

# Customer Experiences Using Online Food Ordering and Delivery Platforms (OFODPs): An S-O-R Perspective

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## **Customer Experiences Using Online Food Ordering and Delivery Platforms (OFODPs): An S-O-R Perspective**

### **Abstract**

Online food ordering and delivery platforms (OFODPs) are witnessing a notable growth in use and revenues and are expected to continue soaring in the coming years. Drawing on the S-O-R model, this paper explores the influence of usefulness, content quality, visual appeal, and social presence on satisfaction and loyalty toward OFODPs. Results from our cross-sectional study reveal that all of the model's independent variables positively influence loyalty, while all of them (apart from social presence) influence satisfaction. It is additionally found that satisfaction mediates the relationship between usefulness, content quality and visual appeal with loyalty toward OFODPs. An interesting finding from this research is the important role of social presence in achieving loyalty in the context of OFODPs, since the social side of such platforms is rarely addressed in research. Managerial implications and future research directions are discussed at the end of the paper.

*Keywords: Food Ordering and Delivery Platforms, Social Presence, S-O-R*

*Track: Digital Marketing & Social Media*

## 1. Introduction

Online food ordering and delivery platforms (OFODPs) have witnessed a notable growth in recent years. According to Statista (2020), the global revenues of the online delivery market reached \$107.4 billion in 2019 and are expected to climb to \$182.3 billion by 2024. The spread of the COVID-19 pandemic and the dine-in restrictions imposed as a result of it contributed even more demand for OFODPs, with users in the US growing by 25.2% to 45.6 million (Kats, 2020).

OFODPs, such as websites and smartphone apps, are used by the customers to order meals and beverages which are then delivered to them. This service offers customers convenience, transparency, and timesaving (Alalwan, 2020; Kapoor & Vij, 2018). Through such platforms, customers access information about the restaurants and their offerings, including menus, meal pictures and descriptions, and delivery time estimations. Customers can pay for their meals on said platforms, track their orders in real-time, and access food reviews and customer service.

To date, little academic research has been carried out to understand customer perspectives of OFODPs (Alalwan, 2020; Kapoor & Vij, 2018), with the existing research mainly setting to explore how to achieve positive customer responses toward said platforms. For example, perceived control, convenience, and usefulness were linked to behavioural intentions toward OFODPs by Kimes (2011) and Yeo, Goh, & Rezaei (2017). Similarly, it was found that ease-of-use, usefulness, innovativeness and trust all lead to better attitudes toward online ordering (Alagoz & Hekimoglu, 2012; Daim, Basoglu, Gunay, Yildiz, & Gomez, 2013). Additional variables that help achieve a positive customer experience on OFODPs were identified in research, including trustworthiness (Cho, Bonn, & Li, 2019), app design (Kapoor and Vij, 2018), and the overall performance of the platform (Taylor, 2020).

More research on user's behaviours and experiences using OFODPs, with the aim of informing the marketing perspective, is needed. This is especially important because of the 'sticky' nature of such platforms, which reflects the consumers' reluctance toward platform migration (Hirschberg et al., 2016). Indeed, it was found that 80 percent of customers rarely leave a platform to a competitor's, once they have signed up to it (*ibid*, 2016). This necessitates continued to research to uncover how to create the best OFODP-specific customer experiences that contribute to achieving customer satisfaction (Cho et al., 2019).

## 2. Conceptual Framework

To offer a holistic view of the customer experience through OFODPs, we turn to the Stimulus-Organism-Response (S-O-R) model, which has been used in past research to explore the process of interacting with and responding to new technologies (e.g. Animesh, Pinsonneault, Yang, & Oh, 2011; Eroglu, Machleit, and Davis, 2001). According to this model, environmental stimuli influence the customers' inner emotions and perceptions, and through this influence they (the stimuli) ultimately affect the customers' approach or avoidance responses to the environment (Donovan & Rossiter, 1982; S. Lee, Ha, & Widdows, 2011). In the context of new technologies, the stimuli manifests in the platform's performance, appearance, and facilitation of communication (S. Lee et al., 2011). We incorporate these three facets in our conceptual model. Specifically, usefulness, visual appeal, and content quality are used in the model as proxies to the performance, appearance, and communication aspects of the OFODPs, respectively.

We use social presence as an additional variable representing the platform stimuli. Indeed, social presence is used in the model to reflect the increasing importance of the online social experiences of customers and the growth of the social commerce phenomenon (Molinillo, Anaya-Sánchez, & Liébana-Cabanillas, 2020; Turban, Strauss, & Lai, 2016). We use satisfaction and loyalty as the organism and response parts of the S-O-R model, respectively. This is because satisfaction is considered an umbrella for positive online experiences and is connected to many positive outcomes on online platforms (Almahdi, 2018), while loyalty is a much-desired outcome for OFODPs, as it reflects continued use, WOM behaviours, and return intentions (Hirschberg et al., 2016, Lee, Moon, Kim, and Mun, 2015).

### 2.1 *The Role of Usefulness in OFODPs*

In the context of information systems, perceived usefulness is a user's perception of how beneficial a system is to them (Davis, Bagozzi, & Warshaw, 1989). Usefulness is considered an important motivation of technology adoption and use (*ibid*, 1989) and has been linked within TAM theory to user acceptance of new technology, usage behaviour, and usage intentions (Davis, 1989, Davis et al., 1989). In the years that followed, researchers continued linking usefulness to relevant customer behaviours in newer technological contexts. For example, usefulness has been linked to behavioural intentions toward mobile websites (Coursaris & Sung, 2012) and to satisfaction and continuance intentions in shopping mobile apps (Hew, Lee, Ooi, & Lin, 2016). Bhattacharjee (2001) explains that the usefulness of a

technological platform plays a motivating role throughout the different stages of a users' experience with it and hence affects their satisfaction with the platform and their decision to continue using it. Based on this justification, we hypothesize that:

H1: Usefulness of the OFODP influences (a) user satisfaction and (b) loyalty toward the platform

### *2.2 The role of Content Quality in OFODPs*

Content quality is an important indication of the quality of an e-business system (Kim, Kishore, and Sanders, 2005). Kim et al. (2005) explain that content quality is made up of three dimensions: information accuracy (its freedom of errors), relevance (its closeness to customer interests or queries), and completeness (the availability of the right information as per users' needs). Content quality has been linked in past research to positive outcomes, such as conversion to the app (Kapoor & Vij, 2018), perceived value of the app (Wang, Tseng, Wang, Shih, & Chan, 2019), satisfaction (Yoo, Kim, and Sanders, 2015), and trust and usage intentions (Gao & Wu, 2010).

Complete, accurate, and relevant information on shopping systems, such as OFODPs, play an important role in supporting customer decision-making processes on said systems (Okumus & Bilgihan, 2014). Xu and Huang (2019) employ the uncertainty reduction theory to shed light on the role of content quality in an e-shopping context. They explain that accurate and complete information help reduce customers' feelings of uncertainty when making purchase decisions online (*ibid*, 2019). Since there is a strong element of uncertainty when ordering food online, clear and complete information will help reduce it, leading to positive feelings and customers' return to the platform. Therefore, we hypothesize that:

H2: Content quality of the OFODP influences (a) user satisfaction and (b) loyalty toward the platform

### *2.3 The Role of Visual Appeal in OFODPs*

Visual appeal describes the aesthetics and overall look of an information system, including colours, graphics, fonts, text, etc. (Zhang, Lu, Wang, & Wu, 2015). In the context of new technologies, visual appeal has been linked to positive attitudes and pleasure (S. Lee et al., 2011), value (Zhang et al., 2015), and app conversion (Kapoor & Vij, 2018). According to Eroglu et al. (2001), visual cues on a website contribute to making shopping more pleasurable and memorable and can even lead the customer to trusting a merchant who is unknown to them. As pleasurable shopping experiences provide value to the customers (Wang, Baker,

Wagner, & Wakefield, 2007) and are connected to loyalty in an online context (Cyr, Head, & Ivanov, 2009), we hypothesize that:

H3: Visual appeal of the OFDOP influences (a) user satisfaction and (b) loyalty toward platform

#### *2.4 The Role of Social Presence in OFODPs*

Social presence is the feeling of warmth and sociability of another on an information system (Rodríguez-Ardura & Meseguer-Artola, 2016). Social presence has been connected in research to many positive outcomes when it comes to online platforms, including positive attitudes toward websites (Cui, Wang, & Xu, 2010), perceived enjoyment of online shopping (Shen, 2012), and behavioural intentions toward e-learning environments (Rodríguez-Ardura & Meseguer-Artola, 2016). When an online shopping platform communicates a sense of social presence to its customers, this contributes to reducing the differences between it and traditional shops (Shen, 2012), signalling the organization's readiness to serve its customer (Alalwan, 2020). Conversely, the lack of human contact on OFODPs might lead to technology anxiety, thus impeding adoption and WOM behaviours (Kimes, 2011). According to Rodríguez-Ardura & Meseguer-Artola (2016), social presence in an online platform gives the customers a feeling of being in humanized environment, which encourages them to continue using said environment. Therefore, we hypothesize that:

H4: Social presence of the OFODP influences (a) user satisfaction and (b) loyalty toward platform

#### *2.5 The Role of Satisfaction in OFODPs*

Satisfaction is "the customer's evaluation and impression of the ... [platform's] performance across a number of attributes" (Rose et al., 2012, p.312). Customer Satisfaction on technological platforms has been linked to loyalty and continuance intentions in prior research (e.g. Yang and Peterson, 2004, Zhao and Lu, 2012). Indeed, when customers are satisfied with a service, they tend to use it more (Yang and Peterson, 2004), harbour repurchase intentions, and even urge others to use it (Zeithaml, Berry, & Parasuraman, 1996). Therefore:

H5: Satisfaction of the OFDOP influences user loyalty toward platform

#### *2.6 Satisfaction as a mediator in the relationship between usefulness, content quality, visual appeal, and social presence with loyalty toward OFODPs*

It was found in prior research that satisfaction can mediate the relationship between a customers' experiences on online platforms and their behaviour toward them. For example,

Yu et al. (2017) found that satisfaction mediates the relationship between website quality and word-of-mouth behaviours. Similarly, Lee et al. (2015) found that satisfaction mediates the relationship between usability and brand loyalty of mobile phone users, while Chen and Lin (2015) found that the effect of customers' experiences of blogs on continuance intentions is mediated by their satisfaction. This is consistent with S-O-R model, which suggests that the organism (satisfaction, in our model) mediates the effects of the stimuli on the response. Therefore, we hypothesize that:

H6: Satisfaction mediates the relationship between (a) usefulness, (b) content quality, (c) visual appeal, (d) social presence and loyalty toward OFODPs

### 3. Methods

A total of 389 participants (55.5% female and 44.5% male) took part in this cross-sectional study. The respondents are undergraduate students between the ages of 18-25 years old, studying at a large private university. They were acquired through convenience sampling and admitted to the study upon positively answering the question: 'Do you use online food ordering and delivery apps?'. An online questionnaire was created by adapting several measurements to test the model's relationships using 5-point Likert scales. The scales adapted were usefulness (Hew et al., 2016), content quality (Yoo et al., 2015), visual appeal (Zhang et al., 2015), social presence (Shen, 2012), satisfaction (Song and Zinkhan, 2008), and loyalty (Lee et al., 2015).

### 4. Results

#### 4.1 Regression Analysis

The effect of usefulness, content quality, visual appeal, and social presence on satisfaction of the OFODP was investigated using a multiple linear regression model in SPSS 23 after controlling for gender, age, frequency of use, and their preferred platform. The results (Table 1) showed that satisfaction of the OFODP is significantly affected by usefulness (H1a), content quality (H2a) and visual appeal (H3a), but not by social presence (H4a).

**Table 1: Multiple Linear Regression Model**

	Linear Regression Model		
	Satisfaction of app (Dependent)		
	beta	T	p-value
<b>Usefulness (Independent)</b>	0.44	10.42	0.00*
<b>Content Quality (Independent)</b>	0.20	4.49	0.00*
<b>Visual Appeal (Independent)</b>	0.16	3.45	0.00*
<b>Social Presence (Independent)</b>	-0.05	-1.20	0.23
<b>Gender (Control)</b>	0.09	2.25	0.03*

<b>Age (Control)</b>	-0.09	-2.29	0.02*
<b>Frequency of use (Control)</b>	0.06	1.53	0.13
<b>Preferred platform (Control)</b>	-0.05	-1.27	0.21

\* significant at the 0.05 level

The relationships between usefulness, content quality, visual appeal, social presence, and satisfaction with loyalty toward OFODP were investigated using a multiple linear regression model after controlling for gender, age, frequency of use, and their preferred platform. The results showed that loyalty toward OFODP is affected by usefulness (H1b) content quality (H2b), visual appeal (H3b), social presence (H4b), and satisfaction (H5) as shown in Table 2.

**Table 2: Multiple Linear Regression Model**

	Linear Regression Model		
	Loyalty toward app (Dependent)		
	Beta	T	p-value
<b>Usefulness (Independent)</b>	0.37	7.37	0.00*
<b>Content Quality (Independent)</b>	0.12	2.43	0.02*
<b>Visual Appeal (Independent)</b>	0.16	3.03	0.00*
<b>Perceived Social Presence (Independent)</b>	0.08	2.35	0.02*
<b>Satisfaction (Independent)</b>	0.22	4.06	0.00*
<b>Gender (Control)</b>	0.02	0.36	0.72
<b>Age (Control)</b>	-0.04	-1.20	0.23
<b>Frequency of use (Control)</b>	0.03	1.58	0.12
<b>Preferred platform (Control)</b>	-0.10	-1.99	0.05*

\* significant at the 0.05 level

#### 4.2 Mediation Analysis

Mediation analysis was conducted using Process on SPSS 23 to test the mediating effect of satisfaction on the relationship between each of the independent variables and loyalty. The results (Table 3) show that satisfaction mediated the relationship between all of the IVs and loyalty toward OFODP (H6a, b, and c), except for social presence, due to the insignificant relationship between it and satisfaction in the first place (H4a) (Baron and Kenny, 1987).

**Table 3: Mediation Models**

		Loyalty toward app (Dependent)		
		co-ef	T	p-value
<b>Mediation Model 1</b>	<b>Perceived Usefulness (Independent)</b>	0.42	8.07	0.00*
	<b>Satisfaction (Mediator)</b>	0.31	5.75	0.00*
<b>Mediation Model 2</b>	<b>Content Quality (Independent)</b>	0.24	4.60	0.00*
	<b>Satisfaction (Mediator)</b>	0.47	9.11	0.00*
<b>Mediation Model 3</b>	<b>Visual Appeal (Independent)</b>	0.29	5.67	0.00*
	<b>Satisfaction (Mediator)</b>	0.45	8.98	0.00*

\* significant at the 0.05 level

## 5. Discussion

The results reflect the importance of understanding the customers' multifaceted experiences on OFODPs. Indeed, they show that the different elements of the customer experience on such platforms are equally important, whether the customer is reacting to the performance of the platform, its visuals, its information, or even the feeling of others on the platform. All of these elements band together to offer the customer a convenient, transparent, enjoyable, and socially warm experience when ordering food online. The findings are in line with the literature investigating customer experiences in a variety of online platforms (see section 2). The results are also consistent with the S-O-R model, which asserts that in order to understand customers' responses to an environment's stimuli, one has to understand the organismic experiences that they go through (Donovan, & Rossiter, 1982, Eroglu et al., 2001).

A notable finding from this paper is the role of social presence in achieving customer loyalty in OFODPs. Indeed, almost no prior research on online food ordering platforms addressed the importance of the customers' social experiences. Nevertheless, the sociability of online platforms is becoming increasingly visible, as more attention is being paid to the role of social commerce in informing customer attitudes and behaviours online (Turban and Strauss, 2016). Interestingly, although social presence positively affects loyalty as our findings reveal, a significant relationship was not found between social presence and satisfaction. However, since satisfaction is achieved when a platform's performance surpasses expectations (Zhao and Lu, 2012), this could signal the importance of incorporating more social elements into the OFODP experience in order to achieve customer satisfaction.

Our results contribute to the still nascent research about customer experiences on OFODPs, highlighting different elements of these experiences and how they can lead to customer satisfaction and loyalty toward these platforms. Our results are useful to marketers of OFODPs, enriching their understanding of what aspects customers find useful when experiencing these platforms. Additionally, our findings serve restaurant managers and marketers, as they shed light on the importance of including complete and accurate information and attractive pictures on their OFODP presences. Future research can approach the same subject using experiments, comparing different prototypes of OFODPs to show how different features can lead to different responses from customers. Another future research suggestion is to address the role and effects of interactivity within OFODPs, especially as customers' perceptions of and responses to interactivity keep changing with time.

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