



Determinants of Customer Purchase Intention to Online Food Delivery Services: a Case in Iligan City

Steven Sachi Pangilinan

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

March 5, 2025

DETERMINANTS OF CUSTOMER PURCHASE INTENTION TO ONLINE FOOD DELIVERY SERVICES: A CASE IN ILIGAN CITY

Steven Sachi A. Pangilinan

College of Economics, Business, and Accountancy – Mindanao State University – Iligan Institute of Technology (MSU-IIT)

stevensachi.pangilinan@g.msuiit.edu.ph

ABSTRACT

The study aims to examine determinants that influence purchase intention to use online food delivery applications using a smartphone. Previous studies are mainly focused on key metropolitan areas and generalized national data with little attention on smaller cities such as Iligan City under the post pandemic setting. This research gap is filled through this study by exploring consumer attitudes, challenges and behavioral drivers tailored to Iligan City. The determinants examined in this study are based on the existing theory of Unified Theory of Acceptance and Use of Technology (UTAUT) namely social influence, effort expectancy, performance expectancy, trust, food safety risk perception, hedonic motivation, and personal innovativeness towards purchase intention to use online food delivery applications. Furthermore, the present study also tested the role of food safety risk perception as mediator constructs between trust towards purchase intention on online food delivery services and intention to use online food delivery services through a smartphone. The study employed a quantitative method and 152 respondents participated in this study. The online questionnaires are distributed using random sampling technique and the data is analyzed using Jamovi. The results demonstrate that effort expectancy, personal innovativeness, and trust are key determinants for purchasing intentions toward OFDS. Personal innovativeness was the strongest predictor, lending confidence to its exceptional importance in shaping consumer adoption in Iligan City. Social influence, performance expectancy, and hedonic motivation had no significant effect. Although the study can identify key determinants, it is limited since little generalizability is allowed due to its focus on Iligan City. Future research should further investigate consumer behavior in the online food delivery sector beyond the geographical scope and introduce further factors, such as cultural and regional effects, to enhance the understanding of this phenomenon.

Keywords: Food delivery, Mobile apps, Purchase intention, Consumer Behavior, Technology Adoption

INTRODUCTION

In adapting to the new regular, restaurants worldwide have increasingly begun utilizing online food delivery services (OFDS) to reach customers. Online food delivery services (OFDS) refer to the process of connecting partner restaurants to consumers through a website or mobile application (Ray et al., 2019). In recent years, the food delivery sector has been undergoing rapid technological progress globally as consumer demand pushes restaurants and third-party providers to offer delivery services worldwide (Muller, 2018). The Philippines is seeing that global trend as there is rapid growth in food delivery apps on mobile. The market size of Philippine online food delivery is predicted to reach US\$4.55 billion (Statista, 2024) by 2024. It is most noticeable in significant cities, but more studies need to be done to understand how consumers in Mindanao areas like Iligan City deal with OFDS. Most food delivery services are found in urban areas are more frequent with current literature overwhelmingly targeting highly urbanized areas, leaving small cities underserved in research (Semblante et al., 2024).

Consumers can access restaurants through their mobile application so that in an OFD system, they can have a better choice of restaurants and food items (Pigatto et al., 2017). In the past, consumers access food delivery through restaurant apps like Jollibee, McDonalds, or Pizza Hut. As online food delivery evolves, consumers can pick multiple restaurants to choose from in a single mobile app. OFD platforms are made up of two models; the first is the third-party food delivery aggregators (GrabFood, Foodpanda, Uber Eats, and Swiggy), and the second is the restaurants' platforms (e.g., KFC, Dominos and McDonald's) (Hwang et al., 2020). In 2024, the top applications of consumer choice for online food delivery in the Philippines are GrabFood,

FoodPanda, and Pick.A.Roo (MyBest, 2024). Foodpanda's order count increased twelve times before the pandemic, while restaurant partners grew five times more, estimated to reach 15.8m users by 2025 (Doyle, 2021). The two most used mobile applications for online food delivery in the Philippines are GrabFood, which has 61% of the total market share, and FoodPanda, which has 39% (Balita, 2023). Pick.A.Roo reported an increase of 400% in 2021 and has over 600,000 users in Metro Manila (NewBytes.PH, 2022). In Mindanao, only GrabFood and FoodPanda are the primary options for online food delivery services in Iligan City. Online food delivery (OFD) services have experienced significant growth in large cities like Metro Manila, Cebu City, and Davao City. However, studies are needed to explore the significant effects of determinants on online food delivery services, specifically in Iligan City.

During the pandemic, FoodPanda started its operation in Iligan City in September 2020 (FoodPanda Rides to Batangas, Butuan, Dasmariñas, Iligan, Koronadal, Ormoc and More, 2020). Its services were extended to Iligan City by May 2022 (Promote Iligan, 2022). In light of the expansion of online food delivery services during the pandemic, understanding consumer intentions in the post-pandemic context in Iligan City became important. This research addresses an important gap in the existing literature on online food delivery services (OFDS) in the Philippines' smaller urban areas by focusing on Iligan City. Based on the discussion above, this study aims to answer the following research questions (RQS) to contribute to the OFD literature.

RQ1: What factors determine consumers' intention to purchase online food delivery services in Iligan City?

RQ2: What mediating effect does food safety risk perception have on the relationship between the trust and purchase intentions towards online food delivery services in Iligan City?

RQ3: What are consumers' attitudes, behaviors, and challenges toward online food delivery services in the post pandemic context in Iligan City?

To address this, this study focuses on the determinants (social influence, effort expectancy, performance expectancy, trust, food safety risk perception, hedonic motivation, and personal innovativeness) that drive OFDS usage intention in Iligan City after the pandemic. Finally, it extends the unified theory of acceptance and use of technology (UTAUT) to include hedonic motivation and personal innovativeness constructs. It also explores the determinants influencing customers' purchase intention towards OFDS. It tries to test the mediating role of food safety risk perception towards purchase intention.

In addition to this focus, it's time to build trust by providing reliable information, showing how we deal with food safety, and encouraging customer feedback. Similarly, word-of-mouth campaigns, user-generated content, and referral programs can all be used to leverage social influence to promote the adoption of a product. Another way to improve usability and satisfaction is by making interfaces more straightforward and providing a "reorder" button. Alternative marketing means include targeted strategies such as endorsing frequently used offers to trusted advertisers or including referral incentives for nonfrequent users. Finally, the delivery of food using hygienic practices can reassure customers about food safety even though no direct link has been found between food safety risk perception and purchase intention (Hong et al., 2023).

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Unified theory of acceptance and use of technology

In this study, The UTAUT was adopted as the leading theory. This theory explains four primary constructs: perceived usefulness, perceived ease of use, external pressure, and perceived readiness. Nevertheless, only three determinant constructs have been selected out of this theory. First, performance expectancy is the level at which the user believes the system enables them to accomplish job performance. Second, effort expectancy can be defined as the level of effort required to operate a particular system.

Hence, the third construct is social influence, which is defined as the perception or belief that it is correct to use the new system (Venkatesh et al., 2003). UTAUT is also utilized as the theoretical framework for this research study. Since these models are integrated and correlated, there is a potential and close relationship. This current study utilized UTAUT as the established research model, and three principal components proposed in the current study from UTAUT, including performance expectancy, effort expectancy, and social influence, are the main antecedent variables. The UTAUT has been significantly extended and adapted across numerous fields, although it has incorporated several factors that are sensitive to the context (Roh & Park, 2019). For example, Okumus et al. (2018) included personal innovativeness in the UTAUT to examine the factors that influence the usage intention toward smartphone diet applications (apps) before ordering food at restaurants and realized that the performance expectancy, effort expectancy, social influence, and personal innovativeness have the significant effect on usage intention toward smartphone diet application (app). On the other side of the measure, the equivalent for performance expectancy is hedonic motivation as the gratification through use. It involves using technology in order to enjoy, have fun and exercise pleasure (Venkatesh et al., 2012). In the OFDS context, Zhao and Bacao (2020) extended the UTAUT by combining it with the expectancy confirmation. This study attempts to include two additional constructs (i.e., hedonic motivation and personal innovativeness) in the three main factors from UTAUT, namely social influence, effort expectancy, performance expectancy to improve the prediction of the determinants affecting the purchase intention toward OFDS. Following the perspective of the previous research, this study attempts to include two additional determinants (i.e. personal innovativeness and hedonic motivation) in the three main factors from UTAUT, namely performance expectancy, effort expectancy, and social influence to improve the prediction of the determinants affecting the purchase intention toward OFDS.

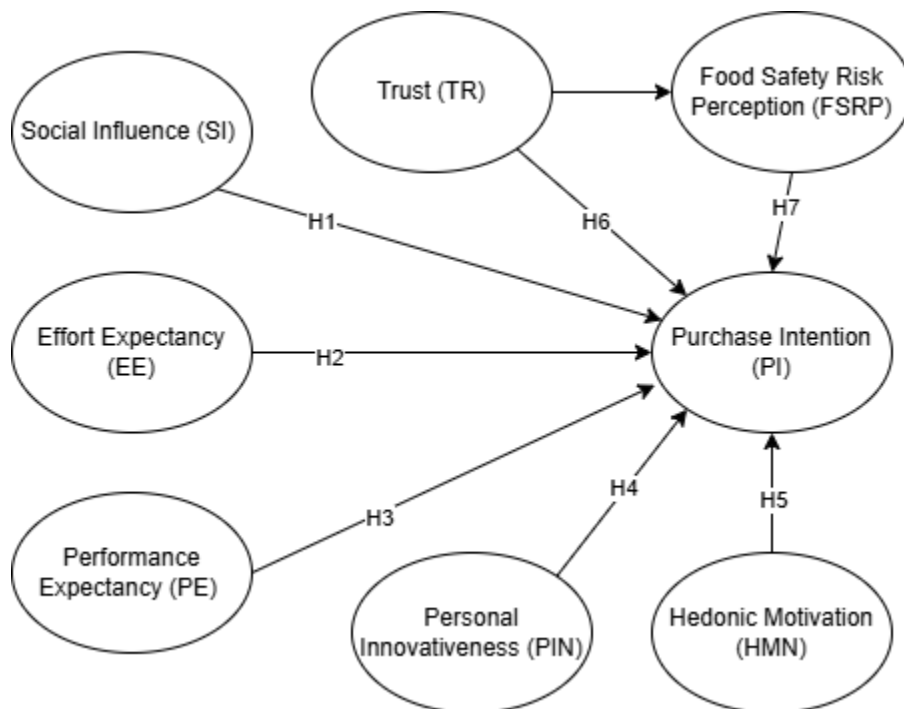


Figure 1: Conceptual Framework

Social Influence to Purchase Intention

When customers regard a product as being useful, the belief takes place in the course of adopting specific beliefs arising from membership of given reference groups or social circles, belonging to the person. In other words, if people believe in what the outsiders among them say as true, in terms of opinion, the opinion optimistically leads to the acknowledgment of the benefits from the service (Bonn et al., 2016). As evidenced by Bonn et al (2016) consumers appreciate the convenience that comes with purchasing wine online especially when influential people are seen patronizing other online wine shops. Compared with dining in, the OFDS concept anticipates that customers order via mobile apps; therefore, purchase intention should help predict customers' actual behavior when using technology. A number of prior studies using surveys on customer related technologies established that social influence enhances the purchase intention as evidenced by flight ticket purchase through the internet (Escobar-Rodríguez & Carvajal-Trujillo, 2014), mobile banking (Bhatiasevi, 2016) and diet application (Okumus et al., 2018).

For example, Beldad and Hegner (2018) conducted a study on the understanding of fitness application users and identified social influence to be a key determinant of the continual usage intention of the application. Other OFDS studies also suggested that customers rely on the opinion of their reference group which is strongly bonded, in adopting OFDS (Al Amin et al., 2021; Lee et al., 2019; Roh & Park, 2019; Troise et al., 2020). Thus, the following hypotheses are developed in the present study:

H1. Social influence significantly affects customers' purchase intention toward OFDS.

Effort Expectancy to Purchase Intention

Effort expectancy is one of the most important usefulness indicators of the user's intention to adopt or/and further engage in the usage of online/mobile technology (for example, Beldad and Hegner, 2018, Bhatiasevi, 2016, Okumus et al., 2018). In particular, customers are more likely to be loyal in using mobile banking service when the usage of such service is low effort (Bhatiasevi, 2016). Like Beldad and Hegner (2018), the authors established that effort expectancy has a significant influence on the continued use of a fitness application. However, with the advancement and maturity of smartphones and apps (Lee et al., 2019; Zhao & Bacao, 2020) and static interface of smartphone apps because of the development of information and communication technologies over time (Lee et al., 2019), the customers did not face much difficulty to use new apps including OFDS as demonstrated in the recent studies of OFDS literature; these studies revealed no mediating role of effort expectancy. Altogether though, OFDS research findings are inconclusive on the effect of purchase intention as other marketing literature suggest that customers have a higher purchase intention toward technology if they perceive usage to be easy and clear.

H2. Effort expectancy significantly affects customers' purchase intention toward OFDS.

Performance Expectancy to Purchase Intention

Performance expectancy is very influential in the use of any service. A particular service or product will compensate for a lack of quality in another area because that enhances life or work efficiency, which drives the purchase of such products (Lee et al., 2019). In the technology-driven service industries, the actual purchase is determined when the service is required to accomplish some tasks (Morosan & DeFranco, 2016). The OFDS studies have similar findings on the link between performance expectancy and purchase intention (Hong et al., 2021; Jun et al., 2021; Lee et al., 2019; Zhao & Bacao, 2020). For instance, Hong et al. (2021) established the Readymade Factories Direct Selling (OFDS) purchase intention hypothesized by the following structural equation model: In the same order, Zhao and Bacao (2020) confirmed that the surveyed OFDS customers will continue to use the services due to the ease of the service.

H3. Performance expectancy significantly affects customers' purchase intention toward OFDS.

Personal Innovativeness to Purchase Intention

In the literature, perceived ease of use along with usefulness was found as being positively affected by an antecedent variable, such as innovation. Recently, Waris et al. (2022) examined customers' adoption intention of drone food delivery services, and the results indicated that innovativeness positively influenced customers' intention to use drone food delivery services. Such a positive relationship was found in other past studies. Slade et al. (2015) identified a significant positive effect of performance expectancy, social influence, and innovativeness on the intention to adopt remote mobile payments. In a study by Sun and Chi (2018), innovativeness had a positive influence on perceived usefulness. In the context of food delivery services, Hwang et al. (2019) noted that hedonic, social, and functional motivation were the dimensions of consumer innovativeness which were found to be significant predictors of attitude and behavioral intentions.

H4. Personal innovativeness will significantly impact purchase intention toward OFDS.

Hedonic Motivation to Purchase Intention

In addition to extrinsic motivation (performance expectancy and intrinsically motivate people's self interest in an activity were for instance perceived usefulness has been.

For instance, the need for intrinsic motivation has been recurrently viewed it was shown that it plays a significant role in favoring the customer's overall intention and willingness. to implement new systems and applications (Alalwan, 2018). He defined hedonic motivation in the following ways in concept: described in terms meaningful activities such as play and enjoyment. of the utilitarian, hedonistic, and functional value or fun and pleasure that may be got from new products. be present; in relations to Web services, applications; thus, such feelings of pleasure might be felt. be correlated to the degree of the level of innovativeness and novelty of with new systems (Venkatesh et al., 2012). In fact, mobile applications continue to become an essential aspect of people's lives. lifestyles worldwide. Furthermore, social apps including MFOAs are considered it is modern or creative (Yeo et. al., 2017), which may cause customers have pleasure and enjoyment while using such new applications It is similarly observed by Okumus et al., 2018 and Yeo et al., 2017. The role of hedonic According to Yeo et al. (2017), motivation was realised determining customers' decision. concerning the extent of the need for and flexibility of online food delivery systems. Okumus and Bilgihan (2014) discovered that perceived Again, enjoyment has been found to affect customers' concern towards adopting MFOAs. Thus, the following hypothesis is suggested:

H5. Hedonic motivation will significantly impact Iliganon customers' purchase intention.

Trust to Purchase Intention

Due to some ways the comparison the OFDS has with online/mobile service providers, in which activities take place in the online/mobilized environment, this study adopts The synthesis of the earlier customer-related studies is as follows: the usage behavior towards online/mobile services and anticipates that if customers of those surveyed who answered affirmatively, 50% categorically expressed a belief that OFDS provides a reliable service as well as meeting its responsibility. then customers will most likely perceive the service as being useful to them. In addition, many studies assessing the technology literacy of the consumer behavior have confirmed the evident positive direct relationship between trust and. intention to use (Cho et al., 2019; Purchases; Nguyen et al., 2019; Zhao & Bacao, 2020). In specifically, Nguyen et al. (2019) discovered that the trust which customers placed on an impact of online food shopping website has a positive effect on their usage intension toward the website. Existing OFDS studies also indicated that customers are more willing to use OFDS when they believe that the service would proceed correctly (Cho et al., 2019; Hong et al., 2021; Jun et al., 2021; Muangmee et al., 2021; Zhao & Bacao, 2020).

H6. Trust significantly affects customers' purchase intention toward OFDS.

Trust to Food Safety Risk Perception to Purchase Intention

In food goods threatened by the animal disease outbreak, Dang and Tran (2020) observed that consumers 'the source choice trust regarding food distributors will result in food guests considering the low threat in the purchase.' Yet, in contrast, Ha et al. (2020) asserted that consumers who believe that the results showed also that people inside the food supplier group tend to see foods as unsafe. Thus, this study suggests that the quality of a supplier's products is more important to customers who trust that supplier more. Even though OFDS might not know the risks of food safety risks, these risks have scared the entire food supply chain, including food, including advertised cases of poisoning and contamination that may occur during the process of delivery. Freer (2020) indicated that among the OFDS users, 36% of respondents had problems with freshness and food. Temperature. Likewise, consumers expressed concern related to food. Hygiene and safety for not using OFDS (Open survey, 2020). Findings from this particular cross-sectional survey illustrate the higher the food safety risk customers can visualize OFDS and lower their intention to use OFDS. Thus, the following hypotheses are formulated in the current study:

H7. Food safety risk perception has significant mediating effect in the relationship between trust and purchase intention.

METHODOLOGY

Data and Sample

A Likert-type questionnaire was used based on the review literature. The questionnaire was organized into two sections: measurement of the study constructs and socio-demographic information of the respondents. Before beginning the survey, a screening question was provided to confirm that the respondents were over 18 years old, and a definition of OFDS was presented to have the same understanding of the concept. The first section of the survey consisted of the socio-demographic information of the respondents, including age, gender, city, usage frequency of online delivery service, and OFDS applications. The second section of the survey comprised eight constructs that were measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), namely social influence, effort expectancy, performance expectancy, trust, food safety risk perception, hedonic motivation, personal innovativeness, and purchase intention toward OFDS. E-questionnaires were used to auto-tally, protect data, and prevent paper damage that can lead to data loss or inaccuracy. Google Excel was used to save the data collected and data were saved on the internet through OneDrive. This secured the data in case of computer memory corruption. The data were collected by random sampling then treated and interpreted using statistical tools and techniques, specifically descriptive analysis, which included data frequencies, mean scores, and standard deviation.

Variables, Measures, and Reliability

People living in Iligan City that are above 18 years old are targeted in this study. To collect the data, an online survey using Google forms was conducted after the pandemic period. To eliminate common method bias, procedural controls were utilized in the survey design process of this study. At the beginning of the survey questionnaire, a clear definition of OFDS and the detailed instruction that all responses will remain anonymous were provided in the informed consent. Up to 150 responses is the target number of respondents for the data collection. According to (Raosoft, Inc., 2021) the city profile of Iligan City (City Profile, 2020) according to the Census of 2020 with the total population of 363,115.

This study evaluated the model using Cronbach's Alpha to test the reliability. Cronbach's Alpha is an important test to be conducted in studies of online food delivery services (OFDS) because it evaluates the reliability or internal consistency of the measurement scales used in the research instrument. An alpha (≥ 0.7) high indicates strong reliability and suggests that the instrument consistently produces the same results. Cronbach's Alpha is tested to indicate that the instrument is related to the OFDS context and reduces measurement errors. It also is helpful to pinpoint items that do not seem to fit well with other items that may not represent good data quality. The Cronbach's Alpha values are tested to each determinant and as follows:

Item	Cronbach's α	Item	Cronbach's α	Item	Cronbach's α	Item	Cronbach's α	Item	Cronbach's α	Item	Cronbach's α	Item	Cronbach's α
SI1	0.367	EE1	0.778	PE1	0.852	PIN1	0.695	HMN1	0.851	TR1	0.524	PI1	0.785
SI2	0.323	EE2	0.778	PE2	0.852	PIN2	0.526	HMN2	0.591	TR2	0.724	PI2	0.700
		EE3	0.853	PE3	0.840	PIN3	0.634	HMN3	0.721	TR3	0.831	PI3	0.761
scale	0.511	scale	0.860	scale	0.893	scale	0.710	scale	0.801	scale	0.779	scale	0.817

Table 1: Reliability analysis of the variables

The Cronbach's alpha test determines that effort expectancy ($\alpha = 0.860$), performance expectancy ($\alpha = 0.893$), trust ($\alpha = 0.779$), hedonic motivation ($\alpha = 0.801$), personal innovativeness ($\alpha = 0.710$), and purchase intention ($\alpha = 0.817$) was within the 0.70 acceptable values, thus indicating acceptable reliability. Indeed, for social influence ($\alpha = 0.511$), it is still considered acceptable. Chan (2017) states that the permissible value for a Cronbach's alpha value is 0.5; however, in social sciences, constructs may exhibit low internal consistency.

Data Analysis

Data analysis of the collected data includes performing descriptive statistics, assessing the data's reliability and validity, and analyzing the data using correlation, regression, and mediation. In this study, Jamovi software approach by Şahin, M., & Aybek, E. (2020) can perform descriptive statistics to describe and summarize the characteristics of the data set, the sample, and data measures. These data sets are the responses collected from the sample size of the population, which in this case are the food delivery app users in Iligan City.

As for the correlation used in the analysis of the collected data, this approach was used to analyze particular relationships between variables. This method allows to measure the strength and direction between variables. It has several advantages including valuable insights into potential associations and the method can be useful to predict outcomes. Regression can determine how good the independent variables are to predict purchase intention. This is especially vital when studying the causes driving a consumer's choice of online food delivery services since it can help provide proper marketing strategies.

Understanding the complex relationships between the factors that affect purchase intention for online food delivery services heavily relies on mediation. Mediation examines whether an intermediate variable might be responsible for the way other variables had an indirect effect on purchase intention.

RESULTS AND DISCUSSION

Sample profile

Characteristics	Category	n	%
Gender	Male	44	31.40
	Female	96	68.60
Age	Less than 30 years	118	77.60
	30-39 years old	10	6.58
	40-49 years old	3	1.97
	50-59 years old	4	2.63
	Above 59 years old	5	3.30
Online Food Delivery Service	FoodPanda	81	53.29
	Grab Food	18	11.84
	Foodpanda, Grab Food	38	25
	Foodpanda, Grab Food w/ others	15	9.87
Usage Frequency	Once a Month or Less	50	32.89
	2-3 Times a Month	55	36.18
	1-2 Times a Week	25	16.45
	3-5 Times a Week	8	5.26
	More than 5 Times a Week	2	1.4

Table 2: Demographic profile of the respondents

The demographic profile of the respondents is shown in Table 2. Up to 68.6% of the respondents are female, and up to 31.4% are male. According to Keeble et al., 2020, most women will order conveniently because of tight schedules or meeting other responsibilities. Most respondents are less than 30 years old and belong to the young adult group with up to 77.6% of the respondents. As for the age factor, it has been established that consumers from the age group 18-24 prioritize the category of online food delivery because of its cost efficiency and a focus on applications created with the technical-industrial age in mind. Platform frequency is promoted through the popularity of promotions, appealing to urban and suburban consumer demographics (Flynn, 2023).

Up to 53.29% of the respondents use FoodPanda as their primary platform for online food delivery services, whereas for Grab Food, 11.84% use that platform. In terms of usage between both FoodPanda and Grab Food as platforms for online food delivery, 25%. The usage frequency where most respondents order online food delivery is 2-3 times a month at 36.18%. This will be followed by 32.89% of the respondents ordering online food delivery once a month or less and 16.45% ordering 1-2 times a week.

		SI	EE	PE	PIN	HMN	TR	PI
SI	Spearman's rho	—						
	p-value	—						
EE	Spearman's rho	0.425 ***	—					
	p-value	< .001	—					
PE	Spearman's rho	0.323 ***	0.62 ***	—				
	p-value	< .001	< .001	—				
PIN	Spearman's rho	0.435 ***	0.529 ***	0.501 ***	—			
	p-value	< .001	< .001	< .001	—			
HMN	Spearman's rho	0.429 ***	0.491 ***	0.376 ***	0.436 ***	—		
	p-value	< .001	< .001	< .001	< .001	—		
TR	Spearman's rho	0.338 ***	0.536 ***	0.53 ***	0.539 ***	0.361 ***	—	
	p-value	< .001	< .001	< .001	< .001	< .001	—	
PI	Spearman's rho	0.435 ***	0.566 ***	0.51 ***	0.617 ***	0.457 ***	0.612 ***	—
	p-value	< .001	< .001	< .001	< .001	< .001	< .001	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3: Correlation matrix of the variables

The Spearman correlation results revealed some significant relationships using variables and purchase intention. There was a significant and moderate positive association between social influence and purchase intention ($r = 0.435$, $p < 0.001$). The same is true of a significant, positive, moderate association between effort expectancy and purchase intention ($r = 0.566$, $p < .001$). The relationship between performance expectancy and purchase intention was positive, significant, and moderate ($r = 0.510$, $p < 0.104$). A strong, positive, and significant association was also found between personal innovativeness and purchase intention ($r = 0.617$, $p < 0.001$). In addition, it was also found that hedonic motivation to have a moderate, and also positive, significant association with purchase intention ($r = 0.457$, $p < 0.001$). Next, A strong positive and significant ($r = 0.612$, $p < 0.001$) association also existed between trust and purchase intention.

Model Fit Measures						
Model	R	R ²	Overall Model Test			
			F	df1	df2	p
1	0.8	0.64	39.5	6	133	< .001

Model Coefficients - PI				
Predictor	Estimate	SE	t	p
Intercept	0.1187	0.2742	0.433	0.666
SI	0.0738	0.0561	1.316	0.19
EE	0.3321	0.0813	4.083	< .001
PE	0.0255	0.0792	0.322	0.748
PIN	0.2173	0.0662	3.285	0.001
HMN	0.0365	0.0745	0.489	0.625
TR	0.3181	0.0847	3.754	< .001

	Mean	Standard Deviation	Shapiro-Wilk W	Shapiro-Wilk p
SI	3.63	0.838	0.951	< .001
EE	4.07	0.815	0.867	< .001
PE	4.20	0.819	0.852	< .001
PIN	3.50	0.789	0.971	0.005
HMN	3.87	0.702	0.927	< .001
TR	3.75	0.678	0.901	< .001
PI	3.94	0.778	0.924	< .001

Table 4: Regression Analysis and Predictor Distribution Assessment (Shapiro-Wilk)

The result gives an R² value of 0.640, meaning that the variance explained for the dependent variable, purchase intention, toward OFDS is 64%. Thus, the model seems to have a strong explanatory power.

The p-value for the overall model test is $p < .001$ and determines that the model is significant statistically determines that the combination of predictors, taken together, can predict the dependent variable ($R^2 = .640$, $F(6, 133) = 39.5$, $p < .001$). The robust and reliable model presented a high R^2 value and a highly significant p-value.

It was found social influence does not significantly affect purchase intention towards OFDS ($\beta = .074$, $p = .190$), thus H1 is not supported. According to the results, that effort expectancy significantly affect purchase intention towards OFDS ($\beta = .332$, $p < .001$), indicating H2 is supported. However, performance expectancy does not significantly affect customers' purchase intention toward OFDS ($\beta = .025$, $p = .748$), meaning H3 is not supported. Moreover, personal innovativeness did significantly impact purchase intention toward OFDS ($\beta = .217$, $p = .001$), H4 is supported. Hedonic motivation does not significantly impact to Iliganon's purchase intention ($\beta = .036$, $p = .625$) with H5 not supported. Trust did significantly affect customers' purchase intention toward OFDS ($\beta = .318$, $p < .001$), having H6 supported.

The Shapiro-Wilk normality test revealed that the distribution of all variables, social influence ($SW = .951$, $p < .001$), effort expectancy ($SW = .867$, $p < .001$), performance expectancy ($SW = .852$, $p < .001$), personal innovativeness ($SW = .971$, $p = .005$), hedonic motivation ($SW = .927$, $p < .001$), trust ($SW = .901$, $p < .001$), and purchase intention ($SW = .924$, $p < .001$) is not normally distributed. It means the data does not conform to the normal distribution assumption.

Mediation Estimates					
Effect	Estimate	SE	Z	p	% Mediation
Indirect	-8.06e-4	0.0139	-0.058	0.954	0.104
Direct	0.774	0.0729	10.6086	< .001	99.896
Total	0.773	0.0716	10.7947	< .001	100

Table 5: FSRP mediating effect in the relationship between TR and PI

Table 5 shows the direct and indirect effects on purchase intention. The indirect effects have a mediator, whereas direct impact represents direct relations without mediation. Furthermore, the mediation analysis shows that food safety risk perception has no significant mediating effect in the relationship between trust and purchase intention ($p = 0.954$) and only 0.104% of the total effect being mediated. Instead, the relationship between trust and purchase intention is almost entirely direct with a strong direct effect ($p < .001$) accounting a 99.90% of the total effect.

Convenience-Driven Adoption with Persistent Service Challenges

The results revealed that convenience is the most favorable point of online food delivery services, and about 85% cited it as one of the most crucial advantages. Many respondents used these services mainly because they were easy to use, had a high time efficiency, and could afford to order food from home. Moreover, around 70% of respondents frequently purchase fast food items, such as Jollibee, McDonald's, and KFC, with a smaller proportion choosing to buy other sweet and alcoholic products and desserts, pizza, and drinks. It was also found that online food delivery services enhanced their appeal due to the ability to offer multiple restaurant options on a single platform and promotional discounts. These results show how these platforms serve the preferences of the present time and effort-saving consumers when getting food. However, 60% of respondents reported other problems like incorrect or incomplete orders 20%, delayed deliveries 15%, or trouble finding addresses 10%. Others also suggested that people wanted refund policies to make credits refunded into the original payment methods rather than e-wallets. 10% of respondents mentioned reasons for longer delivery times, such as external factors such as traffic and weak internet connections. In addition, around 5% of arrivals said the packaging was an issue, such as items that weren't appropriately packed or utensils went missing. The results remind service providers to increase operational efficiency, communication between riders and customers, and refund policies to increase customer satisfaction and trust.

CONCLUSION

As popularity of OFDS increases, this research extended UTAUT with the additional determinants such as hedonic motivation and personal innovativeness to examine factors to purchase intention toward OFDS. This study revealed that out of three factors of social influence, effort expectancy, and performance expectancy adopted from the UTAUT, trust and personal innovativeness significantly influenced purchase intention. Specifically, personal innovativeness was the strongest determinant of purchase intention, indicating that user's tendency to embrace and adopt new and innovative products or technologies contributes a huge significant role in influencing their intention to make a purchase to online food delivery services. Continuing in a post-pandemic context, this study addressed this gap in the understanding of consumer purchase intentions for online food delivery services in smaller urban settings in Iligan City. In addition to extending the Unified Theory of Acceptance and Use of Technology (UTAUT), it aimed at examining the determinants of OFDS purchase intention.

The research conducted in this study used a quantitative approach through online surveys. 152 respondents were used as the source of data, which were then analyzed using Jamovi software. Social influence, effort expectancy, performance expectancy, personal innovativeness, hedonic motivation, and trust were examined as relationships, along with their impact on purchase intentions.

Purchase intention is determined by effort expectancy, performance expectancy, trust, and personal innovativeness. Personal innovativeness, as an influential determinant among these, is the essential element for consumers' intent to use OFDS, given that the willingness of consumers to adopt new and innovative technologies is crucial to induce their use of OFDS. On the other hand, purchase intention does not seem to be significantly influenced by constructs such as social influence, performance expectancy, and hedonic motivation has been hypothesized in this area.

Moreover, the relationship between trust and purchase intention is significant, while between trust and purchase intention, it does not mediate food safety risk perception. These results are consistent with previous work highlighting the role of usability, efficiency, and consumer confidence in adopting new technology. Furthermore, personal innovativeness is in line with understanding the importance of consumer innovativeness to technology adoption; these insights also have potential practical implications for the online food delivery service and local businesses in Iligan City.

Marketing strategies should focus on user-friendly interfaces, reliability, and innovative features to attract and retain customers. Another approach would be to engage tech-savvy individuals in educational campaigns or promotions to try to entice them to adopt this new channel. However, trust-building initiatives, like clear food safety policies and reliable delivery systems, are critical in rebuilding consumer confidence.

Limitations and Future Research

However, this study has limitations. The results may not be generalized to other regions due to the restriction of the sample to Iligan City. Finally, while the determinants identified were key, other potential factors that may influence the purchase intention, such as regional and cultural preferences, were not considered. Future research can be done using more significant and more diverse samples, as well as other variables. Further comparative studies across different cities or regions can enrich our understanding of how consumers behave towards OFDS in the Philippines.

Finally, this paper develops a rich understanding of the drivers of OFDS purchase intention in Iligan City. It offers actionable insights to relevant stakeholders for future research investigation in this dynamic sector.

REFERENCES

- Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65–77.
- Al Amin, M., Arefin, M. S., Alam, M. R., Ahammad, T., & Hoque, M. R. (2021). Using mobile food delivery applications during COVID-19 pandemic: An extended model of planned behavior. *Journal of Food Products Marketing*, 27(2), 105–126.

- Al-Emran, M., Arpaci, I., & Salloum, S. A. (2020). An empirical examination of continuous intention to use m-learning: An integrated model. *Education and Information Technologies*, 25(4), 2899–2918.
- Balita, P. (2023). Market share dynamics in the Philippine food delivery industry. *Philippine Business Review*, 12(4), 23–35.
- Beldad, A. D., & Hegner, S. M. (2018). Expanding the technology acceptance model with the inclusion of trust, social influence, and health valuation to determine the predictors of German users' willingness to continue using a fitness app: A structural equation modeling approach. *International Journal of Human-Computer Interaction*, 34(9), 882–893.
- Bhatiasevi, V. (2016). An extended UTAUT model to explain the adoption of mobile banking. *Information Development*, 32(4), 799–814.
- Bonn, M. A., Kim, W. G., Kang, S., & Cho, M. (2016). Purchasing wine online: The effects of social influence, perceived usefulness, perceived ease of use, and wine involvement. *Journal of Hospitality Marketing & Management*, 25(7), 841–869.
- Choi, G., & Chung, H. (2012). Elaborating the technology acceptance model with social pressure and social benefits for social networking sites (SNSs). *Proceedings of the American Society for Information Science and Technology*, 49(1), 1–3.
- City Profile. (2020). Iligan City profile: 2020 Census of Population and Housing. Philippine Statistics Authority.
- Dang, H. D., & Tran, G. T. (2020). Explaining consumers' intention for traceable pork regarding animal disease: The role of food safety concern, risk perception, trust, and habit. *International Journal of Food Science*, 2020, 1–13.
- Doyle, C. (2021). The growth of food delivery services: A pandemic-driven surge. *Journal of Business and Economics*, 34(2), 45–58.
- Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, 43, 70–88.
- FoodPanda Rides to Batangas, Butuan, Dasmariñas, Iligan, Koronadal, Ormoc and More. (2020, September). FoodPanda expands operations to new cities across the Philippines. Retrieved from <https://foodpanda.ph>
- Flynn, J. (2023, February 28). 18+ Food Delivery Statistics [2023]: Online Ordering Industry Numbers You Need To Know. Zippia. <https://www.zippia.com/advice/food-delivery-industry-statistics/>
- Freer, A. (2020). Food delivery apps have a customer service issue. *Business of Apps*. <https://www.businessofapps.com/news/food-delivery-apps-have-a-customer-service-issue/>.
- Ha, T. M., Shakur, S., & Do, K. H. P. (2020). Linkages among food safety risk perception, trust and information: Evidence from Hanoi consumers. *Food Control*, 110, Article 106965.
- Hong, C., Choi, H., Choi, E.-K., & Joung, H.-W. (2021). Factors affecting customer intention to use online food delivery services before and during the COVID-19 pandemic. *Journal of Hospitality and Tourism Management*, 48, 509–518.
- Hong, C., Choi, E.-K. (C.), & Joung, H.-W. (D.). (2023). Determinants of customer purchase intention toward online food delivery services: The moderating role of usage frequency. *Journal of Hospitality and Tourism Management*, 54, 76–87. <https://doi.org/10.1016/j.jht.2022.12.005>
- Hwang, J.; Kim, H.; Kim, W. Investigating motivated consumer innovativeness in the context of drone food delivery services. *J. Hosp. Tour. Manag.* 2019, 38, 102–110.
- Hwang, J., Kim, J., & Kim, G. T. (2020). Sustainability of online food delivery (OFD) services: Dual perspective of restaurants and consumers. *Sustainability*, 12(20), 1–16.
- Jun, K., Yoon, B., Lee, S., & Lee, D. S. (2021). Factors influencing customer decisions to use online food delivery service during the COVID-19 pandemic. *Foods*, 11(1), 64.
- Lígia Isoni Auad, Verônica Cortez Ginani, Eliana, Stedefeldt, E., Costa, A., Nakano, E. Y., & Zandonadi, R. P. (2019). Brazilian Food Truck Consumers' Profile, Choices, Preferences, and Food Safety Importance Perception. *Nutrients*, 11(5), 1175–1175. <https://doi.org/10.3390/nu11051175>
- Maimaiti, M., Zhao, X., Jia, M., Ru, Y., & Zhu, S. (2018). How we eat determines what we become: Opportunities and challenges brought by food delivery industry in a changing world in China. *European Journal of Clinical Nutrition*, 72(9), 1282–1286.
- Morosan, C., & DeFranco, A. (2016). Modeling guests' intentions to use mobile apps in hotels: The roles of personalization, privacy, and involvement. *International Journal of Contemporary Hospitality Management*, 28(9), 1968–1991.
- 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.
- MyBest. (2024). Top 10 online food delivery apps in the Philippines. Retrieved from <https://mybest.ph>
- NewBytes.PH. (2022). Pick.A.Roo sees 400% growth and 600,000 users in Metro Manila. Retrieved from <https://newbytes.ph>
- Nguyen, T. T. H., Nguyen, N., Nguyen, T. B. L., Phan, T. T. H., Bui, L. P., & Moon, H. C. (2019). Investigating consumer attitude and intention towards online food purchasing in an emerging economy: An extended tam approach. *Foods*, 8(11), 576.
- Okumus, B., & Bilgihan, A. (2014). Proposing a model to test smartphone users' intention to use smart applications when ordering food in restaurants. *Journal of Hospitality and Tourism Technology*, 5(1), 31–49.
- Okumus, B., Ali, F., Bilgihan, A., & Ozturk, A. B. (2018). Psychological factors influencing customers' acceptance of smartphone diet apps when ordering food at restaurants. *International Journal of Hospitality Management*, 72, 67–77.
- Online Food Delivery - Philippines | Market Forecast. (2024). Statista. <https://www.statista.com/outlook/emo/online-food-delivery/philippines>
- Opensurvey. (2020). Delivery service trend report 2020. <https://blog.opensurvey.co.kr/trendreport/delivery-2020/>.
- Pigatto, G., Machado, J. G. de C. F., Negreti, A. de S., & Machado, L. M. (2017). Domino effect in food delivery apps: An exploratory study. *British Food Journal*, 119(11), 2405–2420.
- Promote Iligan. (2022). Food delivery services expand to Iligan City in May 2022. Retrieved from <https://promoteiligan.ph>

- Ray, A., Dhir, A., Bala, P. K., & Kaur, P. (2019). Why do people use food delivery apps (FDA)? A uses and gratification theory perspective. *Journal of Retailing and Consumer Services*, 51, 221–230.
- Şahin, M., & Aybek, E. (2020) can perform descriptive statistics to describe and summarize the characteristics of the data set, the sample, and data measures.
- Sample Size Calculator by Raosoft, Inc. (2021). On.driv.tw. https://3ynihrnjb7v5zcebdgtvag.on.driv.tw/ThunkableTest/UserFiles/daniel_larry.html
- Semblante, C. J., Catanduanes, R., Martin, A., Radaza, K. J. Q. II, Bokinkito, P. B. Jr., & Velasco, L. C. (2024). Food delivery service applications in highly urbanized cities: A scoping review. *International Journal of Computing and Digital Systems*, 15(1), 821-835. <https://doi.org/10.12785/ijcds/150159>
- Slade, E.L.; Dwivedi, Y.K.; Piercy, N.C.; Williams, M.D. Modeling consumers' adoption intentions of remote mobile payments in the United Kingdom: Extending UTAUT with innovativeness, risk, and trust. *Psychol. Mark.* 2015, 32, 860–873.
- Sun, J.; Chi, T. Key factors influencing the adoption of apparel mobile commerce: An empirical study of Chinese consumers. *J. Text. Inst.* 2018, 109, 785–797.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- 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. *MIS Quarterly*, 36(1), 157–178.
- Waris, I.; Ali, R.; Nayyar, A.; Baz, M.; Liu, R.; Hameed, I. An Empirical Evaluation of Customers' Adoption of Drone Food Delivery Services: An Extended Technology Acceptance Model. *Sustainability* 2022, 14, 2922.
- Yeo, V. C. S., Goh, S. K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, 35, 150–162.