

## **AN INVESTIGATION BASED ON EMPIRICAL EVIDENCE FOCUSING ON ONLINE FOOD DELIVERY SERVICES FROM THE PERSPECTIVE OF APPLICATIONS**

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### **Abstract**

This empirical study delves into the realm of online food delivery services, with a particular emphasis on the applications that facilitate this burgeoning industry. The research explores various facets, ranging from user experiences to technological functionalities, shedding light on the intricate dynamics of this evolving landscape. By adopting an applications perspective, the study aims to provide valuable insights into the challenges, opportunities, and user preferences shaping the online food delivery service sector. The findings contribute to a deeper understanding of the role played by applications in this domain, offering practical implications for stakeholders and contributing to the broader discourse on the intersection of technology and food service delivery.

### **Keywords:**

Online food Delivery, Application perspective, Empirical study, User experiences, Technological functionalities

## **I. INTRODUCTION**

The surge in e-commerce has significantly impacted the food industry, transforming its landscape much like other sectors. The widespread use of food distribution applications and websites has revolutionized how food is accessed, ordered, and delivered. Online food ordering, facilitated through websites or mobile applications, has witnessed a consistent increase in popularity over the past few years. Food delivery services have transitioned from traditional phone orders to digital platforms, leveraging technological advancements to enhance customer service.

In essence, online portals provide the food industry with novel avenues to reach a broader consumer base. The rapid evolution of e-commerce has addressed challenges identified a decade ago, including long loading times, transaction issues, payment security concerns, and limited food product availability [9]. The industry's exploration of untapped market sectors is propelled by the swift adoption of cutting-edge technological solutions. Notable examples include the emergence of online reservations and food delivery services. Furthermore, the growing trend of mobile ordering, embraced across various industries, reflects a shift toward solutions that streamline processes and enhance customer service. Noteworthy is the substantial increase in revenue and a remarkable 380% surge in the downloads of delivery apps over the past three years [14]. This underscores the significant impact of technological innovations on reshaping the food industry and meeting evolving consumer preferences. Indian customers are drawn to the simplicity with which they may engage in online shopping

using digital apps and portals, and they would like to experience the same ease of use while placing online food orders. Ordering digitally is a real and simple process. This indicates to the clientele that your restaurant is a young, emerging business that is adaptable to the various technology advancements in this rapidly evolving world. The most important thing is that the foundations must be continuously updated, and frequent testing must be done to satisfy both new and returning clients and raise the bar for services provided. When there are no queues behind them, the incentive to eat as soon as possible shifts to enjoying happy offers or extra items. Zomato, UberEATS, Swiggy, and other apps are well-known.

## **II. THEORETICAL BACKGROUND OF FOOD SECTOR APPS**

Conceptual structure of consumers' online food shopping

The perceived social norm involves the expectations placed on an individual's participation in online shopping, specifically in the realm of purchasing food and meeting buying preferences, as perceived by friends and family.

Perceived compatibility assesses the alignment between online food shopping and an individual's actions and beliefs, shaped by positive experiences in social food shopping, order placement, and customer attitudes. Perceived relative gain explores an individual's perception of the superiority of online shopping compared to traditional offline food shopping.

The level of complexity experienced by online food shoppers is inversely linked to their perceptual expectations, purchasing patterns, and overall online shopping experiences. Perceived risk captures consumer expectations regarding potential losses and risks associated with online food shopping, including payment security, exchange issues, and the receipt of substandard food. This perception is negatively associated with buying desires, goals, and the overall online shopping experience. It's important to highlight the absence of randomized controlled analyses validating this original five-factor structure, particularly in the context of customer analysis within the world's largest e-commerce market. The adoption of innovation characteristics may vary among customer segments, especially in programs related to the online purchase of food within specific food categories, as outlined in the theoretical framework [10,12].

## **III. MOBILE APPS USE IN THE FOOD DELIVERY SECTOR**

In the realm of food supply, home delivery involves a process where a service provider for food delivery facilitates connections between customers, bars, and cafes. The business strategy of food services delivery revolves around leveraging the advantages of the Internet, particularly its technological capability to connect various stakeholders in the distribution chain. The strategic advantage of the food industry lies in the indispensable role of mobile applications, which have become integral to modern living.

The use of mobile applications is crucial to the food industry's strategic approach, as they serve as a vital component in facilitating seamless interactions among different entities. Customers benefit from the convenience of ordering their favourite foods from a diverse range of restaurants at times and locations that suit them. This access to desired food is made possible through the use of food supply applications. While these applications play a crucial role in distribution, the motivations behind their utilization are not fully comprehended.

To elaborate further, online technology enables businesses to organize orders efficiently and accurately for delivery to specified locations, particularly during the critical last-mile operations [7].

#### **IV. E-SERVICE QUALITY OF FOOD DELIVERY SERVICE**

The delineation of e-services entails a thorough assessment of consumer electronic services. In financial transactions, consumers expect top-notch services from websites, emphasizing the critical role of website functionality for firms seeking to market their products and services. This is particularly crucial in sectors such as online food delivery services, which exclusively operate through online platforms. The importance of sustaining profitability, enticing user engagement with the website, and ultimately fostering loyalty highlights the paramount significance of upholding website quality. Therefore, the effectiveness of online businesses is contingent upon having a high-quality website. Despite extensive research on the quality of e-services, none of the existing studies have delved into the realm of internet food supply. Consequently, the computational aspects for evaluating the quality variable of e-services are crucial.

1. Convenient web accessibility
2. User-friendly interface
3. Web accessibility ease
4. Seamless web initiation
5. Assured and timely delivery
6. Prompt dispatch of ordered items
7. Transparent online representation
8. Accurate communication regarding delivery status
9. Tracking of shopping patterns
10. Personal information security
11. Ensuring the safety of payment identification

The quality of the food plays a crucial role in shaping online customer loyalty, influencing both their satisfaction levels and perceptions of overall quality. When the food is of high quality, customers not only express a desire to make repeat purchases but also actively recommend it to others. This inclination is further evidenced by their consistent patronage, underscoring the fundamental importance of food quality for both online meal delivery services and traditional dining establishments.

Consequently, it is essential for quick-service restaurants and fast-food chains engaged in online meal delivery to provide gourmet food that not only meets but exceeds customer expectations. To outshine competitors, a focus on factors such as food presentation, flavor, variety, and healthiness becomes crucial. These elements are integral in shaping the perceived value, food quality, and overall efficiency of an e-service [4,6,13].

#### **V. BUSINESS MODEL OF FOOD DELIVERY APP**

The order and supply business model are executed through collaborative ventures with logistics companies. Clients initiate their requests on the website, approving and executing restaurant orders. Simultaneously, the system informs couriers in proximity to the designated pickup location upon order receipt. Potential competitors adopting this strategy may find it challenging to negotiate with established restaurant and courier networks, known for

charging 25–30 percent higher rates. The primary allure of this model lies in offering a diverse range of eateries and pricing points, a feature software-only marketplaces struggle to replicate [3].

Organizations opting for the integrated business model develop their application for customers to place orders, efficiently fulfilled by hired delivery personnel. The administration promptly communicates details about ordered and prepared meals to each driver. Couriers decide on delivery sequences based on order selection or location, prioritizing the closest customers. While this strategy may initially require infrastructure investment, it is expected to reduce distribution costs in the long term. This suggests that well-developed food delivery technology can enhance revenue and provide users with a highly personalized experience [5].

## **VI. DESIGN AND ANALYSIS**

Evaluating the impact of food delivery apps on consumers involves considering multiple factors, including food taste, pricing, menu variety, service quality, speed of complaint resolution, brand recognition, promotional offerings, and positive reviews. Among these significant factors, the flavor of the food holds particular importance, ranking second-highest as a top consideration for customers. The promotional offers provided by the apps on various occasions or orders from specific restaurants also play a substantial role. Interestingly, while service speed may not be given the highest weight by most respondents, it remains a crucial factor, as evidenced by its highest average impact on consumer decisions.

In contrast, when ordering takeaway, customers perceive the external appearance and presentation of the meal as less crucial compared to other factors, with these aspects having no bearing on their decision-making [15, 2, 8, 16].

## **VII. CONCLUSION**

The widespread adoption of smartphones and easy internet accessibility has led to a substantial increase in the popularity of meal delivery services. The convenience of ordering meals online not only saves customers considerable time but also enables businesses to effortlessly connect with new customers through these delivery platforms. Furthermore, meal delivery apps play a crucial role in helping restaurants meet the evolving demands and expectations of their expanding clientele, offering a more personalized and tailored dining experience. Given these advantages, it is highly advisable for restaurant businesses to consider developing and implementing their meal delivery app.

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