

# Determinants of Continuance Intention in Food Delivery Apps: Evidence from Generation Z among Malaysia

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## Abstract

This study examines the factors influencing continuance intention toward food delivery applications (FDAs) among Generation Z users in Malaysia, with a focus on how usage behaviour evolves under changing contextual conditions. Drawing on the UTAUT2 framework, an extended model incorporating price value and fear of COVID-19 was developed and tested using data from 300 respondents via PLS-SEM. The findings indicate that performance expectancy, social influence, facilitating conditions, price value, and fear of COVID-19 significantly influence continuance intention, whereas effort expectancy and hedonic motivation are not significant predictors. These results suggest that functional and economic considerations play a more dominant role than usability and experiential factors in the post-adoption stage. This study reconceptualises FDAs usage as context-contingent rather than stable, highlighting the dynamic interplay of value perceptions, social influences, and contextual factors, and extends the explanatory scope of UTAUT2 in understanding digital platform usage behaviour.

**Keywords:** Food Delivery Apps, Generation Z, Continuance Intention, Context-Contingent Use, UTAUT 2

## Introduction

The rapid advancement of digital technologies has profoundly transformed the food service industry, with food delivery applications (FDAs) emerging as one of the most prominent

manifestations of this shift. By integrating traditional food delivery services with digital platform infrastructures, FDAs enable consumers to browse a wide range of restaurants and place orders conveniently, thereby facilitating efficient and flexible consumption experiences (Xu, 2017; Seghezzi & Mangiaracina, 2021). This platform-based service model not only enhances consumption efficiency but also reshapes everyday consumption practices and modes of service access, contributing to the continued expansion of online-to-offline (O2O) services (Prasetyo et al., 2021).

In recent years, the rapid diffusion of FDAs has been significantly influenced by external contextual factors. During the pandemic period, mobility restrictions and heightened risk-avoidance needs positioned FDAs as a critical intermediary infrastructure connecting restaurants and consumers (Francioni et al., 2022). In this phase, platform usage was not merely driven by convenience but also represented a form of dependency activated under situational pressure. However, as external constraints gradually eased, user behaviour began to shift from “context-driven use” to more selective and discretionary engagement, resulting in patterns of decline and differentiation. In Malaysia, for instance, FDA usage rates have decreased notably following the easing of restrictions, particularly among Generation Z users, despite their relatively high levels of digital literacy (Oppotus, 2023). This phenomenon suggests that platform usage does not follow a linear growth trajectory, but rather constitutes a dynamic practice embedded within specific social contexts.

Within the information systems literature, continuance intention is widely regarded as a key indicator of the long-term success of technologies and platforms (Bhattacharjee, 2001). Unlike initial adoption, continuance behaviour is more strongly shaped by users’ experiential evaluations and value perceptions developed through actual use (Li & Li, 2023). However, existing studies have largely conceptualised platform use as a relatively stable behavioural process, emphasising the role of technological attributes and individual cognition, while paying limited attention to how shifts in external contexts may reconfigure user behaviour. As such, traditional technology acceptance models may have limited explanatory power in capturing the dynamics of post-adoption behaviour.

In response, this study proposes the concept of “context-contingent use” as an analytical lens to reconceptualise user behaviour in relation to FDAs. This perspective posits that platform usage is not solely determined by technological features or individual preferences, but is dynamically activated, reinforced, or attenuated within specific social contexts and risk structures. From this standpoint, several gaps remain in the existing literature. First, most studies treat external events as background conditions rather than as structural triggers of behaviour, limiting their ability to explain behavioural changes in evolving contexts. Second, the explanatory power of core UTAUT2 constructs, such as performance expectancy and effort expectancy, may shift in the post-adoption stage under changing contextual conditions, yet this has not been systematically examined. Third, the role of context-specific emotional factors, such as risk perception or health-related anxiety, in shaping continuance behaviour remains underexplored. Finally, as consumption rationality re-emerges, price value may play an increasingly significant role in influencing user decisions, particularly among Generation Z, who are typically more price-sensitive.

Building on these theoretical and empirical gaps, this study extends the UTAUT2 framework by incorporating price value and context-related emotional variables to examine continuance intention toward FDAs among Generation Z users in Malaysia. By adopting a context-contingent perspective, this study not only provides empirical evidence on how platform usage evolves across shifting contexts but also contributes theoretically by highlighting the situational embeddedness and non-stability of digital platform use. In doing so, it offers a novel analytical pathway for understanding user behaviour in the platform economy.

### Literature Review

Food delivery applications (FDAs) have been widely conceptualised as mobile-based platforms that integrate online-to-offline (O2O) technologies to bridge catering businesses and consumers, facilitating convenient and efficient food ordering processes (Ray et al., 2019). With the rapid expansion of FDAs, a growing body of research has examined the factors influencing users' continuance intention. Existing studies can be broadly categorised into three streams: technology-oriented perspectives, service and satisfaction-based approaches, and affective and experiential frameworks.

First, from a technology-oriented perspective, scholars have focused on how system–user alignment and functional performance shape continuance behaviour. For instance, Shahzad et al. (2023) employed the task–technology fit (TTF) model. They found that both TTF and user attitudes significantly influence continuance intention, with traceability acting as a positive moderator. Similarly, studies grounded in expectation-confirmation theory (ECT) have highlighted the importance of perceived usefulness and confirmation in shaping satisfaction and continuance intention (Al Amin et al., 2020). These studies emphasise the role of cognitive evaluations of system performance in post-adoption behaviour.

Second, a substantial body of research adopts a service and satisfaction-based perspective, examining how service quality and user satisfaction contribute to continued usage. Empirical findings suggest that multiple dimensions of service quality, including reliability, safety, hygiene, and system operation, significantly influence customer satisfaction, which in turn predicts user loyalty and continuance intention (Koay et al., 2022; Nguyen et al., 2023). In addition, user segmentation studies have further demonstrated that different user groups prioritise distinct attributes, such as time efficiency, value, or security, in their decision-making processes. This stream of research highlights the central role of satisfaction as a mediating mechanism between service attributes and behavioural outcomes.

Third, recent studies have incorporated affective and experiential factors to explain continuance behaviour. Drawing on emotional and aesthetic frameworks, Kumar and Shah (2021) demonstrated that pleasure plays a dominant role in predicting continuance intention, with emotional arousal acting as a mediating factor. Similarly, perceived enjoyment, risk, and trust have been identified as important determinants, reflecting the increasing recognition of experiential and psychological dimensions in digital platform usage (Timur et al., 2023; Zhao & Bacao, 2020). These findings suggest that continuance behaviour is not solely driven by rational evaluation, but also by affective responses and perceived risks.

Despite these valuable insights, existing research exhibits several limitations. First, most studies implicitly conceptualise FDA usage as a relatively stable and self-sustaining behaviour,

primarily explained by technological, service, or psychological factors. However, this assumption may overlook the role of external contextual conditions in shaping user behaviour, particularly in environments characterised by rapid social and economic change. Second, while models such as UTAUT2 have been widely applied, the explanatory power of core constructs, such as performance expectancy and effort expectancy, in the post-adoption stage remains insufficiently examined, especially under shifting contextual conditions. Third, although some studies have considered emotional factors such as perceived risk (Zhao & Bacao, 2020; Timur et al., 2023), the persistence and transformation of context-specific emotions, such as health-related anxiety, in influencing continuance intention remain underexplored, particularly in post-crisis contexts where emotional responses may evolve (Bagozzi et al., 1999; Lerner et al., 2015). Finally, the role of price value, particularly among Generation Z users who are typically more price-sensitive, has not been fully integrated into existing theoretical frameworks.

To address these limitations, this study extends the UTAUT2 model by incorporating price value and context-related emotional factors, providing a more context-sensitive framework for understanding continuance intention toward FDAs (Figure 1). In doing so, this study moves beyond a purely technology-centric perspective and contributes to a more dynamic understanding of digital platform usage as contingent upon evolving contextual conditions.

#### *Hypothesis Development*

Performance expectancy refers to the degree to which individuals believe that using a system will provide benefits and enhance task performance (Venkatesh et al., 2003). Prior research consistently demonstrates its positive influence on behavioural intention and continuance usage (Farooq et al., 2017; Naranjo-Zolotov et al., 2019). In the context of FDAs, perceived benefits such as efficiency, convenience, and safety have been shown to strengthen users' reliance on these platforms (Lee et al., 2019; Zanetta et al., 2021). Importantly, under conditions of heightened external constraints, such as risk or mobility restrictions, performance-related benefits become more salient in shaping user decisions (Zhao & Bacao, 2020). From a post-adoption perspective, users are more likely to continue using FDAs when the platform consistently delivers functional value aligned with their expectations. Therefore: H1: Performance expectancy positively influences continuance intention toward FDAs among Malaysian Generation Z.

Effort expectancy refers to the perceived ease associated with the use of a system (Venkatesh et al., 2003). Previous studies suggest that ease of use plays a critical role in both adoption and continuance behaviour (Isaac et al., 2019; Ray et al., 2019). In the context of FDAs, simple interfaces, seamless ordering processes, and convenient payment systems reduce cognitive effort and enhance user experience (Muangmee et al., 2021). However, in the post-adoption stage, effort expectancy may become less decisive compared to performance-related evaluations, as users become more familiar with the system. Nonetheless, a user-friendly system remains an important condition for sustaining usage behaviour. Therefore:

H2: Effort expectancy positively influences continuance intention toward FDAs among Malaysian Generation Z.

Social influence refers to the extent to which individuals perceive that important others believe they should use a particular technology (Venkatesh et al., 2003). Prior studies have

confirmed its significant role in shaping behavioural intention (Schepers & Wetzels, 2007; Ali et al., 2016). In digital platforms such as FDAs, social influence is often manifested through online reviews, recommendations, and peer interactions (Ray et al., 2019). These social signals can shape users' perceptions and reinforce behavioural norms, particularly in networked environments where peer endorsement is visible and influential (Fu et al., 2020). Consequently, individuals may continue using FDAs to align with social expectations and maintain conformity within their social networks. Therefore:

H3: Social influence positively influences continuance intention toward FDAs among Malaysian Generation Z.

Facilitating conditions refer to the degree to which individuals believe that technical and organisational infrastructures support the use of a system (Venkatesh et al., 2003). Adequate resources, technical support, and infrastructure availability have been shown to influence technology usage and continuance behaviour positively (Alalwan et al., 2017; Chopdar et al., 2018). In the FDA context, reliable system performance, stable internet access, and efficient customer support enhance user confidence and reduce perceived barriers to continued usage (Al-Saedi et al., 2020). When users perceive favourable facilitating conditions, they are more likely to maintain their engagement with the platform. Therefore:

H4: Facilitating conditions positively influence continuance intention toward FDAs among Malaysian Generation Z.

Hedonic motivation refers to the enjoyment or pleasure derived from using a technology (Venkatesh et al., 2012). Previous studies have shown that hedonic value significantly influences behavioural intention and continuance usage in digital platforms (Yeo et al., 2017; Jung et al., 2021). In FDAs, enjoyment may arise from browsing diverse food options, exploring promotions, and engaging with user-friendly interfaces (Arya et al., 2019). Such positive experiential elements enhance user satisfaction and reinforce continued usage behaviour. Therefore:

H5: Hedonic motivation positively influences continuance intention toward FDAs among Malaysian Generation Z.

Price value refers to users' cognitive trade-off between perceived benefits and monetary cost (Venkatesh et al., 2012). It has been identified as a key determinant of behavioural intention in consumer technology contexts (Tandon et al., 2021). In FDAs, features such as price comparisons, discounts, and promotional offers enhance perceived value and influence decision-making (Cho et al., 2019; Pandey et al., 2021). This effect is particularly pronounced among Generation Z users, who are typically more price-sensitive. When users perceive that the benefits outweigh the costs, they are more likely to continue using the platform. Therefore:

H6: Price value positively influences continuance intention toward FDAs among Malaysian Generation Z.

Fear of COVID-19 refers to individuals' anxiety and perceived risk associated with the pandemic (Ahorsu et al., 2020). Previous studies indicate that such fear can significantly influence technology adoption and usage behaviour by encouraging risk-avoidance practices (Eger et al., 2021; Francioni et al., 2022). In the context of FDAs, heightened health concerns have been shown to promote contactless consumption and increase reliance on delivery

services (Ulhaq et al., 2023). Although the intensity of such fear may vary over time, its residual effects may continue to shape users' behavioural tendencies in post-crisis contexts. Therefore:

H7: Fear of COVID-19 positively influences continuance intention toward FDAs among Malaysian Generation Z.

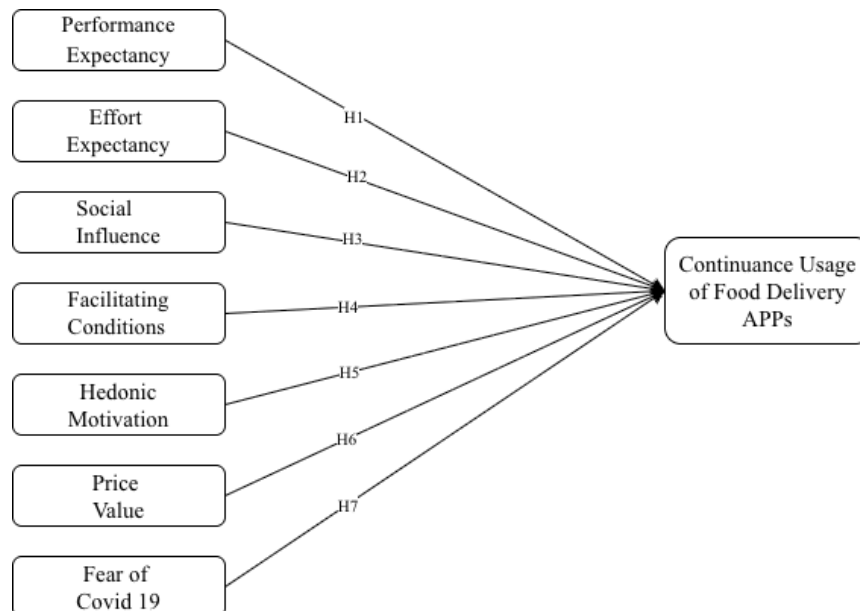


Figure 1: Research Framework

## Methodology

### Measurement

The questionnaire consisted of two sections: demographic information and measurement items. The study examined seven independent variables related to continuance intention toward FDAs. All items were measured using established scales. Measurement items for performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, and continuance intention were adapted from Lee et al. (2019). Price value was adopted from Venkatesh et al. (2012), while fear of COVID-19 was adapted from Ahorsu et al. (2020). All constructs were measured using a seven-point Likert scale.

### Sample

Data were collected through a self-administered online questionnaire distributed via Google Forms. A purposive sampling approach was employed, targeting Malaysian Generation Z users (aged below 27) with prior experience using FDAs during the pandemic period (Dimock, 2019). After data screening, 300 valid responses were retained for analysis.

Table 1 presents the demographic profile of the respondents. The sample comprised 67.7% females and 32.3% males. Most respondents were aged between 21 and 23, with a majority at 22 years old. Regarding usage behaviour, respondents demonstrated substantial experience with FDAs. Over half (55.7%) had more than 12 months of usage experience, and a considerable proportion reported using FDAs at least several times per month. This indicates that the sample consisted of experienced users, making it suitable for examining continuance intention.

Table 1  
*Respondent profile*

Characteristics	Items	Frequency	Percentage (%)
Gender	Male	97	32.3
	Female	203	67.7
Age	19 years old	2	0.7
	20 years old	13	4.3
	21 years old	51	17
	22 years old	156	52
	23 years old	50	16.7
	24 years old	22	7.3
	25 years old	4	1.3
	26 years old	1	0.3
	27 years old	1	0.3
	Frequency of using food delivery apps	Almost everyday	26
A few times a week		89	29.7
Once a week		59	19.7
Once or twice a month		89	29.7
Not even once a month		37	12.3
Less than a month		35	11.7
Experience in months or years of using food delivery apps	1 – 3 months	39	13
	4 – 6 months	28	9.3
	7 – 12 months	31	10.3
	More than 12 months	167	55.7

### *Analysis*

In this study, the data were analysed using the Partial Least Squares Structural Equation Modelling (PLS-SEM) approach based on the recommendations of Ringle et al. (2022). A two-step approach was also used to evaluate the theoretical models of this study; in the first step, quality indicators such as convergent validity and discriminant validity of the external models were measured. In the second step, the structural model and the developed hypotheses were evaluated (Hair et al., 2014).

### *Measurement Model*

In this study, based on the suggestion of Hair and Alamer (2022), Outer loadings, average variance extracted (AVE), and composite reliability (CR) were used to test the convergent validity of the external model as well as to check the composite reliability to assess the reliability. Based on the recommendations of Hair et al. (2022) and Ramayah et al. (2018), this study set the recommended thresholds for these three discriminators as 0.5 and 0.7, respectively. Specifically, a value of indicator extrinsic loadings higher than 0.7 suggests that the structure explains a minimum of 50 per cent of the indicator's variance and also suggests that the indicator has good reliability. If the indicator's extrinsic load value is below 0.5, the indicator should be deleted to ensure the accuracy of CR and AVE. When the AVE value of the

construct is higher than 0.50, which indicates that the construct can explain at least 50% of the variance, the construct has good convergent validity.

Meanwhile, a composite reliability above 0.7 indicates that the construct has good reliability (Hair et al., 2017). As can be seen in Table 2, the loading values of all the measures in this study were greater than 0.7, while the AVEs of all the constructs were higher than 0.50, ranging from 0.698 to 0.887. The composite reliability of all the constructs was greater than the threshold value of a good reliability level of 0.7. Therefore, the analysis results indicate that the external model of this study has good convergent validity and reliability.

Table 2  
*Reflection measurement model evaluation metrics*

Constructs	Indicators	Outer Loadings	Composite Reliability	Average Variance Extracted (AVE)
CON	CON1	0.886	0.895	0.826
	CON2	0.923		
	CON3	0.918		
EFF	EFF1	0.886	0.885	0.729
	EFF2	0.845		
	EFF3	0.877		
	EFF4	0.804		
FAC	FAC1	0.868	0.802	0.703
	FAC2	0.890		
	FAC3	0.751		
FV	FV1	0.827	0.962	0.777
	FV2	0.868		
	FV3	0.922		
	FV4	0.856		
	FV5	0.917		
	FV6	0.877		
	FV7	0.899		
HED	HED1	0.917	0.900	0.829
	HED2	0.925		
	HED3	0.889		
PER	PER1	0.817	0.860	0.698
	PER2	0.854		
	PER3	0.851		
	PER4	0.818		
PRI	PRI1	0.932	0.929	0.875
	PRI2	0.946		
	PRI3	0.928		
SOC	SOC1	0.938	0.937	0.887
	SOC2	0.951		
	SOC3	0.937		

This study used HTMT to assess the validity of the model discriminant based on the recommendation of Franke and Sarstedt (2019). In addition, Hair and Alamer (2022) suggested that the overall maximum correlation of the model is capped at 0.9. As shown in Table 6, the HTME values of all constructs in this study were less than 0.9, which ranged from 0.093 to 0.878. The results of the analysis indicated that the model in this study had discriminant validity.

Table 3

*Discriminant Validity (HTMT)*

	CON	EFF	FAC	FV	HED	PER	PRI	SOC
CON								
EFF	0.478							
FAC	0.631	0.878						
FV	0.330	0.093	0.126					
HED	0.549	0.518	0.626	0.390				
PER	0.712	0.744	0.789	0.167	0.561			
PRI	0.668	0.320	0.475	0.332	0.520	0.572		
SOC	0.696	0.329	0.510	0.400	0.603	0.623	0.647	

*Structural Model*

In order to ensure that the internal structural model is not affected by covariance bias, this study uses the variance inflation factor (VIF) to detect the covariance problem of the model. According to Diamantopoulos and Sigauw (2006), the higher value of VIF represents a higher degree of covariance of the constructs, and the maximum threshold value of VIF should not be greater than 3.3. The analytical results of this study show (as shown in Appendix 2) that the VIF of all the constructs in the internal model of this study is less than 3.3, which ranges from 1.281 to 2.763. This result indicates that there is no covariance problem in this study.

The bootstrap procedure was set at a 0.05 significance level, one-tailed test, 10000 bootstrap resampling to report the percentile bootstrap procedure to test the structural model and test the hypotheses that have been proposed (Becker et al., 2023) with a significance level threshold of 1.645 (Ramayah et al., 2018). The results of the analysis showed that the modelling variables in this study explained 57.2% ( $R^2 = 0.572$ ) of the variance in the intention to use. Meanwhile, the continuous use intention of food delivery apps for Malaysian Generation Z was influenced by Performance Expectancy ( $\beta=0.247$ ,  $t\text{-value}=3.209$ ,  $p<0.01$ ), Social Influence ( $\beta=0.253$ ,  $t\text{-value}=3.263$ ,  $p<0.01$ ), Facilitating Conditions ( $\beta=0.142$ ,  $t\text{-value}=1.753$ ,  $p<0.05$ ), Price Value ( $\beta=0.242$ ,  $t\text{-value}=4.015$ ,  $p<0.01$ ) and Fear of COVID-19 ( $\beta=0.080$ ,  $t\text{-value}=1.748$ ,  $p<0.05$ ) with significant positive effects. Therefore, the hypotheses of H1, H3, H4, H6 and H7 are supported (as shown in Table 4).

Table 4

*Path coefficient for direct relationships*

Hypothesis	Relationship	Std. Beta	Std. Error	t-value	P Values	5.00 %	95.00 %	Results
H1	PER -> CON	0.247	0.077	3.209	0.001*	0.124	0.377	Support
H2	EFF -> CON	0.008	0.083	0.099	0.461	0.121	0.151	Not Support
H3	SOC -> CON	0.253	0.078	3.263	0.001*	0.117	0.371	Support
H4	FAC -> CON	0.142	0.081	1.753	0.040*	0.000	0.270	Support
H5	HED -> CON	0.008	0.070	0.110	0.456	0.098	0.132	Not Support
H6	PRI -> CON	0.242	0.060	4.015	0.000*	0.146	0.344	Support
H7	FV -> CON	0.080	0.045	1.748	0.040*	0.007	0.156	Support

Note: \*P<0.05, \*\*P<0.01

*PLS-Predict*

In order to evaluate the predictive ability of the models in this study, as suggested by Shmueli et al. (2019), this study was analysed with 10 replications using PLS-Predict analysis. The results of the analysis showed that among the study models, the PLS model errors (RMSE) for CON2 and CON3 were lower than those provided by the linear model (LM). Therefore, the present study model has a medium level of predictive potential (Shmueli et al., 2019).

Table 5

*PLS-Predict*

Items	Q <sup>2</sup> predict	PLS- RMSE	LM- RMSE	PLS-LM
CON1	0.430	0.956	0.947	0.009
CON2	0.461	1.116	1.166	-0.050
CON3	0.427	1.133	1.144	-0.011

**Discussion and Implications**

This study provides important insights into the continuance intention toward FDAs among Malaysian Generation Z from a context-contingent perspective.

First, performance expectancy was found to have a significant positive effect on continuance intention, indicating that functional value remains a key driver in the post-adoption stage. This finding is consistent with prior studies (Lee et al., 2019; Marinković et al., 2020) and suggests that users' continued engagement depends on the platform's ability to consistently deliver efficiency, convenience, and practical benefits under evolving usage conditions.

Second, effort expectancy was found to have no significant effect on continuance intention, which aligns with some previous findings (Pitchay et al., 2021; Surya et al., 2021). This suggests that for digitally literate users such as Generation Z, ease of use is no longer a decisive factor. Once technology usage becomes routinised, its explanatory power diminishes, highlighting the difference between initial adoption and post-adoption mechanisms.

Third, social influence and facilitating conditions were both found to have significant positive effects on continuance intention, consistent with prior research (Schepers & Wetzels, 2007; Al-Saedi et al., 2020). This indicates that user behaviour is not only driven by individual cognition but is also embedded in social interactions and technological environments. Online reviews, peer recommendations, and reliable technical support jointly contribute to sustaining platform usage.

Furthermore, hedonic motivation was found to have no significant effect on continuance intention. This finding is consistent with some studies (Novela et al., 2020) but contrasts with research emphasising the role of enjoyment and experiential value (Jung et al., 2021; Yapp & Kataraiian, 2022). This suggests that in utilitarian consumption contexts such as food delivery, users are more likely to prioritise goal-oriented and rational decision-making rather than hedonic experiences, reflecting a shift from exploratory to functional usage.

In contrast, price value was found to have a significant positive effect on continuance intention, supporting previous findings (Venkatesh et al., 2012; Tandon et al., 2021). This highlights the growing importance of economic rationality in user decision-making. For Generation Z users, who tend to be more price-sensitive, discounts, promotions, and price comparisons play a critical role in driving continued usage.

Finally, fear of COVID-19 was found to positively influence continuance intention, consistent with prior studies (Francioni et al., 2022). This finding suggests that context-specific emotions may have lingering effects on user behaviour. Although the impact of the pandemic has gradually diminished, behavioural inertia shaped by risk perception continues to influence decision-making (Ulhaq et al., 2023).

Overall, the findings indicate that continuance behaviour toward FDAs is not stable but is shaped by a dynamic interplay of functional value, economic considerations, social embeddedness, and contextual factors. These results support the conceptualisation of digital platform usage as context-contingent rather than stable, and extend the explanatory scope of UTAUT2 in post-adoption contexts.

### **Theoretical Implications**

The empirical results of this study lead to several theoretical insights. First, it extends the applicability of the UTAUT2 model in post-adoption contexts. Unlike prior studies that implicitly assume technology use to be stable, this study adopts a context-contingent perspective. It demonstrates that continuance behaviour is dynamic and embedded within evolving contextual conditions. In doing so, it enriches the explanatory scope of UTAUT2 in digital platform research.

Second, the findings reveal that the effects of key determinants vary across usage stages. While performance expectancy, social influence, and price value remain significant predictors, the effects of effort expectancy and hedonic motivation diminish in the post-adoption stage. This suggests a shift in behavioural drivers from technology-oriented factors to value-oriented considerations, thereby advancing the understanding of stage-based differences in technology usage.

Third, this study highlights the importance of contextual factors in shaping user behaviour. The results show that fear of COVID-19, as a context-specific emotional variable, continues to influence continuance intention. This indicates that user behaviour is not solely driven by rational evaluation but is also shaped by prior experiences and perceived risks. This finding contributes to a deeper understanding of the contextual embeddedness of digital platform usage

### **Practical Implications**

The findings of this study provide several practical implications for FDA service providers. Platforms should enhance functional value to strengthen users' continuance intention by improving delivery efficiency and service reliability, as well as optimising user experience through features such as personalised recommendations and real-time order tracking. At the same time, pricing strategies should be carefully designed to enhance perceived value; given the price sensitivity of Generation Z users, platforms can leverage discounts, coupons, and membership programmes to increase attractiveness and encourage continued usage. In addition, service providers should leverage social influence mechanisms by strengthening user review systems, social sharing features, and referral programmes to enhance user interaction and trust, thereby increasing engagement and retention. Facilitating conditions should also be continuously improved through stable system performance, diverse payment options, and responsive customer support to reduce usage barriers and improve overall user experience. Finally, platforms should address users' risk perceptions and emotional concerns. However, the impact of the pandemic has diminished, users' awareness of health and safety remains salient, and measures such as emphasising hygiene standards and contactless delivery can help reinforce user trust and promote continued usage.

### **Conclusion**

This study examined the factors influencing continuance intention toward food delivery applications (FDAs) among Generation Z users in Malaysia. The findings indicate that performance expectancy, social influence, facilitating conditions, price value, and fear of COVID-19 significantly influence continuance intention, whereas effort expectancy and hedonic motivation do not show significant effects.

Beyond these empirical results, this study contributes to a deeper understanding of digital platform usage by demonstrating that continuance behaviour is not stable but context-contingent. Specifically, user decisions are shaped by a dynamic interplay of functional value, economic considerations, social embeddedness, and residual contextual influences. This perspective provides a more nuanced explanation of post-adoption behaviour and highlights the evolving nature of user engagement in digital platforms.

Overall, this study provides a basis for rethinking continuance intention as a context-dependent form of digital platform use and offers directions for future research on post-adoption behaviour.

### **Theoretical and Contextual Contribution**

This study makes both theoretical and contextual contributions to the existing literature on digital platform continuance. Theoretically, it extends UTAUT2 beyond a stable post-adoption logic by showing that continuance intention is not merely the outcome of enduring

technological beliefs, but is shaped by context-contingent evaluations that evolve with changing social and risk environments. By demonstrating the continued salience of performance expectancy, social influence, price value, and residual fear of COVID-19, while also showing the diminished relevance of effort expectancy and hedonic motivation, this study refines current understanding of how the determinants of use shift from adoption to continuance stages. Contextually, the study contributes evidence from Malaysia, an underexamined setting in digital platform research, and from Generation Z, a cohort often assumed to be uniformly technology-oriented. The findings show that even among digitally literate users, continuance behaviour remains strongly shaped by economic rationality, social embeddedness, and contextual memory. In this sense, the study not only enriches the literature on food delivery applications in emerging platform economies, but also offers a more situated explanation of post-adoption behaviour in contexts marked by rapid social change and shifting consumption conditions.

### **Limitation and Recommendations for Future Research**

Despite its contributions, this study has several limitations that provide avenues for future research.

First, the use of purposive sampling and a relatively homogeneous sample focusing on a single generational group may limit the generalisability of the findings. Future studies are encouraged to adopt a comparative approach across different generations, such as Generation Z, Millennials, and older cohorts, to understand generational differences better and enhance external validity.

Second, this study focuses on a specific set of variables within the extended UTAUT2 framework. Future research could incorporate additional contextual factors, such as economic uncertainty, platform competition, or lifestyle changes, to further explore the dynamic nature of platform usage.

Finally, this study adopts a cross-sectional design, which limits the ability to capture changes in user behaviour over time. Longitudinal studies are recommended to examine how continuance intention evolves under shifting contextual conditions, thereby providing deeper insights into context-contingent usage patterns.

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## References

- Ahorsu, D. K., Pakpour, A. H., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: Development and initial validation. *International Journal of Mental Health and Addiction*, 20(3), 1537–1545. <https://doi.org/10.1007/s11469-020-00270-8>
- Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*, 37(3), 99–110. <https://doi.org/10.1016/j.ijinfomgt.2017.01.002>
- Al Amin, M., Arefin, M. S., Sultana, N., Islam, M. R., Jahan, I., & Akhtar, A. (2020). Evaluating the customers' dining attitudes, e-satisfaction and continuance intention toward mobile food ordering apps (MFOAs): Evidence from Bangladesh. *European Journal of Management and Business Economics*, 30(2), 211-229.
- Ali, F., Nair, P. R., & Hussain, K. (2016). An assessment of students' acceptance and usage of computer-supported collaborative classrooms in hospitality and tourism schools. *Journal of Hospitality Leisure Sport & Tourism Education*, 18, 51–60. <https://doi.org/10.1016/j.jhlste.2016.03.002>
- Al-Saedi, K., Al-Emran, M., Ramayah, T., & Abusham, E. A. (2020). Developing a general extended UTAUT model for M-payment adoption. *Technology in Society*, 62, 101293. <https://doi.org/10.1016/j.techsoc.2020.101293>
- Arya, V., Sethi, D., & Paul, J. (2019). Does digital footprint act as a digital asset? Enhancing brand experience through remarketing. *International Journal of Information Management*, 49, 142–156. <https://doi.org/10.1016/j.ijinfomgt.2019.03.013>
- Bagozzi, R. P., & Lee, K. (2002). Multiple routes for social influence: The role of compliance, internalisation, and social identity. *Social Psychology Quarterly*, 65(3), 226. <https://doi.org/10.2307/3090121>
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 351-370.
- Bhattacharjee, A., & Lin, C. (2015). A unified model of IT continuance: three complementary perspectives and crossover effects. *European Journal of Information Systems*, 24(4), 364–373. <https://doi.org/10.1057/ejis.2013.36>
- Cao, X., Yu, L., Liu, Z., Gong, M., & Adeel, L. (2018). Understanding mobile payment users' continuance intention: A trust transfer perspective. *Internet Research*, 28(2), 456-476.
- Chen, X., Zhang, S. X., Jahanshahi, A. A., Alvarez-Risco, A., Dai, H., Li, J., & Ibarra, V. J. G. (2020). Belief in a COVID-19 conspiracy theory as a predictor of mental health and well-being of health care workers in Ecuador: Cross-sectional survey study. *JMIR Public Health and Surveillance*, 6(3), e20737. <https://doi.org/10.2196/20737>
- Cho, M., Bonn, M. A., & Li, J. (2019). Differences in perceptions about food delivery apps between single-person and multi-person households. *International Journal of Hospitality Management*, 77, 108–116. <https://doi.org/10.1016/j.ijhm.2018.06.019>
- Chopdar, P. K., Korfiatis, N., Sivakumar, V., & Lytras, M. D. (2018). Mobile shopping apps adoption and perceived risks: A cross-country perspective utilising the unified theory of acceptance and use of technology. *Computers in Human Behavior*, 86, 109–128. <https://doi.org/10.1016/j.chb.2018.04.017>
- Dimock, M. (2019). Defining generations: Where millennials end and Generation Z begins. *Pew Research Center*, 17(1), 1-7.

- El-Gayar, O., Moran, M., & Hawkes, M. (2011). Students' acceptance of tablet PCs and implications for educational institutions. *Educational Technology & Society*, 14 (2), 58–70.
- Farooq, M., Salam, M., Jaafar, N., Fayolle, A., Ayupp, K., Radović-Marković, M., & Sajid, A. (2017). Acceptance and use of lecture capture system (LCS) in executive business studies. *Interactive Technology and Smart Education*, 14(4), 329–348. <https://doi.org/10.1108/itse-06-2016-0015>
- Francioni, B., Curina, I., Hegner, S. M., & Cioppi, M. (2022). Predictors of continuance intention of online food delivery services: Gender as moderator. *International Journal of Retail & Distribution Management*, 50(12), 1437–1457. <https://doi.org/10.1108/ijrdm-11-2021-0537>
- Fu, J., Lu, I., Chen, J. A., & Farn, C. (2020). Investigating consumers' online social shopping intention: An information processing perspective. *International Journal of Information Management*, 54, 102189. <https://doi.org/10.1016/j.ijinfomgt.2020.102189>
- Isaac, O., Abdullah, Z., Aldholay, A. H., & Ameen, A. (2019). Antecedents and outcomes of internet usage within organisations in Yemen: An extension of the unified theory of acceptance and use of technology (UTAUT) model. *Asia-Pacific Management Review*, 24(4), 335–354. <https://doi.org/10.1016/j.ap-mrv.2018.12.003>
- Jung, H. K., Oh, K. T., & Kim, H. (2021). Country differences in determinants of behavioral intention towards sustainable apparel products. *Sustainability*, 13(2), 558. <https://doi.org/10.3390/su13020558>
- Kaur, P., Dhir, A., Talwar, S., & Ghuman, K. (2021). The value proposition of food delivery apps from the perspective of theory of consumption value. *International Journal of Contemporary Hospitality Management*, 33(4), 1129–1159. <https://doi.org/10.1108/ijchm-05-2020-0477>
- Koay, K. Y., Cheah, C. W., & Chang, Y. X. (2022). A model of online food delivery service quality, customer satisfaction and customer loyalty: A combination of PLS-SEM and NCA approaches. *British Food Journal*, 124(12), 4516–4532.
- Kumar, S., & Shah, A. (2021). Revisiting food delivery apps during COVID-19 pandemic? Investigating the role of emotions. *Journal of Retailing and Consumer Services*, 62, 102595. <https://doi.org/10.1016/j.jretcon-ser.2021.102595>
- Li, C., & Li, H. (2023). Disentangling facial recognition payment service usage behavior: A trust perspective. *Telematics and Informatics*, 77, 101939.
- Lu, Y., Zhou, T., & Wang, B. (2009). Exploring Chinese users' acceptance of instant messaging using the theory of planned behavior, the technology acceptance model, and the flow theory. *Computers in Human Behavior*, 25(1), 29–39. <https://doi.org/10.1016/j.chb.2008.06.002>
- Marinković, V., Đorđević, A., & Kalinic, Z. (2020). The moderating effects of gender on customer satisfaction and continuance intention in mobile commerce: A UTAUT-based perspective. *Technology Analysis & Strategic Management*, 32(3), 306–318. <https://doi.org/10.1080/09537325.2019.1655537>
- Muangmee, C., Kot, S., Meekaewkunchorn, N., Kassakorn, N., & Khalid, B. (2021). Factors determining the behavioral intention of using food delivery apps during COVID-19 pandemics. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5), 1297–1310. <https://doi.org/10.3390/jtaer16050073>

- Nguyen, T., Huang, E., & Nguyen, D. M. (2023). Food delivery app continuance: A dual model and segmentation approach. *International Journal of Retail & Distribution Management*, 51(5), 569-589.
- Opposition. (2023). Malaysian food delivery apps in 2023: Food at your fingertips. Retrieved 2.27 from <https://www.opotus.com/malaysianfoodeliveryappsin2023/>
- Oliver, R. P. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469. <https://doi.org/10.1177/002224378001700405>
- Pandey, S., Chawla, D., & Puri, S. (2021). Food delivery apps (FDAs) in Asia: An exploratory study across India and the Philippines. *British Food Journal*, 124(3), 657–678. <https://doi.org/10.1108/bfj-01-2020-0074>
- Pitchay, A. A., Ganesan, Y., Zulkifli, N. N., & Khaliq, A. (2021). Determinants of customers' intention to use online food delivery application through smartphone in Malaysia. *British Food Journal*, 124(3), 732–753. <https://doi.org/10.1108/bfj-01-2021-0075>
- Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., Miraja, B. A., & Redi, A. A. N. P. (2021). Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 76.
- Raman, P. (2022). Fear of coronavirus on continuance intention to use food delivery apps. *Journal of Electronic Commerce in Organizations*, 20(2), 1–22. <https://doi.org/10.4018/jeco.300302>
- Ray, A., Dhir, A., Bala, P. K., & Kaur, P. (2019). Why do people use food delivery apps (FDA)? A use and gratification theory perspective. *Journal of Retailing and Consumer Services*, 51, 221–230. <https://doi.org/10.1016/j.jretconser.2019.05.025>
- Sathye, S., Prasad, B. C., Sharma, D., Sharma, P., & Sathye, M. (2018). Factors influencing the intention to use of mobile value-added services by women-owned microenterprises in Fiji. *EJISDC: The Electronic Journal on Information Systems in Developing Countries*, 84(2), e12016. <https://doi.org/10.1002/isd.12016>
- Schepers, J. J. L., & Wetzels, M. (2007). A meta-analysis of the technology acceptance model: Investigating subjective norm and moderation effects. *Information & Management*, 44(1), 90–103. <https://doi.org/10.1016/j.im.2006.10.007>
- Seghezzi, A., & Mangiaracina, R. (2021). On-demand food delivery: Investigating the economic performances. *International Journal of Retail & Distribution Management*, 49(4), 531-549.
- Shahzad, K., Zhang, Q., Zafar, A. U., Ashfaq, M., & Rehman, S. U. (2023). The role of blockchain-enabled traceability, task technology fit, and user self-efficacy in mobile food delivery applications. *Journal of Retailing and Consumer Services*, 73, 103331.
- Statista. (2024). Online food delivery: Malaysia. Retrieved 2.27 from <https://www.statista.com/outlook/emo/online-food-delivery/malaysia>
- Surya, N. A., Sukresna, N. I. M., & Mardiyono, N. (2021). Factors Affecting Intention to Use Food Order- Delivery Feature of Ride-Hailing Applications: The UTAUT Approach. *International Journal of Business and Society*, 22(3), 1363–1383. <https://doi.org/10.33736/ijbs.4306.2021>
- Tam, C., Santos, D. M., & Oliveira, T. (2020). Exploring the influential factors of continuance intention to use mobile Apps: Extending the expectation confirmation model. *Information Systems Frontiers*, 22(1), 243– 257. <https://doi.org/10.1007/s10796-018-9864-5>

- Tandon, A., Kaur, P., Bhatt, Y. C., Mäntymäki, M., & Dhir, A. (2021). Why do people purchase from food delivery apps? A consumer value perspective. *Journal of Retailing and Consumer Services*, 63, 102667. <https://doi.org/10.1016/j.jretconser.2021.102667>
- Tomacruz, M. D. G., & Flor, N. T. (2018). Family perception and their buying behavior for home-delivered food. *International Journal of Tourism Sciences*, 18(4), 237–246. <https://doi.org/10.1080/15980634.2018.1551308>
- Timur, B., Oğuz, Y. E., & Yilmaz, V. (2023). Consumer behavior of mobile food ordering app users during COVID-19: Dining attitudes, e-satisfaction, perceived risk, and continuance intention. *Journal of Hospitality and Tourism Technology*, 14(3), 460-475.
- Ulhaq, R. N., Munandar, J. M., & Rifin, A. (2023). The effect of fear on purchase decisions food and beverages through the online food delivery application during the Covid-19 pandemic. *Jurnal Manajemen (Edisi Elektronik)*, 14(1), 141. <https://doi.org/10.32832/jm-uika.v14i1.9376>
- Venkatesh, V., Morris, M. A., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *Management Information Systems Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the Unified Theory of Acceptance and Use of Technology. *Management Information Systems Quarterly*, 36(1), 157. <https://doi.org/10.2307/41410412>
- Wang, X., Wong, Y. D., Sun, S., & Yuen, K. F. (2022). An investigation of self-service technology usage during the COVID-19 pandemic: The changing perceptions of 'self' and technologies. *Technology in Society*, 70, 102032. <https://doi.org/10.1016/j.techsoc.2022.102032>
- Wang, Y., Tseng, T. H., Wang, W., Shih, Y. W., & Chan, P. (2019). Developing and validating a mobile catering app success model. *International Journal of Hospitality Management*, 77, 19–30. <https://doi.org/10.1016/j.ijhm.2018.06.002>
- Xu, T. (2017). Development analysis of O2O model based on mobile electronic business. *Springer eBooks*, 507–516. [https://doi.org/10.1007/978-981-10-2920-2\\_43](https://doi.org/10.1007/978-981-10-2920-2_43)
- Yapp, E. H. T., & Kataraiian, S. (2022). Key determinants of continuance usage intention: An empirical study of mobile food delivery apps among Malaysians. *Directory of Open Access Journals*, 82(1), 15. <https://doi.org/10.3390/proceedings2022082015>
- Zhou, T. (2019). Understanding social influence on mobile social networking sites: A social support perspective. *Information Development*, 35(2), 220–229. <https://doi.org/10.1177/0266666917738042>