# Trust in E-commerce Acceptance and Use: The Case of the Philippine Online Food Delivery and Tourism Booking Services

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As the Philippine business environment continues to look to information technologies for new avenues of development, growth, and sustainability, the pressure to design and develop the necessary e-commerce channels to support these trends has also increased. Therefore, given this context, academic research should also keep up to provide certain theoretically sound and empirically supported evidences to provide valuable insights. In turn, these insights should address the gaps between what the environment demands, what the industry offers, and what the customers want. This research, employing an integrated theoretical framework of trust theory and the Unified Theory of Acceptance and Use of Technology (UTAUT), attempts to contribute to this issue. Analyzing data from 399 customers of online food delivery and tourism booking services, this research identifies certain factors that affect Filipino online customers' behavioral intentions to use technology, specifically the websites and mobile apps of these services. Through a battery of statistical analyses, this research shows that trust significantly contributes to these customers' perceptions of their utilitarian, environmental, and hedonic expectations towards using websites and mobile apps. However, not all of these expectations exert significant influence on their behavioral intentions to use technology. This opens up theoretical and practical opportunities to enhance the strengths and address the weaknesses of these particular websites and mobile apps. Further implications and future research directions are also discussed.

Keywords: Food delivery, tourism booking, e-commerce, trust, UTAUT

#### 1 Introduction

While researchers have repeatedly observed that information technologies (ITs) and information communication technologies (ICTs) are increasingly becoming a part of individuals' decision making for commercial purposes (Alalwan, 2020; Amalia & Indrawati, 2019; Dwiyedi et al., 2019; Izzati, 2020; Palau-Saumell et al., 2019; Patil et al., 2020; Vasanthakumar & Arunprakash, 2019), the sudden changes in the social and commercial environments have forced many businesses to change their operations models, turning to IT alternatives such as e-commerce to adapt (Rappler.com, 2020). Although the numbers describing the internet and social media use in the Philippines paint a very rosy picture of its potential, e-commerce-related numbers have been slow to pick up; and it has taken a drastic reduction in mobility due to the COVID-19 pandemic for Filipinos to further exploit ecommerce (Masigan, 2020). From a mere two percent before the pandemic, e-commerce adoption has risen to 76%, leading to sales projections breaching US\$12 billion by 2025. This includes an actual doubling of growth in the number of buyers and in the monetary value of purchases from 2019 (amounting to US\$3 billion) in the first six months of 2020. In addition, this has reignited public interest in developing the overall e-commerce infrastructure of the country, renewing previous calls for better policies and programs to support Filipino companies and consumers who desire to engage in e-commerce (Cahiles-Magkilat, 2020), and more academic research.

The motivations for this research are multiple-fold. From the academic side, this research contributes to the ongoing calls to continuously scrutinize the established information system (IS) theories and models by subjecting them to different contexts and environments and introducing other possible factors that can potentially make these theories and models more inclusive (Venkatesh et al., 2016). Also, an enhanced understanding of what makes e-commerce work and what makes it attractive in the Philippines is key for companies to properly entice their customers to engage in their online channels, rather than continuously rely on their brick-and-mortar presence (Almonte et al., 2020). Additionally, this research complements ongoing efforts to theorize and contextualize IT acceptance and use in the Philippines, especially in taking on the role of trust (Capistrano, 2020). This is in line

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with the recognition by the Philippines' Department of Trade and Industry (DTI) of the importance of trust-building measures to enhance the country's overall e-commerce landscape (Cahiles-Magkilat, 2020).

From the practical side, this research presents newer contexts, online food delivery and tourism booking services in both website and mobile app form, to complement the existing pool of literature. Aside from the fact that these two sectors are considered to have great potential (Diangson, 2018; INQUIRER.net BrandRoom, 2017; Roque, 2020), the COVID-19 situation has significantly influenced the way these two sectors are perceived for a number of different reasons (Department of Tourism, 2020; Manalang, 2020; Roque, 2020).

Prior to the pandemic, the food delivery service was on a very attractive trajectory. In 2018, the country's online food delivery market (via websites or mobile apps): (1) was valued at around US\$228.1 million; (2) was patronized by almost eight million Filipinos; (3) accounted for 25% of the total food services industry; and (4) was projected to grow annually by 20% through 2020 (Go, 2018). As for the tourism booking service, pre-COVID-19 expectations projected that the online travel market in the Philippines would grow from US\$1.1 billion in 2015 to US\$4.6 billion by 2025 (Manila Standard Business, 2018).

However, regardless of the COVID-19 external environmental shock, many Philippine businesses, including those in the food and tourism services, have ramped up their e-commerce efforts, albeit for different reasons. Because of the significant uptick in demand for online channels to place orders and make deliveries, many food businesses have enhanced their presences through their own websites and mobile apps or by partnering with third-party ones (Manalang, 2020; Masigan, 2020; Rappler.com, 2020). However, for the tourism industry, which was hit very hard by the pandemic, many stakeholders are exploring online channels as tools to help arrest the decline in businesses, rethink business models, and even encourage future business activities (Roque, 2020). Hence, if companies want to participate in e-commerce, they ought to heavily consider what their customers want as they develop their websites and mobile apps.

Now that COVID-19 has prompted Filipino markets and industries to consider embracing ecommerce technologies to do business, businesses must ensure that they are able to provide high-quality online platforms to sell their products and services (Masigan, 2020). Past researches have amply demonstrated that in order for businesses to design new platforms for their online presences, or improve their existing ones, they must refer to the feedback and insights of consumers who have prior experiences using such online platforms (Capistrano, 2020; Dwivedi et al., 2019; Venkatesh et al., 2003; Venkatesh et al., 2011; Venkatesh et al., 2016); in this case, those who have transacted through websites and mobile apps of services offering food delivery (Alalwan, 2020; Izzati, 2020; Khalilzadeh et al., 2017; Vasanthakumar & Arunprakash, 2019) and tourism bookings (Amalia & Indrawati, 2019; Lien et al., 2015; Ozturk et al., 2016; Tan & Ooi, 2018).

By comparing and contrasting two different contexts of food delivery services and tourism booking services, this research hopes to demonstrate the importance of contextual factors in making observations and decisions regarding IT acceptance and use. There is a tendency in practice to draw conclusions based on macroeconomic points of view utilizing aggregate data, assuming that these are one-size-fits-all ideas applicable across different contexts employing the same or highly similar technologies. Particularly, this research strongly discourages assumptions and conclusions that just because different industries employ similar website and mobile app technologies, they can therefore broadly apply similar suggestions, recommendations, and courses of action. In this case, these contextual factors are the industries covered in this research - food delivery services and tourism booking services. For one, the prices and the perceived values of the respective product offerings in these two contexts are very different, and previous researches have made repeated observations on the influence of price and perceived value in shaping customer feedback and behavior (Alalwan, 2020; Tan & Ooi, 2018). These two considerations alone can influence many aspects of the consumer's ecommerce use (Escobar-Rodríguez & Carvajal-Trujillo, 2014; Khalilzadeh et al., 2017). In addition, even if there are similarities in the market profiles (e.g., demographics and psychographics) of Filipinos who use websites and mobile apps to avail of these services, this research advocates that there can still be significant differences in their online purchase behaviors simply because the products and services that they avail are different.

Also, this research heeds the present calls for more research to enhance the appreciation and understanding of IT acceptance and use from a certain point of view (Almonte et al., 2020; Capistrano, 2020; Venkatesh et al., 2016). This is all aside from the current dearth of academic discussions in the Philippine context of IT use, despite numerous pronouncements, comments, opinions, and discussions from the domestic and international industry that the Philippines is one of the biggest pools of internet users.

Therefore, the following research questions are posed:

**RQ1:** What factors influence Philippine online food delivery and tourism booking services acceptance and use?

**RQ2:** What is the role of trust in Philippine online food delivery and tourism booking services acceptance and use?

The rest of this paper is structured as follows. Section 2 presents the review of related literature, discussing the relevant theories and the selected theoretical framework, all leading to the development of the research hypotheses. Section 3 provides information regarding the methods for data collection and analyses. Section 4 presents the results of the statistical analyses done, and some initial interpretations of them. Lastly, Section 5 covers the conclusions and discussions, addressing the research questions, interpreting further the results of the analysis, and providing a number of theoretical and managerial implications, and directions for future research.

## 2 Literature Review

## 2.1 E-commerce Use, Attitudes, and Behaviors

Most reviews on consumer technologies, such as websites and mobile apps, focus on several dimensions of usefulness, convenience, accessibility, empowerment, diversity of features, choices, and options to use, and a slew of others (Cahiles-Magkilat, 2020; Diangson, 2018; INQUIRER.net BrandRoom, 2017; Masigan, 2020). All of these dimensions are supposed to ensure significantly enhanced operations to better serve customers (Go, 2018; Manila Standard Business, 2018). In response, IS research has produced a number of theoretical discussions trying to explain and predict certain user attitudes and behaviors across multiple contexts. For this context, this research adopts the Unified Theory of Acceptance and Use of Technology (UTAUT) as the theoretical foundation. Firstly, it has considerable explanatory power and has demonstrated a certain degree of robustness across different contexts (Dwivedi et al., 2019). Secondly, the UTAUT perspective takes into consideration individual users' expectations and perceptions (Alalwan, 2020) and the inputs of the society around these individual users (Izzati, 2020) as critical constructs influencing intentions of acceptance and use.

Originally, UTAUT is a product of a comprehensive review and synthesis of several theoretical models, including the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT), positing that the four basic factors of performance expectancy, effort expectancy, social influence, and facilitating conditions each exert influence of behavioral intentions to use technology (Venkatesh et al., 2003, p. 447). Over time, UTAUT has proven its robustness, being applied in many different contexts beyond its original scope of computer use in workplaces (Venkatesh et al., 2016). UTAUT has also experienced several revisions and additions to its scope (Dwivedi et al., 2019; Venkatesh et al., 2011; Venkatesh et al., 2016), some of which are also considered in this research. This research adopts and extends the previous UTAUT application to food services (Alalwan, 2020; Izzati, 2020; Khalilzadeh et al., 2017; Palau-Saumell et al., 2019) and tourism booking (Amalia & Indrawati, 2019; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Ozturk et al., 2016; Tan & Ooi, 2018). Furthermore, an additional variable of hedonic motivations is also considered in this research, primarily to reflect the reality that some hedonic elements, such as fun, enjoyment, and satisfaction derived from technology acceptance and use, can enhance the overall

perceptions of the technology (Alalwan, 2020; Khalilzadeh et al., 2017; Ozturk et al., 2016; Palau-Saumell et al., 2019; Tan & Ooi, 2018).

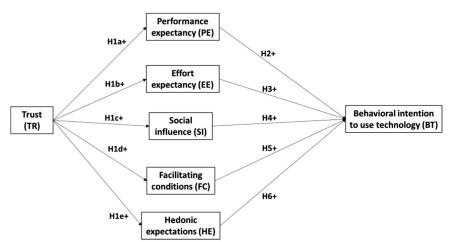


Figure 1. Proposed research model

## 2.2 Trust Theory in E-commerce Use

Discourse on trust in IS research is continuously evolving. Even across different research contexts, the theoretical lens taken on by the role of trust can vary as well (McKnight & Chervany, 2001; McKnight et al., 2002). In e-commerce, trust is a common issue that should not be excluded in the discussion, most especially if markets for e-commerce experience meteoric rises (Cahiles-Magkilat, 2020; Diangson, 2018; INQUIRER.net BrandRoom, 2017; Masigan, 2020). For this context, this research defines trust as the initial stage of developing favorable reactions, attitudes, and perceptions towards the service provider. These initial stages have been theorized as important factors influencing further evaluations of the IT in question, which would then lead to influencing IT acceptance, use, and continued use (Venkatesh et al., 2011). More specifically, trust provides some degree of subjective guarantee that users will have a positive experience using the technology, and therefore form more favorable perceptions towards the technology and towards the service providers using the technology (Khalilzadeh et al., 2017; Patil et al., 2020). Furthermore, this particular definition of trust is employed in this research to reflect the reality that many existing food delivery and tourism booking services are operated by well-known and reputable organizations. Consistent with theory, such favorable images can already establish initial trust beliefs (McKnight & Chervany, 2001; McKnight et al., 2002). However, this puts pressure on these organizations to follow through on those initial impressions by employing good quality technologies to deliver on their products and services (Venkatesh et al., 2011).

Theoretically, there are some previous studies that explored the role of trust within the context of UTAUT (Khalilzadeh et al., 2017; Patil et al., 2020; Venkatesh et al., 2011). Especially for e-commerce, trust theory is an important consideration (Lien et al., 2015; Vasanthakumar & Arunprakash, 2019), especially since these online services of food delivery and tourism booking include two distinct functions that require a significant degree of user trust: (1) the collection of personal information; and (2) the facilitation of online payment mechanisms via digital currencies or credit cards. Online food delivery services require a customer name, a destination address, and contact details, while online tourism booking requires similar user data as well. Also, both services encourage using cashless transactions to make their payments. This makes customers vulnerable, and therefore expectations regarding the services that they want to avail themselves rises (Lien et al., 2015), and their tolerance for mistakes of the service provider reduces (Vasanthakumar & Arunprakash, 2019). But, on the other hand, once trust is achieved, it contributes to favorable perceptions towards the service and the technology it employs (Capistrano, 2020; Khalilzadeh et al., 2017), and also reduces any unfavorable perceptions (Lien et al., 2015; Vasanthakumar & Arunprakash, 2019). Specifically, trust is an important mitigating factor in several negative perceptions and a crucial factor in enhancing positive perceptions

(McKnight & Chervany, 2001; McKnight et al., 2002). Therefore, the following hypotheses are proposed for this research:

**H1 (a to e):** Filipino users' trust positively influences their (a) performance expectancy; (b) effort expectancy; (c) social influence; (d) facilitating conditions; (e) hedonic motivations involving online food delivery and tourism booking websites and mobile apps.

#### 2.3 UTAUT in E-commerce Use

Performance expectancy is an individual's belief that using the technology being scrutinized helps attain performance gains in more convenient and productive ways (Venkatesh et al., 2003). Largely a utilitarian construct, it measures user perceptions of the main uses and benefits derived from using the technology (Alalwan, 2020), especially when it leads to the quicker and more efficient execution of tasks (Tan & Ooi, 2018). It is all about the users' cognitive perceptions of the overall usefulness of the technology (Venkatesh et al., 2011). In this research context, this can mean offering a wide selection variety, such as diverse choices and options of restaurants and cuisines to order, and of hotel accommodations, travel routes, and pre-packaged itineraries; collecting and selecting sufficient information to help make decisions on these choices and options; and eventually completing transactions conveniently (Alalwan, 2020; Palau-Saumell et al., 2019; Tan & Ooi, 2018). And as the UTAUT model posits, favorably delivering on these expectations leads to favorable increases in users' behavioral intentions to use the technology (Dwivedi et al., 2019; Venkatesh et al., 2003; Venkatesh et al., 2011; Venkatesh et al., 2016). Consistent with the theory, this research hypothesizes that:

**H2:** Filipino users' performance expectancy positively influences their behavioral intention to use online food delivery and tourism booking websites and mobile apps.

Effort expectancy is the ease of use of the technology in question (Venkatesh et al., 2003). Another utilitarian construct, effort expectancy reflects certain expectations regarding the overall user-friendliness (Venkatesh et al., 2011) and ease of use (Palau-Saumell et al., 2019) of the technology. This means that, compared to alternatives, the technology must be simpler and easier to use, must require less effort to use, and must require minimal to no help or assistance from the service provider (Alalwan, 2020; Tan & Ooi, 2018). These are important considerations within the context of this research, since the success of online services of food delivery and tourism booking is largely dependent on how users operate and navigate the website or the mobile app, almost completely devoid of any interaction with the service provider. Similarly, as the UTAUT model illustrates, the more user-friendly and the greater ease of use the technology is, the larger the chances that users exhibit more favorable intentions to use it (Dwivedi et al., 2019; Venkatesh et al., 2003; Venkatesh et al., 2011; Venkatesh et al., 2016). As such, the following hypothesis is proposed:

**H3:** Filipino users' effort expectancy positively influences their behavioral intention to use online food delivery and tourism booking websites and mobile apps.

Social influence is defined as the user's perceptions regarding the attitudes towards using the technology of other people important to him or her (Venkatesh et al., 2003). Due to the tendencies of society to exert some form of "peer pressure" to label technology use as some form of "status symbol" and to consider technology as some form of conformity to present social norms (Palau-Saumell et al., 2019; Tan & Ooi, 2018), this variable has inevitably become an interesting determinant of behavioral intention to use technologies. A number of researchers have observed that the newer the technology is, the greater the effect of social influence on an individual's decision whether or not to use it (Alalwan, 2020; Khalilzadeh et al., 2017; Tan & Ooi, 2018). Hence, the greater the social influence, the higher the likelihood that individuals exhibit more favorable intentions to use the technology (Dwivedi et al., 2019; Venkatesh et al., 2003; Venkatesh et al., 2011; Venkatesh et al., 2016). For the purposes of this research, this hypothesis is stated as follows:

**H4:** Filipino users' social influence positively influences their behavioral intention to use online food delivery and tourism booking websites and mobile apps.

Facilitating conditions measures the degree of the user's belief towards the support of organizational and technical infrastructures in using the technology (Venkatesh et al., 2003). In some

cases, these facilitating conditions are also perceived as the different enablers empowering users to exert some degree of control over the technology that they use (Venkatesh et al., 2011). These enablers have been found to be essential for sustained IT and ICT acceptance (Palau-Saumell et al., 2019). For example, in the case of online food delivery, some critical facilitating conditions are the quality of internet connections, the quality of the device used, and the presence of the appropriate operating and support software (Alalwan, 2020). Similar considerations are present in tourism bookings, where certain operational and technical skills and know-how are needed to interact with the website or the mobile app to complete an air travel transaction (Tan & Ooi, 2018). Consistent with the previous hypotheses, the effects of facilitating conditions towards behavioral intentions to use technology are posited in the UTAUT model. The better the facilitating conditions to adopt and use the technology are, the more likely that users accept and use the technology (Dwivedi et al., 2019; Venkatesh et al., 2003; Venkatesh et al., 2011; Venkatesh et al., 2016). That being said, the following hypothesis in this context is presented:

**H5:** Filipino users' facilitating conditions positively influence their behavioral intention to use online food delivery and tourism booking websites and mobile apps.

The original proponents of UTAUT recognized that the model may be modified over time (Venkatesh et al., 2003). Therefore, later iterations of UTAUT have included some other variables for consideration, reflecting the dynamic nature of IT acceptance and use (Dwivedi et al., 2019). One of these is hedonic motivations, which is the intrinsic, subjective, and personal drive of the user that draws some feeling of pleasure, fun, and playfulness due to the use of technology (Alalwan, 2020; Amalia & Indrawati, 2019; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Ozturk et al., 2016; Palau-Saumell et al., 2019). The most common arguments for the addition of this particular variable stem from the fact that the fundamental UTAUT model only covers the cognitive and technical aspects of technology acceptance and use. But over time, many experts have pushed that in order to enhance user intentions to adopt and use technology, there should be some hedonic elements of fun, enjoyment, and satisfaction present as well (Alalwan, 2020; Khalilzadeh et al., 2017; Ozturk et al., 2016; Palau-Saumell et al., 2019; Tan & Ooi, 2018). In addition, the context of this research covers some of the basic human needs for food and leisure, and therefore the process of availing these shall be made as pleasurable and enjoyable as possible to one's satisfaction. Therefore, this research proposes the following hypothesis:

**H6:** Filipino users' hedonic motivations positively influence their behavioral intention to use online food delivery and tourism booking websites and mobile apps.

UTAUT's final dependent variable of behavioral intention to use technology describes the motivational factors that determines whether an individual performs the action in question under a specific situation (Venkatesh et al., 2003). This has been a common dependent variable on a wide range of previous studies examining the effects of various factors related to technology acceptance and use (Dwivedi et al., 2019; Venkatesh et al., 2016), including the contexts of food delivery (Alalwan, 2020; Izzati, 2020; Khalilzadeh et al., 2017; Palau-Saumell et al., 2019) and tourism booking (Amalia & Indrawati, 2019; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Lien et al., 2015; Ozturk et al., 2016; Tan & Ooi, 2018). As such, it is a key predictor of technology acceptance and use, especially of technologies that are relatively new in the context under scrutiny (Venkatesh et al., 2003). This research posits that it can exhibit a similar descriptive power in this particular context of the Philippine online food delivery and tourism booking services, influenced by the aforementioned factors as hypothesized.

#### 3 Methods

The use of two very different contexts of food delivery services and tourism booking services is done to consider the fact that even if these services are hosted on the same platforms, in this case via websites and mobile apps, they are fundamentally different. Different online services have different requirements, needs, wants, and expectations, and therefore, users have different evaluative approaches towards them. The food service is a relatively new beneficiary of ICT acceptance and use,

hereby warranting extensive academic discourse (Alalwan, 2020; Izzati, 2020; Khalilzadeh et al., 2017; Palau-Saumell et al., 2019; Vasanthakumar & Arunprakash, 2019). On the other hand, while there have been a number of previous studies on the tourism sector, there are still some areas that are currently being explored (Amalia & Indrawati, 2019; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Lien et al., 2015; Ozturk et al., 2016; Tan & Ooi, 2018).

A combination of paper-based and online seven-point Likert-scale survey (1=very much disagree to 7=very much agree) was used for the data collection. The adopted question items were based on the original UTAUT model and were revised accordingly to suit the context based on the cited previous studies on the similar contexts of food delivery services and tourism booking services. Convenience sampling was employed. While there was no set quota for the overall number of respondents, special quotas were set for the type of context (food delivery service vs. tourism booking), the type of channel (website vs. mobile app), and the type of device (desktop/laptop vs. tablet/smartphone) to ensure all contexts were more or less equitably represented for better reflection of the prevailing realities of Philippine e-commerce use. The target respondents surveyed had at least some experience repeatedly making and completing a purchase or successfully availing a service through a website and/or a mobile app. This, in turn, meant that they owned at least a desktop or laptop computer and/or a mobile device (tablet or smartphone). Previous research repeatedly emphasized that experienced users had much more valuable and actionable insights, comments, and feedback regarding technology use that were more relevant to improving the technology in question (Venkatesh et al., 2011). Accordingly, a total of 399 usable responses was collected and used for the analysis of this research.

# 4 Analysis and Results

Because of the nature of the data collection method, Harman's single-factor test via SPSS was employed to determine if there were any common method bias (CMB) issues that would affect the quality of the data collected. Based on the results, the total cumulative variance was 48.849%, with the first factor accounting for substantially less than half (18.563%). Based on the rules-of-thumb of this test, the data did not suffer from any CMB issues, and therefore was of sufficient quality to proceed with the next steps in the data analysis.

## 4.1 Respondent Demographics

Of the 399 respondents, 204 said that they most frequently use a food delivery website or mobile app (51.1%), while the other 195 use a tourism booking website or mobile app most frequently (48.9%). The more detailed breakdown of the respondent demographics is further shown in Table 1.

Table 1. Respondent demographics

	All (N=399)		Food delivery (N=204)		Tourism bookin (N=195)	
	n	%	n	%	n	%
E-commerce channel use						
Website	179	44.86	74	36.27	105	53.85
Mobile app	220	55.14	130	63.73	90	46.15
Age						
24 to 35 years old	238	59.65	123	60.29	115	58.97
36 to 45 years old	28	7.02	16	7.84	12	6.15
46 to 55 years old	91	22.81	55	26.96	36	18.46
56 years old and above	42	10.53	10	4.90	32	16.41
Gender at birth						
Male	180	45.11	94	46.08	86	44.10

	All (N	All (N=399)		Food delivery (N=204)		booking 195)
	n	%	n	%	n	%
Female	219	54.89	110	53.92	109	55.90
Marital status						
Single	231	57.89	130	63.73	101	51.79
Married	159	39.85	69	33.82	90	46.15
Separated/Widowed	9	2.26	5	2.45	4	2.05
Highest educational attainm	ent					
High school graduate	5	1.30	4	1.96	1	0.50
Some college	11	2.76	9	4.41	2	1.03
College graduate	282	70.68	139	68.14	143	73.33
Some post-college	38	9.52	24	11.76	14	7.18
Post-college	63	15.79	28	13.73	35	17.95
Average length of time per e	-commerce trar	saction				
5 to 10 minutes	100	25.06	75	36.76	25	12.82
11 to 15 minutes	99	24.81	65	31.86	34	17.44
16 to 20 minutes	67	16.79	28	13.73	39	20.00
21 to 25 minutes	31	7.77	4	1.96	27	13.85
26 to 30 minutes	28	7.02	13	6.37	15	7.69
More than 30 minutes	74	18.55	19	9.31	55	28.21
Number of online accounts u	ised for e-comm	ierce				
1 to 3 accounts	237	59.40	112	54.90	125	64.10
3 to 5 accounts	95	23.81	63	30.88	32	16.41
5 to 7 accounts	34	8.52	20	9.80	14	7.18
More than 7 accounts	33	8.27	9	4.41	24	12.31
Years of transacting via e-co	mmerce					
Less than 1 year	42	10.53	29	14.22	13	6.67
1 to 2 years	89	22.31	62	30.39	27	13.85
2 to 3 years	79	19.80	43	21.08	36	18.46
3 to 4 years	49	12.28	22	10.78	27	13.85
4 to 5 years	40	10.03	20	9.80	20	10.26
More than 5 years	100	25.06	28	13.73	72	36.92

As seen, these demographics support what has happened in the industry and practice. There are more mobile app users for food delivery services (63.73%), while tourism booking services are largely availed through websites (53.85%). This particular piece of demographics is expected, as this is reflective of the current state of e-commerce in the Philippines for these two particular service sectors. Also, users of food delivery services act quickly, spending five to 15 minutes per transaction, whereas tourism booking customers take a longer time, somewhere from 10 to 20 minutes. Lastly, the demographics also confirm the observation that online food delivery is a newer service compared to online tourism booking, which has been around for a longer period of time.

## 4.2 Descriptives, Validity, and Reliability

Because all of the question items in this research's survey instrument were adopted from previous studies and were all empirically validated, confirmatory factor analysis (CFA) via AMOS was conducted to test for the overall validity and reliability of data collected for the measurement model. Meanwhile, descriptive statistics and complementary calculations of reliability were carried out using SPSS. After deleting some items due to validity issues and to achieve some degree of parsimony, the resulting measurement model, detailed in Table 2, all showed acceptable convergent validity, reliability, and model fit figures.

Table 2. Descriptives and CFA results

Variable	Question Item	Mean	Std. Dev.	Std. Loading	AVE	CR	Cron. α
Trust (TR) (Khalilzadeh et al., 2017; Patil et al., 2020)					0.820	0.901	0.901
TR1	I believe that the online channel providers keep their promise/s.	5.326	1.463	0.909			
TR3	I believe that the online channel providers are trustworthy.	5.351	1.420	0.902			
TR2	I believe that the online channel providers keep customers' interests in mind.	5.476	1.348	Deleted			
TR4	I believe that the online channel providers will do everything to secure the transactions for users.	5.506	1.387	Deleted			
Performan	ice expectancy (PE) (Venkatesh et al., 2011)				0.824	0.903	0.902
PE2	Using this online channel enables me to accomplish my shopping for products and/or services more quickly.	6.018	1.229	0.923			
PE3	Using this online channel increases my efficiency in online shopping.	5.845	1.290	0.892			
PE1	I find this online channel useful in my daily life.	5.697	1.413	Deleted			
Effort expe	Effort expectancy (EE) (Venkatesh et al., 2011)				0.907	0.951	0.951
EE3	I find this online channel easy to use to shop for products and/or services.	5.885	1.312	0.960			
EE2	It is easy for me to master using this online channel to shop for products and/or services.	5.917	1.286	0.945			
EE1	Navigating through this online channel to shop for products and/or services is clear and understandable.	5.835	1.170	Deleted			
Social influ	uence (SI) (Venkatesh et al., 2011)				0.907	0.951	0.950
SI2	People who are close to me think that I should use this online channel to shop for products and/or services.	5.368	1.506	0.969			
SI3	People whose opinions I value prefer that I should use this online channel to shop for products and/or services.	5.328	1.514	0.935			
SI1	People who are important to me think that I should use this online channel to shop for products and/or services.	5.153	1.558	Deleted			
Facilitating	g conditions (FC) (Venkatesh et al., 2011)				0.615	0.760	0.747
FC1	I have the knowledge necessary to use this online channel to shop for products and/or services.	6.103	1.146	0.852			

Variable	Question Item	Mean	Std. Dev.	Std. Loading	AVE	CR	Cron. c
FC2	This online channel to shop for products and/or services is compatible across the different devices that I use.	5.900	1.352	0.710			
FC3	Help services are available for assistance for difficulties with this online channel to shop for products and/or services.	5.363	1.539	Deleted			
Hedonic m 2017)	notivations (HM) (Escobar-Rodríguez & Carva	jal-Trujillo, 2	.014; Khalilz	zadeh et al.,	0.784	0.879	0.873
HM2	I feel trendy when I shop for products and/or services using this online channel.	5.073	1.731	0.888			
HM1	Using this online channel to shop for products and/or services is fun.	5.406	1.482	0.883			
НМ3	Using this online channel to shop for products and/or services makes me feel satisfied.	5.379	1.543	Deleted			
Behaviora	I intention to use technology (BT) (Venkatesh	et al., 2011)			0.906	0.951	0.949
BT1	I intend to continue using this online channel to shop for products and/or services in the next few months.	5.832	1.502	0.990			
BT2	I plan to use this online channel to shop for products and/or services more frequently in the next few months.	5.622	1.590	0.912			
BT3	I intend to continue using this online channel to shop for products and/or services rather than shop offline.	5.426	1.652	Deleted			

The CFA results yield an abundance of theoretical and practical insights. For the respondents, the means represent what these online service providers do best currently, while the standardized loadings represent what the respondents think the online service providers ought to do in the context of that research variable. For trust, believing that the food delivery or the tourism booking service will do everything to secure the transactions for users is what they currently see most prominently, but what the respondents want these online service providers to do more of is to keep their promise/s.

For performance expectancy, the results show an agreement on what these service providers do best and on what the respondents think they should be doing, which is to enable customers to accomplish their e-commerce transactions more quickly via the online channel. However, for effort expectancy, the respondents deem that, for the moment, easy mastery of the online channel is what stands out. But what they want to see more of is the online channel's overall ease of use.

The results also show an agreement for the social influence variable, which focuses on the favorable feedback from people close to the respondents towards these online channels. The same observation is found for facilitating conditions, where the respondents say that possessing the knowledge necessary to use the online channel for e-commerce purposes is what it is, and what it should be. However, for hedonic motivations, the results show different insights. The use of the online channel to shop being fun is what respondents agree with the most, but being trendy because they shop online is what actually drives their hedonic motivations. Lastly, the results also show an agreement on the behavioral intentions to use technology, where respondents focus on the intention to continue using these online channels in the next few months.

The correlation matrix presented in Table 3 further provides statistical evidence on the discriminant validity of the collected data. The squares of the AVE in the diagonal are higher than the correlation matrix figures, indicating good discriminant validity and giving further support for the research to proceed to the hypothesis testing.

	TR	PE	EE	SI	FC	HE	BT
TR	0.906						
PE	0.558	0.908					
EE	0.718	0.825	0.953				
SI	0.476	0.642	0.580	0.952			
FC	0.717	0.817	0.918	0.556	0.784		
HE	0.638	0.544	0.526	0.632	0.548	0.886	
ВТ	0.530	0.712	0.688	0.636	0.757	0.612	0.952

Table 3. Correlation matrix with the squares of the AVEs in the diagonal

## 4.3 Structural Equation Modeling (SEM)

Because these research hypotheses were all derived from an existing and well-established theoretical model, structural equation modeling using AMOS statistical software was employed to test these research hypotheses. Three structural models were produced: (1) an overall model accounting for the entire research sample (See Figure 2: SEM results (Overall model)); (2) a model describing the online food delivery users (See Figure 3: SEM results (Food delivery model)); and (3) a model for the online tourism booking users (See Figure 4: SEM results (Tourism booking model)). As per rules-of-thumb criteria, the resulting structural models yielded acceptable model-fit figures.

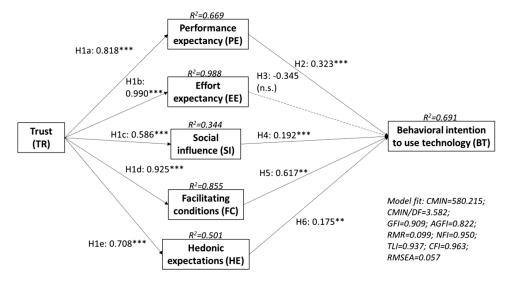


Figure 2. SEM results (Overall model)

For the overall model, only Hypothesis 4 is not supported, indicating that there are some issues and concerns regarding the effort being exerted by the respondents in using these particular online services. In fact, effort expectancy shows a negative influence on behavioral intention to use technology. This is a very important finding because, among the hypothesized influence of trust, it is trust towards effort expectancy that shows the strongest effect. In practical terms, the respondents trust these service providers that by using their website and mobile app channels, the amount of effort to transact with them is made easier. However, this trust is apparently not translated into action, discouraging the respondents to actually use the website and mobile app channels. On the other hand, amongst the supported hypotheses on the UTAUT variables, it is facilitating conditions that exert the most significant influence towards behavioral intentions to use technology, followed by performance expectancy. Further analyses using group comparisons are made to discern the differences between the food delivery users and the tourism booking users.

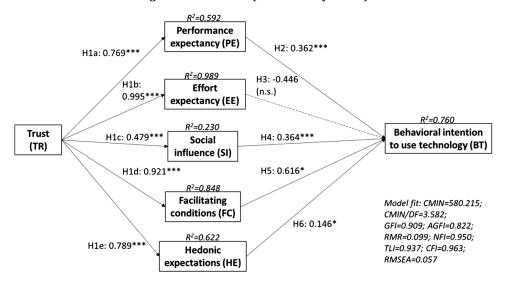


Figure 3. SEM results (Food delivery model)

The food delivery context yields very similar results with the overall model. There are, however, slight differences such as the weaker positive and significant effects of facilitating conditions and hedonic expectations towards behavioral intention to use technology. There are also some differences – the effects of social influence towards behavioral intention to use technology are stronger compared to the overall model.

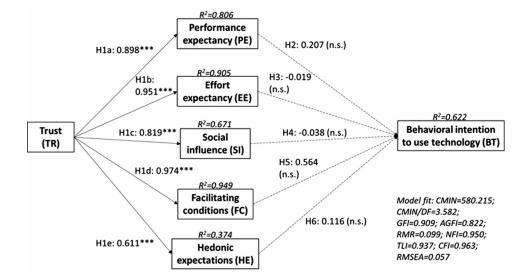


Figure 4. SEM results (Tourism booking model)

The tourism booking context yields more surprising results. While trust remains to be a significant and positive influence, the results provide no statistical support for Hypotheses 2 to 6. Furthermore, as far as tourism booking users are concerned, effort expectancy and social influence even exert negative influence towards behavioral intentions to use technology.

To further discern the differences between the two research contexts, bootstrapping to attain z-scores is employed. The results, detailed in Table 4, show that there are significant differences between the two in the areas of trust towards facilitating conditions and hedonic expectations, with the former

yielding the most significant difference of them all. There is also a significant difference in social influence towards behavioral intentions to use technology. On the other hand, there are very minimal differences in terms of trust towards effort expectancy and hedonic expectations towards behavioral intentions to use technology. Additionally, the food delivery services outperform the tourism booking services in terms of the influence of trust across the UTAUT dimensions and how effort expectancy and social influence affect behavioral intentions to use technology.

Table 4. SEM group comparisons (z-scores)

Hypothesis	Relationship	z-score
Н1а	TR→PE	-1.510
H1b	TR→EE	-0.023
H1c	TR→SI	-0.354
H1d	TR→FC	-3.651***
H1e	TR→HE	-3.199***
Н2	PE→BT	1.066
НЗ	EE→BT	-0.669
H4	SI→BT	-2.551**
Н5	FC→BT	0.413
Н6	не→вт	0.085

#### 5 Discussions

## 5.1 Conclusions

Many have repeatedly said that e-commerce and making transactions online is the way to go (Cahiles-Magkilat, 2020; Masigan, 2020), encouraging businesses and societies to take advantage of its numerous opportunities (INQUIRER.net BrandRoom, 2017; Rappler.com, 2020). As a response, many companies have been building up their online presences in the hopes of grabbing a significant share of the digital economic pie (Department of Tourism, 2020; Diangson, 2018; Manalang, 2020). However, despite these rosy and engaging pictures and narratives of opportunities, rushing through the world of e-commerce in its many different forms is not a good strategy. Repeatedly stressed over many years of research is that companies and individuals must understand what encourages consumers to turn and return to these online channels (Venkatesh et al., 2003).

To reiterate, this research employs a well-established theoretical model, the UTAUT model. It delves into the Philippine e-commerce environment, touching on two different contexts of food delivery and tourism booking. Both services available to users via websites and mobile apps. This research's purpose is to provide further insights on what should companies wanting to establish and enhance their online commercial presences must do to further entice and engage their customers. A summary of the research results is shown in Table 5.

Table 5. Summary of research results

Hypothesis	Statement	Overall Model	Food Delivery Model	Tourism Booking Model
Н1а	Filipino users' trust positively influences their performance expectancy involving online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Supported
H1b	Filipino users' trust positively influences their effort expectancy involving online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Supported

Hypothesis	Statement	Overall Model	Food Delivery Model	Tourism Booking Model
H1c	Filipino users' trust positively influences their social influence involving online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Supported
H1d	Filipino users' trust positively influences their facilitating conditions involving online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Supported
H1e	Filipino users' trust positively influences their hedonic motivations involving online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Supported
Н2	Filipino users' performance expectancy positively influences their behavioral intention to use online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Not supported
Н3	Filipino users' effort expectancy positively influences their behavioral intention to use online food delivery and tourism booking websites and mobile apps.	Not supported	Not supported	Not supported
H4	Filipino users' social influence positively influences their behavioral intention to use online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Not supported
Н5	Filipino users' facilitating conditions positively influence their behavioral intention to use online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Not supported
Н6	Filipino users' hedonic motivations positively influence their behavioral intention to use online food delivery and tourism booking websites and mobile apps.	Supported	Supported	Not supported

To this end, this research poses two questions, which are now discussed based on the empirical findings:

**RQ1:** What factors influence Philippine online food delivery and tourism booking services acceptance and use?

From an overall perspective, not all factors that can potentially influence the acceptance and use of technology for food delivery services and tourism booking services make the cut. In the overall model, facilitating conditions, followed by performance expectancy, are the most influential towards behavioral intentions to use technology. The third that exerts a significant positive effect is social influence, followed by hedonic expectations. However, effort expectancy even proves to be a negative, albeit not significant, determinant.

Going deeper into each context offers an interesting story. For online food delivery services, the order of factors from the most influential to the least influential are as follows: social influence, performance expectancy, facilitating conditions, hedonic expectations, and effort expectancy. Just like the overall model, all the UTAUT factors, except for effort expectancy, exert a positively significant influence towards behavioral intentions to use technology. Likewise, effort expectancy has a negative influence. The interesting insight about this is that online food delivery services are relatively new in the Philippines, and therefore the competitive field is still fresh and open to a lot of possibilities and challenges. As such, channels of word-of-mouth and peer pressure, which are significant sources of social influence, are prevalent in making decisions as to what online food delivery platforms to use (Alalwan, 2020; Izzati, 2020; Palau-Saumell et al., 2019).

For online tourism bookings, what is surprising is that none of the UTAUT factors proved to be statistically significant. In fact, both effort expectancy and social influence even proved to be negative determinants of behavioral intentions to use technology. Of those that exert a positive influence,

facilitating conditions are the most favorable, followed by performance expectancy, and then hedonic expectations, albeit all are not significant. Indeed, being more established in the Philippine e-commerce domain, tourism businesses such as airlines and hotel accommodations, and even itinerary planning, are in more mature sectors compared to the online food delivery services. As such, users look to a bigger and broader set of factors that would justify their acceptance, use, and continuous use of online tourism booking services (Amalia & Indrawati, 2019), instead of looking at just one or two factors that would stand out for them. This results in some factors losing their importance as far as technology use is concerned (Tan & Ooi, 2018). And apparently, this means that there are some issues with the present functions, features, and conditions that make users think twice about regularly using online tourism booking services.

One of these factors may be the price and the perceived value that customers expect from tourism businesses, such as airlines and hotel accommodations (Amalia & Indrawati, 2019; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Tan & Ooi, 2018). Prices of tourism-based activities are obviously higher than food and food services. Similarly, tourism-based activities' perceived value is also quite different. Customers spend an obviously longer period of time to plan for, purchase and consume tourism-based services, compared to food and food services. Therefore, it can be implied that customers would be more stringent, more discriminating, and less accommodating towards the utilitarian and non-utilitarian factors influencing their behavioral intentions to use websites and mobile apps to book tourism services. This means that the tourism booking services face more pressure and are under greater scrutiny to prove that they have earned the customers' trust by ensuring that they have very good website and mobile app channels for their customers to use.

**RQ2:** What is the role of trust in Philippine online food delivery and tourism booking services acceptance and use?

Trust is definitely a factor. This research highlights that trust is indeed a precursor to user expectations and evaluations, shaping what they think they would experience once they get to use the technology (Capistrano, 2020; McKnight & Chervany, 2001; McKnight et al., 2002; Venkatesh et al., 2011), in this case in the form of a website or mobile app. In fact, trust is very strong towards all five UTAUT-related variables, signifying that establishing initial trustworthiness is very important in the evaluation of the utilitarian, environmental, and hedonic components that comprise technology acceptance and use in online food delivery and online tourism booking. In the overall model, trust exerts the most positive influence towards effort expectancy and towards facilitating conditions, as represented by both their respective SEM standardized coefficients and by the model fit R2 values. Similar findings can also be found in the specific contexts of the Philippine online food delivery and tourism booking services.

Furthermore, these results illustrate the pressures on companies in these two service sectors to deliver on that initial trust. Users and customers already trust the companies and the brands behind these food delivery and tourism booking services. Therefore, there is pressure to follow through on that trust (Venkatesh et al., 2011) and to ensure that the technology is indeed sound and worthy of that trust through various utilitarian, environmental, and even hedonic means (Cahiles-Magkilat, 2020; Khalilzadeh et al., 2017; Lien et al., 2015; Rappler.com, 2020; Vasanthakumar & Arunprakash, 2019).

## 5.2 Theoretical Implications

This research provides more empirical support for three theoretical implications. The first is the use of UTAUT as a theoretical framework to analyze present-day technologies, such as websites and mobile apps as channels for e-commerce, and understudied contexts, such as the Philippines. As mentioned, it is surprising that many in the industry highlight the Philippines as a global IT hub and one of the most populous internet users, and yet there is little academic discourse on their activities online, especially on the e-commerce side of internet use (Capistrano, 2020). The results of this research provide empirical support for the continuous use of the UTAUT model to examine developing and evolving IT and ICT, and their respective acceptance and use. Continuous research on this matter is not only needed for the robustness of the theory, but also for the proper analysis of new technologies (Dwivedi et al., 2019; Venkatesh et al., 2011; Venkatesh et al., 2016). This research adds to the pool of knowledge regarding the applicability of UTAUT in certain technologies (website and mobile apps)

that are in different phases of their respective life cycles, and within different sectors (food delivery and tourism booking).

The second is the integration of other variables, such as hedonic-based motivations, to complement what UTAUT is already analyzing. In recognizing a greater set of variables and perspectives that can influence behavioral intentions to use technology, a more accurate picture of reality can be painted (Dwivedi et al., 2019), but without losing the original intentions of the theory itself. As demonstrated in this research results and as discussed in the literature review, additions and revisions to existing theories and models must not redirect the attention from and must not undermine the previous contributions of the original proponents, but rather these must strengthen them (Venkatesh et al., 2016). The inclusion of hedonic expectations enhances the overall explanatory power of the UTAUT model, and therefore must be considered as something that may eventually be fundamental in the academic discussions on IT and ICT acceptance and use.

The third is the theoretical contributions of trust theory to an established framework such as UTAUT. The results lend empirical support for the role of trust in the UTAUT perspective, specifically on the importance of trust and trust-building measures as a means to encourage favorable evaluations and feedback towards the various factors involved in the acceptance and use of technology. These factors must deliver on the trust exhibited by the users at the initial stages of the acceptance and use of the technology as posited in the trust theory cited in this research (McKnight & Chervany, 2001; McKnight et al., 2002), in the theoretical arguments supporting the role of trust in the UTAUT model (Venkatesh et al., 2011), and in IS research in general (Lien et al., 2015; Vasanthakumar & Arunprakash, 2019).

# 5.3 Managerial Implications

The use of IT and ICTs to significantly improve business operations, and thereby significantly enhance customer service, must always be the overarching objective as far as the managerial side of their acceptance and use are concerned (Cahiles-Magkilat, 2020; Department of Tourism, 2020; Diangson, 2018; Go, 2018; INQUIRER.net BrandRoom, 2017; Manalang, 2020; Manila Standard Business, 2018; Masigan, 2020; Rappler.com, 2020; Roque, 2020). Immediately, the most important managerial implication derived from this research is that these service providers and their website and mobile app developers must exert more effort on improving these channels.

Specifically, the matches and mismatches between the means and the standardized loadings as discussed in the CFA results provide more specific directions as to what website and mobile app developers and food delivery and tourism booking managers should investigate. For instance, in strategizing for trust, while it is good that they are putting a lot of effort into the security of the transactions with their customers, they must not neglect to keep whatever promise they make to their customers. It appears that the developers and managers are looking more into the technical side of trust-building, risking neglecting the business side of trust-building, and ensuring that their customers are getting what they want. Websites and mobile apps are additional means to convey the actual products and services, but there must also be additional means to ensure that the company delivers on whatever promises they make to their customers. Another concern is on effort expectancy, what customers want is greater ease of navigation through the website or mobile app. Gaining mastery of the website or mobile app is good, but if it is not easy to do so, then the developers' and managers' efforts to entice better intentions to use are at risk to be wasted. Furthermore, what is interesting is the use of websites and mobile apps for food delivery and tourism booking to be perceived as being trendy. It seems that for customers, going online to transact is seemingly becoming a trend as well, especially given how local media channels and local marketing efforts portray the use as such.

The SEM results also provide developers and managers insights and directions on where to strengthen their existing website and mobile app channels. For instance, as a consequence of the mismatch in effort expectancy, this UTAUT factor is actually the weakest and even the most problematic amongst all factors. This is an immediate concern and must be addressed if the overall intentions to use these technologies will be sustained. Also, while the other technical, or utilitarian, aspects are doing well, one must not forget the influences of the external environment towards encouraging more use – the fact that users look to other people for opinions and engage in word-of-mouth. There are social pressures to engage in e-commerce. Couple this with the influence of hedonic

expectations, companies can therefore craft marketing campaigns around these social pressures and hedonic expectations aimed at portraying a favorable image using these websites and mobile apps to order one's next meal or to plan one's next vacation.

#### 5.4 Limitations and Directions for Future Research

Given the dearth of previous research, putting the Philippine IS research in the mainstream academic spotlight remains to be a long and difficult road. Ironically, as the rest of the world recognizes the Philippines to have a very huge base of internet users, yet there is little academic attention and discourse on this. Cultivating the pool of literature in this country context, therefore, is an obvious overarching direction for future research. This is made more interesting by the increased opportunity for future research to compare pre- and post-COVID-19 contexts e-commerce adoption and use behaviors. The effects of COVID-19 have been different across different industries. Food and food services have seen a huge boost in their online presences and transactions as people are unable to eat out (Manalang, 2020; Masigan, 2020; Rappler.com, 2020). On the other hand, tourism is one of the hardest hit by the pandemic, experiencing very significant declines in business activities (Roque, 2020). Theorizing and analyzing how such a significant external environmental shock influences e-commerce adoption and use behaviors add to the richness of this opportunity for further research.

In reality, while they are significant and aggressively growing contributors to their respective industries, the food delivery and the tourism booking sectors are merely fractions of the larger Philippine e-commerce pie (Cahiles-Magkilat, 2020; Masigan, 2020; Rappler.com, 2020). Therefore, other industries significantly engaged in e-commerce, such as the more obvious online retail shopping and banking, are contexts that must be examined in future research. Furthermore, since these different industries can exist and operate in some Philippine e-commerce ecosystem, comparisons of these other industries similar to what this research has done can also be made. In addition, even the differences due to the nature of the organizations employing websites and mobile apps must be considered. Some organizations might consider putting up their own websites and mobile apps and directly interact with their customers, while others may opt to use a third-party website and mobile app (e.g., Foodpanda and GrabFood for food delivery services and Bookings.com and TripAdvisor for tourism booking services). Others still may even do both. The same is true with decisions on maintaining an online presence via a website only, a mobile app only, or both. These add some more layers of comparisons to be made for future research.

Also, the development of the UTAUT model has included other factors aside from the trust and hedonic expectations and other perspectives on their applications as well (Venkatesh et al., 2011; Venkatesh et al., 2016). As argued, even well-established theoretical models should evolve to include and test relevant variables that would make them applicable to the ever-changing times of technology acceptance and use. For one, this research has unearthed some initial indications touching on customers' perceptions on how price and perceived value can be significant factors influencing behavioral intentions to use e-commerce channels. And speaking of theoretical models, similar to previous studies involving the evaluation and decisions to use technology, the same contexts can also be analyzed under other IS theoretical lenses (Capistrano, 2020). Therefore, all in all, these provide other avenues for further research as well.

To further exploit this suggestion of having multiple and repeated analyses on theoretical models, how trust is defined in an online context should also be further examined. Because of its multidimensionality, there are many ways to define trust and its role within certain contexts (McKnight & Chervany, 2001; McKnight et al., 2002). While it is proven in this research that building trust is a very important consideration, future academic explorations should further build on these present results. They can expound on the other theoretical perspectives of trust in online contexts to have an even better understanding on how to develop and employ it to encourage continued ecommerce use.

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## **Author's Note**

The original concept of this research was made prior to the COVID-19 pandemic, but the data collection efforts were hampered when the Philippine government imposed strict quarantine measures. What was originally a purely paper-based survey was changed to a combined paper-based and online survey to minimize any health risks to both the researchers and the respondents. Hence, note that a number of the responses made in the survey may have been influenced by the environment caused by these quarantine measures, which were difficult to discern since the theoretical framework applied to this research did not account for COVID-19-related situations.

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