FROM CRAVING TO CLICKING: EXPLORING GRATIFICATIONS, EMOTION, AND HABIT FORMATION IN ONLINE FOOD DELIVERY

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ABSTRACT

Purpose– This study explores the psychological and behavioural factors that drive user engagement with Online Food Delivery platforms (OFDPs) in India. Drawing on the Uses and Gratifications Theory (UGT), it aims to understand how various gratifications influence user attitudes and behavioural intentions through analysis of user-generated content.

Design/Methodology/Approach– The study analyses over 563,000 user reviews from leading Indian OFD platforms such as Zomato, Swiggy, and FoodPanda, using computational techniques. Natural Language Processing (NLP), Latent Dirichlet Allocation (LDA) for topic modelling, sentiment analysis, and regression modelling are employed to identify key gratification themes and their relationship with user sentiment.

Findings– The results reveal that app usability, meal quality, service excellence, and emotional fulfilment positively influence user attitudes and habitual usage. Conversely, negative experiences such as refund opacity, technological failures, and brand distrust contribute to user dissatisfaction. Regression analysis ($R^2 = 0.91$) indicates a strong correlation between thematic gratifications and user sentiments, validating the influence of these factors on consumer behaviour.

Practical Implications- The findings offer valuable insights for OFDPs aiming to enhance user engagement, communication, and retention. Recommendations include improving app functionality, emotional engagement strategies, and transparent service mechanisms to foster trust and loyalty.

Originality/Value- This research extends the scope of UGT by integrating computational methods for analysing large-scale user data. It contributes to the understanding of digital consumer behaviour in the evolving platform economy and provides a framework for developing emotionally intelligent and user-centric digital services.

Keywords- online food delivery platforms, uses & gratification theory, user-generated content, text-sentiment analysis, consumer behaviour.

INTRODUCTION

Over the past few years, the speedy development of digital communication and the integration of information technology (IT) have revolutionised numerous industries, with tourism and hospitality being among the leaders in this process (Yang et al., 2025; Yang and Wibowo, 2025; Ramos, 2021). In the hospitality industry, food services and offers have become a central driver of economic growth by leveraging high internet connectivity to promote consumer convenience (Humbani et al., 2024; Belanche et al., 2020). The increase in mobile phone penetration (Portingale et al., 2023; Tandon et al., 2021; Partridge et al., 2020) has helped further branch online engagement, which affects the purchasing behaviour of consumers, and changes dietary consumption habits of the traditional food market (Dogra et al., 2023; Pillai et al., 2022). One of the most significant developments in the digital food service industry is the proliferation of Online Food Delivery platforms (OFDP). The traditional role of passive diners is transformed into active digital communicator and content creators through reviews, which

serve as a continuous loop of consumer-to-consumer communication (Taheri et al., 2021). But the OFD service providers, such as Zomato, Swiggy, FoodPanda, and others, have significantly transformed and reshaped consumers' communication and dining behaviour by offering diverse food options (Shankar et al., 2024).

According to the Expert Market Research 2024 Report, the global OFD market, which was worth $221.65 billion in 2023, is projected to reach $505.5 billion by 2032, with a compound annual growth rate (CAGR) of 9.8% (Statista, 2023). The Indian OFD market alone was worth $43.47 billion in 2024, registering a 3-year CAGR of 100%. These statistics highlight a fundamental shift in food consumption behaviour with customers increasingly depending on digital solutions for convenience, efficiency, and personalisation (Foroughi et al., 2024; Lee et al., 2022; Shroff et al., 2022).

The rise of the food sector and OFDP helps to understand consumer behaviour. However, we still find some gaps in the existing literature. Firstly, the prior studies Foroughi et al. (2024); HumbTheani et al. (2024); Shashank and Behera (2024); Thakkar et al. (2024); Prasetyo et al. (2021); Singh et al. (2022); Shroff et al. (2022); Shankar et al. (2022); Cheng et al. (2021); Zhao and Bacao (2020); Cai and Leung (2020); Ray et al. (2019) relies on the structured survey data which does not give the real picture of consumer intention and behaviour. To understand the actual behaviour and predict their intention to reuse the OFDP again, this study utilized the user-generated content (UGC). UGC, in the form of comments, reviews, and ratings, has emerged as a crucial element in business success, influencing consumer attitudes and purchase intentions (Khan et al., 2023). UGC is treated as a signal of communication between the customer or users. Although previous research has thoroughly analysed variables like the quality of services, customer satisfaction, and efficiency of platforms (Ma et al., 2024; Meena & Kumar, 2022), comparatively fewer works have looked into the qualitative elements of user interaction, specifically how individuals share their emotions and experiences with products and services through online reviews.

This inconsistency emphasises the importance of the UGC, which influences the trust, loyalty, intent, and decision-making of consumers (Sampath, 2024) regarding available OFDP. And the participatory behaviour of customers transforms passive diners into active content creators (Sigala, 2018), whose digital communication significantly shapes the perception of service and quality (González-Ramírez, 2022). These digital narratives collectively shape the community's perception of the quality and service of food establishments, effectively making the platform a dynamic social space rather than just a transactional marketplace. Secondly, the existing current literature has focused on the transactional and operational aspects of OFDP services, including delivery efficiency, pricing models, and technology integration (Shankar et al., 2022). Nevertheless, some gaps still exist, one of the most critical of which is the comprehensive research on consumer sentiment and the emotional side for different OFDPs.

While some researchers have examined the measures of customer satisfaction, fewer studies have focused on emotional messages contained within UGC. Emotions such as joy, anger, disappointment, and gratitude have a significant influence on brand perception and consumer loyalty (Khan et al., 2023; Meena & Kumar, 2022). Addressing this gap can help businesses develop emotion-aware service improvements. Although sentiment analysis has been applied to OFD reviews, most studies focus on quantitative sentiment polarity (positive, negative, or neutral) rather than extracting underlying thematic patterns that explain why users express specific sentiments (Shroff et al., 2022; Tong et al., 2020). A deeper textual analysis can uncover key pain points, satisfaction drivers, and emerging trends in consumer expectations. Limited research has examined how OFD usage evolves into a habitual behaviour, where consumers integrate these platforms into their daily routines (Chotigo & Kandono, 2021). Understanding the factors that drive long-term dependency on OFD services is crucial for predicting future consumer trends and platform sustainability.

Therefore, to address the given gaps in the context of OFDs, we proposed the following research questions:

RQ1. What key factors drive consumers' intentions to engage with OFDP services?
RQ2. What sentiments do users convey during their interactions with OFDP services?
RQ3. What core themes are associated with users' positive, negative, and neutral sentiments, and how do these themes influence the potential for OFDPs usage to become a habitual or routine behaviour?

To address these research questions, we apply Uses and Gratifications Theory (UGT) to explain the user's sentiments and factors influencing them for OFD usage intention (Kumari et al., 2024). Previous research has identified several factors influencing consumers' adoption of OFDPs, including ease of use, service quality, trust, and perceived value (Kapoor & Vij, 2022; Ray et al., 2019). These studies applied different theories and frameworks, TAM (Troise et al., 2020), UTAUT (Zhao & Bacao, 2020), UTAUT-2 (Yang et al., 2025), UGT (Ray et al., 2019), IRT, TPB (Prasetyo et al., 2021), Trust Transfer Theory (Raza et al., 2022) to explain and predict the user behavioural intention for usage of OFDPs again.

However, none of the studies we found examined the entire range of gratifications to explain the behavioural intention of consumers for a specific OFDP. UGT is particularly relevant for analysing digital consumer behaviour, as it focuses on why users engage with digital platforms and how they derive value from them. UGT provides a structured approach to understanding OFD consumer behaviour. For their informational need, consumers rely on user reviews, ratings, and recommendations to make informed decisions about food quality, delivery reliability, and service responsiveness (Lee et al., 2022). Reviewing and sharing experiences online can be a form of self-expression, social validation, and identity-building (Shankar et al., 2022) for users in digital feedback mechanisms. Users integrate with OFDs due to the ease of access, personalised recommendations, and seamless transactions, which contribute to routinised behaviour, reinforcing continued engagement (Dogra et al., 2023; Pillai et al., 2022).

This study seeks to bridge the research gaps in understanding consumer sentiments, behavioural trends, and engagement patterns on OFDP by leveraging text analysis methodologies. Through the lens of UGT, the research will provide insights into why users interact with OFDP, how they express satisfaction and dissatisfaction, and what factors contribute to long-term consumer loyalty. The study findings will be crucial for OFD service providers to enhance user experience, address service shortcomings, and optimise platform sustainability in an increasingly digital marketplace.

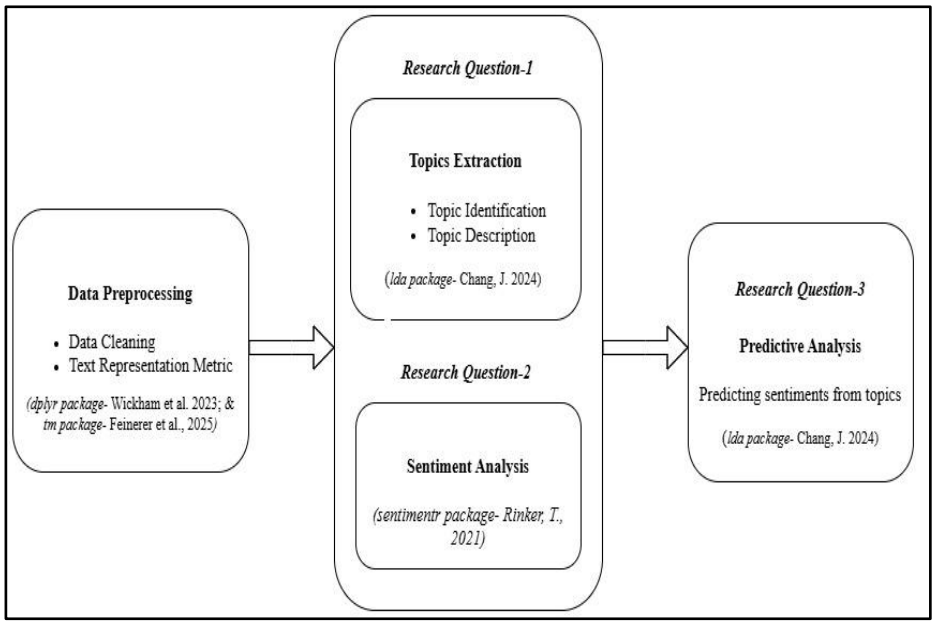

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Figure 1: Sequential Approach for Main Research Questions and Model Validation

THEORETICAL BACKGROUND

Uses and Gratification Theory

Uses and Gratifications Theory (UGT) is a prominent framework in the research, especially in the field of mass media (Kumari et al., 2024). In 1944, UGT developed to understand that how individuals select specific media to fulfil their needs (Katz et al., 1973; Ray et al., 2019). This theory basically covers the social and psychological motivations that attract users for specific media consumption.

From 1964, this framework uses to investigate the intention of users in various context for eg. selection of television programs (Kumari et al., 2024; Raya et al., 2019; Katz et al., 1973). In recent years, this theory has been extensively applied to understand behavioural intention of user during the technology adoption. Notable applications include the impact of virtual reality on consumer purchasing intentions (Hsu et al., 2024), user satisfaction with matrimony applications (Kumar et al., 2024), motivations for utilizing AI assistants (Xie et al., 2023), and the adoption of augmented reality filters in social media platforms (Sánchez et al., 2022). Additionally, it has been treated as an instrument to exploring customer engagement in different brand communities available on social media (Kamboj, 2020). It also has the application to analysing user experiences with food delivery applications (Ray et al., 2019).

UGT presents a robust theoretical framework that researchers employ to investigate the primary drivers of media usage and consumers' purchasing intentions. In this study, UGT has been utilised to examine the different gratifications influencing users' intentions to purchase food through delivery applications.

Users Generated Content (UGC)

In recent years, the hospitality sector has garnered considerable attention within the research community. An essential aspect of this industry is service, which possesses an intangible quality that complicates standardization. Experience-based services necessitate substantial reviews and opinions to assist potential customers in making informed decisions and mitigating perceived risks. User-generated content (UGC) has emerged as a significant component of digital ecosystems, shaping interactions and influencing consumer behavior (Chung, 2025). The proliferation of social media platforms, review websites, and quick-commerce portals such as Zomato and Swiggy (Khan et al., 2023; Zhao et al., 2021) has enabled users to actively contribute to and curate content, thereby redefining the conventional producer-consumer paradigm (Chatterjee, 2019). UGC not only influences market trends but also plays a pivotal role in guiding consumer decision-making regarding restaurant selection and brand credibility (Kim & Wang, 2025).

While UGC serves as a valuable resource for capturing consumer experiences with reduced selection and social desirability biases, it also presents challenges. The rise of misinformation, fake reviews, and AI-generated content highlights the necessity for robust verification mechanisms to ensure the reliability of information. Moreover, platforms must navigate the delicate balance between content moderation and preserving user autonomy to foster creativity and facilitate authentic discourse (Nambiar, 2025).

This study seeks to utilize UGC for predictive analysis by integrating natural language processing (NLP) techniques with conventional research methodologies. The objective is to identify predominant topics discussed by consumers within UGC, thereby enabling policymakers to formulate strategies that align with consumer preferences and expectations.

Research Design

Online reviews are the best part of user-generated content that depicts the original feedback for a particular product and service provider (Kumari et.al., 2024; Kumar et al., 2024; Ray et al., 2021), which is treated as an important source of customer experiences for new customers and prospects (Chatterjee, 2019). This source of UGC helps scholars and academicians access information free from several biases, like sample-related biases, self-selection biases, and survey-related biases. This generates more authentic data based on consumer perceptions and experiences (Kumari et al., 2024). This type of data is majorly available on different media platforms including social media (Kushwaha et al., 2020), particularly websites of the

product, X (twitter), Facebook, Instagram, Google Play Store, Apple store and other distributional networks like apps, etc. (Ray et al., 2021) which are widely used by researchers for their study according to their context adoption (Li et al., 2024; Kumar et al., 2024, 2023; Ray & Bala, 2021).

Data Collection

The OFDPs have a significant market expansion (Ma et al., 2024), with the projected revenue of the Indian OFD market being nearly $43.78 billion by 2024 (Statista, 2024). In this study, we took the dataset of three main OFD applications (Zomato, Swiggy, and FoodPanda) comprising nearly 5,63,124 reviews sourced from the Google Play store, which were used for further analysis after completing the pre-processing step for the collected data. We selected these OFD apps because they have 100+ M downloads with an average rating of 4.5 out of 5.0 on the Play Store. Furthermore, Zomato and Swiggy are two leading applications whose respective shares in this market are 58% and 34% (Statista, 2024), making them an ideal platform for our study, along with FoodPanda. From the literature, we found that scholars used online reviews for their study like reviews related to grocery apps (Kumar et al., 2023) and mobile payment apps (Verkijika & Neneh, 2021) because OCR (online user reviews) provide essential insights to future users regarding the product and service with detailed valuable pieces of information which are based on their own experience (Kumari et al., 2024).

Data Pre-Processing

Performing further analysis on the original dataset study requires the pre-processing step (Shashank & Behra, 2024). It needs to be done with vectorised text to map words to a vector space (Shashank & Behra, 2024). To remove all the noise from the data we used tokenization and removed punctuation, and symbols, trimmed whitespace, transformed special characters by using a string library provided by standard ASCII (Kumari et.al., 2024; Shashank & Behra, 2024), and converting the entire data into lowercase which applied to all text (Shashank & Behra, 2024; Kushwaha, et, al., 2021). We removed stop words and contained their custom words and lemmatised and stemmed the data (Kumari et al., 2024) to maintain consistency in language (Sánchez-Franco et al., 2020) and returned the words in their original forms (Shashank & Behra, 2024). The study suggested a technique to find frequently used phrases/idioms with multiple expressions (Kumari et.al., 2024; Shashank & Behra, 2024). Table 1 shows different words

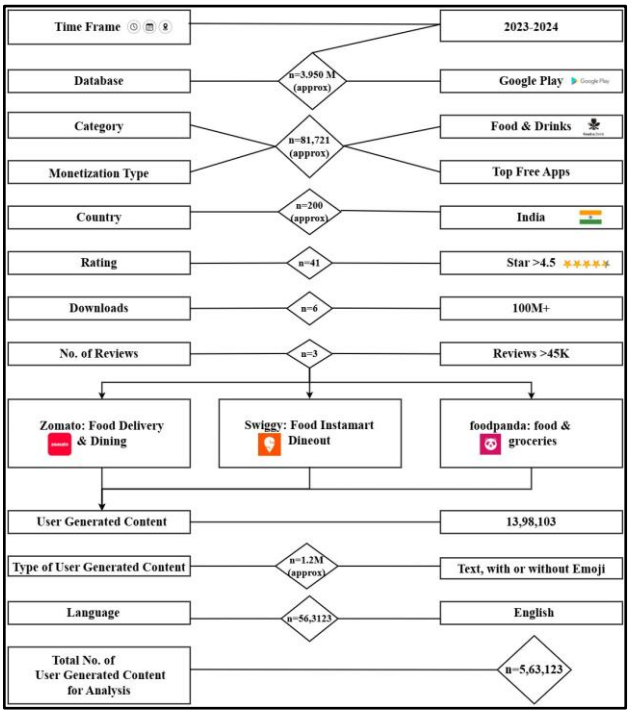

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Figure 2: Inclusion Criteria for Users' Generated Content (UGC)

with their frequency, and for different apps, the words 'good' and 'bad' have different frequencies. The entire process of cleaning was done using R with the tm package for further analysis of the research objective.

In previous studies, the researchers suggested two major approaches to quantify the number of different themes. Blei et al. (2003) proposed a perplexity-based approach, and Sarkar (2016) suggested a coherence-based approach.

Table I. Word Frequency Analysis for Apps

Words	FoodPanda		Swiggy		Zomato	
	Freq	Percent	Freq	Percent	Freq	Percent
order	5910	0.82%	29424	1.05%	16804	0.75%
app	3489	0.48%	13439	0.48%	8237	0.37%
food	2835	0.39%	12141	0.43%	8768	0.39%
delivery	1846	0.25%	14971	0.53%	9208	0.41%
time	1786	0.25%	9560	0.34%	5432	0.24%
service	1493	0.21%	6972	0.25%	4100	0.18%
refund	1467	0.20%	5715	0.20%	3335	0.15%
cancel	1461	0.20%	5998	0.21%	3225	0.14%
use	1362	0.19%	4302	0.15%	2552	0.11%
customer	1233	0.17%	9534	0.34%	5614	0.25%
deliver	1082	0.15%	7028	0.25%	3465	0.15%
restaurant	986	0.14%	4729	0.17%	4409	0.20%
good	1025	0.14%	5129	0.18%	4829	0.21%
bad	1206	0.17%	10836	0.39%	5483	0.24%
charge			4196	0.15%	2957	0.13%
money			4151	0.15%	2766	0.12%
experience			3553	0.13%	2175	0.10%
support			3531	0.13%	2519	0.11%
rider	1587	0.22%				
foodpanda	1090	0.15%				
panda	974	0.13%				
voucher	853	0.12%				
wait	848	0.12%				
pay	778	0.11%				
swiggy			15224	0.54%		
item			4045	0.14%		
zomato					10336	0.46%
gold					2040	0.09%
Total Words	**724695**		**2810964**		**2246208**	

Topic Modelling

Latent Dirichlet Allocation (LDA) is a method that uses natural language comprehension and has been applied in empirical investigations to discover the criteria and recognise the pattern or topic on which the product is being recommended. In this method, each latent topic is represented as a probability distribution over the set of words, while each document is a probabilistic mixture of these latent topics. Consequently, the proportion of topics in each document varies uniquely. This exploratory study indicates that the LDA framework typically assumes a predefined number of topics. However, in our study, this assumption does not work because we are working on UGC, i.e., online comments.

In our study, we used perplexity-based metrics, as shown in Fig. 3, to identify the number of hidden topics. This approach is based on the LDA package used in our study, whereas the second approach, coherence-based, is primarily used in the STM package.

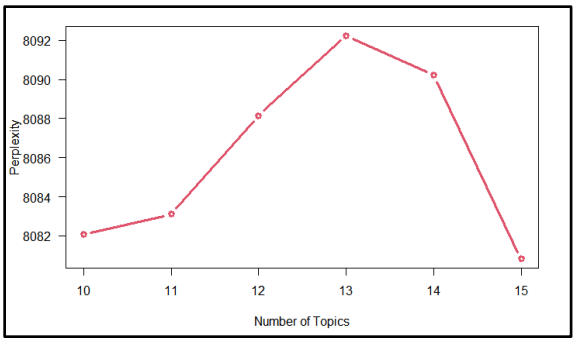

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Figure 3: Perplexity Score-Plot

From past literature, we found that various studies like Kumar et al. (2023), Mehra (2023), Ray and Bala (2021), Verkijika and Neneh (2021) have used the topic modelling technique in different context to capture various factors in retail, tourism, sustainability, mobile payment, travel apps, etc. and explore the satisfaction of customers as well.

Kumari et al. (2024) supported that Machine learning algorithms (MLA) and topic modelling. This technique helps to predict the behavioural intention of users with 80% accuracy most of the time, when using UGC for a particular service. The current study uses the UGC to identify latent topics through text analysis (topic modelling) that helps to understand the intention of users to use the OFDP for availing services. Therefore, the regression analysis is done with the sentiment scores of consumers to check the significance of each topic on consumer intention.

Sentiment Analysis

Sentiment analysis is a branch of Computer linguistics that focuses on opinions and textual data (Ashraf et al., 2024). It is an egregious technique to explore the experience of customers (Ashraf et al., 2024; Huang & Yi, 2021; Samuel et al., 2020). In this study, researchers perform emotion extraction and sentiment analysis to get an overview of the given customers' reviews for different apps. This study utilises a supervised machine learning technique that adopts a semantic approach to detect emotional valence in text (Porya et al., 2024). By assigning polarity scores to individual words, the technique classifies the overall sentiment of a text as positive, neutral, or negative (Chen & Xie, 2020). A positive sentiment score (greater than zero) indicates positive valence, while a negative score (less than zero) signifies negative valence. In this research, the average sentiment score was computed for each review. Moreover, Fig. 4. highlights how sentiment scores from customer reviews vary between the three apps. Swiggy appears to have slightly more consistent sentiment near the median, while Zomato and FoodPanda show more variability or extreme reviews. Word-level polarity scores were first assigned using Jockers and Rinker's dictionary (Jockers, 2022), and these were then averaged per review to support comparative analysis (Ashraf et al., 2024). Given its versatility and effectiveness, sentiment analysis has been widely applied in the hospitality domain to (Porya et al., 2024; Ashraf et al., 2024) evaluate consumer attitudes and intention toward destinations, accommodations, and dining experiences (Li et al., 2020; Liu et al., 2019). As a subfield of computational linguistics, sentiment analysis provides valuable insights into tourists' perceptions and experiences (Huang & Yi, 2021; Samuel et al., 2020). In the initial analysis phase, we performed sentiment analysis and emotion extraction to obtain an overview of the review content. For this phase, we used the sentiment package in the R programming environment, which is known for offering more powerful and higher accuracy than many other sentiment analysis tools (Rinker, 2021). The algorithm computes the strength and divergence in the sentence-level sentiment scores, where both the value and its direction (positive, neutral, or negative) reflect the intensity and polarity of the expressed sentiment (Ashraf et al., 2024; Jockers, 2022; Nandwani & Verma, 2021; Rinker, 2021; Samuel et al., 2020). Fig. 4 indicates the sentiments on the x-axis and categories of the app on the y-axis.

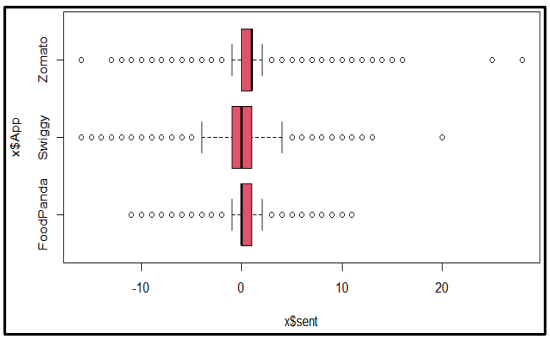

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Figure 4: Sentiment Comparison Analysis

Regression Analysis

In this study, for the regression analysis, we used the supervised and predictive learning techniques (Kumari, et al., 2024; Shashank & Behera, 2024), which are used to identify the relation between the themes/topics that researchers extracted from UGC and the rating of the app. Themes are taken as predictors and rating of apps as an outcome variable (Kumari et al., 2024; Shashank & Behera, 2024; Xing et al., 2023). The equation of regression analysis is given below:

$$Yi = f(X_i, \beta) + e_i$$

Where Yi indicates the outcome variable, X_i is a predictor, β denotes the coefficient of regression, f is the function of X_i and β, and e_i is treated as the error term (Shashank & Behera, 2024). In past literature different researchers used this regression model on OGR (online generated review) to evaluate the behavioural intention, attitude and satisfaction of the customers in several context such as gaming, grocery mobile apps, etc (Kumari et al. 2024; Kumar et al. 2023; Mehra, 2023; Ray and Bala 2021 and Wang and Goh 2020) The regression was conducted with the lda (Linear Discriminant Analysis) package of R.

Table II. Regression Analysis

MODEL INFO:	MODEL FIT:
Observations: 457503	$F(15,457488) = 305667.22$, $p = 0.00$
Dependent Variable: annotations	$R^2 = 0.91$
Type: OLS linear regression	*Adj.* $R^2 = 0.91$

RESULTS AND DISCUSSION

Result

RQ1. What key factors drive consumers' intentions to engage with OFDP services?

Table 3 shows the results of topic modelling along with the top 7 keywords related to each topic. The no. of topics decided based on the perplexity score of given data, shown in Fig. 3. Based on analysis, this study identifies a constellation of gratification factors—utilitarian, hedonic, social, technological, and content-related - that drive consumers' intentions to use OFDPs and validates through regression analysis shown in Table 4 and gives a conceptual model in Fig. 5.

Among the utilitarian gratifications, user-friendly app & engagement (β = 0.37, t = 820.35, $p < .001$) and food quality & quantity (β = 0.24, t = 538.57, $p < .001$) stood out as dominant predictors. These findings reflect the significant weight consumers place on seamless user interface design, reliability, and tangible food-related attributes—elements consistent with prior UGT-based studies in digital consumption (Kumari et al., 2024; Ray & Bala, 2021). Further, Perceived Value and Pricing Transparency (β = 0.10, t = 220.75, $p <$ .001) indicates that transparent cost structures enhance perceived fairness, thereby influencing behavioural intention.

Hedonic gratifications also exerted a strong influence. Exceptional service quality (β = 0.49, t = 1089.73, $p < .001$) and taste & emotional delightment (β = 0.32, t = 727.46, p

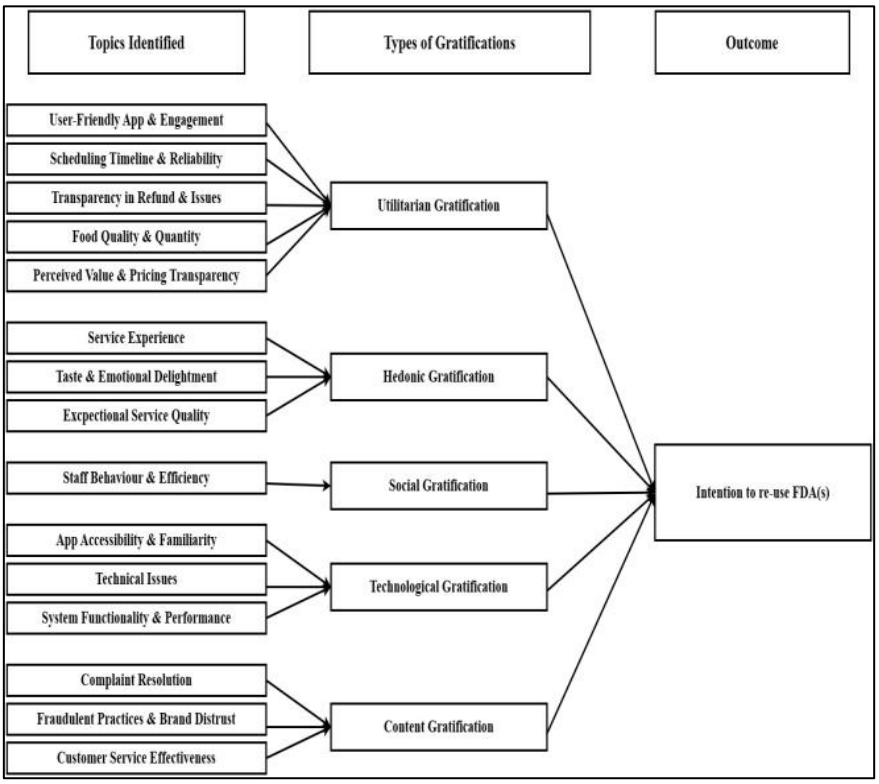

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Figure 5: Conceptual Model

< .001) emerged as emotionally rich drivers, reflecting users heightened affective engagement. These gratifications affirm the dual utility of OFDPs as both functional and experiential tools, extending the hedonic-utilitarian dichotomy identified in recent digital service studies (Ashraf et al., 2024).

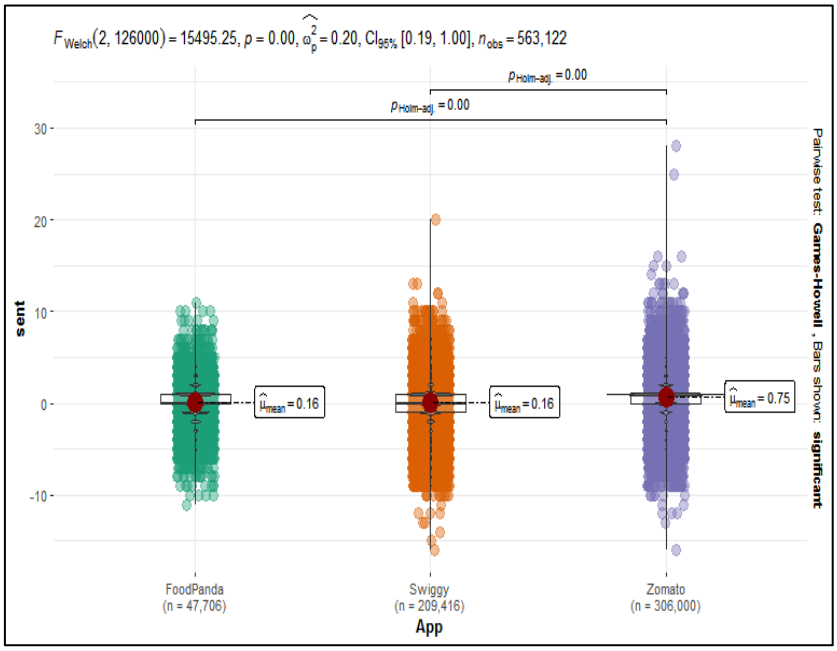
In social and technological gratifications, staff behaviour and efficiency (β = 0.26) and app accessibility and familiarity (β = 0.10) also demonstrated significant explanatory power, reinforcing the importance of both human and system-level interactions in the delivery ecosystem. Collectively, these results emphasise that users seek convenience, consistency, and emotional resonance, supporting the hybrid gratification model underpinning OFD platform adoption.

RQ2. What sentiments do users convey during their interactions with OFDP services?

Emotional analysis revealed a complex emotional landscape that underpins user interactions with OFD platforms. Positive emotions such as joy, satisfaction, and delight were prominently linked with hedonic themes like Taste & Emotional Delightment ("yummy," "fabulous") and Exceptional Service Quality ("superb," "wow"). These

Table III. Top Words for Topic Modelling

Topics	Top Words
User-Friendly App & Engagement	app, easy, offers, discounts, friendly, smooth, convenient
Transparency in Refund & Issues	refund, cancel, payment, amount, policy, scam, returned
Scheduling Timeline & Reliability	delivery, late, minutes, cold, delayed, waited, night
Food Quality & Quantity	quality, taste, home, quantity, fresh, enjoy
Perceived Value and Pricing Transparency	charges, fee, expensive, discount, gst, price, pay
Service Experience	love, happy, hungry, apps, prefer, family, enjoy
Taste & Emotional Delightment	amazing, yummy, fabulous, food, love, happy
Exceptional Service Quality	excellent, superb, wow, performance, job, amazing
Staff Behaviour and Efficiency	fast, polite, delivery, partner, staff, response
App Accessibility & Familiarity	zomato, cancel, order, download, company, swiggy
Technical Issues	worst, poor, download, slow, install, waste
System Functionality & Performance	location, login, update, error, fix, vouchers, map
Complaint Resolution	missing, wrong, complaint, products, replacement, expired
Fraudulent Practices & Brand Distrust	fraud, scam, fake, looting, uninstall, waste
Customer Service Effectiveness	support, chat, resolve, email, reply, solution



Source: author's contribution

Figure 6: Sentiment Distribution across Apps

expressions are emblematic of the flow state, where users experience high engagement and satisfaction, akin to the immersive states observed in metaverse and tourism contexts (Csikszentmihalyi, 1975).

Negative emotions, on the other hand, clustered around topics such as Technical Issues and Fraudulent Practices & Brand Distrust, where keywords like "worst," "scam," and "fake" suggest disillusionment and mistrust. Such emotional ruptures reflect instances of expectation violation, which, according to service failure literature, can severely impair continued usage and brand equity.

Neutral or mixed emotional responses emerged in reviews concerning Scheduling Timeline & Reliability and Customer Service Effectiveness, reflecting a more evaluative, less affective orientation. These sentiments suggest that routine interactions—such as dealing with delays or issue resolution—while not emotionally charged, still contribute to platform perceptions.

Fig. 6 indicates that Zomato has a stronger sentiment in user satisfaction than Swiggy and Foodpanda, as the sentiment mean of the Zomato app is 0.75, significantly more positive than the 0.16 mean sentiment of the Swiggy and Foodpanda apps.

RQ3. What core themes are associated with users' positive, negative, and neutral sentiments, and how do these themes influence the potential for OFDP usage to become a habitual or routine behaviour?

A robust regression model (R^2 = 0.91, Adj. R^2 = 0.91, F (15, 457488) = 305,667.22, p < .001) shown in Table 2 was used to predict user sentiments based on latent topics. This high degree of explained variance indicates a strong predictive relationship between topic-level gratifications and sentiment valence, positioning sentiment as a proxy for habit formation and routine engagement.

Positive sentiments were most strongly predicted by themes linked to hedonic and utilitarian gratification, especially exceptional service quality, user-friendly app & engagement, and taste & emotional delightment. These topics are not merely indicative of satisfaction but suggest the emergence of routinised behaviours. As observed in the uses and gratifications framework, consistent positive reinforcements create a feedback loop, transforming occasional use into habitual engagement.

Conversely, negative sentiments were significantly associated with fraudulent practices, brand distrust, technical issues, and transparency in refunds & issues. And these themes which this study, drawn from UGC indicates the loop in the habitual usage of OFDPs, increasing level of consumer scepticism and low platform stickiness. The emotional intensity of these issues is consistent with findings from immersive settings mismatch between expectation and reality results in an unpleasant user experience (Ashraf et al., 2024).

Procedural topics such as complaint handling, scheduling timeliness, and dependability were the most effective predictors of neutral emotion. These regions, while they may not

Table IV. OLS Regression Analysis

Gratification	Topics	Est.	Beta	t value
Utilitarian	***User-Friendly App & Engagement***	***4.89***	***0.37***	***820.35******
	Transparency in Refund & Issues	0.66	0.02	46.39***
	Scheduling Timeline & Reliability	1.22	0.04	96.99***
	Food Quality & Quantity	***4.6***	***0.24***	***538.57******
	Perceived Value and Pricing Transparency	2.36	0.1	220.75***
Hedonic	***Service Experience***	***4.72***	***0.27***	***606.54******
	Taste & Emotional Delightment	***4.6***	***0.32***	***727.46******
	Expectational Service Quality	***4.83***	***0.49***	***1089.73******
Social	***Staff Behaviour and Efficiency***	***4.62***	***0.26***	***575.02******
Technological	App Accessibility & Familiarity	2.42	0.1	218.69***
	Technical Issues	1.13	0.05	117.11***
	System Functionality & Performance	***2.18***	***0.08***	***183.51******
Content	***Complaint Resolution***	***1.63***	***0.05***	***118.22******
	Fraudulent Practices & Brand Distrust	0.26	0.01	18.85***
	Customer Service Effectiveness	0.31	0.01	23.64***

elicit powerful emotions, are critical for long-term habit building. When procedural elements repeatedly function within acceptable levels, they act as subconscious reinforcements of dependability, promoting habitual usage via cognitive conditioning.

Overall, these findings not only validate the emotional and cognitive pathways through which OFD platforms influence user behaviour but also suggest that routinised usage is contingent upon minimising disruption and maximising gratification. The interplay of gratification types with sentiment valence offers a rich lens for understanding consumer digital behaviour and paves the way for targeted platform improvements.

DISCUSSION

In this study, we found that the utilitarian and hedonic gratifications are the most powerful motivators of the UGT (Katz et al., 1973) in the context of OFD users. In the utilitarian gratification, mainly user-friendly interfaces, food quality and quantity, and scheduling delivery, are the notable criteria. The consistent usage of performance expectation is also a critical element for digital services (Zhao & Bacao, 2020). TAM-based findings also supported the interface intuitiveness and its usability for sustaining user engagement (Ray et al., 2019).

Furthermore, the service experiences, taste, and emotional delight have a relevant impact on users' intention to reuse the OFDP. This is similar to the experience consumption paradigm, which holds that symbolic and emotional or affective satisfaction is more important than practical value during online service interactions. The emotion-based reviews support the importance of emotive pleasure in online-based consumption (Ashraf et al., 2024; Geng et al., 2024).

In previous literature, Choi et al. (2016) stated that for perceived service quality and brand loyalty, employees play a crucial role. This study also found that social fulfilment as the efficiency and attitude of the available staff. The staff behaviour improves the customer experience in high-involvement services like OFDP.

For the answer to the second research question, this study found that Zomato have highly favourable associated emotions compared to other apps, such as Swiggy and FoodPanda. In the prior literature, Foroughi et al. (2024), Khan et al. (2023) and Belanche et al. (2020) indicate that the satisfaction parameter of any platform depends on perceived value, perceived responsiveness, emotional branding methods and brand trust as well as investment in service innovation. On the other hand, Lee et al.'s (2022) claim that emotional tone in digital evaluations reflects accumulated brand equity rather than single instances.

To answer the third research question, this study used regression modelling. For this, we took gratification topics as predictors and sentiment of users as the outcome, resulting in significant predictive associations ($R^2 = 0.91$). From the utilitarian gratifications, user-friendly app design and food quality and quantity theme were the most important contributors to positive attitude in digital food services (Kumari et al., 2024; Ma et al., 2023). In the hedonic category, expected service quality, taste, and emotional delight were powerful predictors of positive attitude and user reviews. This claim that digital consumption frequently occurs in a "flow state," in which immersive, joyful experiences foster habitual use.

Notably, staff conduct, and delivery efficiency emerged as the primary social reward, driving both emotional and behavioural results. This is consistent with prior findings by Limayem et al. (2007), who discovered that regular technology usage is the result of both cognitive evaluation and constant positive reinforcement, which is often shaped by interpersonal service signals.

Implications

Theoretical Implications

This study helps to understand the psychology and behaviour pattern of the consumer and also experience the digital services through the lens of UGT. This study explores the broader application of UGT (Xie et al., 2023; Dhir et al., 2017; Katz et al., 1973) by analysing user reviews to uncover consumer motivations and emotional engagement.

UGT is a framework that helps to examine the digital consumption and emotional feedback from the customer. This study follows the

integrated approach of NLP, text, and sentiment analysis to overcome the limitations of the traditional survey method by evaluating different aspects of consumers' experience.

Additionally, this study talks about a shift change from habitual usage to technology adoption. This study suggests that OFDPs extend beyond basic utility to become essential to daily routine, activity, and strategy. Overall, this research knitted with the functional benefits and emotional experiences of users in digital service consumption, emphasizing the importance of operational excellence and emotional value in OFD platforms.

Practical Implications

The findings of this study present some valuable insights to the practitioners for improving consumer engagement, satisfaction, and loyalty level in the running competitive OFDP(s) market.

Firstly, this study highlights the importance of the gratifications in the OFD market. One of the utilitarian gratifications is in the form of usability, quality food, and service enhancement, and another is hedonic gratification, such as enjoyment and emotional satisfaction. To achieve these gratifications, OFDPs should focus on more seamless app navigation, quality, personalized recommendations, and immersive branding strategy to increase the engagement level of the customer (Ma et al., 2023; Belanche et al., 2020).

Secondly, users' reviews reflect the emotions and usage of the app directly. So, to control the fraud, delays in delivery, technical issues, and to handle or address other complaints, OFDP should emphasize emotion-aware service systems. By tracking the emotions of users, providers can easily predict the problems and reduce customer dissatisfaction to loyalty (Khan et al., 2023; Huang & Yi, 2021).

Thirdly, OFDPs like Zomato and Swiggy should adopt transparent refund dashboards, AI-driven order tracking, and live chatbots for efficient resolution (Leimo, 2025; Ray & Bala, 2021) to counter consumer scepticism.

Finally, insights on routinization and sentiment polarity can guide tailored marketing. Customizing recommender systems based on historical sentiment data can result in timely promotions and meal suggestions, fostering deeper engagement and increasing customer lifetime value.

CONCLUSION, LIMITATIONS, AND FUTURE SCOPE

This study contributes to the growing body of literature on digital consumer behaviour by unpacking the cognitive-emotional underpinnings of user engagement on OFDPs through the lens of UGT. By analysing 5,63,123 user-generated reviews from leading OFD applications in India-Zomato, Swiggy, and FoodPanda, the research provides a nuanced understanding of the latent gratifications, emotional expressions, and routinized behaviours that drive platform engagement. The integration of text mining, sentiment analysis, and regression modelling reveals that functional and affective drivers are essential in shaping intention and loyalty, suggesting that OFDPs are service utilities and affective ecosystems.

Therefore, this paper supports the critical importance of UGCs by showing the effectiveness of affective ecosystems for the well-being of the OFD community i.e., existing as well as potential users. The community of OFDPs heavily relies on the emotional tone of digital messages, which are conveyed in the form of reviews and expressions of emotion.

Nonetheless, like all empirical research, this study has some limitations. To begin with, although UGC provides rich qualitative data, it is not complemented by structured demographics and psychographic data to support the generalizability of the findings.

Additionally, user reviews can be biased towards skewed opinions, either extremely positive or extremely negative, hence underrepresenting moderate opinions (Liu et al., 2019). Second, the research is geographically limited to the Indian market and only three leading OFDPs. While these platforms have a significant market share, cultural and regional consumption patterns can be very different in other countries or contexts.

Third, this study has been done only on the user-generated content of the Google Play Store. In the future, researchers can also conduct a comparative study of Apple's apps, which might provide a broader perspective to understand user emotions and behavior.

Future studies might address these limitations by combining UGC with user profile metadata (i.e., demographics such as age, gender, and income level) and making cross-cultural comparisons to assess the universality of the findings. In addition, future studies might use experimental or longitudinal research designs to estimate the causal influence of gratification and sentiment on behavioural intention and retention. Another promising area is to investigate the interaction of algorithmic curation and emotional states—how recommendation systems reinforce emotional experiences over time. The combination of affective computing with service design can produce emotionally responsive platforms that provide meals and curate end-to-end experiences of satisfaction and well-being.

In summary, this study emphasizes the importance of OFDPs to move beyond operational metrics and invest in effective engagement, emotional intelligence, and psychological satisfaction. By measuring what users feel, rather than what they do, platforms can establish more robust, trust-based relationships that are critical to maintaining competitive advantage in the platform economy.

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