


FACTORS INFLUENCING CONSUMER INTENTIONS TO PURCHASE GROCERIES OVER THE INTERNET: AN EXPLORATORY STUDY DURING THE PANDEMIC

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 21 November 2022</p> <p>Accepted 01 February 2023</p>	<p>Purpose: As a result, the current study focused on e-commerce in the retail sector to examine the factors influencing consumer purchasing of online groceries throughout Covid-19 in Bangkok, Thailand.</p> <p>Theoretical framework: Using Technology acceptance model (TAM) as the underpinning theoretical framework, which was presented by Davis and his colleagues it in 1989, to accomplish this, this study identified five independent variables that can influence online grocery purchase intent. These are perceived utility, perceived ease of use, and other additional variables such as online accessibility, security perception, and shipment services.</p> <p>Design/methodology/approach: The convenience sampling approach, which is considered a nonprobability sampling method, was used to collect the data from 384 respondents via an online survey from the population in this study. Internet users between the ages of 19 and 65 years or older who live in Bangkok and buy groceries for themselves and/or family members from Thai physical and/or online retailers were the target demographic. Multiple regression analysis is used to test the significance of the research model.</p> <p>Findings: The findings reveal that pandemic has a considerable influence on Bangkok customers' online purchase intent. The result of linear regression analysis shows the three variables: perceived ease of use, shipment services and online accessibility significantly affected the online grocery shopping intent of consumers in Bangkok. While security perception and perceived utility had no significant effect on the online grocery shopping intent of consumers in Bangkok.</p> <p>Research, Practical & Social implications: The implication drawn from this study helps the researchers and firms to rapidly adapt and adjust their marketing strategy, with a focus on digitization, as consumers want to prevent the infection and the danger of Covid-19, but stores are having difficulty reaching clients.</p> <p>Originality/value: The findings reveal that Covid-19 has a considerable influence on customers' online purchase intent residing in Bangkok and this research adds another perspective from Thailand Context.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i2.859</p>
<p>Keywords:</p> <p>Perceived Utility, Perceived Ease of Use, Online Accessibility, Security Perception, Shipping Services.</p> <div data-bbox="172 1048 480 1294" style="text-align: center;">  </div>	

FATORES QUE INFLUENCIAM AS INTENÇÕES DOS CONSUMIDORES DE COMPRAR COMPRAS PELA INTERNET: UM ESTUDO EXPLORATÓRIO DURANTE A PANDEMIA

RESUMO

Objetivo: Como resultado, o estudo atual se concentrou no comércio eletrônico no setor varejista para examinar os fatores que influenciam a compra de produtos de consumo on-line em todo o Covid-19 em Bangkok, Tailândia.

Estrutura teórica: Usando o modelo de aceitação de tecnologia (TAM) como a estrutura teórica subjacente, que foi apresentada por Davis e seus colegas em 1989, para realizar isto, este estudo identificou cinco variáveis independentes que podem influenciar a intenção de compra de mercearia online. Estas são utilidade percebida,

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facilidade de uso percebida e outras variáveis adicionais, tais como acessibilidade on-line, percepção de segurança e serviços de remessa.

Design/metodologia/abordagem: A abordagem de amostragem de conveniência, que é considerada um método de amostragem não-probabilidade, foi utilizada para coletar os dados de 384 entrevistados através de uma pesquisa on-line com a população deste estudo. Os usuários da Internet com idade entre 19 e 65 anos ou mais que vivem em Bangkok e compram mantimentos para si e/ou familiares de varejistas físicos e/ou on-line tailandeses foram o alvo demográfico. A análise de regressão múltipla é usada para testar o significado do modelo de pesquisa.

Descobertas: As descobertas revelam que a pandemia tem uma influência considerável na intenção de compra online dos clientes de Bangkok. O resultado da análise de regressão linear mostra as três variáveis: facilidade de uso percebida, serviços de remessa e acessibilidade on-line afetaram significativamente a intenção de compras on-line dos consumidores em Bangkok. Enquanto a percepção de segurança e a percepção de utilidade não tiveram efeito significativo sobre a intenção de compras online dos consumidores em Bangkok.

Pesquisa, implicações práticas e sociais: A implicação extraída deste estudo ajuda os pesquisadores e empresas a adaptar e ajustar rapidamente sua estratégia de marketing, com foco na digitalização, pois os consumidores querem evitar a infecção e o perigo do Covid-19, mas as lojas estão tendo dificuldade em alcançar os clientes.

Originalidade/valor: As descobertas revelam que o Covid-19 tem uma influência considerável na intenção de compra on-line dos clientes residentes em Bangkok e esta pesquisa acrescenta outra perspectiva do contexto da Tailândia.

Palavras-chave: Utilidade Percebida, Facilidade de Uso Percebida, Acessibilidade On-Line, Percepção de Segurança, Serviços de Remessa.

FACTORES QUE INFLUYEN EN LA INTENCIÓN DEL CONSUMIDOR DE COMPRAR ALIMENTOS POR INTERNET: UN ESTUDIO EXPLORATORIO DURANTE LA PANDEMIA

RESUMEN

Propósito: El presente estudio se centró en el comercio electrónico en el sector minorista para examinar los factores que influyen en la intención del consumidor de comprar comestibles por Internet durante la pandemia Covid-19 en Bangkok (Tailandia).

Marco teórico: Utilizando el modelo de aceptación de la tecnología (TAM) como marco teórico subyacente, presentado por Davis y sus colegas en 1989, este estudio identificó cinco variables independientes que pueden influir en la intención de compra de comestibles en línea. Se trata de la utilidad percibida, la facilidad de uso percibida y otras variables adicionales como la accesibilidad en línea, la percepción de seguridad y los servicios de envío.

Diseño/metodología/enfoque: El método de muestreo por conveniencia, que se considera un método de muestreo no probabilístico, se utilizó para recoger los datos de 384 encuestados a través de una encuesta en línea de la población de este estudio. Los usuarios de Internet con edades comprendidas entre los 19 y los 65 años o más que viven en Bangkok y compran comestibles para sí mismos y/o para los miembros de su familia en comercios tailandeses físicos y/o en línea fueron el grupo demográfico objetivo. Se utiliza un análisis de regresión múltiple para comprobar la significación del modelo de investigación.

Resultados: Los resultados revelan que la pandemia influye considerablemente en la intención de compra en línea de los clientes de Bangkok. El resultado del análisis de regresión lineal muestra que las tres variables: facilidad de uso percibida, servicios de envío y accesibilidad en línea afectaron significativamente a la intención de compra de comestibles en línea de los consumidores de Bangkok. Mientras que la percepción de seguridad y la utilidad percibida no tuvieron un efecto significativo en la intención de compra de comestibles por Internet de los consumidores de Bangkok.

Investigación, implicaciones prácticas y sociales: Las implicaciones extraídas de este estudio ayudan a los investigadores y a las empresas a adaptar y ajustar rápidamente su estrategia de marketing, centrándose en la digitalización, ya que los consumidores quieren prevenir la infección y el peligro de Covid-19, pero las tiendas tienen dificultades para llegar a los clientes.

Originalidad/valor: Las conclusiones revelan que el Covid-19 influye considerablemente en la intención de compra en línea de los clientes residentes en Bangkok y esta investigación añade otra perspectiva desde el contexto tailandés.

Palabras clave: Utilidad Percibida, Facilidad de Uso Percibida, Accesibilidad en Línea, Percepción de Seguridad, Servicios de Envío.

BACKGROUND

Covid-19 has accelerated consumer behaviour outside of its normal behaviour. People are social animals, but Covid-19 changes all that. It impacts the living, thinking, and buying behaviour of customers, as well as the health and economic conditions of those customers. Consumers are reacting in different ways. Some consumers panic, worry, and experience anxiety about hygiene products and basic needs like groceries. At another point, some people remain constant in the face of the pandemic situation and do regular activities as usual (Silverman et al., 2001). In a pandemic, companies focus on understanding the consumer's behaviour, and the retail sector concentrates on digitalization and e-commerce because consumers prefer online shopping and increase e-commerce transactions. The supply chain of grocery, food, and basic needs products is the key sector of the country's economy (Serpil & Mehmet Seckin, 2020). Grocery retailers need to understand consumer behaviour, gear responses, and reactions for improvement in the supply chain and to develop marketing strategies according to consumer behaviour, as most shoppers customise and personalize their strategies. They should adopt digitalization, e-commerce, and e-payment systems to minimise the challenges (Butu et al., 2020).

The findings of Katawetawaraks & Wang (2011) showed that circumstances have altered dramatically. The lockdown and the restrictions have affected the production capacity of the manufacturers. It has also reduced contact with others. There have been many restrictions on the travel of workers and the shipping of products. It has created pressure on production, distribution, and the movement of workers and finance as well. Consumers have avoided gatherings and physical buying. Most cities have remained on lockdown, and a number of non-essential businesses have closed. Since retailers, shopkeepers, and every business needed to convert their business into a digital business. Shopkeepers and supermarkets have faced difficulties in managing stock and supply chains due to a shortage of products. Consumers are seeking new, easy ways to shop. They adopt new behaviours and habits. Consumers prefer digital devices for searching and gathering product information, ordering products, and making payments. Different age groups of consumers are responding differently due to Covid-19. All

these factors are the main drivers of consumer behaviour during a pandemic situation (Mehta et al., 2020).

As a result, the current study focused on e-commerce in the retail sector to examine the factors influencing consumer purchasing of online groceries throughout Covid-19 in Bangkok, Thailand. To accomplish this, the researcher identified five independent variables that can influence online grocery purchase intent. These are perceived utility, perceived ease of use, online accessibility, security perception, and shipment services. The target respondents were consumers who have already shopped online to investigate the elements influencing consumer online grocery purchasing intent. This research used the online data collection method from an online questionnaire to reach the larger respondents easily in this pandemic situation, with no restrictions or boundaries. From Bangkok, the researcher gathered 400 surveys.

REVIEW OF RELATED LITERATURE

Customers gradually began to purchase things online in the late 1990s, with the expectation that this new mode of purchasing would be utterly revolutionary for business. In the face of a looming pandemic, retail is more popular and more important than ever. Consumers' consumption and purchasing patterns have greatly diversified. The majority of consumers now choose to shop for food and groceries online via smartphones and web-based technologies (Lim, 2020). When it comes to buying groceries and food in a pandemic situation, consumers prioritize health and safety. The majority of countries have declared a state of emergency and imposed restrictions to halt the spread of the coronavirus and allow delivery services (Golicic et al., 2002). According to Roggeveen & Sethuraman (2020) during the pandemic, grocery merchants faced increased demand potential for providing shoppers at homes while also dealing with inventories, supply chain management, shipping, and preserving their facilities. A few studies on consumer behaviour and e-commerce have been conducted to better understand how consumers shop for groceries online in Covid-19. Theoretical implications include a good view of consumer motivation, and the pandemic validates this strategy by illustrating the effects of consumer decision-making and online grocery shopping (Laato et al., 2020).

Grashuis et al. (2020) considered overall pandemic situation, such as the temporary closure of retail shops, hotels, restaurants, and other things, consumers being less willing to purchase through physical shopping and favouring internet purchases. If the number of cases of Covid-19 rises, it will affect consumer purchasing habits. When it comes to grocery shopping, consumers prefer home delivery and other online options. Age has little impact on

customer behaviour and preferences for online grocery shopping, and gender has statistical validity for shifting consumer behaviour. This study utilised the panic buying behaviour concept to analyse consumer behaviour during this pandemic situation (Nguyen et al., 2021; Huang et al., 2019).

Technology Acceptance Model (TAM)

The technology acceptance model (TAM) is a technique for investigating people's attitudes towards technological progress. TAM comprises a broad range of factors that influence the decision to use or not use a digital system, application, or electronic medium to do a task that may be performed using a traditional technique. It is used to determine the influence of external factors on adoption choices. Nonetheless, there are a number of crucial factors that influence a user's "perceived utility," "perceived ease of use," and "intention" in relation to modern technologies (Davis, 1989; Singh, Zolkepli and Cheah, 2018). Technology acceptance model was also employed by Driediger & Bhatiasevi (2019), to comprehend subjective norms, potential complications, transparency, and the positive or negative impacts of online grocery shopping. One further study discovered that, while the ease of usage of technology is important for its adoption, elements like security, utility, and accessibility of technological instruments are highly important to respondents (Pigatto et al., 2017; Pantano & Di Pietro, 2012).

Perceived utility

Perceived utility is the degree to which a user believes that using a particular technology will improve his or her task efficiency (Davis, 1989). It is the belief that the technology utilized will assist in achieving a valuable outcome unrelated to the goal of usage. Perceived utility influences the desire to purchase online in a good way. Shopping online was evaluated based on numerous factors, including the importance of speed, the overall quality of delivery and pick-up, and also a decrease in interacting directly. Buyers who shop online are not tired of driving in rush hour, looking for a parking space, and queuing for pay. As a result, people who are wary of public contact prefer to buy anything online (Katawetawaraks & Wang, 2011). Ever since the SARS crisis started, eateries that dissuade customers from dining on the spot, which was already required to be offered and enforced due to the increased awareness of disease transmission (Ait Youssef et al., 2020; Hansen et al., 2018). As a result, while the Covid-19 out-break's condition is equivalent to those with SARS, the degree of exposure is massively greater. Pham, Do Thi, and Ha Le (2020) also agreed that consumers are more inclined to look

for and purchase items at a single location. Buyers may not need to wait in line to purchase items and may not need to converse with the vendor. Online shopping is the ideal example of convenience since it allows customers to buy anything at any time of day or night. This service is far more convenient than traditional shopping. Online shopping also allows customers to buy items or services from anywhere on the globe, which means they simply need to search for what they want to buy (Boyte, 2015).

Perceived ease of use

Perceived ease of use refers to the amount of effort required by the technology user to put into practice to successfully use it (Venkatesh & Davis, 2000). Perceived ease of use is connected to the amount of ease that one experiences when purchasing online using e-commerce platforms in this study. Consumers usually find browsing, finding, and purchasing products in online stores to be a time-consuming as well as a frustrating process. It is a common occurrence for online shoppers to leave online stores without having found whatever they are looking for (Silverman et al., 2001). The platform must provide features that aid in shopper decision-making. Furthermore, the platform should provide proper search assistance (for example, using a search engine), provide relevant recommendations in response to the user's search, and efficiently arrange the contents (including products). These efforts can improve the e-commerce platform's performance and design, resulting in enhanced ease of use as viewed by the online consumer.

The simplicity of online shopping is also connected to the operation; it is important to access and log into the portal using a tablet or a smartphone to verify if the interface and structure of the web pages correspond to the tablet or smartphone format with no requirement to zoom in or out. As for learnability, it was evaluated to determine the company's preparedness to help, if needed, using search kits, correct information, and the availability of chat, phone, and e-mail. The presence of immediately available backlinks on the same page was considered more intelligent than visiting a new page in the quest for details (Pigatto et al., 2017).

Online accessibility

Online accessibility indicates that all customers can access the same, trustworthy, timely, and necessary information about the shop via the business's website (Vasic et al., 2019). According to Hsiao et al. (2010) qualities of a website suit online buyer's wants and criteria. Online accessibility also includes user friendliness and navigation, as well as accessibility and contact elements, and so often relates to the site's accessibility, availability, interaction,

usability, and information on pricing, performance, quality, and other features of items being collected (Al-Debei et al., 2015). Customers might change their assumptions about merchants' competency and consistency as a result of their visible advertising usage (Deyalage & Kulathunga, 2019). As a result, because sustaining high accessibility involves significant expenditures, a web-based merchant with high accessibility is more likely to be considered knowledgeable, genuine, and reputable. Furthermore, customers want online shops to give all necessary and accurate product information (Vasic et al., 2019). Providing relevant information can assist online businesses in assuaging consumers' anxieties and fears about a particular product or online buying. Abundant and high-quality product information is recognized as a component of e-satisfaction for consumers (Park & Kim, 2003; Leong et al., 2019; Kian et al., 2019).

Security perception

Security perception is described by Balapour et al., (2020) as the website provider's proper efforts to preserve shared information from security breaches during and after transmission when utilizing the online platform. Because of technological improvements and an ever-increasing reliance on online platforms for transactional purposes, many established enterprises have created virtual storefronts (Al-Qirim, 2007). As stated by Balapour, Nikkiah, and Sabherwal (2020) discovered that when consumers believe a company's privacy policy is effective, they believe the website has greater security standards and is more trustworthy. Consumers trust that all transaction operations will go well because of their security perception. Higher security is thought to give reassurance that personal information will not be lost or taken by others for illegal or unethical reasons (Park & Kim, 2003; Deyalage & Kulathunga, 2019). As an outcome, consumers who feel the process is secure are far more likely to utilize and recommend it. That might help other consumers decide (Limbu et al., 2012). Furthermore, the Covid-19 pandemic, which spreads by close physical contact, has raised a key topic of security that was previously unrelated to customers' acceptance and use of online buying and e-commerce services, namely health and safety concerns.

Shipment services

As stated by Zhou, Wang, and Liu (2018) shipping is a component of the whole supply chain, which has an immediate influence on consumer's intention to purchase and drives satisfaction. Shipping is an important activity in any business, but it is more important in online buying. The merchandise delivery service is needed for client happiness. It implies that the

client will receive the desired items, which will be properly packed and whose volume, quantity, and specifications will be in accordance with the purchase and also the expected delivery schedule and location. It is emphasized that the delivery process is perhaps the most significant component in meeting the criteria and ensuring the fulfilment of the e-customer. The primary and most important goals for online consumers are reliability, security, and on-time shipping (Zamil, Abu-ALSondos and Salameh, 2020). Customers may get unhappy if their orders are not delivered on time. Product delivery that is timely and dependable stimulates new online purchases. The level of trust in online buying is also impacted by the effective-ness of the shipping service. If customers are dissatisfied with slow and unsecure delivery, they may easily switch from one online store to another with a couple of clicks (Vasic et al., 2019).

RESEARCH METHODOLOGY

The convenience sampling approach, which is considered a nonprobability sampling method, was used to pick a sample from the population in this study. Internet users between the ages of 19 and 65 years or older who live in Bangkok and buy groceries for themselves and/or family members from Thai physical and/or online retailers were the target demographic. For this study, Generation Z up to the age of 18 years was omitted from the target group due to a lack of income.

The answers were gathered using the Microsoft form, an online survey platform. The online questionnaire was circulated using the convenience sample approach to reach the greatest number of respondents in the shortest amount of time. The questionnaire contained a series of filter questions to check that respondents had prior experience with internet purchases. The study equipment utilized was derived from other studies. A pre-test was administered before data collection to verify that respondents understood the language and content of the questionnaire. The pre-test yielded a total of 47 replies, of which six responses were rejected because respondents did not shop online and were below 18 years old.

Pilot Test

Internal consistency reliability was used to establish the questionnaire's reliability. The Cronbach's value must be more than 0.6 for the instrument to be reliable. The pilot test was carried out with 41 target responders, as demonstrated in Table 1. The variables investigated are more than 0.6, showing the questionnaire's reliability. Given that the questionnaire was adapted from a prior study, it is clear that the content validity has been established. As a result,

the questionnaire is considered acceptable (Tavakol & Dennick, 2011; Deyalage & Kulathunga, 2019; Leong et al., 2019).

Table 1 Internal consistency reliability (n=41)

Variables	Alpha value	Items
Perceived utility	0.923	3
Perceived ease of use	0.970	4
Security perception	0.875	3
Online accessibility	0.876	3
Shipment services	0.971	6
Online grocery shopping intent	0.940	3

Source: Prepare by Author (2022)

DATA ANALYSIS APPROACHES

This research was conducted using a self-administered questionnaire, and questionnaire responses were examined using Microsoft Excel. Additionally, all data from the questionnaires was analysed using SPSS software. The research used both descriptive and inferential measurements for the study to evaluate the respondents' information and relevant hypotheses. The descriptive research design was utilized in this study to characterize the demographic features of the target demographic in terms of gender, age, education, and monthly expenditure of the respondents. Furthermore, the researcher used multiple regression analysis to summarize the accurate conclusion of the full population based on the sample (Crawford-Welch, 1991). Moreover, multiple regression helped to find relationships between many factors and one variable. The analysis assisted and supported the researcher in determining the clear results among variables. Furthermore, the researcher quantified the degree and direction of the association by calculating the correlation coefficient between the two variables (Cooper & Schindler, 2003).

PRESENTATION AND CRITICAL DISCUSSION OF RESULTS

According to Zikmund, Carr & Griffin (2013) descriptive statistics may be used to turn raw data into a for-mat that is easier to grasp and evaluate. The demographics of the questionnaire respondents are referred to in this frequency distribution table along with the percentage. There were 400 respondents in this survey, with 16 responses being excluded since the respondents did not purchase online and were under the age of 18. The results reveals that the highest percentage of respondents were women, with 64.1% (246), while 35.9% (138) of the total population were men. There-fore, the majority group in this sample population were women, with the majority of respondents were between 19 and 34 years old, representing 39.8%

of the whole sample (153 respondents), followed by 39.8% from those aged between 35 and 44 years old (153 respondents), 16.9% from those aged between 45 and 64 years old (65 respondents), and 3.4% from those aged over 65 years or more (13 respondents) respectively. Results also revealed the education level of respondents, and it indicates that the highest percentage of respondents' education level was 48.2% (185 respondents) with a bachelor's degree, and the others were 46.9% (180 respondents) with a master's degree, 0.3% (1 respondent) having less than a high school certificate, 2.9% (11 respondents) with a high school graduate, and 1.8% (7 respondents) with a doctoral degree, respectively. Therefore, the majority of the respondents have bachelor's degrees and are slightly followed by those with master's degrees.

Furthermore, responses revealed that 33.6% (129 respondents) spent time surfing the internet for more than 4 hours per day and 31.0% (119 respondents) spent 3 to 4 hours per day. Moreover, 21.1% (81 respondents) spent 2 to 3 hours per day and 12.0% (46 respondents) used 1 to 2 hours, while 2.3% (9 respondents) used less than 1 hour of internet surfing daily and 47.7% (183 respondents) used smartphone devices and 19.3% (74 respondents) used PC/Desktop. Moreover, 18.8% (72 respondents) used notebooks and 14.3% (55 respondents) used tablet devices to go online. Additionally, the largest spending group of the respondents was 5001–10000 Thai Bhat per month, which equals 32.0% (123 respondents). The second largest spending group was respondents who spent 10,000–30,000 Thai Bhat per month, which equals 26.6% (102 respondents).

Table 2 Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	IF
Constant	0.482	0.099		4.857	<.001		
Perceived Utility	0.001	0.049	0.001	0.013	0.99	0.204	.9
Perceived Ease of Use	0.124	0.051	0.141	2.44	0.015	0.185	.42
Shipment Services	0.433	0.05	0.452	8.631	<.001	0.225	.45
Online Accessibility	0.272	0.055	0.289	4.954	<.001	0.181	.52
Security Perception	0.042	0.047	0.046	0.892	0.373	0.235	.26

Source: Prepare by Author (2022)

Next were respondents who spent between 1,001 and 5,000 Thai Bhat, which equals 26.0% (100 respondents), and those who spent less than 1000 Thai Bhat, which equals 12.8%

(49 respondents). The smallest was the group of respondents who spent more than 30,000 Thai Bhat, which equals 2.6% (10 respondents). Respondent further revealed that 40.4% (155 respondents) used payment on delivery for completing online purchases and 20.1% (77 respondents) used QR codes. Moreover, 19% (73 respondents) used credit/debit cards, whereas 18.5% (71 respondents) used mobile banking, and only 2.1% (8 respondents) used other payment options for purchases, in which 44.5% (171 respondents) selected all of the above options in grocery purchases and 21.4% (82 respondents) used meal kits (e.g., line/Grab/Robinhood). Furthermore, 16.4 (63 respondents) used grocery home delivery, 14.8% (57 respondents) used it directly from a restaurant, and only 2.9% (11 respondents) had no experience with online purchases. More-over, 32.3% of respondents used the hypermarket retailer's website (124 respondents), 27.1% of them used the brand's official store (104 respondents), and 22.9% of them used the department store (88 respondents), whereas 17.4% of respondents used unbranded shops on Facebook/Instagram/Shopee/Lazada (67 respondents) and 0.3% of the other stores. Therefore, it is clear that the majority of respondents used hypermarket retailers for grocery shopping.

Inferential Results

This section represents the relationship between independent (perceived utility, perceived ease of use, security perception, online accessibility, shipment services) and dependent (online purchase intention) variables. A multiple regression analysis was conducted to analyze this relationship.

The variance inflation factor (VIF) measures how much the variance is inflated. It exists for each predictor in multiple regression analysis. The VIF 1 shows that there is no correlation between the predictor and the remaining predictor variables; hence, the variance is not inflated at all. A VIF value of greater than 4 indicates further investigation, and exceeding 10 shows there is a need for serious multicollinearity requiring correction (Hair et al., 2008). The tolerance shows the relation-ship between independent variables from 0 to 1. A tolerance value of below 0.10 is a cause for concern. High tolerance, i.e., over.84, shows low multicollinearity (Bhukya & Singh, 2015). In this study, the tolerance values of all variables were above 0.10 and the VIF value was less than 10. Thus, the multicollinearity problem was not a concern.

Table 3 Model Summary Data

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	f1	f2	Sig. F Change
1	0.876 ^a	0.767	0.764	0.35696	0.767	248.515	5	78	<.001
a. Predictors: (Constant), Shipment services, Perceived Ease of Use, Security Perception, Perceived Utility, Online Accessibility.									

Source: Prepare by Author (2022)

The result of linear regression analysis shows the significant variables in this research were three variables: perceived ease of use (sig level =.015, which is less than the P value of 0.05); shipment services (sig level =.001, which is less than P value 0.05); and online accessibility (sig level =.001, which is less than P value 0.05) significantly affected the online grocery shopping intent of consumers in Bangkok at 0.05 level of statistical significance. While security perception (sig level =.373, which is more than P value 0.05) and perceived utility (sig level =.990, which is more than P value 0.05) had no significant effect on the online grocery shopping intent of consumers in Bangkok. For the significance analysis, if the value is equal to or less than the P value of 0.05, then this hypothesis indicates the significant influence of the independent variables. In educational research, 0.05 and 0.1 levels of significance are commonly used because 0.5 levels of significance are equal to 95 times in the population sample. In this research study, the findings also revealed that the unstandardized coefficient B value of 0.433 in shipment services had the strongest weight among all factors towards purchase intention of consumers, followed by 0.272 in online accessibility, 0.124 in perceived ease of use, 0.042 in security perception, and 0.001 in the perceived utility factor. The B value is the value that can change a standard deviation, such as in shipment services, where the B coefficient value is equal to 0.433, which means a change of 0.433 standard deviations in the criterion variable item. The higher the B value, the greater the impact of the predictor variable on the criterion variable. Moreover, in multiple regression analysis, unstandardized coefficients (B) signs, which can be plus or minus signs, can be used to interpret the relationship between variables' directions. In the case of a positive level of B coefficient, it means the relationship of those variables with the dependent variable is positive. In contrast, if the B coefficient is negative, the relationship between the independent variable and the dependent variable is negative. Eventually, the B coefficient is equivalent to zero, which means there is no relationship between variables. The significant F value from Table 3 was less then to 0.01,

which shows that all the variables were significantly related to each other. The R-square in this study was 0.767, which explains that perceived ease of use, perceived utility, security perception, online accessibility, and shipment services had 76.7 % of the influence on the online grocery shopping intent of consumers in Bangkok.

SUMMARY OF THE FINDINGS

The data revealed that Covid-19 had a substantial influence on the e-commerce distribution network, e-retailers, and customer behaviour while shopping for food online. Smartphones and tablets were the most commonly used devices for online shopping, with 64% of respondents using them to make purchases. Thailand has a relatively high smartphone penetration rate, and people use their cell phones for a variety of functions, including online shopping.

The majority of respondents (64 %) started their online shopping experience with a Google search. As was also discovered, there is no single shopping site where customers always go to find the things they desire, since 32.3 percent of respondents used a hypermarket retailer's website (124 respondents), 27.1 per-cent used a brand's official store (104 respondents), and 22.9 percent used department stores (88 respondents), while 17.4 percent used unbranded shops on Facebook / Instagram / Shopee / Lazada (67 respondents), and 0.3 percent used other online stores.

During the crisis, research revealed that vendors and retailers enhanced their online e-commerce infrastructure and emphasized consumer safety, online accessibility, ease of use, and fulfilment. Online shopping offers superior conveniences such as speedier delivery and a more user-friendly website or app, which encourages individuals to purchase online instead of in-store locations. The current study suggested a conceptual framework based on the Theory of Acceptance Model and the inclusion of online accessibility, security perception, and shipment services as factors to investigate the significant influence on consumer online grocery buying intention.

Traditionally, buyers could only acquire most of the knowledge provided by the merchant through face-to-face engagement or telecommunications. Currently, online businesses provide much more complete services, such as shipping offerings and the convenience of online affordability. For the reason that the demand for interactive websites and online purchases has skyrocketed, this study was critical in determining the link between the antecedents and dependent variables. As a result of this research, the prospective findings will have useful consequences for online marketers and sellers looking to improve their services and

preserve consumer happiness. All of the independent factors (perceived ease of use, online accessibility, and shipment services) were related to the customer's purchase intention for online grocery shopping in Bangkok, but perceived utility and security were not.

CONCLUSIONS

Organizations continue to take preventative health measures to protect the health and safety of their employees, supply chain collaborators, and customers. Firms must rapidly adapt and adjust their marketing strategy, with a focus on digitization. Government controls, security measures, social isolation, and travel limitations have influenced retail grocery purchasing during Covid-19 and after the government shutdown, resulting in insufficient personnel, a scarcity of funds, mobility challenges, volume limits, consumer expectations, consumer safety, and adjustments in workplace practices, among other factors.

Consumers want to prevent the infection and the danger of Covid-19, but stores are having difficulty reaching clients. During a lockdown, they focus on secure packing and speedy delivery of goods; enhancing the quality of a product or service will contribute to greater demand and profitability. The epidemic of Covid-19 enhances customer awareness of online food purchasing. The study results provide a set of guidelines for managers of Thai retail enterprises to analyze the strengths and limits of their service provision and then recommend areas where adjustments may be required. The characteristics identified in this study can be utilized as advice for the e-commerce sector to improve service delivery.

THEORETICAL IMPLICATIONS

From a theoretical standpoint, this research implies that these three variables, perceived ease of use, online accessibility, and shipment services, may provide a means to optimize the TAM variable's perceived utility in a discretionary situation, including e-commerce. Even though the Covid-19 epidemic occurred near the end of 2019, there appears to be an increase in research on this topic, primarily in healthcare and rarely in business. While the majority of the writers examined the impacts of Covid-19 in the United States and Europe, this research adds another perspective on Covid-19 in Thailand.

This research of the Covid-19 context in Thailand is unique from previous articles. The constraints caused by the Covid-19 pandemic under new circumstances determine the amount of ease that one experiences when purchasing online using e-commerce platforms (Venkatesh & Davis, 2000). The platform must provide features that aid in shopper decision-making and the extent to which a customer believes the attributes and qualities of a website suit his or her

wants and criteria (Hsiao et al., 2010). These efforts can improve the e-commerce platform's user-friendliness, navigation, and design, resulting in enhanced accessibility and ease of use as viewed by the online consumer (Silverman et al., 2001).

The findings reveal that Covid-19 has a considerable influence on Bangkok customers' online purchase intent. During the pandemic, shipping services drove client satisfaction; clients received the desired items, which were properly packed and the volume, quantity, and specifications were in accordance with the purchase, the expected delivery schedule, and location (Zhou et al., 2018). Nevertheless, lacking Covid-19 as a framework, their purchase behaviour remains unchanged. Shipping is an important activity in any business, but it is more important in online buying. As a result, the goal of this article has been accomplished and proven that Covid-19 influences shifting reactions as well as assists businesses in understanding its function in purchasing behaviour and ability to adjust in time to changing conditions.

MANAGERIAL IMPLICATIONS

In a period of global competitiveness, it is critical to react quickly to the diversity of customer expectations and to employ new technologies and intelligence to ease management. The current study suggests that by integrating user experience, shipping service quality, and returns service consistency, e-retailers may increase brand recognition to strengthen the reliability of their engagements. As a result, e-retail logistics service providers must ramp up the transition from conventional shipping to metadata shipping ability to adjust to the introduction of e-business and construct strong customer relationships based on increased perceptions, support, and collaboration. In particular, managers of e-retail supply chain enterprises should control their webpage's overall quality of product content, appealing catalogues, accessibility, and layout, which customers consider essential reasons for a repeat.

As studied by Pigatto, Machado, Negreti, and Machado (2017) the retailer's customer support staff's preparedness and desire to solve customer concerns and give timely replies will be critical to satisfying consumers and increasing purchase intention. Customers will be dissatisfied if there is no online customer service and replies are slow. Second, the availability of several channels of communication can lead to improved satisfaction since different consumers often prefer different contact alternatives. The availability of shipment services has been noted as a key issue that online sellers must address (Zhou et al., 2018). As a result, online merchants must pay close attention to these areas and treat them effectively to boost client happiness, which will lead to greater sales. As a result of fast variations in client purchasing habits and behaviours, businesses must focus on consumer demands and requirements.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

Despite significant insights, this research has several drawbacks. The fact that this is regional research is a significant constraint. Due to time and financial restrictions, the study solely covered Bangkok. This research only focused on the Thailand e-commerce industry, which may result in some varied replies from various e-consumers since the research was undertaken in other nations, the actual market context, and local culture are distinct. Furthermore, the study was confined to a survey methodology employing a questionnaire to obtain the main data from respondents, and it was believed that the participants answered the questions honestly and correctly. Because of the existing conditions' constraints, the number of responders was limited; thus, the majority of responders had access to the internet. Even though the variables perceived utility and security perception had a weaker impact, it is important not to overlook these influencing factors because most studies support these factors, and considering the Covid-19 pandemic, which did not show the same results as others, future research should also consider these factors. , Additionally, due to the rapid growth of retail services and technology aimed at end-users, future research should also seek to address particular technical solutions provided by corporations. Further study should also explore the discovery of key characteristics to increase consumer loyalty in the context of the expanding potential of machine learning in e-commerce, particularly during a coronavirus pandemic. The level of technical preparedness of customers to embrace them will decide the sector's future development. The service of online shopping logistics is a significant aspect of the rivalry between online shopping malls. Given the high expense of return shipping, this issue must be researched further.

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