Journal of Electronic Commerce in Organizations
Volume 21 • Issue 1

Determinants and Outcomes of Food Delivery App Engagement During COVID-19:
A Study of Urban and Semi-Urban Customers

Abhilash Bhattacharjee, National Institute of Technology, Rourkela, India
Kunja Sambashiva Rao, National Institute of Technology, Rourkela, India
Nishad Nawaz, Kingdom University, Bahrain*
https://orcid.org/0000-0003-4781-7993

ABSTRACT

With the expansion of internet penetration and the adoption of mobile apps, usage of food delivery applications has increased significantly during the pandemic. The study's main objective was to examine the antecedents and consequences of food delivery app engagement among urban and semi-urban customers in India during COVID-19. The data were collected from 269 semi-urban respondents and 301 urban respondents. The stimulus organism and response (SOR) model has been used to understand consumers' antecedents and consequences of food delivery app engagement during the pandemic. The study used the structural equation modelling method to test the relationship between the variables. The study's findings showed that the mobile application's perceived ease of use, enjoyment, and time convenience found a significant effect among urban and semi-urban customers. This study is limited to urban and semi-urban customers with cross-sectional survey data. The study has explored a few antecedents and consequences of mobile food delivery app engagement.

KEYWORDS

COVID-19, Customer Engagement, Food Delivery App, Purchase Intention

INTRODUCTION

The COVID-19 pandemic has significantly transformed people's lives and disrupted the Indian economy (Kumar Das & Patnaik, 2020). Government regulations and lockdowns have exacerbated the situation, leading to a shortage of essential resources among people (Sharma et al., 2020). Despite these challenges, the retail sector remains an important source of demand, playing a crucial role in e-commerce value chains by providing goods and services to households and serving as an outlet for

DOI: 10.4018/JECO.323655
*Corresponding Author

upstream sectors (Debata et al., 2020; Harris et al., 2020). Retailers have seen product shortages and customer panic buying behaviours as a profitable opportunity to provide timely service during the pandemic (Eriksson & Stenius, 2020). In addition, urban and semi-urban customers have increasingly relied on online ready-to-eat and fresh food delivery services, resulting in significant growth rates in food sales through online platforms (Pantanoa et al., 2020). Nevertheless, the rise of online food delivery services culture during the pandemic has left a gap in our understanding of customer behaviours and the decision-making process. As many people were isolated at home and needed help accessing grocery stores or supermarkets, online food delivery services became a popular alternative for urban and semi-urban populations. Hence, understanding CE behaviour towards the mobile food delivery services applications during the pandemic is essential.

There have been some empirical consumer studies that have explored various aspects of CE with the mobile apps phenomenon, including on customer satisfaction with mobile FDA service, customer intention to use OFD services, the associated risk of OFDs, customer expectations and OFDs performance, consumer behavioural choices, and purchase intentions (Hong et al., 2021; Meena & Kumar, 2022; Poon & Tung, 2022; Prasetyo et al., 2021; Zvarikova et al., 2022). However, there was limited research on CE behaviour with reference to food delivery mobile apps during COVID-19. More specifically this study examines the factors that affect consumer behaviour in engaging food delivery service apps and their consequences in India during COVID-19. In addition, in an emerging country like India, the use of mobile apps and consumer behaviour varies from urban to semi-urban areas. It is also interesting to understand how sudden disruption affects adoption of technology and consumer behaviours. Specifically, this research investigates the antecedents and consequences of FDA adoption. The prior studies investigated variables like perceived innovativeness (Hwang et al., 2019), ease-of-use, enjoyment, app engagement (Tian et al., 2021), efficiency (Kim & Baek, 2018), and behavioural intention (Ali et al., 2021), and these studies were limited to traveling, service quality, banking, and digital payments (Ali et al., 2021; Shahid et al., 2022). None of the studies, however, specifically focused on antecedents and consequences of CE with food delivery mobile apps, and very limited studies have focused with a comprehensive model on online food retail mobile apps engagement from a pandemic perspective. Therefore, the present study examines the antecedents and consequences of mobile FDA engagement among urban and semi-urban customers with the COVID-19 scenario under the lens of the SOR framework. By addressing these gaps, the study contributes to the literature concerning CE with FDA services and their importance during emergencies. Further, the study finding will be helpful to the scholars and managers their interest in CE with mobile food retail delivery services and their importance during pandemic situations.

The rest of the paper is organized in the following manner: An overview of the theoretical and conceptual framework, hypotheses development, methodology employed, and data analysis and results. The implications, limitations, and recommendations for future research are presented.

THEORETICAL BACKGROUND

Online Food Delivery Mobile Apps Engagement During COVID-19

During the COVID-19 pandemic, customer involvement with online food delivery services and mobile apps significantly increased and influenced the food industry (Muangmee et al., 2021). CE with online food delivery services is a process through which individuals browse the menu, place the order, make the payment, receive confirmation, prepare food, deliver, and provide feedback. According to Apoorva and Tarush (2022), the Indian food delivery market through mobile apps saw growth in between 15 to 20% during the lockdown. As many people were staying at home to prevent the spread of the virus, they were ordering food online rather than going to grocery stores or convenience stores (Goolsbee & Syverson, 2021). As a result, there has been a notable increase in the demand for food delivery services, prompting many food delivery service providers to utilize mobile apps to maintain