensively explored the implications around the online platform context.

Extant research on B2B relationships in channels of distribution has focused on relationships that are managed by both parties due to the importance of every relationship (Weitz and Jap 1995). B2B relationships in the online platform context may entail different dynamics due to the volume of relationships happening at once. Relationship marketing has explored B2B

relationships and found factors mediating relationship continuity as well as antecedents, including trust, dependence, and investment (Palmatier et al. 2006). Research, however, has not explored the seller and online platform relationship, which has broader implications for both sides of the relationship. Sellers in these relationships face network effects that expand well-beyond their offline networks, while online platforms find themselves engaging in exchanges that do not necessarily translate into relationships. Research on dynamic relationships has explored different stages of relationships that include exploration, recovery, and betrayal (Zhang, Watson, Palmatier, and Dant 2016). These factors, however, do not appear to capture the nature of the relationship between sellers and online platforms. Research that considers additional factors and other nuances is needed to understand the dynamics of this new context.

Transaction cost economics have also explored firms' decisions to use the market and the factors influencing firms to stay in exchange relationships (Rindfleisch and Heide 1997). Coase (1937) suggests that, for a firm, there are not only costs to performing an activity but there are also costs to engaging in market exchange. The transaction cost analysis framework suggests that there are factors such as bounded rationality and opportunism that influence the costs of using the market as opposed to integrating an activity (Rindfleisch and Heide 1997). Online platform and seller relationships, however, do not only involve costs to the exchange but also relational and network aspects. Research has suggested that transaction cost economics may benefit from interacting with other theories to better explain more modern firm dynamics (Crook, Combs, Ketchen, and Aguinis 2013). Hence, I am considering not only transactional costs but also relational aspects to B2B relationships in the online platform context.

The present study explores the seller and online platform relationship while considering both relational aspects as well as a transaction cost approach. The dynamic nature and unique

characteristics of the online platform context suggest that a consideration of more than one perspective may be necessary.

4.3 Intended Contribution

This study will contribute to the literature in platform adoption. By focusing on the restaurant industry and delivery context, this study will provide a seller perspective to the online platform literature, which has focused on the platform perspective, while considering the particular characteristics of the industry. The first model offers validation of the qualitative study and identifies and tests determinants that have not been examined before. The second model explores the influence of the quality of the relationship between the seller and the platform on perceptions of value. While context specific, the research lays out work upon which further online platform research can be built.

The practical contribution of the study involves providing both online platforms and restaurants with information on the different factors that must be considered when making online platform adoptions. As online delivery platforms expand to partnering with businesses other than restaurants, this study provides a look into the drivers that both online platforms and businesses must consider and may help firms prioritize factors when building relationships.

4.4 Conceptualization

Organizational decision making is the basis for a firm's success or failure. Small and large businesses may differ in the way decisions are made. Particularly important to decision making is the amount of information that the business is able to process and the level of bounded rationality. As more capacity for processing information is required, a gap may be created

between small and large businesses. A larger firm is able to collect and manage a larger amount of external information due to the specialized personnel the firm may have (Nooteboom 1993). Smaller businesses, on the other hand, are limited not only by a smaller capacity to absorb information but also by the weight of the personal perspective and biases of, usually, a single decision maker (Nooteboom 1993). Manager perceptions and biases, then, become crucial in decision making for small businesses.

4.5 Determinants of Intention to Discontinue Platform Use

The qualitative study provided a basis for identifying the determinants of restaurants' continued use of online food delivery platforms. The four determinants were complementarities, uncertainties, level of customer interaction, and relationship quality. Taking these into consideration, I explore and empirically test the different determinants and their influence in restaurant managers' perceptions of value and desire to discontinue use of the online food delivery platforms.

After the toughest period of lockdown restrictions, restaurants were faced with the decision of whether to keep using or dropping online food delivery platforms. These decisions are made through different processes depending on the size of the firm. Larger chains of restaurants are able to remove the autonomy of the decision makers and replace it with organizational processes (Vargas Hernandez and Perez Ortega 2019), while smaller restaurants rely on the entrepreneur and staff's perspective and capacity (Nooteboom 1993). To empirically test the determinants of discontinuation of use of online food delivery platform by small restaurants, I measure their influence in managers' perceptions of value.

Complementarities

I first consider different complementarities and their influence on the value perceptions of restaurant decision makers. Complementarity refers to using a group of resources for the same value-creating purpose (Lachmann 1947). This combined use of resources creates more value than every resource can create alone (Ennen and Richter 2010). Online platforms may offer complementary functions to sellers and the amount of value created through these complementarities influences the continuation or discontinuation of the business relationship. Restaurants' value creation perceptions of the role of online food delivery platforms as offering complementarities will influence whether the business uses the platforms.

Online food delivery platforms grew in importance during the COVID-19 pandemic. As restaurants' usual sales sources were limited by restrictions, many restaurants turned to online sales. As lockdown restrictions were eased and customers started going back to restaurants, the question of who was using the online food delivery platforms emerged. Based on the interviews, the opinion on who uses the online food delivery platforms is divided. Some owners and restaurant managers believe that it's their usual customers using the online food delivery apps while others believed the apps helped them tap into a new market. These two perspectives have different value creation implications.

A platform that taps into a new market for the seller, it creates complementarities. On the other hand, when a platform taps into the seller's same customer base, it acts as a substitute, resulting in cannibalization. Cannibalization refers to the proportion of one product's sales that shifted from another product from the same brand (Mason and Milne 1994). Small restaurants have limited resources or capabilities to collect information and determine whether cannibalization is occurring or whether complementarities exist. It is likely, then, that managers'

perceived cannibalization is influencing the perceived value and the decision to drop or keep the platform. Cannibalization is the perceived, subjective threat of loss of business caused by an alternative or substitute source (Sharma and Gassenheimer 2009).

A manager who believes the online food delivery platforms are helping the restaurant tap into a new market, may look at the app as a source of new sales, thus increasing perceived value in using the app. On the other hand, a manager who believes those placing orders through the online delivery apps are the same customers as those buying directly through the restaurant, may believe the app is cannibalizing direct sales.

platform decreases.

Smaller restaurants may not always have formal marketing departments that collect and analyze information to create marketing intelligence. This may create a desire to take advantage of other firms' marketing capabilities, creating capabilities complementarities. Knowledge and capabilities complementarities are knowledge, relationship, and intelligence based competencies, including marketing capabilities (Ennen and Richter 2010). Marketing complementarities involve the ability to obtain intelligence from market, customer, promotion, etc. data collected by another party.

Online food delivery platforms offer services other than delivery. The qualitative study suggested that some of the restaurants considered the cost of using online food delivery platforms a marketing expense due to the exposure these give the restaurant. The major food delivery apps offer marketing intelligence, data, promotions, and overall offer restaurants a way to have an online presence. Small restaurants, which may not have a dedicated marketing department, may perceive marketing complementarities from working with online food delivery

platforms. The degree to which restaurant managers perceive marketing complementarities will positively affect the perceived value of using online food delivery platforms.

The qualitative study strongly suggested that restaurants view online food delivery platforms as a way to offer delivery when they otherwise would not be able to. Teece (1986) suggests that innovations and new offerings usually require asset complementarities and online food delivery platforms may offer restaurants this type of complementarities. Small restaurants, particularly, may view delivery services as a crucial complementarity when they want to offer delivery but do not have the resources or capability to do it themselves.

Managers that consider online food delivery platforms to provide higher delivery complementarities may perceive that platforms provide more value than those who perceive lower delivery complementarities. Restaurants that, for example, already offer their own delivery may not perceive as high delivery complementarities as those that do not offer their own delivery service.

Complementarities influence managers' perceived value of using online food delivery platforms by helping small restaurants perform functions that they otherwise would not be able to perform. Managers that think online food delivery platforms offer a high level of complementarities may perceive the value of using the platform to be higher. Formally, I hypothesize that:

H1: Complementarities are positively related to perceived value.

Uncertainties

One of the themes that emerged from the qualitative study involved restaurants' ability to control for the factors surrounding the use of online food delivery platforms. One of the concerns was the number of orders coming through online food delivery platforms varies and restaurants must try to predict and adjust to these changes with a limited amount of information. I suggest that this creates uncertainty in managing the business.

Uncertainty involves the limited ability of a business to plan or control for changes in demand. If a restaurant is unable to appropriately staff the business to keep up with in store and online food delivery platform orders, it may lose sales, damage customer satisfaction, or waste wages. Smaller restaurants with lower capabilities of collecting and processing information may be more vulnerable to these uncertainties. Uncertainty, then, may negatively influence the perceived value of the online food delivery platforms.

The qualitative study also emphasized a common concern that restaurants may have with using online food delivery platforms, the loss of control over the delivery process. Managers emphasized that once the food leaves the restaurant, it is hard to assess whether the delivery would be timely and whether the order would be delivered in good conditions. Performance of the online food delivery platform was hard for the restaurant to assess. Behavioral uncertainty involves the difficulty in evaluating, both before and after, another party's performance (Rindfleisch and Heide 1997). For the purpose of this study, performance uncertainty refers to the difficulty a business faces in evaluating whether the standards agreed on by the parties are being met. Formally, I hypothesize that:

H2: Uncertainties are negatively related to perceived value.

Level of Customer Interaction

The qualitative study also suggested that restaurants struggled with the use online food delivery platforms due to the loss of direct contact with the customer. Online food delivery platforms act as an intermediary between the restaurant and the customer. If there is a problem with the order, the customer may get customer service from the food delivery app and, only in some cases, from the restaurant. The use of the online food delivery platform entails a loss of direct contact with the customer, often making it difficult to offer service recovery or build relationships. I suggest that the manager's perception of the level of customer interaction they may have through the online food delivery app will influence the perceived value of using it.

For the purpose of this study, level of customer interaction refers to the manager's perceived ability to access, communicate with, and provide customer service to the end consumer. If the restaurant manager perceives that a low level of customer interaction may damage its brand or reputation, this may result in lower perceived value of using the online food delivery platform. Formally, I hypothesize that:

H3: Level of customer interaction is positively related to perceived value.

Perceived Value

Value is a complex concept and research has considered that value will differ if measured from the client or the supplier perspective, so it is important to measure "how" the parties view value (La, Patterson, and Styles 2009). Perceived value in business-to-business is the customer's evaluation of the utility in a transaction based on the perceptions of what one party gives and receives, costs vs benefits (Zeithaml 1988). Often, perceived value involves a comparison with

competitors (Mencarelli and Riviere 2015). Perceived value has been found to influence behaviors, including repurchase intention, search for alternatives, and word-of-mouth (Eggert and Ulaga 2002). Without formal organizational decision-making processes, small businesses may rely on entrepreneur and staff value perceptions when making strategic decisions (Nooteboom 1993). I suggest that, particularly in small businesses, perceived value plays an important role in restaurants' decisions to discontinue the use of online food delivery platforms. Eggert and Ulaga (2002) suggest that perceived value is positively related to repurchase intention, suggesting a continuation of the relationship. I suggest that perceived value of using online food delivery platforms will decrease the likelihood of the discontinuation of the platform's use. Formally, I hypothesize:

H4: Perceived value has a negative effect on intention to discontinue use.

Intention to discontinue use of the online food delivery platform is relevant in the restaurant industry context due to the particular conditions of initial adoption. Adoption of online food delivery platforms occurred rapidly and due to an impactful event, the covid-19 pandemic and lockdown restrictions. Restaurants might have expected to return to the "normal" way of doing business once lockdown restrictions eased, but current trends suggest that the decision to drop these platforms has become more complex.

4.6 Relationship Quality Moderation

One of the emerging themes in the qualitative study was online food delivery platforms' poor customer service and restaurants' inability to communicate, cooperate, and negotiate with the platforms. This speaks of a perceived lack of attention towards the platform-seller relationship. Relationship quality is, in general terms, an assessment of the relationship between a buyer and seller (Čater and Čater 2010). Research agrees that relationship quality is multidimensional and the three of the accepted dimensions are commitment, trust, and overall quality perception (Henning-Thurau and Klee 1997). Research often includes satisfaction in place of overall quality perception (Barry, Dion, and Johnson 2008). Research on relationship quality often involves its influence on loyalty (Čater and Čater 2010), but I suggest that relationship quality may help attenuate the effect of uncertainties in a buyer-seller relationship.

For the purpose of this study evaluating the impact of relationship quality on the relationship between uncertainties and perceived value, I consider relationship quality to have three dimensions: satisfaction, trust, and commitment (Barry et al. 2008). A restaurant's perception of relationship quality will be influenced by how satisfied the decision makers are with the service provided by online food delivery platforms, how much they trust the platform to not act opportunistically, and how committed they feel to staying in the relationship. The level of perceived relationship quality, then, will help mitigate the negative effects of operation uncertainties on perceived value by increasing managers' confidence that the platform will not act opportunistically in the face of information asymmetry. Perceived relationship quality will weaken the effect of performance uncertainty on perceived value by reassuring managers that the platform is performing up to standards despite the restaurant having incomplete information. Formally, I hypothesize that:

H5: Relationship quality weakens the negative effect of uncertainty on perceived value.

Figure 4.1 shows the mediated effect of the determinants on intention to discontinue the use of platforms through perceived value and the moderating effect of relationship quality.

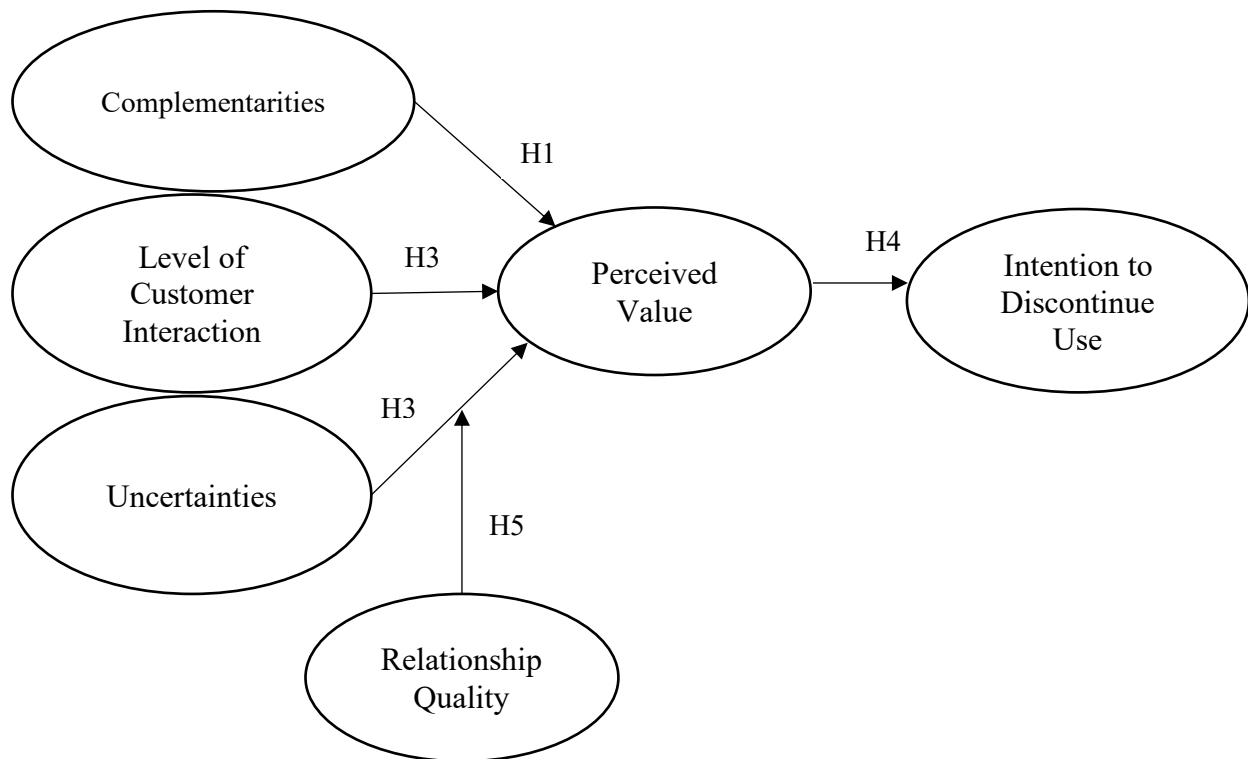


Figure 4.1: Determinants of Intention to Discontinue Online Food Delivery Platforms

4.7 Data Collection

To test these relationships, I conducted a survey of 278 restaurant managers using Qualtrics. All respondents were using online food delivery platforms at the time of the study.

The survey considered only managers who were currently working with online food delivery platforms in order to measure the drivers of the perceived value of using the online platform as well as their intention to discontinue the use of the OFD platform. This could not have been measured with managers without experience using OFD platforms or that were not currently working with one of the online platforms. 65.5% of respondents were male and 75% of respondents were between 25 and 44 years old, and 68% of the respondents hold a college or professional degree. 50% of the respondents work with 3 or more online food delivery platforms while 41% work with 2. On average, respondents suggested that about 50% of their sales came from online food delivery platforms, but this percentage ranged from 2 to 100%. 60% of the respondents have worked with online food delivery platforms for over 2 years. Most respondents were managers in fast food or casual dining restaurants, which are the most common types of food ordered through online food delivery platforms (Walker, 2023). The sample characteristics suggest that respondents had enough experience working with online food delivery platforms to answer the instrument and provide valuable insight. Table 4.1 presents the sample's characteristics.

The questionnaire was developed and distributed through Qualtrics. The instrument was comprised of 65 items, including a screening question and attention check item, and it took respondents 14 minutes, on average, to complete the survey. The data was collected from September 16, 2021 through September 19, 2021 in the United States. Existing measures were adapted to fit the current study and new items were developed and tested for new constructs. Items measuring complementarities and level of customer interaction were developed due to the unique definition of these constructs in the present study. I developed the measure of complementarities based on the main benefits mentioned by managers in the interviews during

the qualitative study. The rest of the items were adapted from existing scales to fit the present study. Appendix B presents the construct definitions and the items used to measure each construct.

Table 4.1: Sample Characteristics

Restaurant Managers N = 278		
	Mean	Standard Deviaton
%Sales from OFD Platforms	49.26	21.77
	Frequency	Percent
Age		
18-24	17	6.1
25-34	72	25.9
35-44	137	49.3
45-54	40	14.4
55-81	12	4.4
Gender		
Male	182	65.5
Female	96	34.5
Have Own Delivery		
Yes	188	67.6
No	90	32.4
# of Platforms		
1	23	8.3
2	114	41
3 or more	141	50.7
Have Worked With OFD Platforms		
Less than 6 months	3	1.1
1-year	21	7.6
2-years	84	30.2
More than 2-years	170	61.2
Type of Restaurant		
Fast food	153	55
Casual dinning	75	27
Café	14	5
Pop up	3	1.1
Fine dinning	26	9.4
Ghost kitchen	7	2.5
Number of Employees		
Less than 50	74	26.6
50 to 1,500	181	65.1
More than 1,500	23	8.3

4.8 Results

Measurement Model

To measure managers' perceptions of the level of complementarities with the online food delivery platform, I developed four scale items (Coefficient Alpha = .825). To measure managers' perception of uncertainties coming from using online food delivery platforms, I adapted four scale items from Mooi and Ghosh (2010) on a Likert-type scale ranging from 1 "extremely difficult" to 7 "extremely easy" (Coefficient Alpha = .876). I developed four scale items to measure managers' perceived level of customer interaction when using online food delivery platforms (Coefficient Alpha = .848). In the present study, managers' perceived relationship quality is considered to have satisfaction, trust, and commitment dimensions (Barry, Dion, and Johnson 2008) and I used three items to measure each dimension (Coefficient Alpha = .892). To measure managers' perceived value of using the online food delivery platform, I adapted four scale items from Kim, Wang, and Yu (2020) (Coefficient Alpha = .819). To measure managers' intention to discontinue use of the online food delivery platform, I adapted four scale items from Lussier and Hall (2018) and Ramsey and Sohi (1997) (Coefficient alpha = .943). All measures were measured on Likert-type scales ranging from "strongly disagree" to 7 "strongly agree", except uncertainties. A restaurant manager reviewed the instrument to assess its face validity. Table 4.2 presents the measurement reliabilities.

Table 4.2: Measurement Reliabilities

Measurement Reliability	
Construct	Coefficient Alpha
1. Complementarities	0.83
2. Uncertainties	0.88
3. Level of Customer Interaction	0.85
4. Relationship Quality	0.89
5. Perceived Value	0.82
6. Intention to Discontinue	0.94

I conducted exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) in two separate groups and the tables present results for each of these groups. I conducted exploratory factor analysis to check for unidimensionality. I first conducted an EFA test of the antecedents to perceived value. In this group I included the complementarities, uncertainties, and level of customer interaction variables. As suggested by Tabachnick and Fidell (2007) and given that factor correlations exceed .32, I used oblique promax rotation in conducting the EFA. Factor loadings in the pattern matrix showed that the items load appropriately in their respective factor, with all factor loadings exceeding .65 (Hair et al. 2010). Table 4.3 presents the factor loadings.

While the items loaded in their appropriate factor, I performed additional tests to assess the reliability and the validity of the measures. For reliability, I examined the coefficient alpha as well as composite reliability of the measures. For validity, I examined the average variance extracted (AVE) to determine convergent and discriminant validity. In addition, I conducted a CFA with these three variables using SPSS Amos (Churchill 1979). The CFA yielded a significant Chi-square of 94.054, a goodness-of-fit index (GFI) of .904, a comparative fit index

of .941, Tucker-Lewis index of .924 and a RMSEA of .078. All the indices are within acceptable levels (Hu and Bentler 1999, Browne and Cudeck 1993 p.144). Composite reliability and AVE were measured to assess construct and discriminant validity. The three constructs had a composite reliability higher than .70 as well as an AVE higher than .50 (Fornell and Larcker 1981). The square correlations between the constructs are smaller than the AVE, suggesting discriminant validity (Fornell and Larcker 1981). Table 4.3 presents the results of the EFA and CFA run with the antecedents to perceived value.

Table 4.3: EFA and CFA Results Including Complementarities, Uncertainties, and Level of Customer Interaction

Construct	EFA Components			CFA		
	1	2	3	Standardized Loading	Construct Reliability	Average Variance Extracted
<i>Complementarities</i>						
1. There are a large variety of services available for use with the online food delivery platform.	.18	.66	.02	0.68	0.822	53.60%
2. The online food delivery platform allows the restaurant to offer food delivery to its customers.	-.16	.84	-.10	0.76		
3. The online food delivery platform allows the restaurant to have an online presence.	-.07	.71	.06	0.77		
4. The online food delivery platform lets the restaurant access new customers.	-.07	.73	.07	0.72		
<i>Uncertainties</i>						
6. Please rate how easy or difficult is it to judge the quality of the online food delivery platform service at the time of delivery.	.78	.13	-.05	0.80	0.875	63.80%
7. Please rate how easy or difficult is it to compare the price/quality ratio of online food delivery platform services.	.63	.11	.07	0.71		
8. Please rate how easy or difficult is it to plan for the number of orders that will be placed through this online food delivery platform every day.	.87	-.09	.02	0.85		
9. Please rate how easy or difficult is it to predict the amount of resources you need to keep up with the orders from this online food delivery platform.	.87	-.13	.03	0.82		
<i>Level of Customer Interaction</i>						
10. I believe this online food delivery platform allows the restaurant to communicate with customers.	.05	.11	.71	0.79	0.824	54.00%
11. I feel the restaurant can solve customers' problems when they order through this online food delivery platform.	.01	-.02	.71	0.74		
13. I feel the restaurant can have a connection with customers when they order through this online food delivery platform.	.05	-.04	.77	0.73		
14. I find it easy to contact the customer when they order through this online food delivery platform.	.00	.00	.76	0.67		

Note: Exploratory factor analysis uses a Promax rotation. Bold values indicate the factor on which each item predominantly Discriminant Analysis Model fit: $\chi^2 = 94.054$, $df = 51$, $p = 0.0$, $GFI = .904$, $TLI = .92$, $CFI = .94$, $RMSEA = 0.078$

I conducted an EFA with the two remaining variables in the main model: perceived value and intention to discontinue us presented in Table 4.4. Factor loadings in the pattern matrix showed that the items load appropriately in their respective factor and none were below .65 (Hair et al. 2010). To assess convergent and discriminant validity, I conducted a CFA with the two variables using SPSS Amos (Churchill 1979). The CFA yielded a significant Chi-square of 49.165, a goodness-of-fit index (GFI) of .957, a comparative fit index of .98, Tucker-Lewis index of .971 and a RMSEA of .076. All the indices are within acceptable levels. Composite

reliability and AVE were measured to assess construct and discriminant validity. The three constructs had a composite reliability higher than .70 as well as an AVE higher than .50 (Fornell and Larcker 1981). The square correlations between the constructs are smaller than the AVE, suggesting discriminant validity (Fornell and Larcker 1981). Table 4.4 presents the results of the EFA and CFA run with perceived value and intention to discontinue.

Table 4.4: EFA and CFA Results Including Perceived Value and Intention to Discontinue

Construct	EFA Components		CFA		
	1	2	Standardized Loading	Construct Reliability	Average Variance Extracted
<i>Perceived Value</i>				0.822	53.80%
1. This online food delivery platform has delivered what we wanted and expected.	-.03	.69	0.69		
2. We get what we pay for.	.03	.82	0.80		
3. Considering the fee paid and the service the online food delivery platform delivers, overall we receive good value for money.	-.01	.75	0.76		
4. Overall, the online food delivery platform provides better value compared to other firms offering similar services.	.01	.67	0.67		
<i>Intention to Discontinue</i>				0.94	81.00%
6. It is probable that I will not contact this online food delivery platform again.	.80	.01	0.80		
7. I am not willing to discuss business with this online food delivery platform again.	.92	.04	0.91		
8. I do not plan to continue doing business with this online food delivery platform.	.94	-.02	0.95		
9. I will not use this online food delivery platform again.	.93	-.03	0.94		

Note: Exploratory factor analysis uses a Promax rotation. Bold values indicate the factor on which each item p
Discriminant Analysis Model fit: $\chi^2 = 46.165$, $df = 19$, $p = 0.0$, $GFI = .96$, $TLI = .97$, $CFI = .98$, $RMSEA = 0.076$

I summated the scales and obtained descriptive statistics of all constructs. The correlations among constructs were significant but not too high. Table 4.5 presents descriptive statistics for complementarities, uncertainties, level of customer interaction, relationship quality, intention to discontinue, and perceived value.

Table 4.5: Descriptive Statistics of Scales

Means, Standard Deviations, and Correlatons								
	Mean	Standard Deviation	1	2	3	4	5	6
1. Complementarities	6.13	0.80	1.00					
2. Uncertainties	5.58	1.24	0.35**	1				
3. Level of Customer Interaction	5.96	0.92	0.52**	0.60**	1.00			
4. Relationship Quality	5.95	0.79	0.68**	0.54**	0.72**	1.00		
5. Intention to Discontinue	2.87	1.84	-0.26**	-0.09**	-0.19**	-0.16**	1.00	
6. Perceived Value	5.97	0.82	0.63**	0.42**	0.56**	0.77**	-0.22**	1.00

Structural Model and Hypothesis Testing

The data was analyzed using structural equation modeling using the two-step modeling approach recommended by Anderson and Gerbing (1988). The tables present the path estimates and t-values of each structural equation model separately. The first step involves running a measurement model through a confirmatory factor analysis (CFA) in order to assess relations between constructs and the observed variables and to assess the psychometric properties of the scales. Using Amos, discriminant and convergent validity was assessed through confirmatory factor analysis. Following recommendations by Fornell and Larcker (1981), scale reliability, discriminant validity, and convergent validity will be assumed if composite reliability scores are above .80, average variance extracted (AVE) is above .50, and there is adequate fit without significant cross loadings. The second step involves the structural model testing relations among independent and dependent variables. SEM is appropriate because I am testing a theoretical model. Additionally, SEM allows for mediation and moderation analysis. Each construct has three or more indicators, allowing for error estimates (Hair, Black, Babin, and Anderson 2010). Anderson and Gerbing (1988) suggest a sample size of 200 is appropriate for conducting SEM.

The ideal sample size would be greater than 300 due to the number of parameters. Due to budget constraints, a sample of 278 was used.

Following the two-step process of SEM, I ran the CFA using Amos (Steenkamp and Baumgartner 2000). Table 4.6 presents the hypotheses. All factor loadings were considered to be acceptable and none were below .60 (Hair, Black, Babin, and Anderson 2010). I examined skewness and kurtosis to assess multivariate normality. Skewness in all cases was within -2 and 2 while kurtosis was within -7 and 7, suggesting multivariate normality (Hair et al. 2010). Mardia's coefficient is significant, however, this may be due to the large sample size and may not be an accurate indicator of nonnormality (Stevens 2012). I examined the variance inflation factor (VIF) and tolerance to assess multicollinearity. All VIF values were lower than 5 and tolerance values were higher than .20, suggesting that there is not a multicollinearity problem (Hair, Ringle, and Sarstedt 2011). Anderson and Gerbing (1988) suggest that more complex models should use a larger sample size. The recommended sample size in this study would approximate 300. Due to budget constraints, I could only gather 278, but the strength of the results suggest that sample size bias should not be an issue. Table 4.7 presents the values obtained when checking for multivariate normality and multicollinearity. Additionally, Sande and Ghosh (2018) suggest that by explicitly estimating the covariance between error terms, SEM allows to control for omitted variables as well as alternative sources of endogeneity.

Table 4.6: Hypotheses

Hypotheses

- H1:** Complementarities are positively related to perceived value.
- H2:** Uncertainty is negatively related to perceived value.
- H3:** Level of customer interaction is positively related to perceived value.
- H4:** Perceived value has a negative effect on intention to discontinue use.
- H5:** Relationship quality weakens the negative effect of uncertainty on perceived value.

Table 4.7: Multivariate Normality and Multicollinearity Indicators

Normality and Multicollinearity Indicators				
Construct	Skewness	Kurtosis	Tolerance	VIF
1. Complementarities	-1.87	6.91	0.54	1.87
2. Uncertainties	-0.91	0.128	0.61	1.63
3. Level of Customer Inter:	-1.28	1.60	0.42	2.38
4. Relationship Quality	-1.4	1.47	0.34	2.91
5. Perceived Value	-1.73	5.45	1	1
6. Intention to Discontinue	0.74	-0.853		

I first tested the mediation model using SEM on SPSS Amos. Since SEM requires that moderating variables are tested as independent variables, it was important to test the mediation model without it first (Little, Card, Bovaird, Preacher, and Crandall 2007). The chi-square statistic was large and significant (Chi-square = 313.750), as expected due to the large sample size (Hu and Bentler 1999). Large sample sizes are necessary for SEM so other fit indices were assessed (Bollen and Long 1992). The suggested comparative fit index (CFI) and Tucker-Lewis index (TLI) level is .90, while it is suggested that the root mean square error of approximation (RMSEA) be 0.05 or less. Indices of the model with no moderation suggest it is a good fit: CFI = .956 (Hu and Bentler 1999), TLI = .949, and RMSEA = .058. As suggested in H1, complementarities significantly increase perceived value (coefficient = .605, $p < .01$). The perceived level of customer interaction positively and significantly influences perceived value (coefficient = .196, $p = .014$), as suggested by H3. Perceived value is negatively and significantly related to intention to discontinue the use of the online food delivery platform (coefficient = -.664, $p < .01$), as suggested by H4. Uncertainties do not appear to significantly influence perceived value (coefficient = .054, $p = .214$), so the data does not provide support for H2. Table 4.6 presents the path estimates for this model.

Table 4.8: Model Estimation and t-values

	Coefficient	t-value
H1: Complementarities> Perceived Value	0.605	6.42**
H2: Uncertainties> Perceived Value	0.054	1.24
H3: Level of Customer Interaction>Perceived Value	0.196	2.46**
H4: Perceived Value> Intention to Discontinue	-0.664	-4.24**

*p<.05 **p<0.01

Model fit: $\chi^2 = 313.75$ df = 163; p = 0.0; GFI = .90; TLI = .95; CFI = .96, RMSEA = 0.058

Even though effect of uncertainties on perceived value is not significant, I tested for the influence of relationship quality in this relationship. Relationship quality could interact with uncertainties and have a combined effect on perceived value. Drawing from the qualitative study, it is important to explore the role that differences in relationship quality may have in the only variable in the model predicted to have a negative effect on perceived value. While managers may consider uncertainties to be a natural consequence of using online food delivery platforms, the level of relationship quality may still affect managers' perceptions of these uncertainties. To test for the effect of relationship quality on the relationship between perceived uncertainty and perceived value, I created a variable with the interaction between uncertainties and relationship quality. As suggested by Little et al. (2007), I calculated the summated scale of relationship quality. I then created mean-centered interaction variables between relationship quality and each of the uncertainties variable items, creating the four items for the relationship quality and uncertainties interaction variable. I tested the model including uncertainties, the interaction of uncertainties and relationship quality, perceived value and intention to discontinue. The chi-square was high and significant due to the large sample size needed for SEM, so I examined other fit indices. The fit indices suggest this model is an acceptable fit: CFI = .957, TLI = .949,

and RMSEA = .068. Contrary to H5, this model suggests that the interaction of relationship quality and uncertainties does not significantly influence managers' perceived value of using the OFD platform (coefficient = -.028, p= .463). This model also suggests that uncertainties has a positive effect on perceived value (coefficient = .246, p <.01), which represents the opposite hypothesized effect. I tested the full model, including all antecedents to perceived value, to observe if the uncertainties variable has a different effect. In this model, uncertainties goes back to having a non-significant effect on perceived value (coefficient = .061, p = .166) while the interaction effect remains non-significant (coefficient = .020, p = .548). Table 4.7 and table 4.8 present the paths estimates for these models.

Table 4.9: Moderation Model Estimation and t-values

	Coefficient	t-value
H2: Uncertainties > Perceived Value	0.246	5.83**
H4: Perceived Value > Intention to Discontinue	-0.665	-3.76**
H5: Relationship Quality * Uncertainties>Perceived Value	-0.028	-.733

**p<0.01

Model fit: $\chi^2 = 229.68$; df = 100; p = 0.0; GFI = .663; TLI = .95; CFI = .96, RMSEA = 0.068

Table 4.10: Model Estimation and t-values Including All Antecedents to Perceived Value

	Coefficient	t-value
H1: Complementarities> Perceived Value	0.595	6.23**
H2: Uncertainties> Perceived Value	0.061	1.39
H3: Level of Customer Interaction>Perceived Value	0.203	2.40*
H5: Relationship Quality * Uncertainties>Perceived Value	0.02	.60

*p<.05 **p<0.01

Model fit: $\chi^2 = 374.56$ df = 160; p = 0.0; GFI = .67; TLI = .92; CFI = .93, RMSEA = 0.07

After using SEM to test the theoretical model, I used PROCESS to further test the statistical model. In choosing between PROCESS and SEM, Hayes, Montoya, and Rockwood (2017) suggest that estimating latent variable interactions may prove difficult when using SEM and recommend the use of PROCESS. The sample size may not be large enough to analyze the effect of the interaction of uncertainties and relationship quality on perceived value (Sagan 2019). Additionally, PROCESS may help mitigate concerns regarding multivariate nonnormality with the perceived value and complementarities variables because regression assumes normality only for the outcome variable (Hair et al. 2010). I used PROCESS with summated scales for every variable in the model. I used model 7 to test the moderated mediation (Hayes 2017) with uncertainties as the independent variable, intention to discontinue as the dependent variable, perceived value as the mediating variable, and relationship quality as the moderator. The output suggests that uncertainties have a significant negative effect on perceived value (coefficient = -0.4264 , $p < .01$), as suggested by H2. The interaction between uncertainties and relationship quality significantly and positively affects perceived value (coefficient = 0.0744 , $p = .0199$), as suggested by H5. Perceived value has a negative and significant effect on intention to discontinue (coefficient = -0.4971 , $p < .01$), as suggested by H4. The direct effect of uncertainties on intention to discontinue is non-significant (coefficient = 0.0045 , $p = .9624$), supporting the mediation model (Zhou, Lynch, and Chen 2010). Table 4.9 presents the results using PROCESS.

Table 4.11: Model Estimation Using PROCESS

	Coefficient	t-value
H2: Uncertainties > Perceived Value	-0.426	-2.64**
H4: Perceived Value > Intention to Discontinue	-0.497	-3.43**
DE: Uncertainties>Intention to Discontinue	0.005	.05
H5: Relationship Quality * Uncertainties>Perceived Value	0.074	2.69**

**p<0.01

To explore the influence of uncertainties at different levels of relationship quality, I used the Johnson-Neyman technique which highlights the difference in means in terms of a control variable (Johnson and Fay 1950). The output suggests that at relationship quality scores below 4.47, relationship quality enhances the negative effect of uncertainties on perceived value. On the other hand, at relationship quality scores approaching 7, uncertainties appear to have a positive, significant effect on perceived value. Relationship quality scores between 4.5 and 6.89 do not appear to have a significant effect on the relationship between uncertainties and perceived value. Table 4.12 presents the Johnson-Neyman regions of significance for the effect of the interaction of relationship quality and uncertainties on perceived value. The indirect effect of uncertainties on intention to discontinue through perceived value at different levels of relationship quality, appears to be non-significant. The influence of relationship quality on uncertainties may not be enough to turn the negative effect on perceived value into a positive one, hence not translating into an effect on intention to discontinue.

Table 4.12: Significance Regions of Relationship quality and Uncertainties on Perceived Value

Relationship Quality	Effect of Interaction on Perceived Value
3.00	-0.20*
3.21	-0.19*
3.42	-0.17*
3.63	-0.16*
3.84	-0.14*
4.05	-0.13*
4.26	-0.11*
4.47	-0.09*
4.56	-0.08
4.68	-0.07
4.9	-0.06
5.11	-0.05
5.31	-0.03
5.53	-0.02
5.74	0.00
5.95	0.03
6.16	0.05
6.37	0.05
6.58	0.06
6.79	0.08
6.9	0.09
7.00	0.09*

*p<0.05

Perceived value appears to mediate the relationship between uncertainties, complementarities, and level of customer interaction. A stepwise regression analysis suggests that complementarities has the highest influence on perceived value (coefficient = .640, $p < .001$), while adding level of customer interaction (coefficient = .288, $p < .001$) to the model improves the R^2 from .394 to .471.

The moderated mediation model was also tested in PROCESS with Model 8. Table 4.13 presents the results of the model. Results are consistent with those of Model 7 and the direct effect of uncertainties on intention to discontinue and interaction effect of uncertainties and

relationship quality on intention to discontinue were non-significant. Providing support for a mediation effect through perceived value.

Table 4.13: Model 8 Estimation Using PROCESS

	Coefficient	t-value
H2: Uncertainties > Perceived Value	-0.426	-2.64**
H4: Perceived Value > Intention to Discontinue	-0.55	-2.64
DE: Uncertainties>Intention to Discontinue	-0.16	-.27
H5: Relationship Quality * Uncertainties>Perceived Value	0.074	2.69**
Relationship Quality * Uncertainties>Intention to Discontinue	0.03	.26

**p<0.01

Table 4.14: Stepwise Regression Analysis of Independent Variables on Perceived Value

Predictor of Perceived Value	R-square	Coefficient	Beta
Complementarities	0.394	0.64	0.628
Complementarities, Level of customer interaction	0.471	0.467 0.288	0.458 0.324

SEM provided support for the measurement model as well as the theoretical basis of the model. While uncertainties did not perform as well as complementarities and level of customer interaction, the overall model appears to perform well. The significance of the effect of uncertainties and relationship quality appears to be limited to certain values of relationship quality as a moderator. SEM tests for relationships simultaneously while accounting for random measurement error (Hayes et al. 2017). PROCESS is an ordinary least square method that analyzes every relationship as single equation, hence allowing for bias due to random measurement error, but allowing for a closer look into the moderated mediation (Hayes et al.

2017). Additionally, due to the non-significant effect of uncertainties on perceived value, it is possible that the interaction effect between relationship quality and uncertainties on perceived value is too small to be analyzed with the current sample size (Sagan 2019). PROCESS provides a regression-based alternative that is able to test for moderated mediation through model 7 (Hayes 2017). I used PROCESS to statistically support the theoretical model explored through SEM. PROCESS and the Johnson-Neyman technique helped identify the areas of significance in the interaction of relationship quality and uncertainties.

4.9 Discussion

In the context of B2B relationships between delivery platforms and restaurants, the present study examines the determinants of perceived value of online platforms from the seller's perspective as well as its decision to keep or drop the relationship. The model suggests that there are specific antecedents to managers' perceptions of the value of working with online food delivery platforms. Complementarities and level of customer interaction appear to have the most significant influence in managers' assessment of the value offered by OFD platforms. Perceived value, in turn, influences a manager's decision to continue working with an online platform.

Complementarities and level of customer interaction, as predicted, have a positive effect on perceived value. This result shows that as managers perceive that the OFD platform helps offer services that either the restaurant cannot offer on its own or that can be performed best when working with a third-party. Additionally, managers' perceptions that using OFD platforms allows them to reach a larger customer base and have an online presence, likely influences the value that managers place on these online platforms. Similarly, a higher level of customer interaction appears to influence perceived value, suggesting that as managers perceive that they

can communicate easily with customers as well as address their concerns, they perceive that the online platform offers higher value. While the online platform represents a barrier between the customer and the restaurant, being able to reach the customer remains relevant in a managers' assessment of the OFD platform and, consequently, their decision to keep or drop the online platform. As suggested in the qualitative study, complementarities and level of customer interaction help drive a manager's decision to keep or drop an online food delivery platform.

Uncertainties do not appear to influence managers' perceptions of value when working with OFD platforms. One aspect that may make uncertainties irrelevant in managers' perception of value, may be that these uncertainties are expected to come with the use of these online platforms. Managers' difficulty in assessing an online platform's performance may be seen as a given when entering the relationship and may be the same for all OFD platforms as a whole, rather than for each individual platform. If this perception is generalized to all platforms, it might not influence managers' perceptions of value for each particular platform.

Upon further analysis, I found that relationship quality may interact with perceived uncertainties to have a negative or positive effect on perceived value. This would provide support for the idea that uncertainties may be a generalized notion of using OFD platforms and a restaurant's particular relationship with a platform may change the way these uncertainties influence perceived value. The quality of the relationship between the restaurant and any particular OFD platform may differ depending on how an online platform manages its business-to-business relationships. Research on customer loyalty has found that while individual factors may influence loyalty, factors such as a lack of satisfaction and customer value influence a change in the effect (Russo, Confente, Gligor, and Autry 2016). The present study suggests that relationship quality, which includes dimensions of satisfaction, trust, and commitment, has a

similar effect on perceived value when interacting with uncertainties. Hence, this relationship quality may significantly influence a managers' consideration of uncertainties and assessment of value of an OFD platform. This interaction, however, may have very little influence in perceived value compared to complementarities and level of customer interaction. The data suggests that relationship quality most likely influences uncertainties and their effect on perceived value when a restaurant's relationship with an online platform is low as well as when it is at its highest. Given the results from the qualitative study, it was important to explore the role that restaurants' loss of control over the customer experience has on the overall assessment of the OFD platform value proposition as well as the decision to keep or drop the platform.

I tested relationship quality as moderator because there could be an asymmetry of expectations between the restaurant and the OFD platform. Restaurants may expect to build a relationship with the few OFD platforms they are working with and which represent a sizeable part of their business. On the other hand, platforms dealing with thousands of sellers at a time, might not expect to build a relationship with every seller. I wanted to explore the influence of the presence of high vs low relationship quality on the negative antecedent of perceived value while also exploring the effect of uncertainties without considering the business-to-business relationship. While I considered relationship quality to influence uncertainties, I considered complementarities and level of customer interaction to not be affected by it. Uncertainties involves a loss of control on the part of the restaurant that may be perceived as negative. Complementarities and level of customer interaction tend to operate as a consequence of the infrastructure of the platform and not the dynamics of the relationship with the platform. Hence, relationship quality is considered to affect the influence of uncertainties on perceived value.

Perceived value, as expected, had a negative influence on a managers' intention to discontinue use of OFD platforms. Level of customer interaction and complementarities influence managers' perceived value of using the OFD platform and indirectly influence a manager's decision to keep or drop an online platform. The present study provides support for the decision-making journey in which managers first assess the value offered by an OFD platform and then assess whether the restaurant should keep or drop the online platform.

4.10 Related Theories

While the present research intends to develop a new framework of B2B relationships in the online platform context, it is important to explore the theories that may inform this framework. I consider this framework to be informed by both transaction cost analysis and relationship marketing.

Transaction cost analysis (TCA) poses that there are costs to using the market and these will determine whether a firm integrates an activity or uses a third-party (Williamson, 1981). TCA considers behavioral factors such as opportunism and bounded rationality and poses that these influence the cost of using the market (Williamson, 1981). Opportunism refers to the tendency of individuals to act in their own self-interest. Bounded rationality refers to the asymmetry of information that occurs between two parties in a transaction. These factors increase the costs of engaging with external parties to the firm. Three of the most important dimensions of a transaction, according to TCA, are uncertainty, frequency, and asset specificity. Uncertainty refers to the need to act based on opinions rather than knowledge (Coase 1937). Asset specificity refers to the investments that are unique to a particular transaction and that cannot easily be used for other transactions (Williamson 1981). These dimensions combined

with opportunism and bounded rationality determine the costs of using the market. For the context of online platforms and sellers, however, TCA does not completely assess the relationship aspect of these B2B relationships as well as the network effects present in this context.

Relationship marketing, on the other hand, has more of a focus on the nature of the relationship between the parties of an exchange. Relationship marketing focuses on the ongoing engagement between two parties of an exchange, as opposed to focusing on a transaction (Morgan and Hunt 1994). Relationship marketing are those activities that a firm engages in to not only establish, but also maintain relational exchanges (Morgan and Hunt 1994). Relationship marketing literature poses that commitment and trust are the pillars to maintaining successful relationships (Morgan and Hunt 1994) but also considers control mechanisms (Weitz and Jap 1995). Contractual, unilateral, and authoritative control mechanisms are considered to help maintain successful relational exchanges, particularly in determining channels of distribution (Weitz and Jap 1995). Relationship marketing tends to consider bilateral costs in a relationship while TCA tends to focus on the reduction of unilateral costs, hence why a combination of these two theories inform the present framework.

Online platform and seller relationships occur in a context where managing relationships proves difficult due to volume, but where a mere transactional approach is not adequate due to the importance of an ongoing process of exchange. Uncertainty and asset specificity in the form of network externalities help explain one part of the framework surrounding online platform and seller relationships. Aspects of control, trust, and commitment, however, are important in the maintenance of these relationships. Hence, I attempt to bring TCA and relationship marketing

together to develop a framework that encompasses the transactional and relational aspects of B2B relationships in the online platform context.

4. 11 Implications

The present study aims to provide insight of the dynamics and B2B relationships in the context of online platforms. Specifically, I look at the factors influencing restaurant managers' decision around online food delivery platforms.

The study provides evidence that managers' perceived value of using an OFD platform influence their decision to continue or discontinue their use of the platform. So, how can platforms influence this perceived value? The study suggests that perceived complementarities, managers' perceptions that the OFD platform complements the restaurant's functions and enhances its performance, will have a positive effect on managers' perceived value. Platforms may consider expanding the services offered to restaurants beyond delivery. Managers may consider the online platform to provide higher value to the restaurant if the online platform offers a strong online presence as well as access to new customers. Emphasizing additional benefits of working with OFD platforms may influence restaurants' assessment of the value proposition and reduce attrition. I recommend that restaurants take advantage of the services offered by OFD platforms and set up formal performance metrics to assess value.

The present study suggests that restaurant managers' perception of the level of customer interaction within the online platform also influences managers' perceived value. The ease with which a restaurant may communicate with customers may increase the value of using the OFD platform, suggesting that an online platform's infrastructure may help keep sellers in the

platform. Minimizing the barrier between the restaurant and the customer may help manage restaurant perceptions of losing the customer to the online platform.

Online platforms and sellers may have different expectations of building a relationship. Given the natural loss of control that comes with working with OFD platforms, platforms may want to develop and manage more formal relationships with sellers. This may help online platforms address sellers' most common concerns when giving up control of a big part of the value delivery to the customer.

Exploring the antecedents of perceived value may also provide sellers with a framework that allows restaurants to formally assess the value being provided by the online platform. This may help restaurants identify key factors in assessing the online platform's performance as well as identify biases that may be present in managerial decision making. Restaurants may also consider limiting the time frames in which OFD platform orders are open, reducing the window of potential demand uncertainty. Formal processes of OFD platform evaluation and customer feedback incentives may help restaurants evaluate performance while working with these apps.

The present study provides insight into the factors that may help both online platforms and sellers build a strategy around their B2B relationships. Online platforms provide a new opportunity to sellers but not without unique challenges that affect the evaluation of not only performance but also the building of future strategies in a world driven by technology. Importantly, these B2B relationships in the online context may spill into the more traditional, brick-and-mortar world by influencing the relationship of online platforms and restaurants with the customer.

While the present study focuses on OFD platforms and restaurants, it is a first step in exploring B2B relationships in the online platform context. Complementarities, level of customer

interaction, uncertainties, and relationship quality may be explored in other industries such as the shared economy, online retail platforms, and system platforms.

4.12 Limitations and Future Research

The present study faces certain limitations. First, the focus of the study is on the decision to discontinue use of OFD platforms. The present sample, as a consequence, includes only managers of restaurants currently using at least one of the OFD platforms. A larger sample size would have allowed for collection of data from managers who have had previous experience working with OFD platforms but decided to no longer work with them and from managers who refuse to work with these online platforms. There may be a difference in value perceptions between managers who no longer work with OFD platforms and those who remain. Due to budget constraints, only data from managers currently working with OFD platforms was collected. Future research may look at the role that the present antecedents of perceived value have on a managers' decision to drop an OFD platform.

To explore the influence of decision-makers' perceptions, the present study surveyed managers. Managers, however, may not always make decision to keep or drop an online platform. Larger firms may have formal decision-making processes in place that would override a managers' intention to drop or keep an online platform. The present study took a behavioral approach to strategic decision making, but future research may want to explore the differences in decision making between small and large businesses, potentially with secondary data.

Online platforms are global in nature and this study only considered a sample in the United States. Cultural differences may influence the factors considered in decision making as well as the overall nature of the relationships (Dobrucali 2020). Future studies may use the

present study to conduct a larger study at a global scale to explore differences in perceptions, as well as the importance of factors.

Future research may want to explore branding implications for sellers participating in online food delivery platforms as well as attribution dynamics in this particular context in which the customer interacts with two different brands. Similarly, introducing the customer's perspective into future studies may allow for the comparison of seller perceptions and the end customer. Future research may explore questions regarding consumer attributions in the case of service failure through survey studies and may explore ways for sellers to mitigate negative effects through experiments.

This study focuses on a seller's perspective in the OFD platform context, however, not all online platforms function as these platforms. Further research may look into classifying online platforms from a seller's perspective and identifying more universal factors influencing the use of online platforms. For example, some online platforms offer a list of services and not a single avenue of service like OFD platforms. Future research may explore whether there is a separation of the relationship with the online platform and the services it offers. Explore the implications for the online platform as an overarching brand.

4.13 Conclusions

Technology has pushed both customers and firms to explore new ways of doing business. Particularly, the COVID-19 pandemic pushed society to rely on technology for conducting exchange. The present study explores restaurant managers' determinants of perceived value and their influence on the decision to keep working with an online food delivery platform.

The study tested managers' perceived complementarities, uncertainties, and level of customer interaction as antecedents to perceived value and as indirect factors influencing a managers' intention to discontinue the use of an OFD platform. I wanted to approach this strategic decision from a behavioral perspective to explore the factors that affect value assessments at the managerial level.

The research findings show that restaurant managers look at online food delivery platforms as tools to improve restaurant performance beyond plain delivery service. Additionally, managers are concerned with the degree to which platforms intermediate the interaction between the restaurant and the customer. Importantly, managers are paying attention to the relationships they have established with the online platforms they work with, which may represent a challenge for online platforms that manage thousands of sellers at a time. Online platforms may want to work towards establishing relationships with sellers and focus on the customer-seller interface within the platform in an effort to lower attrition. Restaurant managers may focus on the evaluation of the value added by online platforms to both the day-to-day and strategic decisions of the business.

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Appendix A: IRB Exempt Determination Letters



Institutional Review Board

Office of the Vice President for Research and Sponsored Projects
The University of Texas at El Paso IRB
FWA No: 00001224
El Paso, Texas 79968-0587
P: 915-747-7693 E: irb.orsp@utep.edu

Date: October 27, 2021

To: Jessica Felix

From: University of Texas at El Paso IRB

Study Title: [1823766-1] Online Platforms Study 1

IRB Reference #: College of Business - Marketing and Management

Submission Type: New Project

Action: EXEMPT

Review Type: Exempt Review

Approval Date: October 27, 2021

Expiration Date: October 26, 2023

The application for the above referenced study has been reviewed. This study qualifies as exempt from review under the following federal guidelines: **[45 CFR 46.104(b)(2)]**.

If Institutional data (secondary or other) will be used for this research project please verify with the applicable department that such data may be used. Additional institutional clearances and approvals may be required. Accordingly, the project should not begin until all required approvals have been obtained.

Exempt protocols do not need be renewed. Please note that it is the Principal Investigator's responsibility to resubmit the proposal for review if there are any modifications made to the originally submitted proposal. This review is required in order to determine if "Exemption" status remains.

This exemption does not relieve the investigators of any responsibilities relating to the research subjects. Research should be conducted in accordance with the ethical principles as outlined in the Belmont Report.

You should retain a copy of this letter and any associated approved study documents for your records.

We will put a copy of this correspondence on file in our office.

If you have any questions, please contact the IRB Office at irb.orsp@utep.edu or Bernice Caad at (915) 747-6590 or by email at bcaad@utep.edu. Please include your study title and reference number in all correspondence with this office.



Institutional Review Board

Office of the Vice President for Research and Sponsored Projects
The University of Texas at El Paso IRB
FWA No: 00001224
El Paso, Texas 79968-0587
P: 915-747-7693 E: irb.orsp@utep.edu

Date: August 26, 2022

To: Jessica Felix

From: University of Texas at El Paso IRB

Study Title: [1942165-1] Online Food Delivery Platform Study

IRB Reference #: College of Business - Marketing & Management

Submission Type: New Project

Action: EXEMPT

Review Type: Exempt Review

Approval Date: August 26, 2022

Expiration Date: August 25, 2024

The application for the above-referenced study has been reviewed. This study qualifies as exempt from review under the following federal guidelines: **[45 CFR 46.104(b)(2)]**.

If Institutional data (secondary or other) will be used for this research project please verify with the applicable department that such data may be used. Additional institutional clearances and approvals may be required. Accordingly, the project should not begin until all required approvals have been obtained.

Exempt protocols do not need to be renewed. Please note that it is the Principal Investigator's responsibility to resubmit the proposal for review if there are any modifications made to the originally submitted proposal. This review is required in order to determine if "Exemption" status remains.

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Appendix B: Construct Definitions and Scales

Complementarities

Complementarity refers to using a group of resources for the same value-creating purpose (Lachmann 1947). In the present study, complementarities refer to the perception that different activities done through the online food delivery platform enhance the restaurants' performance.

To measure the level of perceived complementarities, four items were developed:

1. There are a large variety of services available for use with the online food delivery platform.
2. The online food delivery platform allows the restaurant to offer food delivery to its customers.
3. The online food delivery platform allows the restaurant to have an online presence.
4. The online food delivery platform lets the restaurant access new customers.

Uncertainties

Uncertainty involves the limited ability of a business to plan or control for changes in demand. To measure uncertainty, the four following items (7-point scale from extremely difficult to extremely easy) were adapted from the scale used by Mooi and Ghosh (2010):

1. Please rate how easy or difficult is it to judge the quality of the online food delivery platform service at the time of delivery.
2. Please rate how easy or difficult is it to compare the price/quality ratio of online food delivery platform services.
3. Please rate how easy or difficult is it to plan for the number of orders that will be placed through this online food delivery platform every day.

4. Please rate how easy or difficult is it to predict the amount of resources you need to keep up with the orders from this online food delivery platform.

Level of Customer Interaction

The level of customer interaction refers to the manager's perceived ability to access, communicate with, and provide customer service to the end consumer. To measure level of customer interaction, the four following items were developed based on the qualitative study and adapted on a Likert scale from 1 to 7:

1. I believe this online food delivery platform allows the restaurant to communicate with customers.
2. I feel the restaurant can solve customers' problems when they order through this online food delivery platform.
3. I feel the restaurant can have a connection with customers when they order through this online food delivery platform.
4. I find it easy to contact the customer when they order through this online food delivery platform.

Perceived Value

Perceived value in business-to-business is the customer's evaluation of the utility in a transaction based on the perceptions of what one party gives and receives, costs vs benefits (Zeithaml 1988). Perceived value will be measured using an adapted four-item scale used by Yuan, Moon, Kim, Wang, and Yu (2020):

1. This online food delivery platform has delivered what we wanted and expected.

2. We get what we pay for.
3. Considering the fee paid and the service the online food delivery platform delivers, overall we receive good value for money.
4. Overall, the online food delivery platform provides better value compared to other firms offering similar services.

Perceived Relationship Quality

Relationship quality is, in general terms, an assessment of the relationship between a buyer and seller (Čater and Čater 2010).

For the purpose of this study evaluating the impact of relationship quality on the relationship between uncertainties and perceived value, I consider relationship quality to have three dimensions: satisfaction, trust, and commitment (Barry et al. 2008).

Satisfaction

1. The work performed by the online food delivery platform typically meets our expectations.
2. The services provided by the online food delivery platform typically lead to our desired result.
3. In terms of services leading to desired results, this online food delivery platform compares favorably to the alternatives.

Trust

1. This online food delivery platform understand how their services impact our operation.
2. This online food delivery platform is genuinely concerned about our business success.
3. We believe the information that this online food delivery platform provides us.

Commitment

1. Our loyalty to this online food delivery platform is a major reason we continue to work with the platform.
2. We want to stay associated with this online food delivery platform because of our allegiance to them.
3. We intend to continue working with this online food delivery platform because we feel they are “part of the family”.

Intention to Discontinue Use of Online Food Delivery Platforms

To measure intention to discontinue the relationship, the scale used by Lussier and Hall (2018) and Ramsey and Sohi (1997) will be adapted on a Likert scale ranging from 1-7. The items are:

1. It is probable that I will not contact this online food delivery platform again.
2. I am not willing to discuss business with this online food delivery platform again.
3. I do not plan to continue doing business with this online food delivery platform
4. I will not use this online food delivery platform again.

Curriculum Vita

Jessica Felix Martinez received her bachelor's and MBA in marketing from the University of Texas at El Paso. She is a PhD Candidate at the University of Texas at El Paso. Her research interests range from strategy and digital marketing to consumer behavior in the digital and online context. Her work has been presented at American Marketing Association and Academy of Marketing Science conferences. She has taught several courses of marketing research as an instructor at the University of Texas at El Paso. She will be joining the University of Southern Indiana as an Assistant Professor in the Fall of 2023.