The effects of service quality, perceived value and trust in home delivery service personnel on customer satisfaction: Evidence from a developing country

Md. Uzir Hossain Uzir [a,**], Hussam Al Halbusi [b,c,*], Ramayah Thurasamy [d,e,f,g,h], Rodney Lim Thiam Hock [i], Musheer A. Aljaberi [j], Najmul Hasan [k], Mahmud Hamid [l]

[a] Putra Business School (PBS), Universiti Putra Malaysia, Serdang, 43400, Selangor, Malaysia
[b] Management Department, Ahmed Bin Mohammed Military College (ABMMC), P.O. Box: 22988, Doha, Qatar
[c] Department of Management, College of Economics and Political Science, Sultan Qaboos University, P.O. Box 20, Al Khoud 123, Oman
[d] School of Management, Universiti Sains Malaysia, Minden, 11800, Penang, Malaysia
[e] Department of Management, Sunway University Business School (SUBS), Malaysia
[f] Faculty of Economics and Business, Universiti Malaysia Sarawak, Malaysia
[g] Fakulti Ekonomi Dan Pengurusan, Universiti Kebangsaan Malaysia (UKM), Malaysia
[h] Fakulti Pengurusan Dan Perniagaan, Universiti Teknologi Mara (UiTM), Malaysia
[i] Faculty of Business, Design and Arts, Swinburne University of Technology, Sarawak Campus, Malaysia
[j] Department of Community Health, Faculty of Medicine & Health Sciences, Universiti Putra Malaysia, Malaysia
[k] Center for Modern Information Management, School of Management, Huazhong University of Science and Technology, Wuhan, 430074, People's Republic of China
[l] Putra Business School, Universiti Putra Malaysia, Serdang, 43400, Selangor, Malaysia

ARTICLE INFO

ABSTRACT

The rapid growth of online purchasing in recent years has emphasized the accompanying role of home delivery service provided by delivery personnel in ensuring customer satisfaction. On-time delivery, better service, generating positive customer perceived value, and trust towards service providers are influential factors that contribute to customer satisfaction. The aim of the study was to investigate the effects of service quality of home delivery personnel and perceived value on customer satisfaction, with trust playing an intervening role. It was conducted in Dhaka, Bangladesh, a less developed country with a new but rapidly growing digital sector. Data was collected from 259 respondents who received home delivery service, using a structured questionnaire. The conceptual model was analysed using partial least square structural equation modelling (PLS-SEM) with SmartPLS tool. The findings revealed that service quality, customer perceived value, and trust influenced customer satisfaction. The relationship between service quality and customer satisfaction and the relationship between customer perceived value and satisfaction were both partially mediated by trust. The findings contribute to the development and validation of a trust-based satisfaction model by extending the SERVQUAL model to incorporate perceived value in the presence of trust, while complying with expectation disconfirmation theory This study provides insights for managers to develop reliability and build trust in their service delivery personnel.

1. Introduction

The emergence of electronic commerce, or e-commerce, has placed home delivery service at the heart of an effective e-supply chain system (Agatz et al., 2011) that aims to deliver speed, convenience, and quality. A good home delivery service ensures that an e-commerce retailer is able to integrate speed, response, convenience, quality, care, and a seamless experience for online customers. Such a capability can provide an edge over in-person shopping and self-pick-up service. Simply defined as a delivery activity provided by a firm (Yamoto, 2007) or services provided in which goods and products are dispatched to customers' door (Kassim and Asiah Abdullah, 2010), the spectrum of home delivery service

ranges from common to rare products, from existing traditional grocery services to food purchased online and to all kinds of essential items bought online for delivery to customers' doorsteps (Kassim and Asiah Abdullah, 2010).

Home delivery service (henceforth, home delivery service indicate the service of home delivery personnel or third-party employees who just deliver the products or goods at the customers' locations-home, office, or elsewhere) has been traditionally featured in the grocery retail sector. With the development of technology and the Internet, this old service found new life (Geng, 2019) as the ability to deliver groceries promptly and properly became a defining success factor for online grocery businesses. In the past, home delivery services faced uncertainties due to the cost implications, especially among inefficient home deliveries in grocery businesses (Kämäräinen et al., 2001). However, by the end of the last century, home delivery service was predicted to regain popularity (Guglielmo, 2000). Nowadays, busy consumers look to home delivery service to obtain goods quickly and conveniently (Kämäräinen et al., 2001).

The rise of e-commerce is attributed to the rapid technological advancement and adoption of the Internet (Karim and Qi, 2018). Fifty-two percent of the world's population are using the Internet, which has greatly impacted business and social life. Internet usage has translated into an e-commerce boom in 2017, e-commerce sales were valued at USD 2.30 billion, and this amount is projected to reach USD 4.88 billion by 2021 (e-Marketer, 2018).

In Bangladesh, e-commerce experienced slow growth prior to 2008. In 2012, 2013 respectively, two new e-commerce sites, Akhoni and AjkerDeal, expedited the growth of online purchasing in the country, accompanied by foreign e-commerce sites such as OLX, Daraz, and Kaymu. Over time, other sitessuch as Rokomary (selling books), Bikroy (electronic items), Othoba, Pickaboo, and Chaldal (fast-moving consumer goods) helped to fuel the boom. In recent years, online food services such as Hungry Naki and Food Panda became popular in the cities (Export.gov, 2017), giving rise to the prominence of home delivery service in the industry. Even in developed countries like Turkey, online delivery is becoming popular (Dirsehan and Cankat, 2021). Home delivery service provided by retailers area major factor influencing the adoption of online commerce and increasing the revenues of these firms (Chen et al., 2018). Thus, it is garnering recognition as an emerging shopping method (Ministry of Economic Affairs, 2007) and a critical aspect of an end-to-end logistics solution (Punakivi and Saranen, 2001). As home delivery service continue to proliferate and become increasingly competitive (Chou, 2014), the ability to ensure fast, smooth and efficient deliveries can be a strategic and competitive tool to affect overall service satisfaction, and competitive advantages.

In a competitive business environment, sustainability can be achieved through the attainment of a competitive advantage. In the retail service sector, strategies to attain a competitive advantage often involves customer services (Chou, 2014). In an online ordering facility, the home delivery component of the service is a crucial part of customers' overall satisfaction (Hübner et al., 2016). However, delivery personnel who distribute ordered items to customer households usually face an array of challenges, such as the unavailability of customers, wrong customer address, long waiting time, and so on. (Lowe and Rigby, 2014). These challenges can present dire implications (Fernie et al., 2010), including the effects on costs (Pan et al., 2017).

Clearly, home delivery service providers need to meet customers' expectations, in terms of on-time delivery, special handling of perishable products, pleasant interactions with the delivery person, proper instructions and documentation, assuring convenience and so on. During the COVID-19 pandemic, online purchasing has sharply increased. According to Ozturk (2020), customers have exhibited different purchase patterns and purchase volumes during the Covid-19 pandemic. These differences are especially pronounced for food items, including those from food courts and restaurants (Brewer and Sebby, 2021). In many countries, where restrictions have been imposed to limit social interactions, including the suspension of dine-in services, drive-through, takeout, and home delivery service have become important options that allow retail businesses to remain in operations (Wida, 2020). This is seen in the increased volumes of online food orders (Brewer and Sebby, 2021) through the Internet (Dixon et al., 2009) and mobile apps (Kumar and Shah, 2021). Within a short time period, interest in online food services has gained prominence among business researchers, practicing managers, and retail businesses alike (Prasetyo et al., 2021). Critical to the success of such a business is the effectiveness of the delivery service personnel in bridging the service quality gap between customers' expectations and the firm's actual service delivery performance, in order to secure customer satisfaction (Kim, 2021). Considering the pivotal roles of delivery personnel in home delivery service amidst the COVID-19 pandemic across the globe, the present study attempted to address the following research questions:

1. How are online purchasers satisfied with the service of home delivery personnel?
2. To what extent do the online purchasers perceive positively the service of delivery personnel compared to the spending for home delivery?
3. To what extent does trust in the service of delivery personnel enhance online purchaser satisfaction?

Therefore, this study aims to examine the impact of service provided by delivery personnel on customer satisfaction in the case of online purchases within the context of the Covid-19 pandemic. Customer satisfaction of home delivery service depends on the service quality of the delivery personnel, the perceived value of the service, and customers' trust in the service. Service quality can result in three possible outcomes in relation to customer satisfaction: if the actual service delivered is below expectation, customers will be dissatisfied; if the actual service delivered is equivalent to expectations, customers will be satisfied; and if the service exceeds the customer's needs, they would be pleased or extremely satisfied (Uzir et al. 2020, 2021). Customers' perceptions of the service level can affect their satisfaction as well. They compare the service with their expectation and the cost they expend for this service. If the customer values the service more than the cost, satisfaction will occur (Yi et al., 2021). Therefore, customers' perceived value is posited as a significant predictor of customer satisfaction.

Lastly, trust, or a mutual dependence between two parties, can be a decisive factor as it acts as a relationship-maker between buyers and sellers (Sharma, 2003). However, Eastlick and Lotz (2011) mentioned that the development of trust is a seminal factor in ascertaining customers' engagement in e-commerce (cited in Kim et al. (2021)). Customer satisfaction is not static, but is somewhat volatile and variant. Although it appears to be an idealistic assertion, the SERVQUAL framework exhibits its diagnostic capabilities and has specific practical implications (Apornak, 2017; Oskooii and Albonaiemi, 2017; Zhou et al., 2021). Although a few studies have focused on customer trust as a mediating variable, to the best of the authors' knowledge, there have been neither qualitative nor empirical studies measuring customer satisfaction on service provided by home delivery personnel. Motivated by this gap, the study proceeds to address how service quality, perceived value and trust of home delivery personnel's service in online purchase can improve customer satisfaction.

The study applied expectation disconfirmation theory (EDT) to investigate post-purchase behavior or post-adoption behavior on products or services to assess customer satisfaction,. Based on this framework, customers involved in an online purchase are deemed to possess an expectation of service provided by the home delivery personnel, receive the service from this personnel, and conceive a belief about the service. At the end of the delivery, customers assess that service and become either satisfied, undecided or dissatisfied with that personnel.

The study was conducted in Dhaka, Bangladesh, with customers who have experienced home delivery service for their online purchases. The

study contributes to service marketers by providing insights to service providers and product sellers to enhance home delivery service systems, expand related business development program and improve customer satisfaction involving third-party home delivery employees. Theoretically, the study contributes to EDT by confirming the contingent role of customer perceived value and intervening role of trust on home delivery service. Contextually, the study is important for a highly populated, developing and digitalizing countries like Bangladesh.

The following sections cover the theoretical background, literature review of the constructs, development of hypotheses, and the conceptual framework for the study. This is followed by research methods, respondent profile, data analysis, discussions, conclusion, and recommendations.

2. Theoretical background and development of hypotheses

The present study investigated the impact of home delivery service related to online purchases on customer satisfaction, in terms of the strengthening effects of the performance of personnel who directly serve purchased products to buyers at specified locations. Specifically, it examined the following research issues: i. online purchasers' psychological attachment with the service provided by delivery personnel, ii. their perception about the service provided, and iii. the role of trust in the service provided by those personnel. Within an EDT framework, the study concentrated on the links between service quality, consumer perceived value, and trust with customer satisfaction.

2.1. Home delivery service

In a typical home delivery system, third party delivery companies are contracted by offline retail firms to distribute their goods and services through online platforms that allow online sales, communications and coordination among the various parties (Jiang et al., 2021). Most third-party logistics companies have to collect and distribute enormous numbers of packages daily (Chen et al., 2018). Delivery personnel often have to contend with navigating traffic conditions, elevators and stairs, knocking on doors, and receiving signatures from clients. These activities can incur great amounts of time, effort, and hardship for the delivery personnel. To save time, appointments are usually set up with customers to receive their orders at specific times that are convenient to them. A study was by Chen et al. (2018) on online retailers' self-service parcel delivery from the perspectives of both the delivery service companies and their customers also showed that while delivery companies strive to reduce their delivery time, labor cost, and improve distribution efficiency and parcel selection system for customer satisfaction, customers expect more flexible delivery schedules and variety of delivery choices.

Home delivery service has become an appealing option because customers need not visit shops, nor do they need to carry heavy items. They can simply receive the purchased items at their doorsteps. The rise in online shopping or e-commerce has further enhanced the importance of home delivery service to consumers (Chen et al., 2015). In the online grocery sector, home delivery service represents an ability to render an efficient, convenient and customized service and is seen as an opportunity to better satisfy customers, gain competitive advantage and build long-term relationship (Ehmke et al., 2012). Innovation in home delivery service is a priority for many practicing managers and researchers (Pan et al., 2017), especially during the current pandemic. Although 2020 was a challenging year for retail businesses due to imposed restrictions on businesses worldwide, retail e-commerce sales were projected to increase by 27.6 percent for the year, to reach $4.280 trillion (Cramer-Flood, 2021). This compares with about USD2.29 trillion in 2018 (John, 2018). This substantial uptick in mid-pandemic assessment is matched by a decline of 3.0 percent to $23.839 trillion in worldwide retail sales in 2020. E-commerce retail sales grew as much as 79 percent in Argentina and 71.1 percent in Singapore (Cramer-Flood, 2021). In

Bangladesh, online shopping has been evolving fast and has the potential to grow exponentially in time to come.

2.2. Expectation disconfirmation theory (EDT)

Marketing and consumer behavior researchers use expectation disconfirmation theory as a root theory (Oliver and DeSarbo, 1988). The pioneers of EDT theory, Oliver (1980) and Susarla et al. (2006), explained EDT as customer satisfaction theory, which is a "function of pre-expectations and confirmation/disconfirmation". Expectation is a set of beliefs a customer possesses about the products or services (Susarla et al., 2006), while the difference between pre-consumption belief and post-consumption experience is known as disconfirmation. This discrepancy may be both positive and negative. Positive disconfirmation (variance) depicts post-consumption experience as better than pre-consumption expectation, while negative variance means that post-consumption experience cannot satisfy the pre-consumption expectation (Yi et al., 2021) and (Kopalle and Lehmann, 2001). Positive disconfirmation is satisfaction to the certain product or service; on the other hand, negative disconfirmation is dissatisfaction (Yi et al., 2021). The usage spectrum of the theory covers many disciplines, such as consumer behavior and marketing (Kopalle and Lehmann, 2001), human resources (Horn and Salvendy, 2006), leisure behavior (Madrigal, 1995), medicine (Joyce et al., 2003), psychology (Phillips and Baumgartner, 2002), service quality (Kettinger and Lee, 2005), marketing (Uzir et al., 2020; Yi et al., 2021), and management (Yi and Nataraajan 2018). According to EDT, customers look forward to a benefit or effectiveness from the product or services compared with their expectations (Uzir et al. 2020, 2021). This comparison determines whether customers are satisfied with the service or are dissatisfied. In this study, customers' expectations about the service from the delivery personnel are compared to their experiences when a product is delivered. This satisfaction depends on the quality of service the delivery personnel provides while delivering the purchased products to online buyers, in terms of how they perceive the service provided by delivery personnel and the degree to which they have trust on the personnel. It is obvious that if the perceived quality of home delivery service and consumer value exceed the expectation, the online buyers will be delighted with the delivery personnel. Besides, if the personnel are able to build a trust with the online purchasers, the perceived quality of delivery service and consumer value will be stronger and results in more satisfied customers. Therefore, trust will play an influential mediator on customer satisfaction.

3. Research hypotheses

Numerous research have utilized EDT to investigate the impact of service quality on consumer loyalty and confidence in a variety of industries, including banking (Hidayat et al., 2015), Internet (Cristobal et al., 2007), ADSL Technology (Rizka and Widji, 2013), utility (Agyapong, 2011), hotels (Bostanji, 2013), mobile Internet (Roostika, 2011), healthcare (Zarei et al., 2015), and retail industry (Ivanauskiene and Volungenaite, 2014). In this study, the focus on the outcome of service provided by home delivery personnel on customer satisfaction or dissatisfaction contributes insights to EDT.

3.1. Service quality (SERVQUAL) and customer satisfaction

Customer satisfaction constructs have been used in the research of psychology, economics, business, marketing, housing, and tourism (Jiang et al., 2017; Kim et al., 2017). Satisfaction refers to a net positive experience that emerges from customers' perceptions of the actual provisions from a service provider in relation to their anticipation of the service (Marinkovic and Kalinic, 2017). It amounts to "a consumer's feeling, attitude, or eager towards a service/product after it has been used" (Yi et al., 2021). Quantitatively, it can be expressed as the number

or percentage of total consumers having excessive experience with a company or product and/or services over their expected level of satisfaction (Gilboa et al., 2019).

Customer satisfaction is highly correlated with service quality (Rigopoulou et al., 2008; Uzir et al., 2020). Gronroos (1988) defined service quality "as the result of an evaluation process where customers compare their expectations with the service they perceive to have received", while Zeithaml (1988) defined it "as the customer judgment about the overall excellence or superiority of a service product". It is simply "the quality level of products and services provided to customers and their service satisfaction" (Kim, 2021) and is "a result of the comparison between consumers' perceptions regarding perceived and expected services, and the functional relationships among variables such as technical quality, functional quality, and image" (Prentice and Kadan, 2019). Omar et al. (2021) and Blut (2016) have noted service quality as a vital and focal factor in consumer-centered business firms, while Kim (2021) has described it as a vibrant factor in the customer satisfaction model.

The SERVQUAL Model is a framework that captures and measures service quality experienced by customers. It features five dimensions (Kim, 2021): *Tangibility* (physical appearance of service or surrounding of service to feel its existence), *Reliability* (the consistency and dependability of performance), *Empathy* (paying attention individually and passionately), *Responsiveness* (the willingness to serve provision on time), and *Assurance* (the increase of trust and confidence). Based on SERVQUAL, service quality has been found to have a positive and significant relationship with customer satisfaction in many contexts, including on-demand home service (Sivathanu, 2019), hotel businesses in Indonesia (Nuryakin and Priyo, 2018), the life insurance industry in Malaysia (Panigrahi et al., 2018; Al Halbusi et al., 2020), the insurance sector in India (Goswami, 2007), restaurant businesses in Korea (Kim and Shim, 2019), grocery retail in Chile (Goić et al., 2021), and the banking industry across the globe (Setiawan and Sayuti, 2017a; Adams et al., 2016).

Applied in different service industries and focusing on different dimensions of service quality analyze the relationship between customer satisfaction and various aspects of service quality, the SERVQUAL model has shown that the most dominant components of a service sector are most dominating components of customer satisfaction (Yi and Nataraajan 2018). In the context of e-commerce, a large number of studies have focused on the quality of logistics service, as it is considered the most significant driver for sales (Ghezzi et al. (2012); cited in Rai et al. (2019)). Several studies in the adjacent area of mobile commerce, or m-commerce, have found that customers' requirements for delivery service providers tend to be based on expectations of behaviors transferred from offline to online channels (Yang et al., 2016). Wang and Liao (2007) constructed a scale to assess customer satisfaction with m-commerce. Meanwhile, Omni-channel retail models featuring both online and offline avenues allow customers to avail their preferences and needs with flexible options of offline-online modes of purchasing and delivery, including the comfort of receiving their purchases at their doorsteps (Rai et al., 2019).

In summary, the literature highlights the significance of quality delivery issues in service marketing (Leonard and Sasser, 1982). To ensure customer satisfaction, marketers need to recognize the importance of customer requirements (Matzler and Hinterhuber, 1998) and to assign priority to meeting those requirements (Tan and Pawitra, 2001), including the provision of multiple channel options to create greater convenience for customers. Söderlund and Sagfossen (2017) emphasized that higher service quality increases customer satisfaction. Therefore, the following hypothesis was formulated.

Hypothesis 1. Service quality has a positive effect on the customer satisfaction in service of home-delivery personnel.

3.2. Customer perceived value and satisfaction

Customer perceived value is "what a customer desires from a product or service" (Woodruff and Gardial, 1996), and "the ratio of perceived benefit and perceived price" (Liljander and Strandvik, 1993). Customers are rapturous and expect value for their spending (Rita et al., 2019; Chicu et al., 2019; Hirata, 2019). Delivering superior customer value to attain customer satisfaction is vital in achieving a competitive edge (Murali et al., 2016). Although customer perceived value is an established and stable factor in predicting consumer buying behavior (Chen and Dubinsky, 2003), studies into the relationship between customer perceived value and customer satisfaction have many returned mixed findings and debate among many researchers (Cronin and Taylor, 1992; Chen, 2008). Cronin et al. (2000) found a positive relationship between perceived value and customer satisfaction. Hu et al. (2009) discovered that higher customer value ensures customer satisfaction in the hotel industry in Mauritius. While researchers like Uddin and Akhter (2012) and Fazal and Kanwal (2017) found that customer perceived value has a substantial direct impact on client satisfaction in the mobile service sector,.other, researchers like van Riel and Pura (2005) and Erciş et al. (2012) found little or no significant relationship between customer perceived value and customer satisfaction. Thus, we theorized as follows:

Hypothesis 2. Customer perceived value has a positive effect on the customer satisfaction in service of home-delivery personnel.

3.3. Trust and customer satisfaction

Trust is seen as an important tool needed for success in any industry and is developed based on the interaction with others in practical forms (Panigrahi et al., 2018). Trust is a rational process which is built, developed, and taken care of actively and tested over time (Joseph-Vaidyan, 2008). Rimawan et al. (2017) investigated the impact of trust on customer satisfaction in home delivery service in Pakistan and found that trust significantly influences satisfaction. Daud et al. (2018) stated that trust has a positive and significant relationship with satisfaction. Corbitt et al. (2003) deemed trust to be a fundamental principle in every business relationship, as it determines the reliability of the two parties in a business transaction. In home delivery service, a customer relies on service providers and delivery personnel to deliver the ordered or purchased items properly, timely, and quickly. Similarly, the delivery personnel expects that a recipient will be available during the delivery period to receive items and sign on the delivery receipt. In the age of the Internet and technology, trust is both significant and complex (Sim et al., 2010) and plays a central role in business and trading relationships. In m-commerce and e-commerce where customers interact with sellers online, trust is reflected through the customer's positive expectations as the delivery personnel often represents the seller. Customers often rate the seller based on the service rendered and behaviors shown by the delivery service personnel. Building customer satisfaction is, therefore, essential to enhancing their satisfaction (Marinkovic and Kalinic, 2017). Many researchers have shown that trust and satisfaction are closely associated. For example, Lin and Wang (2006) reported that customer satisfaction can be positively affected by consumer's trust. Chong (2013) has shown that trust in m-commerce has a major influence on the satisfaction of Chinese customers. Conversely, customer satisfaction has been found to contribute to trust in a substantial and explicit manner (Yeh and Li, 2009; Kassim and Asiah Abdullah, 2010). Hence, based on the above argument, we hypothesized as follows.

Hypothesis 3. Trust has a positive effect on customer satisfaction in the service of home delivery personnel.

3.4. Trust as a mediator

Trust represents a company's competence and reputation as perceived by a customer (De Wulf et al., 2001), and is linked to the desire to engage in transactions despite the presence of known risks (Stathopoulou and Balabanis, 2016). It is also a driving force for customer commitment. Kassim and Asiah Abdullah (2010) illustrated trust as having a positive and significant effect on commitment relationship and being necessary for long-term customer contracts. Morgan and Hunt (1994) stated that trust exists only while "one party has confidence in the exchange of partnerships and internationally". Based on expectation disconfirmation theory, Rimawan et al. (2017) stated that the expectations, service perceptions, and quality perceptions have an influence on consumers' satisfaction when they assess a service or a product (Kim et al., 2003).

Su et al. (2017) used trust as a mediator in their study on tourist relationships in China, wherein service was a predictor. They found mixed mediation, including partial mediation, full mediation, and even no mediation (Ali et al., 2017). Similarly, Moriuchi and Takahashi (2016) adopted trust construct as a mediator in studying the relationship between the marketing mix and online shopping behavior, and found this construct as a strong mediator or intervening variable. Their study suggested that trust can be both partial mediator and a full mediator. Panigrahi et al. (2018) found that customer trust has a mediating effect in their study of the life insurance policy sector in Malaysia. Trust was also found to have a mediating effect in a study of restaurant businesses in Korea (Kim and Shim, 2019). (Roostika, 2011) found an indirect relationship between service quality and customer loyalty with trust as a mediator. In a study on second hand fashion retailing Kim et al. (2021) used the SERVQUAL model to examine the effect of customer perceived value on recipient satisfaction of online purchases via home delivery service, and discovered that trust played a mediating role.

Many studies have shown that the quality of service influences trust positively (Aydin and Özer, 2005). Aurier and de Lanauze (2011) found that perceived quality of a brand has a strong beneficial impact on trustworthiness. Similarly, Yildiz (2017) found that trust plays a significant mediating role in a study of cargo companies operating in Turkey. Thus, we theorized as followed.

H4. Trust mediates the relationship between service quality and satisfaction in service of home delivery personnel.

H5. Trust mediates the relationship between perceived value and satisfaction in service of home delivery personnel.

3.5. Proposed research model

This study adopts the framework shown in Fig. 1 to examine the influence of trust, service quality, and perceived value on customer satisfaction (Deng et al., 2010). The framework depicts service quality with its five dimensions and perceived value as the determinants of customer satisfaction on a personnel delivery service. Past literature has suggested that these two antecedents are strong predictors of satisfaction. Trust is introduced as a mediator to strengthen the nature of these relationships. Service quality and perceived value will also be significant with satisfaction in the presence of trust. These assumptions were formulated under the supervision of EDT. Thus, this framework examines trust construct as a mediator in the SERVQUAL model and perceived value with customer satisfaction to explain the service quality provided by a delivery personnel of online or e-commerce purchase (Fig. 1).

4. Research methods

4.1. Sample and materials

We collected data from 259 respondents who had made online purchases in Dhaka, the capital of Bangladesh. The study was carried out using survey method adopting a structured questionnaire. Before distributing survey questionnaires, we conducted a personal interview with home-delivery shipping practitioners to administer a content validity test, to ensure that the items on the test were relevant and to represent the constructs that it was designed to measure (Hair et al., 2019; Shmueli et al., 2019). The test led to minor changes in language and descriptions of some items in the questionnaire instrument. Factor analysis was performed to define and summarize several service qualities and a manageable set of fundamental variables, known as dimensions.

4.2. Common method variance (CMV)

This study collected data from respondents in a single questionnaire in a short period of time that implied a possibility of having an issue of common method variance (CMV) or common method bias (CMB). Podsakoff and Organ (1986) explained common method variance as a concern when data of variables are collected from the same sources. Therefore, to avoid common method variance (CMV) as much as possible, we first followed the procedural remedies, which included a
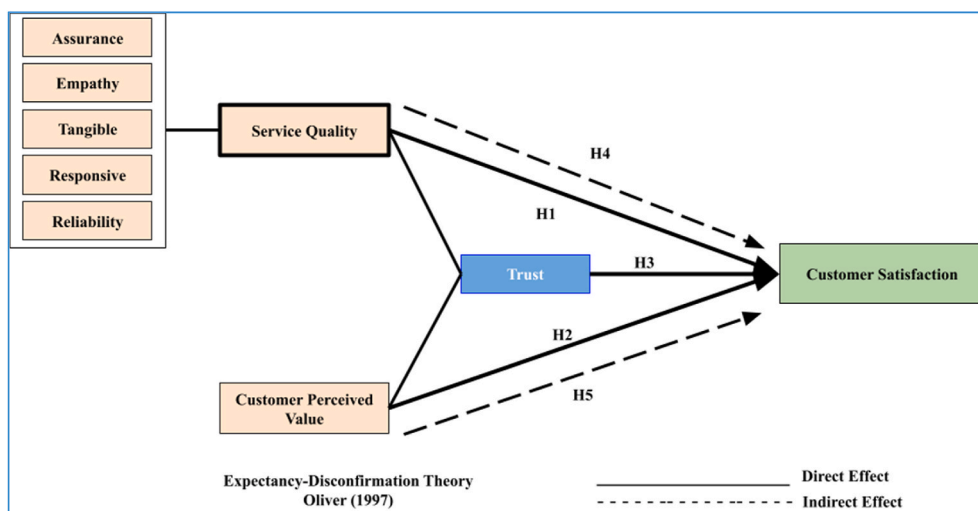

Fig. 1. Conceptual research framework.

cover letter where participants were assured total confidentiality (Podsakoff et al., 2003; 2012), and were encouraged to return the questionnaire directly to researchers. We also employed the statistical remedies by adopting Harman's (1967) single-factor test to deduct common method variance. Harman's single factor test was conducted using unrotated principal component factor analysis in SPSS software. The result showed that seven distinct factors having eigenvalue 1.00 and above accounted for 72.793% of variance rather than a single factor. It also showed the first factor as having the largest variance at 44.759%, which was less than 50% (Podsakoff et al., 2012) and inferred that common method variance was not a major concern. According to Guide and Ketokivi (2015), correlation and single factor test are no longer acceptable. Thus, this study also used an unmeasured latent method construct (ULMC) technique suggested by (Podsakoff et al., 2012). In this technique a substantive construct and common method construct were created from all items. The result showed the path coefficients of these constructs were supported. For both common method construct and substantive construct, the percentage of item-explained variation was calculated as the square of loading. The method construct loadings were not significant, while the substantive constructs' percentages were substantially higher than those of the method construct, indicating that CMB/CMV was not a critical issue in this study (Afthanorhan et al., 2021).

5. Data analysis and results

5.1. Participants and respondents' profile

This study was conducted on online purchasers who live in Dhaka city. Respondents expressed their perceptions through a 5-point Likert scale that measured service quality, customer perceived value, trust, and customer satisfaction. A judgmental sampling technique was used to identify respondents who had made an online purchase at least twice in the past year and had used a home delivery service provided by third-party personnel. Altogether, a total of 259 respondents completed the questionnaires. A total 59.30 percent respondents were male and 40.70 percent were female. In addition, most of the respondens were university graduates (51 percent), single (56.3 percent) and young, as 38.4 percent were from the 25–35 years old age group. These demographic characteristics were consistent with their tendency to have access to the Internet and their familiarity with online purchasing as 53 percent of the participants had made more than five online purchases in the past.

5.2. Data analysis through structural equation modelling (SEM) technique

The study followed a two-step data analysis procedure, namely structural equation modelling (SEM) as suggested by (Anderson and Gerbing, 1988). SEM is a popular and widely used data analysis technique in behavioral science (Zhou et al., 2021). In the first step, the outer model, or measurement model, was examined to check construct reliability, convergent validity and discriminant validity. The second step focused on evaluating the inner model, or structural model, to investigate the relationships between the independent and dependent variables. These tests utilized partial least square structural equation modeling (PLS-SEM) via SmartPLS 3.3 version. Cassell and Bickmore (2000) reported that variance base PLS-SEM is superior to covariance-base SEM due to its robustness to collinearity and data distribution. As PLS is nonparametric, it can overcome these two limitations of multiple regression (Fornell, 1982). He further mentioned that PLS supports a variety of constructs and explains complex relationship models and eliminates inadmissible solutions and factor indeterminacy. Data non-normality is a vital issue in multiple regression. However, PLS-SEM is able to handle non-normal data (Hair et al., 2011) and test hypotheses for their relationships among constructs (Ashraf et al., 2018).

5.2.1. Measurement model assessment

Convergent validity, discriminant validity and construct reliability are the parts of the measurement model (Anderson and Gerbing, 1988). Convergent validity is assured when the scores from two instruments measuring the same concept are highly correlated (Sekaran and Bougie, 2016). According to Hair et al. (2017), one must examine the outer loadings of the factors and the average variance extracted (AVE) to assess the convergent validity of the reflective construct. Outer loadings are also called indicator reliability, and values should be 0.708 and above (Hair et al., 2017). Nevertheless, nine items from various factors such as ADK3, EMP2, RSD4, RSD5, Rel4, Tan5, CPV1, CS3, and CS5 were removed from analysis due to poor outer loading, that is, a loading values less than 0.70. The rest of the items, with values between 0.782 and 0.980, were considered acceptable as they were above 0.708 (Hair et al., 2020). In regards to the construct reliability, that is, Cronbach's alpha (CA) and composite reliability (CR), values of more than 0.70 (Hair et al., 2017) would be considered acceptable. In this study, the values ranged from 0.829 to 0.981 and 0.886 to 0.986, respectively, which achieved the threshold. The Average Variance Extracted (AVE) is a common measure of convergent validity where a value higher than 0.50 would be considered as satisfactory. The results showed that the AVE ranged between 0.660 and 0.947, thus confirming convergent validity (Hair et al., 2017). These results are indicated in Table 1 and Fig. 2.

Discriminant validity was assessed via Fornell and Lacker criteria and HTMT criteria. Fornell and Lacker ratio was used to assume that the square root of AVE was greater than the correlation values for each of the research construct pairings (Hair et al., 2017). As Table 2 shows, the square root of AVE was greater than the respective row and column value which indicated that these variables were free of discriminant validity. Discriminant validity was further examined via the HTMT technique proposed by Henseler et al. (2015). HTMT refers to the ratio of correlations within the construct to correlations between the construct (Henseler et al., 2015). The study showed that the HTMT criterion fulfil the $HTMT_{90}$ or $HTMT_{85}$ (Franke and Sarstedt, 2019). The highest square root was 0.727, which met the threshold value of Franke and Sarstedt (2019). These two criteria indicated that discriminant validity had been ascertained (see Table 3).

5.2.2. Structural model assessment

After checking the measurement model for reliability and validity, the structural model was analysed for hypotheses testing. Table 4 and Fig. 3 show that all five hypotheses were accepted. Service quality ($\beta = 0.399$, t = 7.975, $p < 0.001$) has a positive effect on customer satisfaction. Similarly, customer perceived value ($\beta = 0.350$, t = 6.582, p < 0.001) also significantly influences on customer satisfaction, while trust ($\beta = 0.182$, t = 3.454, $p = 0.001$) has a significant impact on customer satisfaction. Thus, all hypotheses of direct effect (H_1, H_2, and H_3) were accepted. The finding also showed that service quality has the strongest impact on customer satisfaction.

To investigate the indirect effects of the relationships, the bootstrapping method, as suggested by Preacher and Hayes (2008), was applied to ensure appropriate outcomes when measuring the indirect relationship's confidence intervals (CIs). The results showed that service quality has specific indirect effect on customer satisfaction in the presence of trust ($\beta = 0.067$, LCL = 0.028, UCL = 0.114, p < 0.05). Since the direct and indirect effects were significant, trust is found to be a successful mediator in this relationship. Thus, the fourth hypothesis, H4, was accepted (Fig. 4). Similarly, customer perceived value has specific indirect effect on customer satisfaction through trust ($\beta = 0.085$, LCL = 0.038, UCL = 0.140, p < 0.05). Thus, H5 is supported (see Table 5 and Fig. 5).

In terms of the explanatory power of this model, we considered that the R-square value of 0.529 for trust and 0.624 for customer satisfaction suggested a moderate to substantial effect (Hair et al., 2017). Additionally, we examined predictive relevance using the Stone-Geisser

Table 1
Measurement model, item loadings, construct reliability and convergent validity.

Constructs	Items	Loadings (>0.5)	Cronbach's Alpha (>0.7)	Composite Reliability (>0.7)	Average Variance Extracted (>0.5)
Assurance	Delivery personnel has experience in their jobs (ADK1).	0.968	**0.981**	**0.986**	**0.947**
	Delivery personnel behaves politely to customers (ADK2).	0.973			
	Delivery personnel gives complete answers to customers' questions (ADK4).	0.980			
	I think they feel personally safe and secure when delivering the goods (ADK5).	0.972			
Empathy	Delivery personnel uses personal initiative to fulfill customer requests (Emp1).	0.782	**0.869**	**0.911**	**0.719**
	Operating hours of goods delivery is convenient for me (Emp3).	0.863			
	Delivery personnel puts a priority on customers' interests (Emp4).	0.892			
	Delivery personnel puts extra effort into serving our special requests (Emp5).	0.850			
Reliability	Delivery personnel delivers parcels at our convenient location (Rel1).	0.787	**0.877**	**0.916**	**0.732**
	Delivery personnel maintains delivery records (reservations, bills, etc.) accurately (Rel2).	0.855			
	Delivery personnel delivers the parcel at the time promised (Rel3).	0.910			
	Delivery personnel maintain confidentiality and Privacy (Rel5).	0.865			
Responsive	Delivery personnel is not in a hurry while delivering goods to us (Res1).	0.948	**0.924**	**0.946**	**0.816**
	Delivery personnel is always willing to help us (Res2).	0.944			
	Delivery personnel delivers the goods as quickly as possible (Res3).	0.820			
	Delivery personnel gives proper attention to their customer (Res6).	0.896			
Tangible	Delivery personnel looks good and are well dressed (Tan1).	0.806	**0.829**	**0.886**	**0.660**
	Delivery personnel uses state of the art tool and device (Tan2).	0.820			
	Their decoration has a nice appearance (Tan3).	0.825			
	Their service arrangement is well-coordinated (Tan4).	0.797			
Service Quality (Second Order)	Assurance		**0.947**	**0.952**	**0.502**
	Empathy				
	Reliability				
	Responsive				
	Tangible				
Trust	I feel comfortable using the home delivery service (Tr1).	0.806	**0.973**	**0.980**	**0.925**
	I feel this service is safe (Tr2).	0.820			
	This service always delivers what is promised (Tr3).	0.825			
	I always trust this brand (Tr4).	0.797			
Customer Perceived Value	The service quality of delivery personnel is high (CPV2).	0.896	**0.917**	**0.941**	**0.800**
	I feel relaxed in receiving delivery service of online purchase (CPV3).	0.908			
	I feel delighted in receiving the service of the delivery personnel (CPV4).	0.876			
	I feel trust and confident in receiving delivery service of online purchase (CPV5).	0.897			
Customer Satisfaction	The delivery service meets my expectations (CS1).	0.889	**0.939**	**0.954**	**0.804**
	I am satisfied with my decision to use this third-party delivery service (CS2).	0.899			
	I would avail their delivery service the next time (CS4).	0.887			
	I will recommend others to use this delivery service (CS6).	0.889			
	I am very satisfied with the deliveryman's service (CS7).	0.919			

blindfolding sample reuse method, which showed Q-square values greater than 0. Thus, the research model effectively predicted for both trust ($Q^2 = 0.481$) and customer satisfaction ($Q^2 = 0.496$) (Hair et al., 2017). Finally, with the assessment of determinant variance of endogenous variables, effect size was also evaluated in this study. The f^2 shows the effect of a particular exogenous latent variable on an endogenous latent variable through the means of changes in the R^2 (Chin, 1998). Hence, effect size calculation (Cohen, 1988) revealed $f2$ values of 0.02, 0.15, and 0.35, respectively, suggesting weak, moderate, and strong effects. Table 4 shows the calculation and the results of the effect size of each of the latent variables. Thus, service quality, perceived value, and trust had effect sizes of 0.262, 0.181, and 0.042 respectively on customer satisfaction. In accordance with (Cohen, 1988)'s criterion, service quality and perceived value had medium effect on customer satisfaction,

while trust was deemed to have a small effect on customer satisfaction.

An importance-performance map analysis (IPMA) was also conducted to enrich the PLS-SEM analysis and obtain additional results and findings (Ringle and Sarstedt, 2016). According to them, IPMA gives insights into the importance of the variables to the target construct and enables the variables to be prioritized to enhance he targeted variable. find the significance. As shown in Table 6 and Fig. 6, service quality has the most total effect (0.596) on customer satisfaction which signifies 66%, followed by customer perceived value (0.521; 74%). Trust has the lowest effect on performance (0.134; 62%).

6. Discussion and conclusion

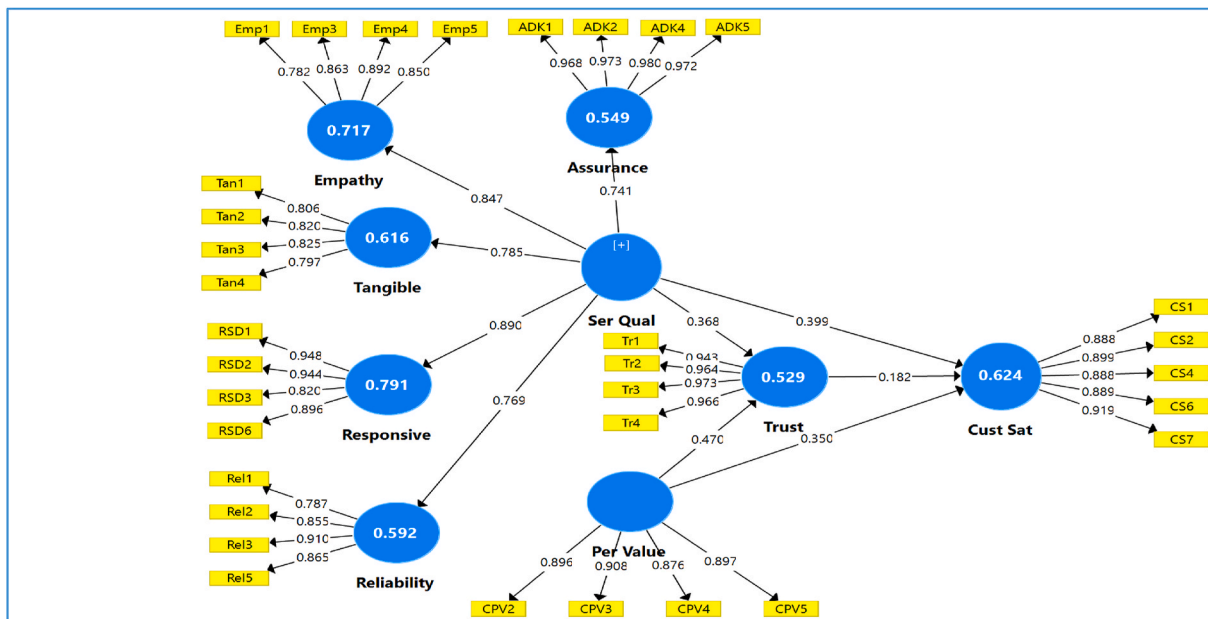The aim of this study was to investigate the effects of service quality

Fig. 2. Measurement model.

Table 2
Discriminant validity via fornell and larcker.

	Customer Satisfaction	Perceived Value	Service Quality	Trust
1. Customer Satisfaction	0.897			
2. Perceived Value	0.668	0.894		
3. Service Quality	0.683	0.499	0.708	
4. Trust	0.651	0.653	0.603	0.962

Notes: Bold values on the diagonal in the correlation matrix are square roots of AVE (variance shared between the constructs and their respective measures). Off-diagonal elements below the diagonal are correlations among the constructs, where values between 0.13 and 0.16 are significant at $p < 0.05$, and values above 0.16 are significant at $p < 0.01$ (two-tailed test).

Table 3
Discriminant validity via HTMT.

	Customer Satisfaction	Perceived Value	Service Quality	Trust
1. Customer Satisfaction				
2. Perceived Value	0.717			
3. Service Quality	0.727	0.534		
4. Trust	0.681	0.688	0.627	

Notes: HTMT should be lower than 0.85.

and perceived value of home delivery service personnel on customer satisfaction, and the mediating role of trust on these relationships. To accomplish this, five hypotheses related to the research questions were

constructed based on EDT. The findings indicated strong support for the effect of service quality and customer perceived value on customer satisfaction. They also indicated the importance of trust towards delivery personnel in order to gain customer satisfaction. The support for these hypotheses of direct effects were significant. Service quality and customer perceived value of the delivery service of the personnel were salient predictors of customer satisfaction.

Moreover, the contingent role of trust towards the service provided by the delivery personnel has a significant influence on customers' contentment. These findings are consistent with a number of previous studies. The salient relationships and direct effects between service quality and customer satisfaction have been demonstrated in various fields (Apornak, 2017; Raza et al., 2020; Rather and Sharma, 2017; Setiawan and Sayuti, 2017b; Amin, 2016). These findings further reinforce the SERVQUAL model, and its five dimensions as strong determinants of customer satisfaction in service marketing. This study confirms recent research by Sivathanu (2019), Nuryakin and Priyo (2018), Panigrahi et al. (2018), and Kim and Shim (2019) to provide overwhelming empirical evidence for these relationships.

Combining this present research's outcomes with the results of previous studies establishes the service quality of delivery personnel as a salient feature of the expectation-confirmation paradigm in satisfying customers. In practice, a buyer expects the delivery personnel to serve accurately, reliably and timely. In addition, the behavior, dressing, communication ability, and caring attitude of delivery personnel can have an effect on the recipients' perceptions of the company or seller. Delivery personnel should be conscious of the effects of delays in delivery on customers' perceptions of the service. They should show patience and be attentive while serving their customers. In cases of large and costly items, where the buyer or recipient takes time to check the
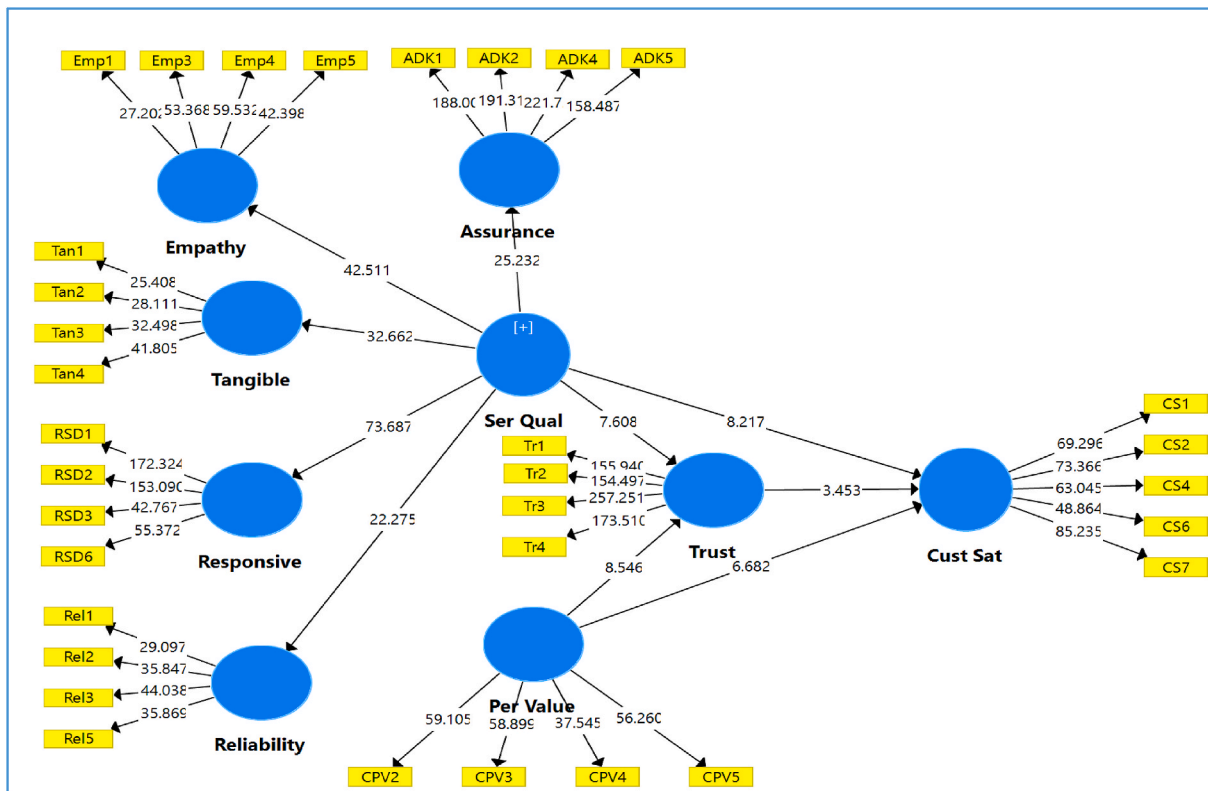
Table 4
Structural path analysis: Direct effect.

Paths	Beta	St. Error	T-Value	P-Values	Bias Corrected at 95% Confidence Intervals		Decision	R^2	f^2	Q^2
					Lower Level	Upper Level				
H1: SQ → CS	0.399	0.050	7.975	**0.000**	0.303	0.492	Supported	0.624 (CS)	0.262	0.496 (CS)
H2: CPV → CS	0.350	0.053	6.582	**0.000**	0.246	0.449	Supported	0.481 (Trust)	0.181	0.481 (Trust)
H3: Trust → CS	0.182	0.053	3.454	**0.001**	0.078	0.288	Supported		0.042	

Notes: N = 259. Bootstrap sample size = 5000. SE = standard error; LL = lower limit; CI = confidence interval; UL = upper limit 95% bias-correlated CI. SQ→CS=Service Quality→Customer Satisfaction, CPV→CS=Perceived Value→Customer Satisfaction, Trust→CS = Trust→Customer Satisfaction.

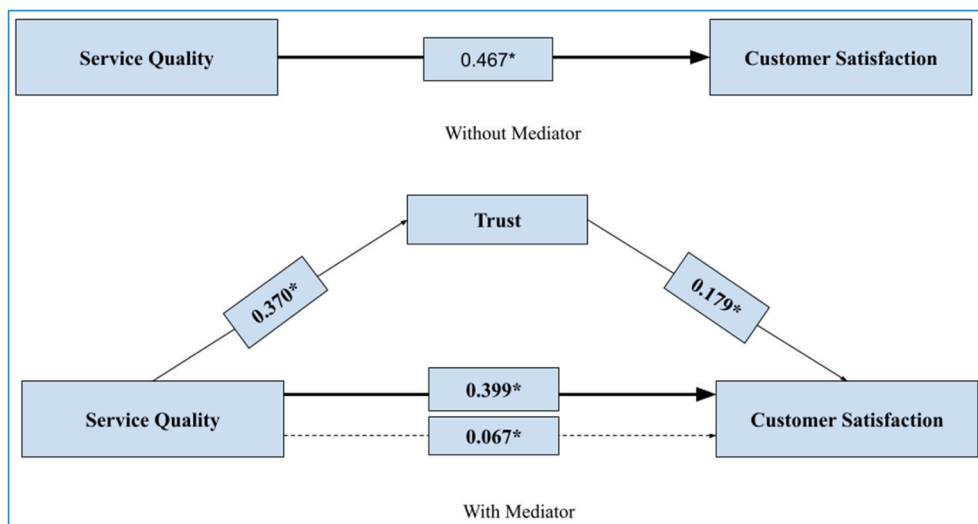**Fig. 3.** Structural model: Hypotheses testing.

Fig. 4. Mediation of trust in service quality and customer satisfaction relationship.

items, the delivery personnel should lend assistance without complaining or rushing them. In food delivery, customers expect certain food items to be served hot and others to be served cold. For electronics and electrical goods, careful handling by the delivery personnel is of utmost importance to satisfy buyers and maintain the brands' goodwill. In adverse situations, such as an occurrence of damage, fracture, or perishing of a purchased item, the delivery personnel must show empathy, provide assurances and suggest possible solutions and guidelines. They must not aggravate the situation but ease the minds of buyers. They should bear in mind that the home delivery service they provide allow customers to save time, reduce physical inconveniences and add value over in-store purchases.

As this study has shown, customer perceived value has a significant and direct effect on customer satisfaction, which aligns with findings from a number of past studies (Rita et al.,2019;Chicu et al., 2019; Hirata, 2019). It suggests that when a customer perceives that the service provided by the delivery personnel is better than expected, they are satisfied with the service. This favorable attitude will increase their likelihood of continuing with the company or brand. When the customers think they are getting more than they expect, they hold a positive attitude towards the brand or the company (Murali et al., 2016;Chen and Dubinsky, 2003; Cronin et al.,2000). This understanding places importance on creating positive perceptions of value among customers, such as being able to provide the service of the delivery personnel promptly and being able to

Table 5
Structural Path Analysis: The Mediation effect of Trust.

Paths	Direct Effect	Indirect Effect			
	Beta		95% BCCI		
		Beta	LCL	UCL	Mediation Status
H4: SQ → Trust→ CS	0.399[a]	0.067[a]	0.028	0.114	Partial
H5: CPV → Trust → CS	0.353[a]	0.085[a]	0.038	0.140	Partial

Notes: N = 259. Bootstrap sample size = 5000. SE = standard error; LL = lower limit; CI = confidence interval; UL = upper limit 95% bias-correlated CI.

[a] VAF: Indirect effect/Total Effect X 100.

match or even surpass customer expectations in relation to their perceived value.

Rita et al. (2019), Hirata (2019), and Chicu et al. (2019) highlighted the importance of perceived value among customers and their desire for value for their money, that is, the extra price paid for home delivery. As customers in Bangladesh are price-conscious and cautious, they tend to evaluate the amount of money they pay and the benefits they get. They would expect that the extra charge for home delivery service is reasonable and competitive compared to those offered by other service providers. They also want to relax and feel safe with the delivery personnel service. In the light of EDT, customer satisfaction is derived when consumers feel the worth of their spending.

The third hypothesis that trust as an antecedent has a direct and positive effect on customer satisfaction is supported in this study. Trust is expressed by Delgado-Ballester et al. (2003) as a symbol of security obtained through interaction with customers. This salient relationship between trust and customer satisfaction has also been demonstrated in many studies (Marinkovic and Kalinic, 2017;Daud et al., 2018), including a study in Pakistan that investigated the relationship in the context of home delivery service (Rimawan et al., 2017). Trust can be accumulated through previous interactions, word-of-mouth (WOM), or the recommendation of other customers that can give an impression of a home delivery service and help develop a perception of reliability among customers. Perception of reliability is strengthened when recommendations and WOM are matched with customers' own service experiences. In particular, the behavior of delivery service personnel, such as their promptness, responsiveness, and sense of responsibility, can create confidence in customers' minds and in turn, increase the

likelihood of improving overall customer satisfaction and goodwill with the company (Ngoc and Ghantous, 2013; Yannopoulou et al., 2011). Therefore, the findings in this study solidify trust as a strong determinant of customers' satisfaction in service marketing.

Interestingly, this study does not show trust as having a role in increasing the relationship between service quality and customer satisfaction. Instead, it suggests that promptness and reliability of delivery service of third-party employees are enough to satisfy customers. Also, with the presence of trust, the relationship between customer perceived value and customer satisfaction becomes stronger and salient. Customers will perceive that the service is worthy of their spending if the company can ensure that their home delivery service is better, reliable, safe, and secure, and if the delivery personnel's performance meets their requirements. Thus, trust is a successful partial mediator. Past studies by Maria Correia Loureiro et al. (2014) and (Kim et al., 2021) showed that trust acts as a mediator to build a significant relationship between two parties where both keep their promise like what this study showed. Like other developing countries, people in Bangladesh expect good, safe, and secure delivery service. They expect every delivery person to deliver their purchased items safely and reliably. Therefore, trust plays a mediating role in the case of service of home delivery personnel.

7. Research implications

The objective of this study is to contribute theoretical understanding and managerial insights to help improve the performance of home delivery service by delivery personnel to increase customer satisfaction in the age of e-commerce and m-commerce. The study has reinforced the importance of the service provided by home delivery personnel in achieving customer satisfaction. To the best of the researchers' knowledge, only a few studies have been conducted to date on the service provided by home delivery personnel in Bangladesh and other parts of

Table 6
Importance and performance map analysis (IPMA) of construct on customer satisfaction.

	Importance (Unstandardized)	Importance (Unstandardized)	Performances
Customer Perceived Value	0.521	0.435	74.39%
Service Quality	0.596	0.466	66.54%
Trust	0.134	0.182	62.63%
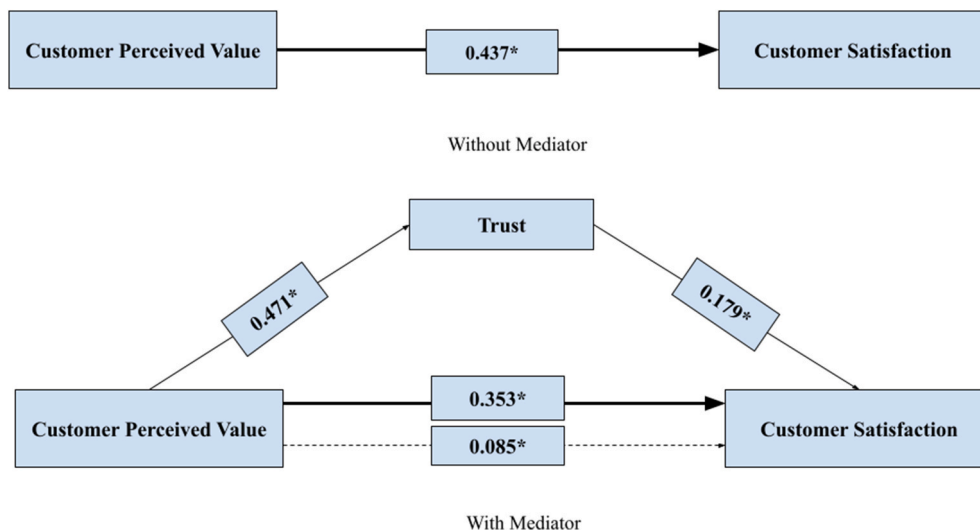
Fig. 5. Mediation of trust in customer perceived value and customer satisfaction relationship.
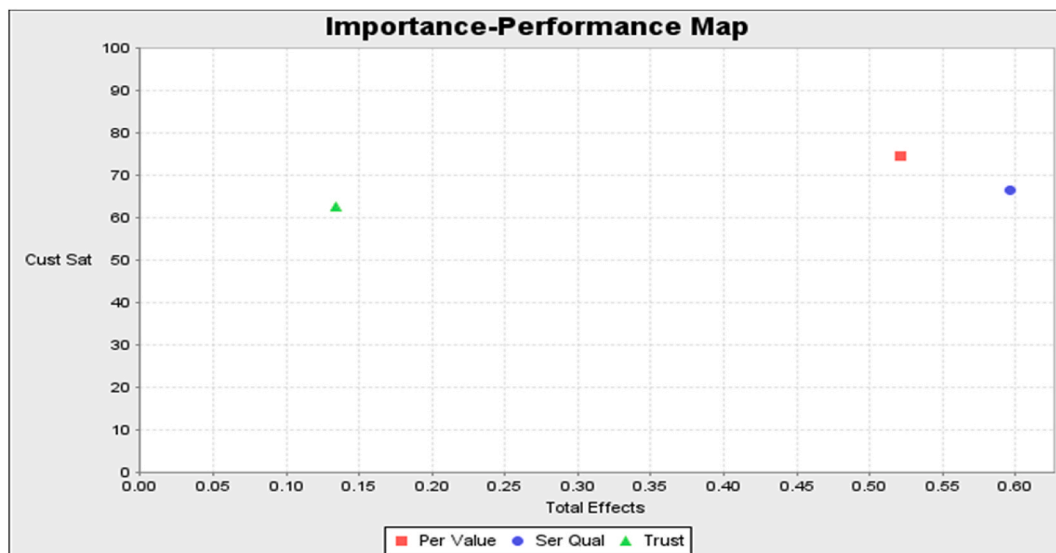
Fig. 6. Importance-performance map analysis.

the Globe. The implications for theory and practice are as follows:

7.1. Implications for theory

First, the present study contributes to the development and validation of a trust-based satisfaction model in home delivery service of third-party employee in SERVQUAL (Parasuraman et al., 1988). It extends the SERVQUAL model with customer perceived value, where it demonstrates good explanatory power. Integrating trust establishes a theoretical platform to explain buyers' psychological attachment with home delivery service of online purchases. The study operationalized the SERVQUAL scale in the context of home delivery service and conceptualized its dimensions on customer satisfaction. This study also makes a contribution to EDT by extending it. According to EDT, customer satisfaction is a function of expectations of quality and perceived value, perceived performance, and disconfirmation of beliefs. In this study, the addition of trust in this framework is shown to increase the likelihood of satisfying customers. The partial mediating role of trust is shown to strengthen the relationship between perceived value and customer satisfaction. Methodologically, the study makes a contribution in its use of second-generation statistical tool and sampling techniques.

7.2. Implications for practice

In terms of practical and managerial contribution, the service quality of home delivery personnel with its five dimensions was found to directly and positively affect customer satisfaction. It implies the need for proper application of SERVQUAL dimensions and training of home delivery personnel. Apart from mobile communication devices, delivery personnel should be equipped with the latest delivery tools such scanners, digital signature pads, and proper modes of transportations, to ensure their ability to perform good quality service in a reliable, timely and accurate manner. When customers ask for information about the company's goods and services, the delivery personnel should be able to convey correct and accurate information. Delivery personnel should be friendly, courteous, customer oriented and empathetic. They should also ensure proper physical presentation in terms of their appearance, dressing, and cleanliness, to conform with customers' expectations as these may affect their overall perceptions and impressions. These characteristics are particularly important in food delivery service, where cleanliness of food items, packaging, handling procedures and hygiene of the delivery person are essential. As food items are best consumed immediately after purchase, timeliness is a major factor. Dissatisfaction or a

failure to meet these expectations may result in customers forming negative attitudes towards online purchases and home delivery service, and affect repurchase behaviors. They may not order again from the company, or switch to other brands. In situations involving online products that have been prepaid, the ability to meet delivery deadlines and conditions is critical. Therefore, managers of e-commerce and m-commerce must ensure that their delivery personnel have the necessary attributes and are well trained to meet customer expectations. The ability to provide superior service will assure customers that they are getting value and quality service for the price of the delivery charge. Delivery charges should, therefore, be competitive and reasonable so that recipients do not think they are paying more than what they are receiving. Finally, managers should pay attention to developing the reliability of their home delivery service in order to build and maintain customers' confidence and trust. In summary, effective management of customer value perceptions in tandem with maintaining competency levels of delivery personnel will help to enhance customer satisfaction.

7.3. Implication for policy-making

The findings showed that service quality and consumer perceived value have an impact on online customer satisfaction, with trust strengthens these relationships. Our findings suggest that firms that are engaged in online selling should not regard the home delivery aspects of their e-commerce systems as a mere afterthought. Home delivery service, including the delivery personnel who expediate the service, should be thought of as a critical component of a firm's online retailing system that can help strengthen customer satisfaction, and incorporate it into their overall retailing strategy. We offer two broad perspectives to achieving this end: First, marketing managers or business owners of online retailing firms might introduce their own home delivery service to ascertain their ability to control this aspect of the process. An in-house delivery service will allow online retailers to design and customized delivery service according to customer needs. It also allows better management of customer experiences and gives retailers control over critical aspects such as setting delivery service standards and processes, recruiting delivery personnel with the requisite attitudes, motivation and skills, and equipping them to fulfill retailer and customer expectations. Second, where the online retailer contracts a specialized third party to fulfil home delivery service functions, care should be taken to ensure that the third party's standards and operating procedures align and synchronize with the firm's quality requirements and customers' expectations. Since such partnerships are usually coordinated through a

digital platform such as a mobile app or an online retailing platform that aggregates buyers and sellers, it is important to leverage technologies and practices to assist home delivery personnel in fulfilling their tasks.

Home delivery service is poised to become a prominent and permanent feature of the retailing landscape in many countries. As they continue to proliferate and as competition in this sector continues to intensify, home delivery service personnel will play pivotal roles in representing retailers to add value and fulfil customer satisfaction. It is imperative for retailers and home delivery service providers to work together to upgrade their capacities, create competitive advantages and adjust to consumers' changing needs and behaviors over the long-term.

8. Research limitation and future research

This study has a few limitations in terms of the methodology, sample size, sampling technique, and constructs. First, it was based on a cross-sectional approach where data was collected within a single time frame. Such an approach does not guarantee that the chosen time frame for the snapshot is representative nor does it allow behaviors to be analysed over a period of time. Thus, further studies should consider a longitudinal approach to ascertain if customer satisfaction prevail over a period of time. Second, this study utilized data collected from 259 respondents in one city in Bangladesh. Future studies can expand the sampling to varying locales, such as rural versus urban areas, utilize larger sample sizes and target other developing countries to account for geo-cultural difference, in order to increase generalizability of the findings. Third, future studies may examine which dimension of SERVQUAL has the most effect on customer satisfaction. Fourth, the moderating effect of product types of ordered goods and/or location can be included to examine the relationships. Finally, customer experiences can be added to the model to examine the effect on satisfaction.

Acknowledgment

References

Adams, A.-M., Bashiru, M., Abdulai, I.A., 2016. Customer satisfaction in the banking industry in Ghana: a case of GCB bank limited in Wa municipality. J. Soc. Sci. Stud. 3 (2), 217–235.

Agatz, N., Campbell, A., Fleischmann, M., Savelsbergh, M., 2011. Time slot management in attended home delivery. Transport. Sci. 45 (3), 435–449.

Afthanorhan, A., Awang, Z., Abd Majid, N., Foziah, H., Ismail, I., Al Halbusi, H., Tehseen, S., 2021. Gain more insight from common latent factor in structural equation modeling. In: Journal of Physics: Conference Series, vol. 1793. IOP Publishing, 012030, 1.

Agyapong, G.K., 2011. The effect of service quality on customer satisfaction in the utility industry–A case of Vodafone (Ghana). Int. J. Bus. Manag. 6 (5), 203–210.

Ali, M., Asmi, F., Rahman, M.M., Malik, N., Ahmad, M.S., 2017. Evaluation of E-service quality through customer satisfaction (A case study of FBR E-taxation). Open J. Soc. Sci. 5 (9), 175–195.

Al Halbusi, H., Jimenez Estevez, P., Eleen, T., Ramayah, T., Hossain Uzir, M.U., 2020. The roles of the physical environment, social servicescape, Co-created value, and customer satisfaction in determining tourists' citizenship behavior: Malaysian cultural and creative industries. Sustainability 12 (8), 3229.

Amin, M., 2016. Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. Int. J. Bank Market. 34 (3), 280–306. https://doi.org/10.1108/IJBM-10-2014-0139.

Anderson, J.C., Gerbing, D.W., 1988. Structural equation modeling in practice: a review and recommended two-step approach. Psychol. Bull. 103 (3), 411–423.

Apornak, A., 2017. Customer satisfaction measurement using SERVQUAL model, integration Kano and QFD approach in an educational institution. Int. J. Prod. Qual. Manag. 21 (1), 129–141.

Ashraf, S., Ilyas, R., Imtiaz, M., Ahmad, S., 2018. Impact of service quality, corporate image and perceived value on brand loyalty with presence and absence of customer satisfaction: a study of four service sectors of Pakistan. Int. J. Acad. Res. Bus. Soc. Sci. 8 (2), 452–474. https://doi.org/10.6007/IJARBSS/v8-i2/3885.

Aurier, P., de Lanauze, G.S., 2011. Impacts of in-store manufacturer brand expression on perceived value, relationship quality and attitudinal loyalty. Int. J. Retail Distrib. Manag. 39 (11), 810–835.

Aydin, S., Özer, G., 2005. The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market. Eur. J. Market. 39 (7/8), 910–925. https://doi.org/10.1108/03090560510601833.

Blut, M., 2016. E-service quality: development of a hierarchical model. J. Retailing 92 (4), 500–517.

Bostanji, G.M.A., 2013. The impact of service quality on customers loyalty: a study on five stars hotel's customers in Riyadh. KSA. European Journal of Business Management 5 (31), 230–240.

Brewer, P., Sebby, A.G., 2021. The effect of online restaurant menus on consumers' purchase intentions during the COVID-19 pandemic. Int. J. Hospit. Manag. 94, 102777. https://doi.org/10.1016/j.ijhm.2020.102777.

Cassell, J., Bickmore, T., 2000. External manifestations of trustworthiness in the interface. Commun. ACM 43 (12), 50–56.

Chen, C.-F., 2008. Investigating structural relationships between service quality, perceived value, satisfaction, and behavioral intentions for air passengers: evidence from Taiwan. Transport. Res. Pol. Pract. 42 (4), 709–717.

Chen, M.-C., Hsu, C.-L., Chang, K.-C., Chou, M.-C., 2015. Applying Kansei engineering to design logistics services–A case of home delivery service. Int. J. Ind. Ergon. 48, 46–59.

Chen, Y., Yu, J., Yang, S., Wei, J., 2018. Consumer's intention to use self-service parcel delivery service in online retailing. Internet Res. 28 (2), 500–519.

Chen, Z., Dubinsky, A.J., 2003. A conceptual model of perceived customer value in e-commerce: a preliminary investigation. Psychol. Market. 20 (4), 323–347.

Chicu, D., del Mar Pàmies, M., Ryan, G., Cross, C., 2019. Exploring the influence of the human factor on customer satisfaction in call centres. BRQ Business Research Quarterly 22 (2), 83–95.

Chong, A.Y.-L., 2013. Predicting m-commerce adoption determinants: a neural network approach. Expert Syst. Appl. 40 (2), 523–530.

Chou, P.-F., 2014. An evaluation of service quality, trust, and customer loyalty in home-delivery services. Int. J. Res. Soc. Sci. 3 (8), 99–108.

Cohen, J., 1988. Statistical Power Analysis for the Behavioral Sciences. Lawrence 403 Erlbaum Associates, Inc, Hillsdale, NJ.

Corbitt, B.J., Thanasankit, T., Yi, H., 2003. Trust and e-commerce: a study of consumer perceptions. Electron. Commer. Res. Appl. 2 (3), 203–215.

Cramer-Flood, E., 2021. Global ecommerce update 2021 [online], eMarketer, insider intelligence. Available: https://www.emarketer.com/content/global-ecommerce-update-2021. (Accessed 18 February 2021).

Cristobal, E., Flavian, C., Guinaliu, M., 2007. Perceived e-service quality (PeSQ). Manag. Serv. Qual.: Int. J. 17 (3), 317–340. https://doi.org/10.1108/09604520710744326.

Cronin, J.J., Taylor, S.A., 1992. Measuring service quality: a reexamination and extension. J. Market. 56 (3), 55–68.

Cronin, J.J.J., Brady, M.K., Hult, G.T.M., 2000. Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. J. Retailing 76 (2), 193–218.

Daud, A., Farida, N., Razak, M., 2018. Impact of customer trust toward loyalty: the mediating role of perceived usefulness and satisfaction. Journal of Business and Retail Management Research 13 (2), 235–242.

De Wulf, K., Odekerken-Schröder, G., Iacobucci, D., 2001. Investments in consumer relationships: a cross-country and cross-industry exploration. J. Market. 65 (4), 33–50.

Delgado-Ballester, E., Munuera-Aleman, J.L., Yague-Guillen, M.J., 2003. Development and validation of a brand trust scale. Int. J. Mark. Res. 45 (1), 35–54.

Deng, Z., Lu, Y., Wei, K.K., Zhang, J., 2010. Understanding customer satisfaction and loyalty: an empirical study of mobile instant messages in China. Int. J. Inf. Manag. 30 (4), 289–300.

Dirsehan, T., Cankat, E., 2021. Role of mobile food-ordering applications in developing restaurants' brand satisfaction and loyalty in the pandemic period. J. Retailing Consum. Serv. 62, 102608.

Dixon, M., Kimes, S.E., Verma, R., 2009. Customer Preferences for Restaurant Technology Innovations, vol. 9. Center for Hospitality Research Publications, pp. 6–16, 7.

Eastlick, M.A., Lotz, S., 2011. Cognitive and institutional predictors of initial trust toward an online retailer. Int. J. Retail Distrib. Manag. 39 (4), 234–255. https://doi.org/10.1108/09590551111117527.

Ehmke, J.F., Steinert, A., Mattfeld, D.C., 2012. Advanced routing for city logistics service providers based on time-dependent travel times. Journal of Computational Science 3 (4), 193–205.

Erciş, A., Ünal, S., Candan, F.B., Yıldırım, H., 2012. The effect of brand satisfaction, trust and brand commitment on loyalty and repurchase intentions. Procedia-Social and Behavioral Sciences 58, 1395–1404.

Fazal, O., Kanwal, S., 2017. Determinants of brand loyalty: a case study of asian mobile phone users. International Journal of Scientific and Research Publications 7 (12), 181–191.

Fornell, C., 1982. A Second Generation of Multivariate Analysis: Measurement and Evaluation. Praeger Publishers, Connecticut:NY.

Franke, G., Sarstedt, M., 2019. Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. Internet Res. 29 (3), 430–447. https://doi.org/10.1108/IntR-12-2017-0515.

Geng, X., 2019. Research on the construction of application platform for industrial promotion service based on process innovation and cultural creativity of tinware. In: 5th International Conference on Arts, Design and Contemporary Education (ICADCE 2019). Atlantis Press, China, pp. 117–120.

Ghezzi, A., Mangiaracina, R., Perego, A., 2012. Shaping the e-commerce logistics strategy: a decision framework. Int. J. Eng. Bus. Manag. 4, 4–13.

Gilboa, S., Seger-Guttmann, T., Mimran, O., 2019. The unique role of relationship marketing in small businesses' customer experience. J. Retailing Consum. Serv. 51, 152–164.

Goić, M., Levenier, C., Montoya, R., 2021. Drivers of customer satisfaction in the grocery retail industry: a longitudinal analysis across store formats. J. Retailing Consum. Serv. 60, 102505.

Goswami, P., 2007. Customer satisfaction with service quality in the life insurance industry in India. ICFAI Journal of Management Research 2 (1), 331–342.

Gronroos, C., 1988. Service quality: the six criteria of good perceived service. Rev. Bus. 9 (3), 10–13.

Guglielmo, C., 2000. Can Webvan deliver the goods? [Online], Available: (http://www.zdnet.com/intweek/stories/news/0,4164,2429751,00.html. . (Accessed 20 February 2021).

Guide, V.D.R.J., Ketokivi, M., 2015. Notes from the Editors: redefining some methodological criteria for the journal. J. Oper. Manag. 37, 5–8, 2015.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Thiele, K.O., 2017. Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. J. Acad. Market. Sci. 45 (5), 616–632.

Hair, J.F., Ringle, C.M., Sarstedt, M., 2011. PLS-SEM: indeed a silver bullet. J. Market. Theor. Pract. 19 (2), 139–152.

Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M., 2019. When to use and how to report the results of PLS-SEM. Eur. Bus. Rev. 31 (1), 2–24.

Hair, J.F.J., Howard, M.C., Nitzl, C., 2020. Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. J. Bus. Res. 109, 101–110.

Henseler, J., Ringle, C.M., Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. J. Acad. Market. Sci. 43 (1), 115–135.

Hidayat, R., Akhmad, S., Machmud, M., 2015. Effects of service quality, customer trust and customer religious commitment on customers satisfaction and loyalty of Islamic banks in East Java. Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah. 7 (2), 151–164.

Hirata, E., 2019. Service characteristics and customer satisfaction in the container liner shipping industry. The Asian Journal of Shipping and Logistics 35 (1), 24–29.

Horn, D., Salvendy, G., 2006. Consumer-based assessment of product creativity: a review and reappraisal. Human Factors Ergonomics in Manufacturing Service Industries 16 (2), 155–175.

Hu, H.-H., Kandampully, J., Juwaheer, T.D., 2009. Relationships and impacts of service quality, perceived value, customer satisfaction, and image: an empirical study. Serv. Ind. J. 29 (2), 111–125.

Hübner, A.H., Kuhn, H., Wollenburg, J., Towers, N., Kotzab, H., 2016. Last mile fulfilment and distribution in omni-channel grocery retailing: a strategic planning framework. Int. J. Retail Distrib. Manag. 44 (3), 228–247. https://doi.org/10.1108/IJRDM-11-2014-0154.

Ivanauskiene, N., Volungenaite, J., 2014. Relations between service quality and customer loyalty: an empirical investigation of retail chain stores in emerging markets. Am. Int. J. Soc. Sci. 3 (2), 113–120.

Jiang, W., Feng, T., Timmermans, H., Li, H., 2017. A gap-theoretical path model of residential satisfaction and intention to move house applied to renovated historical blocks in two Chinese cities. Cities 71, 19–29.

Jiang, Y., Liu, F., Lim, A., 2021. Digital coupon promotion and platform selection in the presence of delivery effort. J. Retailing Consum. Serv. 62, 102612.

Joseph-Vaidyan, K.V., 2008. Factors that Enhance Customer Trust in E-Commerce Web Sites: an Examination of E-Commerce Success Metrics Using Internet Audience Rating. Doctor Philosophy, Capella University.

Joyce, A.S., Ogrodniczuk, J.S., Piper, W.E., McCallum, M., 2003. The alliance as mediator of expectancy effects in short-term individual therapy. J. Consult. Clin. Psychol. 71 (4), 672.

Kämäräinen, V., Saranen, J., Holmström, J., 2001. The reception box impact on home delivery efficiency in the e-grocery business. Int. J. Phys. Distrib. Logist. Manag. 31 (6), 414–426.

Kassim, N., Asiah Abdullah, N., 2010. The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: a cross cultural analysis. Asia Pac. J. Market. Logist. 22 (3), 351–371.

Kettinger, W.J., Lee, C.C., 2005. Zones of tolerance: alternative scales for measuring information systems service quality. MIS Q. 29 (4), 607–623. https://doi.org/10.2307/25148702.

Kim, D.J., Ferrin, D.L., Rao, H.R., 2003. Antecedents of consumer trust in B-to-C electronic commerce. In: Proceedings of the Americas' Conference on Information Systems 2013. AIS, Atlanta, GA, pp. 157–167.

Kim, H.-S., Shim, J.-H., 2019. The effects of quality factors on customer satisfaction, trust and behavioral intention in chicken restaurants. Journal of Industrial Distribution and Business 10 (4), 43–56.

Kim, J., 2021. Platform quality factors influencing content providers' loyalty. J. Retailing Consum. Serv. 60, 102510.

Kim, J., Rasouli, S., Timmermans, H., 2017. Satisfaction and uncertainty in car-sharing decisions: an integration of hybrid choice and random regret-based models. Transport. Res. Pol. Pract. 95, 13–33.

Kim, N.L., Woo, H., Ramkumar, B., 2021. The role of product history in consumer response to online second-hand clothing retail service based on circular fashion. J. Retailing Consum. Serv. 60, 102457.

Kopalle, P.K., Lehmann, D.R., 2001. Strategic management of expectations: the role of disconfirmation sensitivity and perfectionism. J. Market. Res. 38 (3), 386–394.

Kumar, S., Shah, A., 2021. Revisiting food delivery apps during COVID-19 pandemic? Investigating the role of emotions. J. Retailing Consum. Serv. 62, 102595.

Leonard, F.S., Sasser, W.E., 1982. The incline of quality. Harv. Bus. Rev. 60 (5), 163–171.

Liljander, V., Strandvik, T., 1993. Estimating zones of tolerance in perceived service quality and perceived service value. Int. J. Serv. Ind. Manag. 4 (2), 6–28.

Lin, H.-H., Wang, Y.-S., 2006. An examination of the determinants of customer loyalty in mobile commerce contexts. Inf. Manag. 43 (3), 271–282.

Lowe, R., Rigby, M., 2014. The last mile: exploring the online purchasing and delivery journey Barclays, September [Online], Juarez, L. Readkong. December 2020, 2020. https://www.readkong.com/page/the-last-mile-exploring-the-online-purchasing-and-delivery-2885509.

Madrigal, R., 1995. Cognitive and affective determinants of fan satisfaction with sporting event attendance. J. Leisure Res. 27 (3), 205–227.

Maria Correia Loureiro, S., Miranda, J., Breazeale, M., 2014. Who needs delight? The greater impact of value, trust and satisfaction in utilitarian, frequent-use retail. Journal of Service Management 25 (1), 101–124. F.

Marinkovic, V., Kalinic, Z., 2017. Antecedents of customer satisfaction in mobile commerce: exploring the moderating effect of customization. Online Inf. Rev. 41 (2), 138–154.

Matzler, K., Hinterhuber, H.H., 1998. How to make product development projects more successful by integrating Kano's model of customer satisfaction into quality function deployment. Technovation 18 (1), 25–38.

Morgan, R.M., Hunt, S.D., 1994. The commitment-trust theory of relationship marketing. J. Market. 58 (3), 20–38.

Moriuchi, E., Takahashi, I., 2016. Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade. Australas. Market J. 24 (2), 146–156.

Murali, S., Pugazhendhi, S., Muralidharan, C., 2016. Modelling and investigating the relationship of after sales service quality with customer satisfaction, retention and loyalty–a case study of home appliances business. J. Retailing Consum. Serv. 30, 67–83.

Ngoc, P.K., Ghantous, N., 2013. Managing brand associations to drive customers' trust and loyalty in Vietnamese banking. Int. J. Bank Market. 31 (6), 456–480.

Nuryakin, Priyo, J.S., 2018. Service quality, trust and customer loyalty: the role of customer satisfaction at the hotel services industry in Indonesia. Quality-Access to Success 19 (166), 50–55.

Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. J. Market. Res. 17 (4), 460–469.

Oliver, R.L., DeSarbo, W.S., 1988. Response determinants in satisfaction judgments. J. Consum. Res. 14 (4), 495–507.

Omar, S., Mohsen, K., Tsimonis, G., Oozeerally, A., Hsu, J.-H., 2021. M-commerce: the nexus between mobile shopping service quality and loyalty. J. Retailing Consum. Serv. 60, 102468.

Oskooii, N., Albonaiemi, E., 2017. Measuring the customer satisfaction based on SERVQUAL model (case study: mellat Bank in Tehran city). Innovat. Market. 13 (2), 13–22.

Ozturk, C., 2020. Health or death? The online purchase intentions of consumers during the COVID-19 pandemic. Transnational Marketing Journal 8 (2), 219–241.

Pan, S., Giannikas, V., Han, Y., Grover-Silva, E., Qiao, B., 2017. Using customer-related data to enhance e-grocery home delivery. Ind. Manag. Data Syst. 117 (9), 1917–1933.

Panigrahi, S.K., Azizan, N.A., Khan, M.W.A., 2018. Investigating the empirical relationship between service quality, trust, satisfaction, and intention of customers purchasing life insurance products. Indian J. Market. 48 (1), 28–46.

Phillips, D.M., Baumgartner, H., 2002. The role of consumption emotions in the satisfaction response. J. Consum. Psychol. 12 (3), 243–252.

Podsakoff, P.M., MacKenzie, S.B., Podsakoff, N.P., 2012. Sources of method bias in social science research and recommendations on how to control it. Annu. Rev. Psychol. 63 (1), 539–569.

Prentice, C., Kadan, M., 2019. The role of airport service quality in airport and destination choice. J. Retailing Consum. Serv. 47, 40–48.

Punakivi, M., Saranen, J., 2001. Identifying the success factors in e-grocery home delivery. Int. J. Retail Distrib. Manag. 29 (4), 156–163.

Rai, H.B., Sara, V., Macharis, C., Schoutteet, P., Vanhaverbeke, L., 2019. Logistics outsourcing in omnichannel retail: state of practice and service recommendations. Int. J. Phys. Distrib. Logist. Manag. 49 (3), 267–286.

Rather, R.A., Sharma, J., 2017. Customer engagement for evaluating customer relationships in hotel industry. Eur. J. Tour. Hosp. Recreat. 8 (1), 1–13.

Raza, S.A., Umer, A., Qureshi, M.A., Dahri, A.S., 2020. Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. The TQM Journal 32 (6), 1443–1466. I 10.1108/TQM-02-2020-0019.

Rigopoulou, I.D., Chaniotakis, I.E., Lymperopoulos, C., Siomkos, G.I., 2008. After-sales service quality as an antecedent of customer satisfaction. Manag. Serv. Qual.: Int. J. 18 (5), 512–527.

Rimawan, E., Mustofa, A., Mulyanto, A.D., 2017. The influence of product quality, service quality and trust on customer satisfaction and its impact on customer loyalty (Case Study PT ABC Tbk). Int. J. Sci. Eng. Res. 8 (7), 2330–2336.

Ringle, C.M., Sarstedt, M., 2016. Gain more insight from your PLS-SEM results: the importance-performance map analysis. Ind. Manag. Data Syst. 116 (9), 1865–1886. https://doi.org/10.1108/IMDS-10-2015-0449.

Rita, P., Oliveira, T., Farisa, A., 2019. The impact of e-service quality and customer satisfaction on customer behavior in online shopping. Heliyon 5 (10), e02690.

Rizka, M., Widji, A., 2013. Customer loyalty the effects of service quality and the mediating role of customer relationship marketing TelKom Speedy in Jember Area. Review of Integrative Business Economics Research 2 (1), 491–502.

Roostika, R., 2011. The effect of perceived service quality and trust on loyalty: customer's perspectives on mobile internet adoption. International Journal of Innovation, Management Technology in Society 2 (4), 286–291.

Setiawan, H., Sayuti, A.J., 2017a. Effects of service quality, customer trust and corporate image on customer satisfaction and loyalty: an assessment of travel agencies customer in South Sumatra Indonesia. IOSR J. Bus. Manag. 19 (5), 31–40.

Setiawan, H., Sayuti, A.J., 2017b. Effects of service quality, customer trust and corporate image on customer satisfaction and loyalty: an assessment of travel agencies customer in South Sumatra Indonesia. IOSR J. Bus. Manag. 19 (5), 31–40.

Sharma, N., 2003. The role of pure and quasi-moderators in services: an empirical investigation of ongoing customer–service-provider relationships. J. Retailing Consum. Serv. 10 (4), 253–262.

Shmueli, G., Sarstedt, M., Hair, J.F., Cheah, J.-H., Ting, H., Vaithilingam, S., Ringle, C. M., 2019. Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. Eur. J. Market. 53 (11), 2322–2347. https://doi.org/10.1108/EJM-02-2019-0189.

Sim, K., Chan, Y.H., Chong, P.N., Chua, H.C., Soon, S.W., 2010. Psychosocial and coping responses within the community health care setting towards a national outbreak of an infectious disease. J. Psychosom. Res. 68 (2), 195–202.

Sivathanu, B., 2019. An empirical study of service quality, value and customer satisfaction for on-demand home services. Int. J. Inf. Syst. Serv. Sect. (IJISSS) 11 (4), 35–57.

Söderlund, M., Sagfossen, S., 2017. The consumer experience: the impact of supplier effort and consumer effort on customer satisfaction. J. Retailing Consum. Serv. 39, 219–229.

Stathopoulou, A., Balabanis, G., 2016. The effects of loyalty programs on customer satisfaction, trust, and loyalty toward high-and low-end fashion retailers. J. Bus. Res. 69 (12), 5801–5808.

Su, L., Hsu, M.K., Swanson, S., 2017. The effect of tourist relationship perception on destination loyalty at a world heritage site in China: the mediating role of overall destination satisfaction and trust. J. Hospit. Tourism Res. 41 (2), 180–210.

Susarla, A., Barua, A., Whinston, A.B.J., 2006. Understanding the 'service' component of application service provision: an empirical analysis of satisfaction with ASP services. In: Hirschheim, R., Heinzl, A., Dibbern, J. (Eds.), Information Systems Outsourcing. Springer, New York, USA, pp. 481–521.

Tan, K.C., Pawitra, T.A., 2001. Integrating SERVQUAL and Kano's model into QFD for service excellence development. Manag. Serv. Qual.: Int. J.

Uddin, M.B., Akhter, B., 2012. Customer satisfaction in mobile phone services in Bangladesh: a survey research. Management & Marketing Journal 10 (1), 20–36.

Uzir, M.U.H., Hamid, A.B.A., Latiff, A.S.A., 2021. Does customer satisfaction exist in purchasing and usage of Electronic Home Appliances in Bangladesh through interaction effects of Social Media? Int. J. Bus. Excel. 23 (1), 113–123. https://doi.org/10.1504/IJBEX.2019.10024965.

Uzir, M.U.H., Jerin, I., Al Halbusi, H., Hamid, A.B.A., Latiff, A.S.A., 2020. Does quality stimulate customer satisfaction where perceived value mediates and the usage of social media moderates? Heliyon 6 (12), e05710. https://doi.org/10.1016/j.heliyon.2020.e05710.

van Riel, A.C., Pura, M., 2005. Linking perceived value and loyalty in location-based mobile services. Manag. Serv. Qual.: Int. J. 15 (6), 509–538.

Wang, Y.-S., Liao, Y.-W., 2007. The conceptualization and measurement of m-commerce user satisfaction. Comput. Hum. Behav. 23 (1), 381–398.

Wida, E.C., 2020. Which states have closed restaurants and bars due to coronavirus? Today, Today. March 17 2020.

Woodruff, R.B., Gardial, S.F., 1996. Know Your Customer: New Approaches to Understanding Customer Value and Satisfaction. Blackwell Publishers, Inc., Cambridge, MA.

Yamoto, 2007. The evolution of the Yamoto company [Online]. Available. http://www.kuronekoyamato.co.jp. June 2020, 2020.

Yang, S., Liu, Y., Wei, J., 2016. Social capital on mobile SNS addiction: a perspective from online and offline channel integrations. Internet Res. 26 (4), 982–1000.

Yannopoulou, N., Koronis, E., Elliott, R., 2011. Media amplification of a brand crisis and its affect on brand trust. J. Market. Manag. 27 (5–6), 530–546.

Yeh, Y.S., Li, Y.M., 2009. Building trust in m-commerce: contributions from quality and satisfaction. Online Inf. Rev. 33 (6), 1066–1086. https://doi.org/10.1108/14684520911011016.

Yi, H.-T., Yeo, C., Amenuvor, F.E., Boateng, H., 2021. Examining the relationship between customer bonding, customer participation, and customer satisfaction. J. Retailing Consum. Serv. 62, 102598.

Yi, Y., Nataraajan, R., 2018. Customer satisfaction in asia. Psychol. Market. 35 (6), 387–391.

Yildiz, E., 2017. Effects of service quality on customer satisfaction, trust, customer loyalty and word of mouth: an application on cargo companies in gümüşhane. Global Journal of Economics and Business Studies 6 (12), 81–88.

Zarei, E., Daneshkohan, A., Khabiri, R., Arab, M., 2015. The effect of hospital service quality on patient's trust. Iran. Red Crescent Med. J. 17 (1), e17505 https://doi.org/10.5812/ircmj.17505.

Zeithaml, V.A., 1988. Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. J. Market. 52 (3), 2–22.

Zhou, Q., Lim, F.J., Yu, H., Xu, G., Ren, X., Liu, D., Wang, X., Mai, X., Xu, H., 2021. A study on factors affecting service quality and loyalty intention in mobile banking. J. Retailing Consum. Serv. 60, 102424.

Dr. Md. Uzir Hossain Uzir obtained his Doctoral degree in Brand Management (Marketing) at Putra Business School (PBS), Malaysia. He has received his Master and Bachelor degrees in Marketing and another two-year professional Master degree in Disaster Management (MDM) from the University of Dhaka, Bangladesh. Previously he started his career as a banker. After serving more than seven years in a bank, he switched to the academic and research world. He published articles in the International Journals, including Scopus and Web of Science-indexed journals in Business, Economics, and Social Sciences. Besides, he is a regular reviewer of journal articles, book chapters, and theses. He has worked under the funding of the Malaysian Higher Education Ministry. Dr. Uzir is a professional trainer in statistics and data analysis tools (SPSS, SmartPLS, AMOS), referencing tool EndNote. As an entrepreneur, he operates a research consultancy and digital marketing firm in Bangladesh. His research areas are in marketing, marketing-technology, digital marketing, consumer behavior, etc. Recently, he is working on the nexus between applied artificial intelligence and marketing.

Dr. Hussam Al Halbusi holds a Ph.D. in Management and Administration, currently working as Assistant Professor at Management Department, Ahmed Bin Mohammed Military College (ABMMC), Doha, Qatar. Hussam received my BSc degree with first-class honors from the University of Al Anbar in 2011. After completing my BSc in Business Management, he was awarded a Master's degree in Business policy from Fatih University Istanbul, Turkey 2015. He obtained his Ph.D. from the Faculty of Business and Accountancy (UMFBA), University of Malaya, Malaysia 2020. He researches interests lie in the areas of Strategic Management, Business Ethics, Leadership, Human Resources Management, Organizational Psychology, Organizational Sociology, Innovation, Entrepreneurship, SMEs, Technology Adaption, and Technology Addiction. He has published numerous scientific journal articles and conference papers. He is a regular reviewer of numerous prestigious journals. During his career, he was engaged in more than 50 projects.

Professor T. Ramayah, is currently a Professor of Technology Management, School of Management, Universiti Sains Malaysia He started his academia journey in 1998. He has enormous publications: articles, books, book chapters, conference proceeding etc. He has supervised many Phd and master students. He is a Visiting Professor Minjiang University (China), Universiti Malaysia Sarawak, and King Saud University; Adjunct Professor at Sunway University, Universiti Tenaga Nasional, Malaysia, and Multimedia University. He is also an International Collaborative Partner (ICP) at Universiti Tunku Abdul Rahman, Malaysia. His publications, have appeared in high-indexed journals. His full profile can be accessed from http://www.ramayah.com.

Dr Rodney Lim Thiam Hock is Lecturer in Faculty of Business, Design and Arts, Swinburne University of Technology, Sarawak Campus, Malaysia. He did his PhD in Business (Swinburne), Masters of eBusiness and Communications (Swinburne University Lily Dale, Australia). Dr. Rod Lim has taught at the higher education level since 1993. He has extensive teaching experience in the areas of Marketing and Digital Marketing. He is currently coordinating the Capstone 1 unit in the Business degree program. His research interests are in Entrepreneurship, social media and e-commerce. He is teaching Advanced Integrative Business Practice (Capstone 1), Managing the Global Marketplace, International Marketing, Introduction to Management, Marketing Management, Business Strategy.

Dr. Musheer A. Aljaberi is a Ph.D. graduate from the Department of Community Health, Faculty of Medicine & Health Sciences, Universiti Putra Malaysia. He is interested in health services management, acculturation, stress, anxiety, and adaption among international students.

Mahmud Hamid is a PhD candidate in Putra Business School, University Putra Malaysia, Malaysia. His major area is general management, human resource management, organization sustainability. He has graduation and post-graduation degree from Bangladesh. He has written several articles in international journal.

Najmul Hasan is PhD candidate at School of Management, Huazhong University of Science and Technology, Wuhan, China. His research interests are in computational intelligence-based predictive analytics, information systems management and medical informatics. He has published numerous scientific journal articles and conference papers. He received Excellent Academic Award at HUST 2019 and 2020. He is regular reviewer of numerous prestigious journals. During his career, he was engaged more than 50 projects.