The influence of online customer experience on e-satisfaction, eWOM, and repurchase intention: An investigation of on-demand logistics in Thailand

อิทธิพลของประสบการณ์ลูกค้าออนไลน์ที่มีต่อความพึงพอใจทางอิเล็กทรอนิกส์ การสื่อสารปากต่อปากแบบอิเล็กทรอนิกส์ และความตั้งใจในการซื้อซ้ำ: กรณีการบริการโลจิสติกส์แบบออนดีมานด์ในประเทศไทย

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บทคัดย่อ

การวิจัยครั้งนี้มีจุดประสงค์เพื่อการศึกษาตัวแปรด้านประสบการณ์ของลูกค้าออนไลน์และผลกระทบต่อความพึงพอใจทางอิเล็กทรอนิกส์ การสื่อสารแบบปากต่อปากทางอิเล็กทรอนิกส์และความตั้งใจในการซื้อซ้ำของผู้ให้บริการโลจิสติกส์ออนดีมานด์ในประเทศไทย นอกจากนี้ยังมีจุดประสงค์เพื่ออธิบายถึงการศึกษาของตัวแปรส่งผ่าน ได้แก่ ความพึงพอใจทางอิเล็กทรอนิกส์ที่มีต่อตัวแปรตาม ได้แก่การสื่อสารแบบปากต่อปากทางอิเล็กทรอนิกส์และความตั้งใจในการซื้อซ้ำ การบริการโลจิสติกส์แบบออนดีมานด์โดยแพลตฟอร์มการให้บริการอิเล็กทรอนิกส์ เช่นการบริการจัดส่งอาหารและ/หรือการบริการรถรับจ้างให้ความสำคัญกับประสบการณ์ของผู้ใช้บริการแพลตฟอร์มเนื่องจากสามารถส่งผลกระทบต่อพฤติกรรมของผู้ใช้บริการ งานวิจัยนี้ได้พัฒนาและนำเสนอกรอบแนวคิดงานวิจัย และวิเคราะห์ด้วยการใช้แบบจำลองสมการโครงสร้าง (SEM) จากการสำรวจประชากร ได้แก่ผู้ใช้ที่มีประสบการณ์ในการใช้บริการ ในงานวิจัยนี้ มีกลุ่มตัวอย่างจำนวน 537 ราย ซึ่งเป็นผู้กรอกแบบสอบถามเองเพื่อเก็บข้อมูลในการวัดผลและวิเคราะห์ข้อมูลของงานวิจัย ผลการวิจัยยืนยันว่าประสบการณ์ของลูกค้าออนไลน์โดยรวมมีผลโดยตรงต่อความพึงพอใจ ทางอิเล็กทรอนิกส์ ส่วนความพึงพอใจทางอิเล็กทรอนิกส์ ส่งผลกระทบโดยตรงต่อคำพูดแบบปากต่อปากทางอิเล็กทรอนิกส์และความตั้งใจในการซื้อซ้ำอีกด้วย นอกจากนี้ความพึงพอใจทางอิเล็กทรอนิกส์นั้นเป็นตัวแปรการส่งผ่านแบบสมบูรณ์ ที่มีต่อคำพูดแบบปากต่อปากทางอิเล็กทรอนิกส์ และความตั้งใจในการซื้อซ้ำ โดยผลสรุปนี้ได้ผลลัพธ์จากค่าผลกระทบอ้อมถึง ซึ่งวัดโดยวิธีการสร้างกลุ่มตัวอย่างโดยไม่มีพารามิเตอร์ ผลสรุปของงานวิจัยนี้สามารถนำไปต่อยอดด้านการปรับปรุงกลยุทธ์ทางการตลาดและการขยายช่องทางบริการออนไลน์ และการบริการหลังการซื้อได้

คำสำคัญ : ความพึงพอใจทางอิเล็กทรอนิกส์ ; คำพูดแบบปากต่อปากทางอิเล็กทรอนิกส์ ; การให้บริการโลจิสติกส์แบบออนดีมานด์ ; ประสบการณ์ของลูกค้าออนไลน์ ; ความตั้งใจในการซื้อซ้ำ

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ABSTRACT

This study aims to study the online customer experience variables and the impact on electronic satisfaction, electronic word of mouth (eWOM), and repurchase intention in the context of on-demand logistics services in Thailand. Moreover, this research is also aimed at describing the study of mediating variables such as e-satisfaction toward dependent variables such as eWOM and repurchase intention. On-demand logistics through electronic services platforms such as food delivery and/ or ride-hailing transportation prioritize the platform user experiences influence consumer behavior. This research developed and presented a conceptual model. The model was analyzed using structural equation modeling (SEM) from a survey of a population, such as experienced users. The sample group consisted of 537 experience users who answered the questionnaire for collecting, assessing, and analyzing data. The results confirm that overall customer experience has a significant direct effect on e-satisfaction. Furthermore, e-satisfaction has a direct impact on eWOM and repurchase intention. Moreover, e-satisfaction is a perfect mediation that influences eWOM and repurchase intention. The obtained result is derived from the indirect effect, which is measured through the non-parametric bootstrapping method. The summary of this research can be used to improve marketing strategies and extend their online service channels and post-purchase services.

Keywords : e-satisfaction ; eWOM ; On-demand Logistics Service ; Online Customer Experience ; Repurchase Intention

Introduction

For one decade, the digital transformation has changed service industry and community needs in different business sectors globally. To modernize the city life, many scholars started to survey, which factors can impact customer satisfaction negatively and positively in service industries, especially in the sectors which apply and integrate IoT (Internet of Things) technology. In this survey, the researcher built up conceptual model and used quantitative method to measure whether/how e-satisfaction, electronic Word of Mouth (eWOM) and repurchase intention can impact online customer experience in on-demand logistics service, eg. food delivery and/ or ride-hailing transportation in Thailand, because the on-demand logistics service has become a primary demand for society and city development, especially in big cities as Bangkok.

The revolution of the internet and online technology has disrupted customer experiences, especially in the service sector. The online services business has become a vital factor entangled with consumption of products and services. Logistics, especially on demand logistic service, are one of the service related industries whose demand is fueled by the extraordinary growth of the digital commerce market. In Southeast Asia, the Unicorn companies such as Uber, Didi Kuaidi, Grab and Gojek has driven the rapid growth of the on-demand logistics economy. In 2019, P&S market research (2020) announced the value of the global on-demand logistics market alone was $9.1 Billion. P&S market research (2020) revealed that it is expected to reach $75 Billion by 2030.

Taylor (2018) reported that on-demand service platforms, including food delivery, parcel delivery, and ride-hailing transportation, arise to connect a sensitive-on-delay customer with service providers. The growth of online consumers drives the need for on-demand logistics service. Delivery logistics and service quality are the critical factors to gain a competitive advantage for retailers (Hong, Lee, Cheong and Lee, 2019) Recent research has found the relationship between online customer experiences and satisfaction and purchasing behavior. For example, Pandey and Chawla (2018) stated that customer satisfaction and

customer purchasing loyalty depend on customer experience. In addition, Rita, Oliveira and Farisa (2019) found that customers often considered information on electronic-word-of-mouth (eWOM) before buying; thus, positive and negative eWOM can influence customer behavior. Therefore, this study is based on the premises that the exploration of online customer experience and its contribution to forecast customer behavior, namely, satisfaction, eWOM, and repurchase intention are increasingly important for the high growth service industry. Previous studies have also largely ignored the relationship between customer experience and the mentioned variables on on-demand logistic service especially in the emerging market case. The problem of previous research existed in the area of limited of scope especially geographical area and contradictory results which lead to limited generalization for conclusion. The results of this study can also provide value added to previous studies that have contradictory conclusion. Additional of results from the key industry will provide alternative perspective that essential for on-demand logistics service providers in order to understand factors and mechanism explaining repurchase intention. *Thus,* this research provided and integrated model that identifies key variables, namely electronic satisfaction, that mediate online consumer experience, electronic word of mouth and repurchase intention. The conclusion could lead to further improvement of their marketing strategies and, thus, increase their market share. Therefore, this research gap is directed to appropriate research design to fulfil the objectives of this study.

Limsarun, Navavongsathian, Vongchavalitkul and Damrongpong (2021) conducted survey in Food Delivery Application (FDA) Service in Thailand and found out that trustworthiness (TW), social influences (SI), system design (SD) have significant impact on customer's loyalty, task-technology fit (TTF) plays a mediating role between TW, SI, SD and customer's loyalty. Fakfare (2021) revealed that food riders, reviews and timesaving as service attributes play key role in increasing favorable customer experience when using FDA. Chotigo and Kadono (2021) surveyed the adoption of Food Delivery apps before and during the pandemic COVD19, which indicated the user's satisfaction was impacted by social influence, trust, convivence and application quality. According to Paisri, Ruanguttamanun and Sujchaphong (2022), customer experience has positive impact on affective and continuance commitment. Affective commitment plays a mediating role between customer experience and eWOM, while continuance commitment works as mediator between customer experience and revisit intention. The previous scholars built up different research models to verify what impacts the Food Delivery adoption, in another word, what motivate the users to enjoy online food delivery. But by synthetizing their finding, key features can be concluded as Repeating/Continuance, Communication/Sharing/Interchange, fulfillment/Satisfaction, which can be used in more context and more business sectors. There is still research gap existing: One universal and simplified model should be built up to explain and be applied in more on-demand logistics service. In this survey, the researcher built up simplified model including four variables, which are identified and integrated into one model, which includes 2 dependent variables, eWOM and revisit intention, 1 independent variable, customer satisfaction. However, there is mediator between customer satisfaction with eWOM and intention. (Referred to Figure 1 Conceptual Framework)

After COVID Pandemic, the local Thai residents have higher demand of on-demand logistics. In Therefore, it's essential and right time to enhance the level of this industry to help Thailand out of recession.

Objective

This research study aims to examine the influences of online customer experience on customers' e-satisfaction, eWOM, and repurchase decisions as well as the moderating role of e-satisfaction toward eWOM and repurchase intention.

Literature Review

On-demand Logistics in Thailand

Statistics have shown that the significance of the on-demand logistic service business to the overall Thai industry is on the increase. The impact of the COVID-19 crisis has forced many stores to close. In contrast, e-commerce has grown due to less willingness to shop in person. According to Kasikorn Research (2020) stated that the amount of food delivery has increased by up to 150% in the first half of 2020 compared to the same period in 2019. While ride-hailing transport services at a market value of 21,000 million baht decreased by 34% because some cities still restrict travel due to the pandemic. Furthermore, two leading banks in Thailand, SCB and KBANK, jumped into the food delivery industry in 2020. SCB launched its 'Robinhood' application and partnered with Skootar for delivery service, operating only in the Bangkok metropolitan area. Another application, from KBANK called 'Eatable', is a platform for ordering food via QR code at the restaurant and for delivery service. The restaurant can choose the logistics service company such as Grab, Lalamove, or Skootar for a particular order. Both platforms have solved the pain point of food delivery by offering the 'no Gross Profit (GP) fee' for a restaurant so that customers could only pay for a delivery fee but the same price as for walk-in food.

The major players that play important roles in on-demand logistics service in Thailand that cover several service offerings from food delivery, postal service, and ride-hailing transportation are Lineman, Grab, and Gojek. The market leader was Lineman which had more than 500,000 monthly active users with 10,000 drivers available in Thailand.(Syukur, Kosumsuriya and Jongsureyapart, 2020). It also has partnered with Wongnai (local restaurants database platform), Thai postal, and Lalamove (On-demand logistics provider). While Grab, which offers the same services does not have a clear number of users in Thailand, it claims that it has over 3.5 million daily rides overall from eight Southeast Asian countries in which it operates. Another on-demand platform is Gojek which was just rebranded from the GET application in 2020 after it expanded in Thailand in 2018. The number of users in Thailand is unknown but Gojek stated that the current total number of applications downloaded is 170 million. It also has over 2 million drivers and more than 500,000 restaurants in the system's overall service area in Southeast Asian countries.

To summarize, the on-demand logistics in Food Delivery section has developed enormously during the pandemic because of quarantine. In contrast, demand of the ride-hailing has decreased because of travel restriction. In general, the increase and decrease could be traded-off. The fast development has attracted investors even from financial industry. Meanwhile, the main market players are still from food delivery, postal service, and ride-hailing transportation, which will offer more job chances and increase GDP continuously in the future.

Overall Online Customer Experience

In their synthesis of existing definitions, Pei, Guo, Wu, Zhou and Yeh (2020) coined the term 'Online customer experience' to encapsulate the subjective responses individuals manifest during their digital interactions with a company. It encompasses service quality, emotions, and rationality, spanning the entire customer journey from initial exploration to consumption. Customers' expectations of internet businesses are said to be shaped in part by their customer experience. As a result, customer experience is entirely personal and involves the client on various levels. Customer expectations and the stimuli from their interactions with the business and its offerings at various touch points or points of contact are compared to determine the customer experience rating (Micu, Bouzaabia, Bouzaabia, Micu and Capatina, 2019). As for the online customer experience, it is a dynamic, holistic, and subjective process that results from interactions

between customers and the online environment. It is a psychologically subjective response to the e-retail environment (Bhattacharya and Srivastava, 2020).

Customers could perceive the experience through both direct and indirect interaction, and it could be in either a positive or negative manner.(Iqbal, 2020). When a customer has a positive experience, it could empower consumers' confidence which makes online purchasing easier (Saha, Zhuang and Li, 2020). However, McLean, Al-Nabhani and Wilson (2018) argued that when customers spend a longer time than necessary to complete the purchasing process on an application, it will negatively impact customer experience.

Online customer experience is considered as a critical element that has an impact on future online shopping (Saha et al., 2020). The positive experience also has a positive effect on electronic word-of-mouth intention (eWOM) as pointed out by Serra-Cantallops, Ramon-Cardoria, and Salivi (2018). While Online Customer experience technology trends within the greater realm of its overall industry trends require particular attention as clients today anticipate more from their business interactions due to the continuously advancing technological and digital advances. The previous five years have seen an unmatched rate of technological advancement. Examples include the rapid adoption of tablets and touch-screen computers, the proliferation of mobile interfaces and devices, and the commoditization of the "Internet of Things" through sensors and monitors, and micro and mobile payments, which demonstrate the need for corporations to adapt to these technological advancements at the same rate they are released to deliver an innovative and satisfying customer experience (Batra, 2019).

The study of online experience in an e-retailing context by Izogo and Jayawardhena (2018) has developed the framework of the online shopping experience (OSE). It consists of 8 dimensions: aesthetics, playfulness, product-related experiential attributes, cost-related experiential attributes, convenience and usability, trust, expertise experiential attributes, and task experiential attributes. The study found that these dimensions lead to internal and external responses to service experience, repurchase intentions, and word-of-mouth intentions.

Online Customer Experience and e-satisfaction

The result of positive feelings from the experience after perceiving a greater level of service outcome than the expectation is identified as customer satisfaction (Wang et al., 2019). Customer satisfaction is an essential dimension that refers to how customers feel about past activities and experiences in interacting with the retailer. In an online shopping context, e-satisfaction refers to "the contentment of the customer for her prior purchasing experience with a given electronic commerce firm" (Trivedi and Trivedi, 2018). Various studies have indicated that e-satisfaction is influenced by the experience that a customer receives online. The previous study by Roy, Balaji, Sadeque, Nguyen and Melewar (2017) found that online retailers that have adopted various types of smart technologies such as interactive displays, smart shopping carts, radio frequency identification systems (RFID), shopping assistant systems, near field communication systems (NFC), and augment-reality interactive technology (ART) enhance positive online customer experience which directly increases customer satisfaction. Pei et al (2020) divided online customer experience into 3 dimensions namely, experience with the shopping environment, staff service, and shopping procedure. The study found that positive online experiences with staff service and shopping procedures influence customer satisfaction. In today's market, businesses that don't offer high-quality goods and services risk losing clients to rivals. Organizations must be customer-centered, provide higher value to customers, cultivate connections, and concentrate on market engineering be orientated to consumer demand and quality. Organizations of today monitor their competitors as well as their performance,

customer happiness, and customer expectations (Pakurár, Haddad, Nagy, Popp and Oláh, 2019). In addition, Khan, Zubair and Malik (2019) found that customer satisfaction could be enhanced by focusing more on e-service quality. According to Sianipar, Situmorang and Wibowo (2023), digital customer experience impacts customer loyalty and satisfaction through emotional marketing. Digital customer experience can influence loyalty through emotional marketing and satisfaction. Based on these findings, the study proposed:

Hypothesis 1: Online customer experience has a direct positive effect on e-satisfaction.

e-satisfaction and eWOM

Electronic word of mouth (eWOM) is the dynamic and continuing process of information sharing over the internet (Ismagilova, Slade, Rana and Dwivedi, 2020 ; Khan et al., 2019). It could be any positive or negative statement in a form of reviews and ratings, recommendations, or opinion comments (Serra-Cantallops et al., 2018). It is different from traditional WOM as it evolved in form of the internet of things. eWOM is more effective in terms of having a massive amount of impact and the speed of the interaction (Serra-Cantallops et al., 2018). Businesses have to be aware of both positive and negative communication as it impacts customers' behavioral intentions toward the company (Rita et al., 2019). Wang et al (2019) revealed that a positive usage experience enhances a higher eWOM intention. The study suggested that providing above-average quality products and services influences both future continuance and intention to spread positive eWOM. Some studies (Loureiro, Gorgus and Kaufmann, 2017 ; Serra-Cantallops et al., 2018) showed that not only satisfaction influences positive eWOM but also brand love could enhance a higher intention on eWOM. It is relevant to the study by Anastasiei and Dospinescu (2019) that satisfaction and commitment have an essential effect on both word-of-mouth volume and valence. The study explains that when a customer likes an online retailer, they tend to disseminate the information or user experience on social media as a reward to the company. However, dissatisfied customer has a higher possibility to spread negative word-of-mouth than satisfied customers sharing their positive experience. Regarding the previous cited literature, the following hypotheses were proposed:

Hypothesis 2: e-satisfaction has a direct positive effect on eWOM.

Hypothesis 3: e-satisfaction mediates the effect of overall customer experience on eWOM for on-demand delivery service.

e-satisfaction and Repurchase Intention

Repurchase intention is the decision to continue to buy products or services from the same provider in the future which based on customer experience (Thakur, 2018). Rita et al (2019) confirmed that repurchase intention is based on the previous purchasing experience enhancing the willingness to make another purchase from the same provider. Bhattacharya and Srivastava (2020) stated that repurchase intention is influenced by the overall customer experience, and it could be considered as a customer satisfaction outcome. For a company to succeed, its clients should be satisfied. So, they will remain devoted to the company and make more purchases (Rita et al., 2019). A study on American-based e-commerce retailers by (Nisar and Prabhakar, 2017) found that the result of a higher degree of e-satisfaction enhanced the spending behavior of consumers. Although a study by Thakur (2018) show that customer satisfaction influences future continuing intention, the study by Chen and Chen (2017) argued that customer satisfaction is essential but uncorrelated to repurchase intention as it could be more complex under some circumstance and it is an insufficient condition to the future continuing intention (Chen and Chen, 2017). Thus, the following hypothesis are provided to investigate the effect of e-satisfaction on repurchase intention in on-demand logistics service providers:

Hypothesis 4: e-satisfaction mediates the effect of overall customer experience on eWOM**.**

Hypothesis 5: e-satisfaction mediates the effect of overall customer experience on repurchase intention for on-demand logistics services.

Conceptual Framework

Based on the literature review presented in the previous section, the overall customer experience is measured by seven factors, classified in Table 1. Various items were developed from the pre-validated scales for online customer experience as well as adapted from electronic service quality. Some constructs were modified since they were validated in the context of other service industries. The new scale measuring online customer experience comprises seven dimensions which are presented in the measurement items table. A five-item scale was developed to measure e-satisfaction, a four-item scale for eWOM, and a three-item scale for repurchase intention. Table 1 Summarizes the information of each instrument, including the constructs, authors, number of items. The statements were verified to reach reliability coefficients from previous research, therefore, they can be used for the similar context in this survey (Hair et al, 2022).

A research conceptual framework that measures the influence of overall online customer experience on e-satisfaction, eWOM, and repurchase intention is shown in Figure 1.
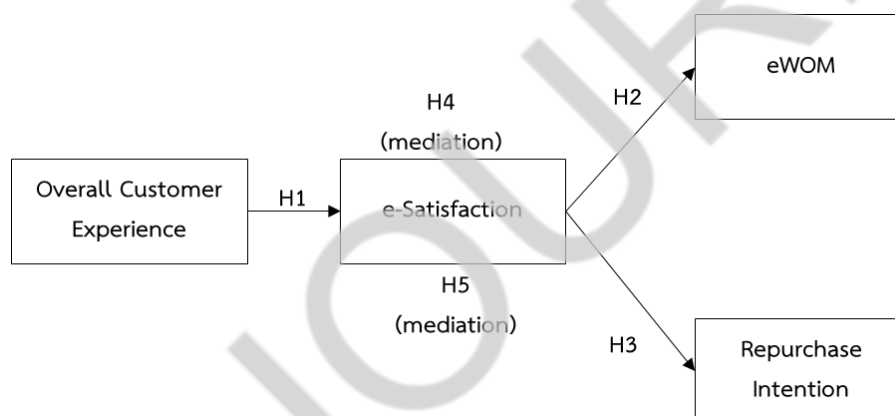

Figure 1 Conceptual framework

Hypothesis

We proposed the following hypothesis.

H1: Overall customer experience has a direct positive effect on e-satisfaction.

H2: e-satisfaction has a direct positive effect on eWOM.

H3: e-satisfaction has a direct positive effect on repurchase intention.

Research Methodology

Population and Samples

The research was conducted on respondents who have had purchasing experiences with on-demand logistics services provided by an on-demand logistics service that operated in Thailand. To reach the respondents efficiently, the researcher applied snowball sampling technique (Naderifar, Goli and Ghaljaie, 2017 ; Parker, Scott and Geddes, 2019). It is rational and convenient to find out the potential respondents with same demand in same context. Data collection was conducted via an online questionnaire focusing on the online customer experience provided by on-demand logistics service firms such as food delivery, ride-hailing transport services, and parcel and document delivery services. In this survey, the sampling and

questionnaire spreading begin with a convenience sample of initial participants, namely, the students, who will recommend their relatives and friends who have the same purchasing experiences. These initial participants as "seeds," are used to recruit the further participants.

Confirmatory factor analysis (CFA), referred to as restricted factor analysis, structural factor analysis, or the measurement model, typically is used in a deductive mode to test hypotheses regarding unmeasured sources of variability responsible for the commonality among a set of scores (Orcan, 2018). In this survey, the reliability and validity of the proposed model was evaluated by employing the confirmatory factor analysis (CFA) method (Capinding, 2023 ; Orcan, 2018). The hypothesizes were developed and tested by using the structural equation model (SEM) technique (Hair et al., 2022 ; Hair, Risher, Sarstedt and Ringle, 2019)

Table 1 Measurement Items

Measures	Items	Statements	References
Overall Customer Experience (OCX)	OCX1	I have a great deal of experience with online ride-hailing/food delivery/postage services	Saha et al (2020)
	OCX2	I have been exposed to online ride-hailing/food delivery/postage services very frequently in the past	Saha et al (2020)
	OCX3	The customer service of online ride-hailing/food delivery/ postage service is proficient	Pei et al (2020)
	OCX4	The customer service of online ride-hailing/ food delivery/ postage service frequently communicates and has a good service attitude	Pei et al (2020)
	OCX5	The procedure of online ride-hailing/ food delivery/ postage service is simple and fast	Pei et al (2020)
	OCX6	The pictures and reviews are always available on the online ride-hailing/ food delivery/ postage service platform	Pei et al (2020)
	OCX7	Online ride-hailing/ food delivery/ postage service after-sales service is reliable and comprehensive	Pei et al (2020)
e-satisfaction (SAT)	SAT1	I think I did the right thing by making a purchase from this application	Pandey and Chawla (2018)
	SAT2	In general, I am satisfied with the products and services provided by this application	Pandey and Chawla (2018)
	SAT3	I am very satisfied with the internet-based transactions	Khan et al (2019)
	SAT4	I am pleased with the experience of using this mobile application	Trivedi and Trivedi (2018)
	SAT5	The products/services offered by the application exceeds my expectations	Roy et al (2017)

Table 1 (Continued)

Measures	Items	Statements	References
eWOM	eWOM1	I will recommend the products/services found in this application to other users	Wang et al (2019)
	eWOM2	I say positive things about this application on social networks	Rita et al (2019)
	eWOM3	I recommend this application to anyone who seeks my advice	Rita et al (2019)
	eWOM4	I have written positive comments about this application on social networks	Serra-Cantallops et al (2018)
Repurchase Intention (PI)	PI1	I will reuse this application in the future	Wang et al (2019)
	PI2	It is likely that I will repurchase from this mobile application in the near future.	Bhattacharya and Srivastava (2020)
	PI3	I will increase purchases through this application	Rita et al (2019)

Research Instruments

Respondents were directed to the questionnaire which was divided into four main parts. Part one concerned respondents' demographic information, part two collected respondents' information about using on-demand logistic services, part three asked about e-satisfaction, and part four was about repurchase decisions. The questionnaires used a 5-point Likert scale rating matrix with "5" indicating "strongly agree" and "1" indicating "strongly disagree". The questionnaires were distributed from June to August 2022 via online self-administrated. The collected data was analyzed by using the structural equation model (SEM) (Hair et al., 2019). The confirmatory factor analysis (CFA) method was undertaken to justify the reliability and validity of the proposed conceptual model.

Data Collection

In terms of data collection, the study used data from end customers who have experience in engaging in online service and actual experience with on-demand logistics service. The online service was limited to those who have web or mobile service and operate in Thailand. Data were collected from 537 people purchasing and engaging in on-demand logistic services via a smartphone application.

Data Analysis

A total of 580 questionnaires were received but only 537 questionnaires were valid because 43 of them contained some missing values. The demographic characteristics of the respondents indicated that about 66.18% were female and 28.45% were male. The majority of the respondents (66.18%) were between 20-30 years old, 75.63% had a bachelor's degree and 20.05% had a master's degree. Respondents had an average income greater than 20,000 THB ($666) and between 10,000–20,000 THB ($333 - $666) accounting for 47.68% and 35.52%, respectively.

Most of the respondents work in the private sector (46.25%) and used a ride-hailing/food delivery/postage service 2 - 3 times per week (48.02%). The type of service that respondents most frequently used were food delivery (34.65%). Most of the respondents spent about 101-200 THB ($3.37 - $6.67) for each on-demand logistics service order.

Table 2 shows the descriptive statistics of the mean and standard deviation for each variable. The maximum value was 5 (strongly agree), and the minimum value was 1 (strongly disagree). The average overall customer experience was 3.70, indicating the respondents have experience in using on-demand logistic services such as food delivery, ride-hailing transport services, and parcel and document delivery service. The average e-satisfaction, eWOM, and purchase intention were 3.69, 3.64, and 3.84, respectively.

Table 2 Descriptive statistics of variables

Construct	Variable	Mean	S.D.
e-satisfaction	SAT1	3.80	0.93
	SAT2	3.67	0.92
	SAT3	3.87	0.94
	SAT4	3.47	1.11
	SAT5	3.63	1.05
Overall Customer Experience	OCX1	3.72	0.86
	OCX2	3.84	0.82
	OCX3	3.77	0.84
	OCX4	3.63	0.89
	OCX5	3.68	0.91
	OCX6	3.63	0.85
	OCX7	3.63	0.85
eWOM	eWOM1	3.45	1.08
	eWOM2	3.64	0.97
	eWOM3	3.88	0.89
	eWOM4	3.57	0.95
Purchase Intention	PI1	3.83	0.95
	PI2	3.74	0.93
	PI3	3.93	0.86

Results and Discussion

Construct Validation

Since the objective of the study is to test the hypothesis based on the conceptual model presented in the previous section. Therefore, it is necessary to test the validation of the conceptual model. We conducted the CFA on the original measurement model. The results were a good fit and all values were in acceptable

ranges (CMIN/DF: 1.23, GFI: 0.97, RMSEA: 0.02, RMR: 0.03, NFI: 0.99, CFI: 0.997, AGFI: 0.93) (Hair et al., 2019). Next, the discriminant validity and reliability were validated. The results of Cronbach's alpha, average variance extract (AVE), and construct reliability (CR) suggested that the model was valid and reliable. The rules of thumb used to evaluate the values of Cronbach's alpha, CR, and AVE are 0.7, 0.6, and 0.5, respectively. Table 3 shows the factor loading, Cronbach's alpha, AVE, and CR values for the constructs. The estimated value of Cronbach's alpha of e-satisfaction was 0.89, AVE was 0.75, and CR was 0.94. For the Overall Customer Experience construct, the value of Cronbach's alpha was 0.91, AVE was 0.79, and CR was 0.96. For the eWOM construct, the value of Cronbach's alpha was 0.83, AVE was 0.75, and CR was 0.92. For the Purchase Intention construct, the value of Cronbach's alpha was 0.74, AVE was 0.80, and CR was 0.92. These results indicate that the internal consistency of the measurement model was acceptable (Hair et al., 2022)

Table 3 Reliability and Validity Testing

Construct	Variable	Factor Loading	Cronbach's Alpha	AVE	CR
e-satisfaction	SAT1	0.85	0.89	0.75	0.94
	SAT2	0.89			
	SAT3	0.89			
	SAT4	0.82			
	SAT5	0.89			
Overall Customer Experience	CX1	0.87	0.91	0.79	0.96
	CX2	0.87			
	CX3	0.91			
	CX4	0.88			
	CX5	0.91			
	CX6	0.90			
	CX7	0.89			
e-WOM	WOM1	0.80	0.83	0.75	0.92
	WOM2	0.90			
	WOM3	0.87			
	WOM4	0.88			
Purchase Intention	PI1	0.89	0.74	0.80	0.92
	PI2	0.90			
	PI3	0.89			

Hypothesis Testing

This study used structural equation modeling (SEM) to test hypotheses. The results show that the full model has acceptable goodness of fit index (CMIN/DF = 1.27, *p* = 0.00; GFI = 0.99; AGFI = 0.95; NFI = 0.99; IFI =0.99; CFI = 0.99; RMSEA = 0.02; RMR = 0.01).

Hypothesis 1 examines whether overall customer experience has a direct positive effect on e-satisfaction. The results show a significant positive association between them (β = 0.99, p < 0.001). Hypothesis 2 investigates the relationship between e-satisfaction and eWOM. The results show a significant positive direct effect from e-satisfaction on eWOM (β = 0.99, p < 0.001). Hypothesis 3 examines the direct effect of e-satisfaction on purchase intention. The results also show a significant direct effect of e-satisfaction on purchase intention (β = 0.94, p < 0.001).

Table 4 The results of the direct relationships among constructs

	Hypothesized paths	β	S.E.	C.R.	*P*	Results
H1	Overall customer experience→ e-satisfaction	0.99	0.05	21.00	0.00	Supported
H2	e-satisfaction → eWOM	0.99	0.06	18.19	0.00	Supported
H3	e-satisfaction → Repurchase intention	0.94	0.03	37.88	0.00	Supported

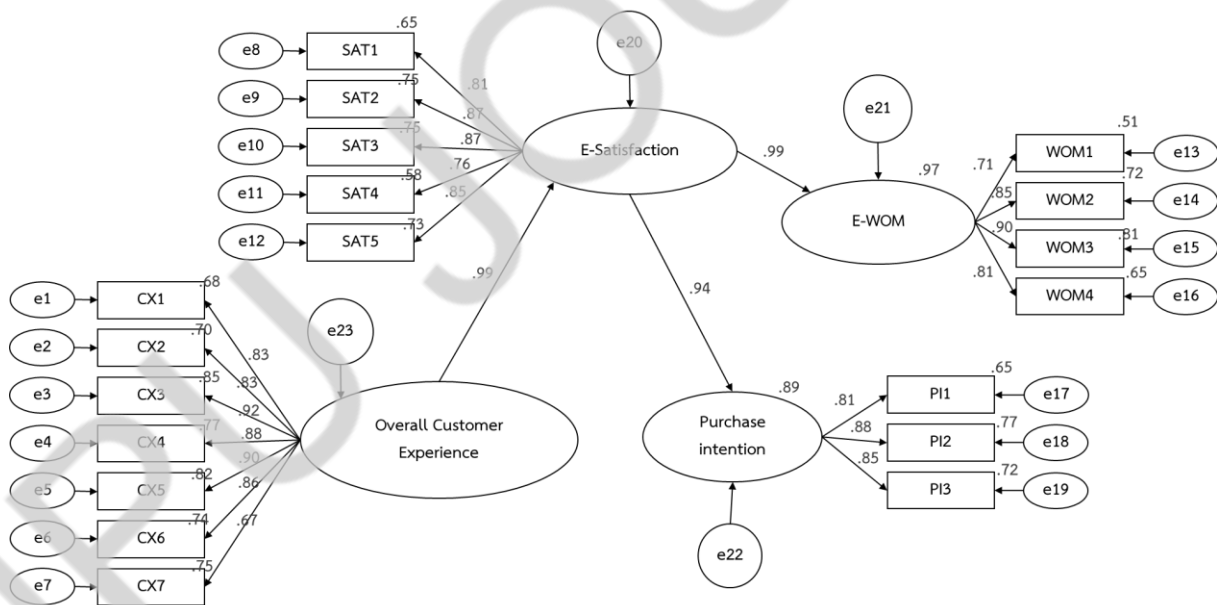Note: *** Statistically significant at p < 0.001

Figure 2 The relationship between the constructs and the variables

To investigate the mediation effect of e-satisfaction, we conducted a path analysis to explore the mediation effect between overall customer experience and eWOM through e-satisfaction. Moreover, we explored the mediation effect between overall customer experience and repurchase intention through e-satisfaction.
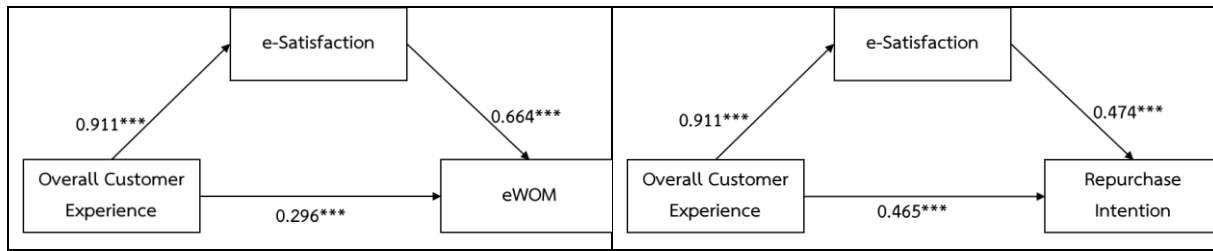
Figure 3: Path analysis between overall customer experience and eWOM

Figure 4: Path analysis between overall customer experience and repurchase intention

Figure 3 shows that the direct effect path from overall customer experience to e-satisfaction is positive and significant (β = 0.91, S.E. = 0.02, p < 0.001), which is consistent with results from the SEM model. The direct effect path from overall customer experience to eWOM is also positive and significant (β = 0.29, S.E. = 0.04, p < 0.001), indicating that customers having high overall experience are more likely to have high e-satisfaction and eWOM. The direct effect of e-satisfaction on eWOM is also positive and significant (β = 0.66, S.E. = 0.04, p < 0.001), indicating those customers who had high e-satisfaction are more likely to express more on eWOM. Figure 4 shows that the direct effect path from overall customer experience to purchase intention is positive and significant (β = 0.47, S.E. = 0.04, p < 0.001). The direct effect of e-satisfaction on purchase intention is also positive and significant (β = 0.47, S.E. = 0.04, p < 0.001). The results indicate that those customers who had a high overall customer experience are more likely to have high e-satisfaction and purchase intention. The findings also strongly support that e-satisfaction is the key driver of eWOM and repurchase intention. The result is consistent with the prior studies on the impact of e-satisfaction (Bhattacharya and Srivastava, 2020 ; Wang et al., 2019)

The indirect effect is tested using non-parametric bootstrapping. For hypothesis 4, the results show that e-satisfaction significantly mediated the effect of overall customer experience on eWOM. The indirect effect value was 0.61 with 95% confidence interval with an upper bound of 0.53 and a lower bound of 0.68. For hypothesis 5, e-satisfaction also significantly mediated the effect of overall customer experience on purchase intention. The indirect effect value is 0.43 with 95% confidence interval with an upper bound of 0.33 and lower bound of 0.54.

In this study, we aimed to examine the effect of overall online customer experience on customers' e-satisfaction, electronic word of mouth, and repurchase decisions. The result has answered research objectives. There is relationship between the variables. The verified model shown how they impact each other. The study proposed five hypotheses and examined these hypotheses by using an empirical data set collected from questionnaires. This research developed a model that was validated, supported, and tested. The empirical results prove that overall customer experience has a significant impact on e-satisfaction. The result is in line with the prior studies which found that a positive experience feeling can increase customer satisfaction and improve the continuance commitment to consume again. (Chotigo and Kadono, 2021 ; Limsarun et al., 2021 ; Rita et al., 2019 ; Wang et al., 2019) Compared with the previous models from previous researchers, this simplified and universal model fulfill the previous study gap and can be extended in all industrial sectors. Based on the results, the on-demand logistic service business, similar to other service provider industries, should focus on online satisfaction to create a positive effect on eWOM and repurchase intention.

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วารสารมนุษยศาสตร์และสังคมศาสตร์ มหาวิทยาลัยนครพนม ; ปีที่ 13 ฉบับที่ 3 กันยายน - ธันวาคม 2566
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Although the importance of on-demand logistic services in Thailand has been widely acknowledged, limited empirical research has explored its mediation effect on consumer decisions. Previous studies have investigated the relationship between customer experience and consumer decision, while our study explored the mediation effect of e-satisfaction on eWOM and repurchase intention. The results show that the impact of overall customer experience eWOM and repurchase intention is fully mediated by e-satisfaction. This study offers empirical reinforcement for a conceptual model of overall customer experience that has not been addressed in the literature and evidence of the association of the mediation effect with e-satisfaction. The results suggest consumer behavior is the result of satisfaction from online experiences. Therefore, on-demand logistic services should develop factors that have a positive impact on E-satisfaction which will ultimately influence eWOM as well as customers' repurchase decisions.

Conclusion

This study provides insights into the relationship between online customer experience, e-satisfaction, electronic word of mouth (eWOM), and repurchase intention for on-demand logistic services. Firstly, providing positive experience is an elemental antecedent of e-satisfaction for on-demand logistic service in Thailand. Customers want to be satisfied with, eg., good communication, service attitude, fast, and simple when ordering, etc. Therefore, on-demand logistics services need to pay attention to developing a positive online customer experience, which benefits consumer satisfaction and positively exhibits consumer intention to spread eWOM and repurchase intention. Secondly, the results of the study show that happy customers perceiving good experiences are willing to spread the positive electronic word of mouth (eWOM). The customer tends to search for online reviews before making a purchasing decision, hence making eWOM an effective tool for the managerial strategy to attract new consumers and to help potential customers make better purchasing decisions. Service application platforms should focus on visual images of products and/ or verbal reviews that reflect the fact of customer experience. This will enhance platform reliability and the trustworthiness of customers' reviews of their experience. Finally, satisfied customers are more likely to repurchase products and services from the same provider. Therefore, on-demand logistic providers should extend their channels through online service and marketing activities, including after-sales service, which may facilitate potential customers to use the services.

Contribution of the Study

The motivation of this research was to examine the existing concept of customer experience and present the new measurement for the on-demand logistics service industry. This analysis adapted and adjusted existing online customer experience attributes can be measured in the on-demand logistic service industry. The model measures the impact of online customer experience on customer e-satisfaction, which later has an impact on eWOM and repurchase intention. The results are expected to extend the knowledge about different industries and country cultures, especially emerging economies, as well as the diverse relevance of online customer experience attributes. The results show that online customer experience is necessary to create customer e-satisfaction and eWOM, as well as intention to repurchase the service in the future. The conceptualization of overall online customer experience used in this study proved to have the ability to predict customer behavior.

The research has contributed to the existing theories. The verified model measures the impact of online customer experience on customer e-satisfaction, which later has an impact on eWOM and repurchase intention. The results are expected to extend the knowledge about different industries and country cultures, especially emerging economies, as well as the diverse relevance of online customer experience attributes.

The results show that online customer experience is necessary to create customer e-satisfaction and eWOM, as well as intention to repurchase the service in the future. The conceptualization of overall online customer experience used in this study proved to have the ability to predict customer behavior.

The current application of IoT (Internet of Things), Big Data and Cloud Technology in on-demand logistics profits the local community and public. The IT experts pay more attention to the technology, meanwhile the market researchers concern the business model to gain more investments. Both parties need to consider how to motivate the communication between all customers and all stakeholders of the value chains. The confirmed model of this study can be used as guidelines to conduct further surveys in different business and different context. Eg. Door to Door Service such as domestic appliance repairing, hair cutting, the orders can be placed online, transacted via third party, reviewed and recommended via eWOM etc.

For managerial implication perspective, the motivation of this research was to examine the existing concept of customer experience and present the new measurement for the on-demand logistics service industry. This analysis adapted and adjusted existing online customer experience attributes can be measured in the on-demand logistic service industry.

The new investors/new market comers and platforms can use the model to check whether/how they can win the users to bring them profits, whether they have the possibility to get new users easily, whether their business goal realizable and reachable. For example, two leading banks in Thailand, SCB and KBANK, jumped into the food delivery industry in 2020 successfully, the advantages can be their strong financial background, their scientifical evaluation system, big data bank, compliance, and linkage to other industry sectors. If the real estate company wants to enter the market, they are faced with the same public but with different business opportunities. They can use the model to manage how they can please their customers to revisit and repeat orders, which has less possibilities in real estate business.

Suggestions

Based on this study, future research could be conducted to extend the findings and solve the limitations in this study. There are 4 variables in the model including one mediator. Also, more latent variables, indexes can help to measure the new context in different industries. As the real life and society are always dynamically changing, more mediating roles and even moderating role can be hypothesized to impact the dependent variables. It is feasible to conduct comparable studies in other industries and/ or geographic areas to locate the generalization of the study. In addition, a qualitative study is suggested to look at the likelihood of different dimensions explaining online customer experience and its impact on consumer behavior. Future research should consider different product segments to ensure that the outcome is similar for other product categories. Some modification in variables may be in needed for appropriate measurement.

Limitations

This study has some limitations that could be addressed in future research. The variables in the model were developed and tested in relation to consumer's need of a specific industry, namely, on-demand logistics service. Moreover, geographical location is limited to only Thailand. The results might difference in other geographical areas. In addition, this research analyzed the on-demand logistics service in general and did not focus on the product segments such as food delivery, grocery shopping, or courier service, etc.

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