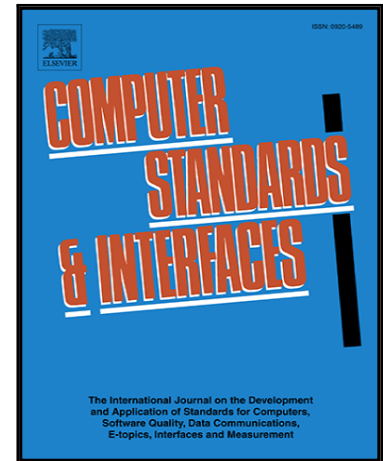


The Trust Model of Enterprise Purchasing for B2B e-Marketplaces

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Highlights

- This study examined the relationships existed between the trusts in commodity information and purchasing intentions by the procurement personnel of the businesses when making a desired purchase from online commodity information marketplaces.
- Trust in commodity information by procurement personnel of the enterprises was influenced by the trust in intermediaries and sellers.
- The relationship between trust in commodity information and purchasing intentions of procurement personnel of the enterprises was mediated by the perceived value.
- This finding can be used as a reference to the operators of online commodity information marketplaces and procurement personnel of the enterprises in both academic and practical areas.

**The Trust Model of Enterprise Purchasing for
B2B e-Marketplaces**

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Abstract

Electronic commerce and online marketplaces have rapidly become critical transaction channels. Many studies of online marketing have focused on the purchasing behaviors of general buyers. However, many business to business (B2B) e-marketplaces allow professional procurement personnel from various businesses to electronically search for and purchase commodities; this facilitates price referencing and helps procurement personnel complete the tasks associated with direct purchasing functionalities. Despite this trend, few studies have examined the purchasing behavior of procurement personnel in B2B e-marketplaces. To fill this research gap, this study examines the relationships between trust in intermediaries and sellers; trust in commodity information; and the online purchase intentions of the procurement personnel in [B2B e-marketplaces](#). This study also investigates the mediating effect of perceived value on the relationship between trust in commodity information and online purchase intention. The results indicate that the relationship between trust in commodity information and online purchase is mediated by perceived value. In addition, both intermediary trust and seller trust positively and significantly influence trust in commodity information, and intermediary trust positively influences seller trust. This finding is a valuable reference for professionals working in [B2B e-marketplaces](#).

Keywords: enterprise procurement; [B2B e-marketplaces](#); trust; perceived value; purchase intention.

Introduction

The global electronic commerce (EC) industry has grown rapidly since the dot-com bubble in early 2000. It not only changes consumer behavior but also influences employee behavior (Odom et al., 2002; Tapia, 2004; Rigby, 2011). This rapid advancement in EC has exponentially increased year after year, stimulating the development of diversified business models, such as business-to-business (B2B) EC, that have contributed to the growth and availability of online purchase and enterprise operating channels (Chang & Wong, 2010). Procurement personnel are playing increasingly critical roles in decisions on enterprise procurement, and they are spending more time searching for commodity information online, browsing websites and searching for the most appropriate products for their enterprises. Websites designed to provide this type of information have developed at an explosive rate. They increase transparency by displaying relevant commodity information. [Specifically, this type of B2B e-marketplace plays an essential role as a third-party platform with the intermediary function of disseminating specific commodity](#)

information. To this end, it provides the procurement personnel of various enterprises with the commodity information they need to make effective purchasing decisions.

Numerous new styles and forms of e-marketplaces have emerged to provide secure and reliable transactions between buyers and sellers (Odom et al., 2002; Pavlou & Gefen, 2005). In B2B EC, given the comprehensive and radical development of e-marketplaces, the trustworthiness of sellers and intermediaries has become an important factor stimulating the online purchase intentions of procurement personnel (Pavlou, 2002; Chong et al., 2003; Chen & Chang, 2012). As Hong and Cho (2011) noted, a marketplace is composed of many business intermediaries who provide related services in complex business environments, and there are many sellers in this environment. Procurement personnel are typically more willing to conduct exchanges with anonymous sellers if they trust the e-marketplace. Thus, trust is a critical factor in buyers' online purchasing decisions, and many researchers have studied the role of trust in e-marketplaces (Ba & Pavlou, 2002; Jones & Leonard, 2008; Chien et al., 2012; Fang et al., 2014; Kim & Koo, 2016; McKnight et al., 2017; Alsaad, Mohamad, & Ismail, 2017; Connelly et al., 2018; Hallikainen & Laukkanen, 2018).

Most previous studies of commodity information and exchange have focused on customer to customer (C2C) or business to customer (B2C) EC activities. They have found that trust is an important antecedent to buyers' purchasing intention, in particular seller trust and intermediary trust (Hong & Cho, 2011; Chong et al., 2003; Jones & Leonard, 2008). Indeed, trust is a crucial foundation of the relationships between sellers, intermediaries, and buyers in the virtual transaction environment and influences buyers' behavioral intentions (Strader & Ramaswami, 2002; Huang & Liu, 2010; Hong & Cho, 2011; Kim & Koo, 2016; Connelly et al., 2018). In other words, when buyers decide to complete a transaction in an e-marketplace, they place trust not only in the sellers, but also in other stakeholders in the e-marketplace (Shankar et al., 2002; Hong & Cho, 2011; Fang et al., 2014). Previous studies have focused on the impacts of sellers' trust or stakeholders' trust on buyers' behavioral intentions or cooperative and performance relationships in C2C and B2C e-marketplaces (Pavlou, 2002; Chien et al., 2012). Few studies have investigated the role of procurement personnel's trust in various objects in B2B e-marketplaces and its effect on their purchase intentions.

A few studies have defined different types of trust in e-marketplaces, considered the relationships between them, and then verified their relative effects (Stewart, 2003; Hong et al., 2011; Chong et al., 2003; Jones & Leonard, 2008; Belanche et al., 2014; Chen et al., 2015; Wei et al., 2019). These studies have mainly divided trust into seller trust and intermediary trust and then investigated the influence of seller trust and intermediary trust on buyers' perceived value, behavioral intention, and derived value

when buyers browse and make purchases in the B2C or C2C EC environments (Konuk, 2018). However, many procurement personnel browse B2B e-marketplaces to obtain commodity information such as characteristics, properties, and prices. They then usually purchase a large quantity of the products for their businesses. When procurement personnel purchase commodities in [B2B e-marketplaces](#), they search for trustworthy sellers and associated intermediaries. Furthermore, trustworthy commodity information on a website enhances perceived value and helps to complete online transactions. Thus, from an organizational perspective, trust in commodity information is critical for procurement personnel. Therefore, it is necessary to clarify and then examine the different degrees of trust in various objects in the B2B e-marketplace (Stewart, 2003; Belanche et al., 2014; Chen et al., 2015; Wei et al., 2019).

Although the role of seller trust and intermediary trust has been well documented, few studies have examined trust in commodity information (Pavlou, 2002). Additionally, the relationships between trust in different objects and the verification of their impact on purchase intention have rarely been investigated in B2B e-marketplaces (Pavlou, 2002). To avoid ambiguity, it is necessary to clearly differentiate the objects of trust, namely intermediaries, sellers, and commodity information. Distinguishing between these categories prevents confusion (Jones & Leonard, 2008; Wei et al., 2019). In addition, perceived value has been identified as a crucial determinant of buyers' behavioral intentions in both B2C and C2C e-marketplaces (Chong et al., 2003; Chen & Chang, 2012; Fang et al., 2014; Fang et al., 2016). When using a [B2B e-marketplace](#), procurement personnel evaluate the utility of the products and services provided by the intermediary. The perceived value of these items is a critical factor in final purchase decisions. As procurement personnel are responsible for purchasing commodities for their companies, their purchasing behaviors are totally different from those of general buyers in e-marketplaces. It is necessary to examine whether enhancing procurement personnel's trust in [B2B e-marketplaces](#) increases their perceptions of value and purchasing intention (Chen & Chang, 2012; Kang & Sharma, 2012; Konuk, 2018).

Trust in sellers, trust in intermediaries, and trust in commodity information interact with each other. However, how this interaction affects perceived value and purchasing intentions in B2B e-marketplace environments has not been studied. Thus, this study asked the following research questions.

- (1) What is the relationship between the types of trust used by procurement personnel in [B2B e-marketplaces](#)?
- (2) What are the antecedents of the online purchase intentions of procurement personnel in [B2B e-marketplaces](#)?

This study examined how seller trust, intermediary trust, and trust in commodity information in [B2B e-marketplaces](#) influence each other in an organizational context. The study also explored the relationships between trust in commodity information and perceived value and purchase intentions. Further, based on the trust model proposed by Chong et al. (2003) and Hong and Cho (2011), this study investigated whether the factors that affect trust impact the purchase decisions of procurement personnel in [B2B e-marketplaces](#).

The remainder of the paper is organized as follows. Section 2 provides a review of the literature on EC, the development of [B2B e-marketplaces](#), and the theoretical underpinnings of the trust model. It also contains the research framework and hypotheses. Sections 3 and 4 describe the research methods and the results of the analyses, respectively. The last section summarizes and concludes the study, and discusses its contributions and managerial implications.

Literature review

With the emergence of EC, the purchasing behaviors of procurement personnel have shifted from traditional face-to-face transactions to virtual transactions. In fact, B2B EC may have had a far greater impact on exchange quantities and purchasing amounts than C2C and B2C EC. Procurement for enterprises is mainly handled by professionals who oversee procurement decisions, purchase amounts, and the quantity of goods bought, and these professionals have different behaviors than general buyers. Furthermore, if an enterprise has a clearly established purchasing process for achieving effective procurement, the enterprise's procurement personnel must follow these process requirements. Therefore, before making purchase decisions, procurement personnel spend a lot of time identifying suitable commodities and carefully reading product information on [B2B e-marketplaces](#). This study examined the effects of trust, specifically seller trust, intermediary trust, and trust in commodity information, on the online purchasing intentions of procurement personnel and how they are mediated by perceived value in [B2B e-marketplaces](#).

B2B e-Marketplaces

The popularity of the Internet and improvements in EC applications means that buyers and procurement personnel increasingly demand and rely on information available on the Internet (Konuk, 2018). Specifically, procurement personnel expect to obtain valuable and reliable commodity information from B2B e-marketplaces. Figure 1 shows an example of the type of commodity information available on Alibaba.com: the posting for an LCD monitor includes a product description, company profile,

image, price, shipping, manufacturer data, product rating, etc. When making purchasing decisions, procurement personnel definitely pay attention to the commodity information provided by intermediaries and sellers. Commodity information undoubtedly strongly influences the purchase decisions of procurement personnel in B2B e-marketplaces.

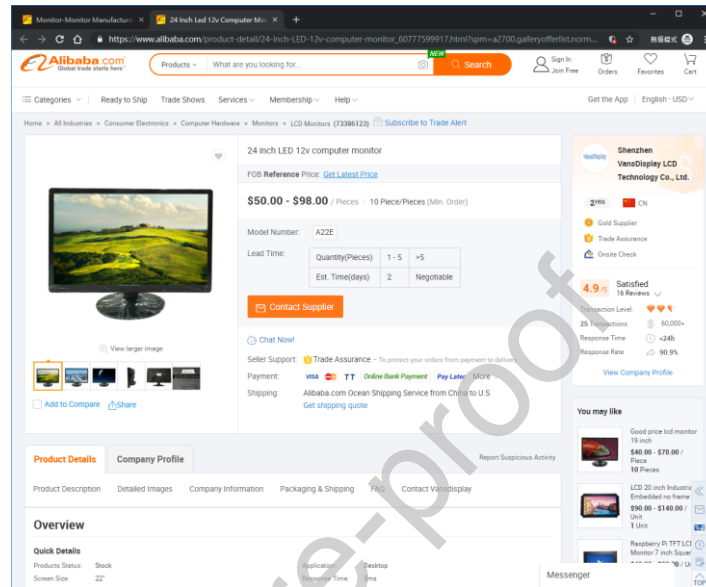


Figure 1. Example of commodity information for an LCD monitor on Alibaba.com

e-Marketplaces must not only provide the information that procurement personnel need to make purchase decisions, but also ensure that purchasers can identify the desired commodities in a timely manner, and may even aggressively push direct online purchases (Son, Tu, & Benbasat, 2006). Recently, e-marketplaces have become a critical source of commodity information, summarizing the prices, properties, and other relevant attributes of products. As a result, **B2B e-marketplaces** are rapidly developing into commodity information services for procurement personnel.

Transactions in an e-marketplace may involve a variety of links and associations between stakeholders, such as buyers, sellers, and third-party platforms or intermediaries (Chang & Wong, 2010). Consequently, as third-party platforms, e-marketplaces act as an Internet intermediary, facilitating relationships between buyers and sellers and promoting transaction flows (Son et al., 2006). These e-marketplaces have become vital for facilitating product searches and performing price comparisons. Indeed, the primary function of **B2B e-marketplaces** is to enable procurement personnel to rapidly understand the relevant market conditions and the

details of potential transactions. For this reason, this study regarded third-party platforms as intermediaries that facilitate transactions and offer information functionalities to reduce uncertainty for procurement personnel (Pavlou & Gefen 2004; Fang et al., 2016). For example, Pricegrabber.com compares relevant commodities and then provides useful purchasing decision recommendations. Alibaba.com is one of the largest B2B platforms for exchanging and sharing commodity information. Aliexpress.com is a B2B exchange platform that offers vertical search functionalities that are domain-specific search solutions for specified fields or particular topics (Battelle, 2011). Other [B2B e-marketplaces](#) that compile and produce commodity information are eWorldTrade.com, Amazon Business, ThomasNet.com, etc.

Recent studies of [B2B e-marketplaces](#) have focused on techniques to enhance the effectiveness of product searches. However, few studies have focused on the roles of different trust relationships and their interaction with perceived value. As [B2B e-marketplaces](#) are a significant source of commodity information for procurement personnel, this study used trust models for [B2B e-marketplaces](#) to explore the interactive relationships between procurement personnel and [B2B e-marketplaces](#).

Trust

Trust, as an important management issue, has attracted the attention of scholars in the fields of information management, business management, buyers' behavior, and marketing management (Mayer et al., 1995; Son, Tu, & Benbasat, 2006; Hong et al., 2011; Chang & Wong, 2010; Hallikainen & Laukkanen, 2018). Parasuraman et al. (1985) asserted that trust is vital for establishing successful service relationships, and Gefen et al. (2003) defined trust as a type of expectation, based on which opportunistic behavior will not occur in specific scenarios. Moreover, trust can be treated as a crucial belief that plays a greater role in EC than in conventional transaction environments. In particular, it motivates buyers to accept and use online services. To satisfy buyers' needs and yield satisfactory results during the processing of the online transactions, relationships between buyers and e-marketplaces must be based on mutual trust (Pavlou, 2003; Son, Tu, & Benbasat, 2006; Chien et al., 2012; Kim & Koo, 2016). Notably, Mayer et al. (1995, p. 712) defined trust as

the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.

Indeed, trust not only reduces buyers' risk and decreases the time required to identify desired products, but also increases their purchasing intentions and enhances

their trust in the sellers and [B2B e-marketplaces](#) (Ba & Pavlou, 2002). Mayer et al. (1995) argued that the antecedents of trust are, in general, perceived trustworthiness, which includes such attributes as integrity, competence, ability, and organizational benevolence. Mayer et al. (1995, p. 719) asserted that the relationship between integrity and trust involves *“the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable.”*

As buyers, sellers, and intermediaries in the e-marketplace environment are unknown to each other, integrity plays a critical role in establishing trust and influencing buyers' purchasing intentions (Strader & Ramaswami, 2002; Huang & Liu, 2010; Hong & Cho, 2011; Kim & Koo, 2016). Connelly et al. (2018) pointed out that integrity-based trust is more effective than competence-based trust in decreasing transaction costs in interorganizational relationships. Hong (2018) stressed that the three factors of trustworthiness (i.e. integrity, competence, and benevolence) are all predictors of trust in an intermediary, but integrity has the strongest association with trust. Consequently, integrity can be treated as an important measure for evaluating trust among trustors and trustees in the e-marketplace. The intermediaries and sellers can use commodity information to build perceptions of integrity, and thus increase the trust of the procurement personnel in the seller and reduce transaction risk. However, competence may be used to emphasize a seller's or intermediary's ability to influence others and benevolence may be used to emphasize their kindness and willingness to provide assistance to others (Mayer et al., 1995). This study focused on the integrity of sellers, intermediaries, and commodity information in [B2B e-marketplaces](#) and investigated the relationships between them and their effects on trust. The effects of competence and benevolence on the trust construct were excluded from this study.

Hong and Cho (2011) and Chong et al. (2003) indicated that trust in e-marketplaces can be divided into seller trust and intermediary trust. Intermediary trust is further influenced by seller trust. In addition, Chong et al. (2003) asserted that seller trust and intermediary trust separately influence trust in an online auction. According to the trust transfer theory (Stewart, 2003), trust transfer is a cognitive process during which the effects of trust on the object's attitudes or perceptions can transfer from one situation to another. According to Stewart (2003), trust transfer occurs *“when a person (the trustor) bases initial trust in an entity (a person, group, or organization, referred to as the target) on trust in some other related entity or on a context other than the one in which the target is encountered (e.g., a different place).”*

Thus, according to trust transfer theory (Stewart, 2003), trust in a seller or intermediary may be an antecedent to other constructs or attributes, including trust in an online auction, loyalty, perceived value, and purchase intention (Fang et al., 2014;

Belanche et al., 2014; Chen et al., 2015; Wei et al., 2019). When procurement personnel browse and purchase commodities from a [B2B e-marketplace](#), the [platform](#) itself may be a critical source of reference information for the purchase decision. For this reason, trust in commodity information cannot be neglected by researchers, as it may also enhance the safety and security of transactions and reduce uncertainty in [B2B e-marketplaces](#).

This study focused on the integrity of buyers, sellers, intermediaries, and commodity information. The assessment and evaluation of trustworthiness were related to the perceived level of integrity (Mayer et al. 1995; Hong, 2018). Perceived integrity was treated as a variable that influences trust in sellers, intermediaries, and commodity information (Hong and Cho, 2011; Hong, 2018). Consequently, based on the definition of integrity given in Mayer et al. (1995), the three kinds of trust in this study were defined as procurement personnel's perceptions of the adherence of sellers/intermediaries/commodity information to a set of principles.

Perceived value and purchasing intention

Woodall (2003) noted that customers' value can be regarded as the customers' perceived value or obtained value. Sweeney and Soutar (2001) also argued that perceived value can be used to assess a customer's pre-purchase situation, and they developed four dimensions to evaluate buyers' perceived value: emotional, social, quality/performance and price/value for money. Further, Zeithaml (1988, p. 14) defined perceived value as a *"consumer's overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given."*

Cronin et al. (2000) asserted that when the perceived interests obtained by customers surpass the perceived costs, their repurchasing intentions are elevated. In addition, perceived value increases both buyers' identification with products and their intentions to repurchase or revisit (Chen & Chang, 2012), satisfaction, and buyer loyalty (Yang & Peterson, 2004). Kang and Sharma (2012) suggested that service providers may reinforce their services or modify their products to enhance buyers' perceived value. Fang et al. (2016) noted that in e-marketplaces, improved text readability of commodity information increases the perceived value of information for procurement personnel. In summary, perceived value plays a fundamental role in [B2B e-marketplaces](#), and procurement personnel only evaluate the information content related to a [commodity](#) after they have formed a specific impression of the function and quality of a website.

Ajzen and Fishbein (1977) found that behavioral intention is a key element when assessing people's actual behaviors. Zeithaml (1988) defined purchasing intention as

the possibility of buyers' making a purchase, where increased purchasing intentions may denote increased purchasing probability. Many studies have adopted the theoretical concept of attitude-intention-behavior relations developed by Ajzen and Fishbein (1977) to investigate buyers' purchasing intention in the EC environment (Chong, Yang, & Wong, 2003; Hong & Cho, 2011).

In general, [B2B e-marketplaces](#) may provide searchable commodity information, guiding procurement personnel to specific e-marketplaces for their desired products after they have built trust in the commodity information provided on the [B2B e-marketplace](#). Many previous studies (Kim, Ferrin, & Rao, 2008; Kim & Koo, 2016) have indeed verified the relationship between trust and constructs such as satisfaction, perceived value, perceived risk, purchase intention, and loyalty in e-stores or e-marketplaces. Thus, perceived value and purchasing intention were included in this study's research model.

Research model and hypothesis

As one of the most important determinants of purchase intention is trust, and the antecedents to trust in e-marketplaces may differ from those in real marketplaces, this study first justified the role of trust in transaction processes in [B2B e-marketplaces](#) (Jones & Leonard, 2008; Hong & Cho, 2011). As discussed above, there may be a relationship between seller trust, intermediary trust, and trust in commodity information, and trust in commodity information may be influenced by intermediary trust and seller trust in [B2B e-marketplaces](#). In addition, the level of trust experienced by procurement personnel may influence their purchasing decision. For this reason, this study examined the relationships between online purchase intention and trust, including intermediary trust, seller trust, and trust in the commodity information in [B2B e-marketplaces](#). Perceived value was treated as a mediator between trust in commodity information and online purchase intention. Moreover, this study proposed a trust model of enterprise procurement in [B2B e-marketplaces](#) based on the findings of Chong et al. (2003) and Hong and Cho (2011), as shown in Figure 2 below, and then developed corresponding research hypotheses.

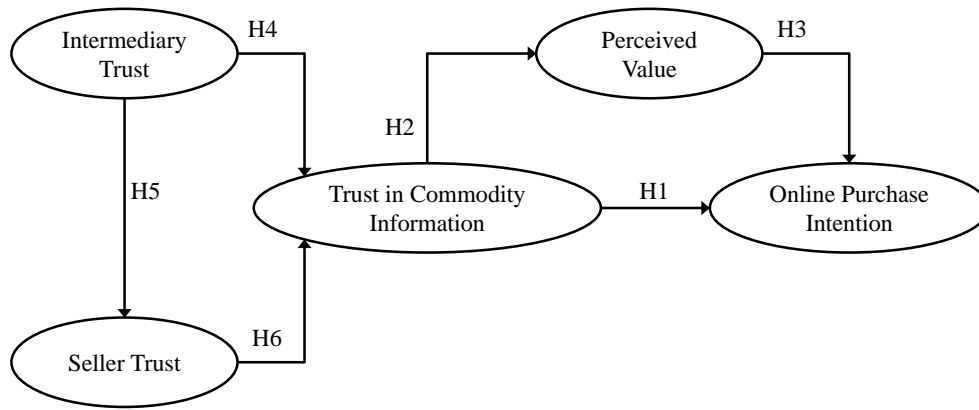


Figure 2. Research model.

Trust in commodity information, perceived value, and online purchase intention

Kautonen et al. (2008) asserted that although users cannot control the behaviors of others, enhancing trust is an effective method of reducing the complexity of transactions. Pavlou (2003) and Pavlou and Gefen (2004) argued that establishing fundamental trust with buyers can reduce perceived risks and increase buyers' loyalty and purchasing intentions. Huang and Liu (2010) argued that positive purchasing intentions are created in C2C marketplaces when buyers trust both the sellers and the intermediary that provides the service. Chong et al. (2003) and Fang et al. (2014) further argued that increased buyer trust in e-marketplaces can elevate perceived value and purchasing intentions. In addition, Fang et al. (2016) argued that e-marketplaces that provide buyers with clear and valuable product information reduce uncertainty, and that strengthening text readability increases the perceived value of information and hence the number of purchase decisions.

Many previous studies (Chen & Chang, 2012; Kang & Sharma, 2012; Konuk, 2018) have examined the effects of trust and perceived value on purchasing intentions. In e-marketplaces, gaining buyers' trust and increasing buyers' perceived value depend on attributes such as convenience, integrity, privacy, and security. Therefore, procurement personnel's trust in the commodity information available in e-marketplaces may affect their online purchase intention and increased trust may also enhance the value perceived in B2B e-marketplaces. Restated, this leads to the following hypotheses.

H1: Procurement personnel's trust in commodity information positively affects their online purchase intention.

H2: Procurement personnel's trust in commodity information positively affects their perceived value.

Relationship between perceived value and online purchase intention

Sirdeshmukh et al. (2002) defined perceived value as the value that buyers expect to gain from the services that sellers provide; they also noted that it reduces the costs of maintaining the relationship between the sellers and buyers. Many previous studies have indicated that perceived value enhances purchasing intentions. For example, Zhang et al. (2011) indicated that buyers' perceptions of the usefulness of sellers' websites positively affects repurchasing intentions. Further, Hsu and Lin (2015) emphasized that buyers' perceived value of paid mobile apps may affect their purchase intention, and Hsu et al. (2013) argued that both relationship quality and perceived value are key variables in predicting repurchasing intentions. Therefore, the information provided and transactions conducted by e-marketplace operators must help buyers to perceive value. Thus, the perceived value of the available information and service must affect procurement personnel's online purchase intention in [B2B e-marketplaces](#). Restated, this gives the following hypothesis.

H3: Procurement personnel's perceived value positively affects their online purchase intention.

Relationships between intermediary trust, seller trust, and trust in commodity information

Corritore et al. (2003) argued that trust consists of the positive beliefs that buyers hold about the scenarios and service qualities offered in e-marketplaces. Many previous studies (Yang & Peterson, 2004; Hsu et al., 2013; Hsu & Lin, 2015; Konuk, 2018) have verified that trust affects customer loyalty, satisfaction, sustained use, trust in objects, and purchasing intentions. Trust can be categorized into trust in e-marketplaces (Hong & Cho, 2011; Chang & Wong, 2010), sellers (Jones & Leonard, 2008), platform providers (Huang & Liu, 2010), brands (Kang & Sharma, 2012), and community websites (Kim et al., 2012). Specifically, Barnes and Hinton (2007) asserted that online intermediaries are critical partners in EC, as they not only facilitate transactions, but also accomplish other functions, such as brand establishment, buyer's protection, and providing buyers with a secure and stable environment for B2B EC. Pavlou and Gefen (2004) noted that buyers' trust in intermediaries may also enhance their sense of security.

Verhagen et al. (2006) indicated that trust in intermediaries influences buyers' trust in sellers and their purchasing intentions. Geyskens et al. (1996) also found that buyers' trust in intermediaries acted as a type of belief on which buyers based their purchase decisions. Hong and Cho (2011) noted that buyers are willing to trust in sellers and subsequently conduct transactions when they develop trust in these sellers' e-marketplaces. Moreover, Hong and Cho (2011) asserted that buyers' trust in intermediaries may affect their trust in sellers and their purchasing methods. That is,

trust in one object can be transferred to others, as predicted by the trust transfer theory (Stewart, 2003) and some empirical studies (Belanche et al., 2014; Chen et al., 2015; Wei et al., 2019). To this end, a successful intermediary in an EC context, such as a website that guarantees the rights of both sellers and buyers, must be capable of monitoring and promoting successful transactions between buyers and sellers (Huang & Liu, 2010).

An intermediary can provide an excellent framework for EC and motivate buyers by evaluating the commodity information provided by sellers, thereby gaining the buyers' trust. For this reason, the procurement personnel's trust in [B2B e-marketplaces](#) stimulates their trust in the information provided by the relevant operators and sellers, and generates trust in the sellers. This leads to the following hypotheses.

H4: Procurement personnel's trust in an intermediary positively affects their trust in the commodity information provided by the intermediary.

H5: Procurement personnel's trust in an intermediary positively affects their trust in the sellers on the platform.

Relationships between seller trust and trust in commodity information

Stader and Ramaswami (2002) indicated that in C2C e-marketplaces, buyers' trust in sellers is the key factor in the purchasing selection of buyers and in the sustained profit growth of sellers. Chong et al. (2003) also indicated that buyers' trust in sellers may influence buyers' trust in online auction activities in a C2C e-marketplace. Sellers who have gained buyers' trust may have a competitive advantage in an e-marketplace, and further interactions and transactions between buyers and sellers tend to increase buyers' trust in the information and commodities provided by the sellers and intermediaries (Verhagen et al., 2006). Therefore, buyers' trust in sellers will influence buyers' evaluation of the commodity information provided by sellers when they are making purchasing decisions on a trusted intermediary platform. In other words, buyers' trust in sellers may enhance their trust in the commodity information provided by the sellers (Stewart, 2003; Wei et al., 2019). Thus, procurement personnel's trust in intermediaries affects their trust in sellers when the procurement personnel are using [B2B e-marketplaces](#). Further, their trust in sellers is transferred to the commodity information presented on the intermediary platform. This leads to the following hypothesis.

H6: Procurement personnel's trust in a seller positively affects their trust in the provided commodity information.

Research methodology

This study investigated how procurement personnel's trust in intermediaries and sellers affects their trust in commodity information in B2B e-marketplaces, which in turn influences their online purchase intentions. The study also investigated how perceived value mediates the relationship between procurement personnel's trust in commodity information and their online purchase intention. As the unit of analysis was at the organizational level, this study used a sample of survey data from procurement personnel from several enterprises.

Research design

A questionnaire survey methodology was adopted. Procurement personnel from different enterprises were asked to respond to this questionnaire. As the research subjects' specific role was to carry out procurement tasks for their employers, this purposive sampling technique was suitable for data collection (Saunders, Lewis, & Thornhill, 2009).

According to Guadagnoli and Velicer (1988), a sample size of 150 respondents was enough to produce valid results from our statistical analysis. Two hundred procurement personnel were invited to participate in the questionnaire survey. A 5-point Likert scale was used in the questionnaire, as shown in the appendix, where "1" represented "strongly disagree" and "5" represented "strongly agree."

Research measures

According to Hong and Cho (2011), and consistent with Flavian et al. (2006), McKnight and Chervany (2001), and Mayer et al. (1995), perceived integrity is "*a belief that a company acts in a consistent, reliable, and honest manner when fulfilling its promises.*" This study defined the three trust constructs (i.e., intermediary trust, sellers' trust, and trust in commodity information) using this definition of perceived integrity. Intermediary trust was defined as the degree to which the procurement personnel perceive that an intermediary acted in a consistent, reliable, and honest manner when fulfilling its promises (Gefen et al., 2003; Flavian et al., 2006; Mayer et al., 1995). Seller trust was defined as the degree to which procurement personnel perceived a seller as acting in a consistent, reliable, and honest manner when fulfilling its promises (Flavian et al., 2006; Mayer et al., 1995). Trust in commodity information was defined as the degree to which procurement personnel perceived the commodity information provided by intermediaries or sellers as being of consistent, reliable, and credible quality (Yoon, 2002; Flavian et al., 2006; Mayer et al., 1995).

Perceived value was defined as procurement personnel's overall assessment of the utility of the commodity based on the perceptions of what is received from and what is given from the B2B e-marketplace (Zeithaml, 1988; Chen & Chang, 2012).

Finally, online purchase intention was defined as the behavioral intention of procurement personnel with regard to the online purchase of commodities (Strader & Ramaswami, 2002; Hong & Cho, 2011).

Analysis method

Structural equation modeling (SEM) was used to verify the causal relationships between the variables in this research model, and the partial least squares software (Smart PLS 2.0.M3) was used to conduct the analysis (Ringle, Wende, & Will, 2005). PLS is an effective analysis tool to complement the SEM for small samples, such as the one collected in this study (Chin & Newsted, 1999). The bootstrapping resampling technique was adopted to analyze the paths of the causal relationships (Efron, 1979); the data were sampled repeatedly until 500 samples had been collected (Goodhue, Lewis, & Thompson, 2007). Moreover, following Anderson and Gerbing (1988), the SEM analyzed the data in two stages, for the measurement model and then the structural model.

The measurement model analysis was primarily used to determine whether the observational variables in a research model accurately measured the latent variables. Specifically, it evaluated the reliability, validity, and estimation parameters of the observational and latent variables (Hair et al., 1992). In other words, the measurement model was used to evaluate the internal consistency of the research model. The structural model analysis then evaluated the causal relationships between the latent variables and calculated the explanatory power of the latent variables. The path coefficients and t statistics of the latent variables were determined to be suitable for evaluating the path strength and statistical significance of the relationships between latent variables.

Data analysis

Of the 200 questionnaires administered, 102 valid questionnaires were returned, yielding an effective response rate of 51%. Anderson and Gerbing (1988) indicated that the structural equation modeling technique requires a sample size between 100 and 150. This study also conducted a statistical power analysis and adopted G*Power software (version 3.1.9.4) to calculate sample size. The results of these analyses suggested a minimum sample size of 97 (Cohen, 1988; Faul, Erdfelder, Lang, & Buchner, 2007; Faul, Erdfelder, Buchner, & Lang, 2009). This was consistent with Pavlou's study (2002) which used a sample of 102 organizational buyers to examine the relationship between institution-based trust and interorganizational trust in B2B e-marketplaces. Thus, the study's sample conformed to the guidelines in Anderson and Gerbing (1988).

Demographic Analysis

Table 1 shows the demographic data for the respondents and their companies' information (SPSS statistic software). In the sample, 46 of the participants were male (45.1%) and 56 were female (54.9%). Most of the respondents were in either the 21-30 or 31-40 years age groups, representing 39.2% and 46.1% of the sample, respectively. Further, about 51% of the respondents had 1-5 years of procurement experience and approximately 31.4% of the respondents were working in business-related units. Most of the respondents surfed B2B e-marketplaces 2-3 times (38.2%) or 4-5 times (24.5%) a week. Moreover, most of the respondents (32.4%) worked in the information and communications industry. Finally, about 28.4% and 24.5% of the respondents worked in enterprises with around 101-300 and 31-100 employees, respectively.

Table 1. Demographic data

Characteristics	Frequency	%	Characteristics	Frequency	%
<i>Gender</i>			<i>Title and Unit</i>		
Male	46	45.1	Procurement personnel in business unit	32	31.4
Female	56	54.9	Procurement personnel in the general affairs department	12	11.8
<i>Age</i>			Head of general affairs	7	6.9
< 20	3	2.9	Head of procurement	8	7.8
21-30	40	39.2	Chief of enterprise procurement	1	1.0
31-40	47	46.1	Procurement personnel in the procurement department	24	23.5
41-50	8	7.8	Others	28	27.5
51-60	4	3.9	<i>Number of employees</i>		
≥ 61	0	0	< 30	19	18.6
<i>Years of procurement experience</i>			31-100	25	24.5
< 1	19	18.6	101-300	29	28.4
1-5	52	51.0	301-500	5	4.9
6-10	23	22.5	501-800	3	2.9
11-15	6	5.9	801-1,000	3	2.9
16-20	0	0	1,001-1,500	4	3.9
> 20	2	2.0	1,501-2,000	0	0
<i>Frequency of weekly OCIMs use</i>			2,001-3,000	3	2.9
Once	17	16.7	3,001-5,000	2	2.0
2-3 times	39	38.2	5,001-10,000	5	4.9
4-5 times	25	24.5	10,001-20,000	2	2.0
6-7 times	11	10.8	20,001-30,000	0	0
8-9 times	4	3.9	30,001-50,000	2	2.0
> 10 times	6	5.9	<i>Industry categories</i>		
<i>Functions frequently used on OCIMs</i>			Information/Communications	33	32.4
Keyword searches	86	84.3	Electronics	18	17.6
Comparing commodity prices	70	68.6	Education and government	18	17.6
Category searches	61	59.8	Manufacturing	17	16.7
Comparing commodity content	54	52.9	Financial	7	6.9
Current commodity prices	44	43.1	Retailing/Service	3	2.9
Popular commodities	43	42.2	Medical/Biotech	3	2.9
Inquiry function	40	39.2	Consortium/Corporate Judicial	2	2
Commodity classification	39	38.2			
Ranking	31	30.4			
Discount messages	29	28.4			
Vendor information search	29	28.4			

Characteristics	Frequency	%	Characteristics	Frequency	%
Commodity recommendation	24	23.5	Food/Merchandise	1	1
Latest news	12	11.8			
Logistics information inquiry	7	6.9			

Measurement model test

The measurement model analysis included reliability, convergent validity, and discriminant validity tests (Hair et al., 1992). According to the threshold values suggested by Fornell and Larcker (1981) and Hair et al. (2009), the standardized factor loadings of the items should exceed 0.7, the composite reliability (CR) of the constructs should be greater than 0.6, and the average variance extracted (AVE) of the constructs should be greater than 0.5. This study adopted these threshold values to test reliability, convergent validity, and discriminant validity.

Specifically, the factor loadings of the observational variables ranged between 0.715 and 0.895, exceeding the suggested threshold value of 0.7. The AVE of all of the constructs ranged between 0.583 and 0.756, exceeding the suggested threshold value of 0.5, and the CR ranged between 0.855 and 0.925, also surpassing the suggested threshold value of 0.8. As a result, a convergent validity test was conducted based on the threshold values proposed by Fornell and Larcker (1981) and Hair et al. (2009), as shown in Table 2. In addition, all of the constructs had a Cronbach's α between 0.747 and 0.892, surpassing the suggested 0.7 threshold value (Nunnally, 1979). In summary, each construct demonstrated a fair and consistent reliability for accurately measuring the constructs. In other words, the research model had excellent reliability and high consistency.

Discriminant validity was tested by examining the relationship between the AVE and correlation coefficients of the constructs. According to Fornell and Larcker (1981), if the square root of a construct's AVE is higher than the correlation coefficients within the inter-construct, the construct has good discriminant validity. In this study, the square roots of the AVE values of the latent constructs were always higher than the off-diagonal elements in their corresponding row and column of Table 3. Consequently, all of the constructs had an acceptable level of discriminant validity. In brief, all of the measurement model tests were satisfactory.

Table 2. Tests of the latent variables

Construct/ Variable	Mean	Sd.	Factor loading	AVE	CR	Cronbach's α
<i>Seller trust</i>				0.607	0.885	0.837
ST1	3.314	0.744	0.715			
ST2	2.971	0.737	0.818			
ST3	3.098	0.738	0.818			
ST4	2.853	0.849	0.762			
ST5	3.451	0.740	0.778			

<i>Intermediary trust</i>				0.721	0.912	0.870
IT1	3.471	0.671	0.868			
IT2	4.127	0.767	0.895			
IT3	3.961	0.561	0.837			
IT4	3.912	0.615	0.793			
<i>Trust in commodity information</i>				0.756	0.925	0.892
TR1	3.725	0.647	0.868			
TR2	3.529	0.640	0.877			
TR3	3.686	0.645	0.885			
TR4	3.412	0.709	0.846			
<i>Perceived value</i>				0.583	0.874	0.821
PV1	4.147	0.552	0.796			
PV2	3.833	0.509	0.783			
PV3	4.059	0.687	0.784			
PV4	3.873	0.670	0.755			
PV5	4.392	0.677	0.693			
<i>Online purchase intention</i>				0.663	0.855	0.747
OPI1	3.696	0.642	0.818			
OPI2	3.716	0.680	0.852			
OPI3	3.725	0.647	0.771			

Table 3. Discriminant validity and correlation coefficients matrix analysis

Construct	Mean	Sd.	ST	IT	TR	PV	OPI
ST	3.137	0.592	0.779				
IT	3.346	0.616	0.647	0.849			
TR	3.588	0.573	0.577	0.732	0.869		
PV	4.008	0.483	0.209	0.492	0.404	0.763	
OPI	3.712	0.535	0.120	0.358	0.259	0.568	0.814

Note 1: ST= seller trust; IT= intermediary trust; TR= trust in commodity information; PV= perceived value; and OPI= online purchase intention.

Note 2: Diagonal elements (bold) are the square roots of AVE by latent constructs from their indicators; elements in the lower triangular are the Pearson correlation coefficients.

Common method bias

Podsakoff et al. (2003) suggested that data obtained using self-reported surveys should be tested for potential common method bias. Harman's one-factor test was adopted, in which all of the items reduce the potential common method variance (CMV). This test was performed using exploratory factor analysis. The un-rotated principal component factor analysis for all of the constructs yielded five factors, and no single factor accounted for most of variance. The first factor only explained 37.9% of variance, and the five factors together accounted for 69.9% of the variance. Thus, common method bias did not appear to seriously affect the results.

Structural model test

The structural model was analyzed to test the proposed hypotheses while estimating the path coefficients and explanatory power (R^2) using PLS software (Fornell & Larcker, 1981). Table 4 shows the standardized path coefficients, t values, and test results for the hypotheses.

Trust in commodity information positively and significantly influenced perceived value ($\beta=0.404$, $t\text{-value}=4.880$, $p<0.001$), but failed to positively and significantly influence online purchase intention ($\beta=0.035$, $t\text{-value}=0.414$, $p>0.05$). Thus, H2 was supported and H1 was rejected. Perceived value also positively and significantly influenced online purchase intention ($\beta=0.553$, $t\text{-value}=8.141$, $p<0.001$), supporting H3. In addition, intermediary trust positively and significantly influenced trust in commodity information ($\beta=0.616$, $t\text{-value}=8.341$, $p<0.001$) and seller trust ($\beta=0.647$, $t\text{-value}=8.582$, $p<0.001$), supporting both H4 and H5. Seller trust positively and significantly influenced trust in commodity information ($\beta=0.179$, $t\text{-value}=2.012$, $p<0.05$), supporting H6.

Figure 3 summarizes the results of the tests of the research model and shows the explanatory power of the constructs. The research model accounted for 41.8% of the variance in seller trust, 55.4% of the variance in trust in commodity information, 16.4% of the variance in perceived value, and 32.3% of the variance in online purchase intention.

Table 4. Hypothesis test results

Hypothesis	Path	β value	t value	Results
H1	TR→OPI	0.035	0.414	Not supported
H2	TR→PV	0.404***	4.880	Supported
H3	PV→OPI	0.553***	8.141	Supported
H4	IT→TR	0.616***	8.341	Supported
H5	IT→ST	0.647***	8.582	Supported
H6	ST→TR	0.179*	2.012	Supported

Note 1: The constructs are defined in the notes to Table 3.

Note 2: *** $p < .001$; ** $p < .01$; and * $p < .05$.

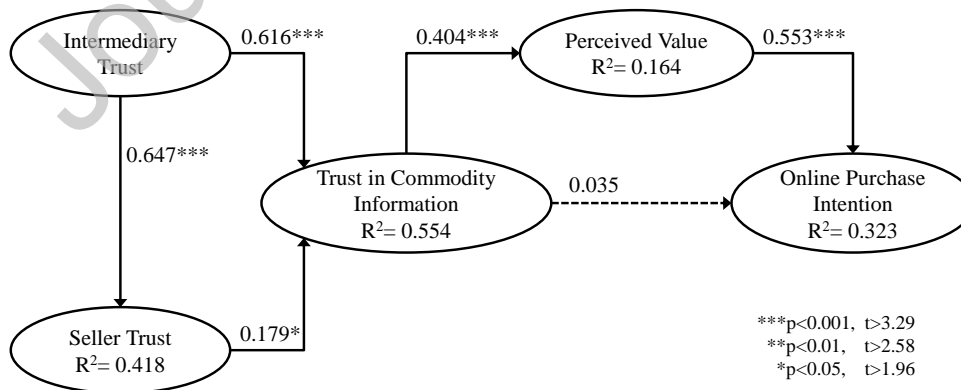


Figure 3. Path coefficients for the research model.

Mediation effect test

The Sobel test is traditionally used to test the significance of mediation effects (Sobel,

1982). The research model proposed two mediating variables: seller trust as a mediator between intermediary trust and trust in commodity information, and perceived value as a mediator between trust in commodity information and online purchase intention.

In the analysis of the mediating effects of these variables in [B2B e-marketplaces](#), this study first found a t -value of 2.63 for the direct effects of trust in commodity information on online purchase intention. The Sobel test showed that the mediating effects of trust in commodity information on online purchase intention was z -value=4.170 and $p<0.000$, indicating that a significant indirect effect existed. Moreover, the path coefficient of the total effect of trust in commodity information on online purchase intention was 0.259, whereas the path coefficients of the direct and indirect effects were 0.035 ($p>0.05$) and 0.223, respectively. Thus, the influence of the mediating effect was 0.865 (86.5%), indicating full mediation. Therefore, the relationship between procurement personnel's trust in commodity information and their online purchase intention was mediated by perceived value.

For the mediating effects of intermediary trust, seller trust, and trust in commodity information, the direct effects had a t -value=15.086 for intermediary trust and trust in commodity information. The Sobel test showed a z -value of 2.052 ($p<0.05$) for the indirect mediating effects of intermediary trust and trust in commodity information, indicating that an indirect effect existed and that the direct effect was significant. Moreover, intermediary trust yielded a path coefficient for the total effect of 0.732 on trust in commodity information, whereas the path coefficient for the direct effect and indirect effects were 0.616 ($p<0.000$) and 0.116, respectively. The influence of the mediating effect was 0.158 (15.8%), indicating a partial mediation. In other words, the relationship between intermediary trust and trust in commodity information was mediated by seller trust.

Research analyses and discussion

This study used the trust model of purchases in [B2B e-marketplaces](#) to examine the relationships among intermediary trust, seller trust, and trust in commodity information in an organizational context. It investigated whether trust in commodity information influences online purchase intention and if this relationship was mediated by perceived value. The results showed that intermediary trust and seller trust positively and significantly influenced procurement personnel's trust in commodity information. Furthermore, perceived value significantly influenced their online purchase intention.

The findings for perceived value were consistent with Yang and Peterson (2004), Hsu et al. (2013), Hsu and Lin (2015), and Konuk (2018), who found that perceived

value is a critical influence on buyers' loyalty and purchasing intentions. Fang et al. (2016) argued that the text readability of online reviews influences perceived value by encouraging reviewers to carefully read reviews in e-marketplaces. Therefore, perceived value mediates the relationship between trust and purchase intention (Konuk, 2018). This study found that trust in commodity information in [B2B e-marketplaces](#) influences perceived value, thus increasing the purchase intention of procurement personnel.

Many previous studies have indicated that trust is a primary factor in buyers' intentions to engage in online purchases (Huang & Liu, 2010; Verhagen et al., 2006; Yoon, 2002; Kim & Koo, 2016). Hong and Cho (2011) verified that trust can be divided into trust in intermediaries and trust in sellers in B2C e-marketplaces, and that trust in the intermediary is a critical factor in buyers' trust and their willingness to accept sellers (Hong, 2018; Wei et al., 2019). Chong et al. (2003) found that the intermediary facilitates online transactions, and Verhagen et al. (2006) found that the intermediary may also assume a critical role in providing services to the buyer. Pavlou and Gefen (2004) and Barnes and Hinton (2007) argued that the intermediary may help to develop buyers' brand awareness, and thus influence buyers' trust in sellers. When procurement personnel use popular and well-known [B2B e-marketplaces](#), they will naturally pay more attention to information provided by the intermediary. Furthermore, procurement personnel tend to prioritize their trust in the intermediary, seller, and commodity information. These trusts are related, and trust in one object can be transferred to another (Stewart, 2003; Belanche et al., 2014; Chen et al., 2015; Wei et al., 2019). Therefore, procurement personnel's trust in an intermediary and a seller may positively and significantly influence their trust in the commodity information provided on a platform and trust in an intermediary may influence the trust in sellers in [B2B e-marketplaces](#). These results are consistent with the findings reported by Pavlou and Gefen (2004), Hong and Cho (2011), and Huang and Liu (2010).

Rauyruen et al. (2009) reported that buyers' trust in service providers failed to significantly influence the purchasing intentions in B2B EC. Hong and Cho (2011) asserted that buyers' trust in the community of sellers does not significantly influence their loyalty and purchasing intentions in B2C e-marketplaces. This study found that procurement personnel's trust in commodity information failed to significantly influence their online purchase intention. The inference is that procurement personnel generally pay more attention to commodity information provided by sellers and intermediaries in [B2B e-marketplaces](#). Some [B2B e-marketplaces](#) provide procurement services and some provide summaries that enable procurement personnel to locate, compare, and search commodities. This seems to explain why trust in

commodity information in [B2B e-marketplaces](#) failed to significantly influence the online purchase intention of enterprise's procurement personnel.

Conclusion and research implications

In the early stage of development, B2B EC generally consisted of enterprises using the online services of other enterprises. Following the successful development of B2B e-marketplaces, such as Alibaba.com, e-marketplaces have gradually become key e-procurement channels. Many previous studies have proposed trust models based on the intermediaries in C2C and B2C e-marketplaces, which suggest that trust positively influences buyers' purchasing intentions. This study extended this research by examining how online commodity information affects the purchasing intentions of procurement personnel in B2B EC contexts. This study focused on B2B e-marketplaces and investigated the relationships between buyers, sellers, and intermediaries. The trust model proposed by Chong et al. (2003) was adopted and integrated with the views of Hong and Cho (2011) and Kim et al. (2008) to create a trust model for procurement personnel with an organizational perspective. The contributions of this study are as follows.

- (1) The results indicated that procurement personnel's trust in both intermediaries and sellers significantly and positively influenced their trust in commodity information. Furthermore, intermediary trust significantly and positively influenced seller trust. The path coefficient for trust in commodity information substantially exceeded that of seller trust, suggesting that procurement personnel tend to prioritize their intermediary trust. In other words, procurement personnel are more dependent on intermediaries for locating, browsing, and searching commodity information in [B2B e-marketplaces](#).
- (2) Although trust in commodity information had an insignificant influence on online purchase intention, trust in commodity information positively influenced the perceived value, and perceived value positively influenced the online purchase intention. Perceived value enhanced the influence of trust in commodity information on online purchase intention. When procurement personnel generate perceived value through their trust in intermediaries, they increase their online purchase intention in [B2B e-marketplaces](#). These results suggest that procurement personnel perceive the trustworthiness of intermediaries as a critical factor when making their purchase decisions.
- (3) This study used a trust model of [B2B e-marketplaces](#) to examine the relationship between trust, perceived value, and online purchase intention in the purchasing decisions of procurement personnel. However, current trust models of [B2B e-marketplaces](#) cannot directly verify the online purchase intention of

procurement personnel toward intermediaries and sellers. Although procurement personnel trust the commodity information provided by intermediaries and sellers, they do not directly engage in the relevant purchases from [B2B e-marketplaces](#). In other words, the procurement personnel are only willing to purchase from sellers in [B2B e-marketplaces](#) after they have generated a positive perceived value for the commodity information.

This study explored the role of trust in the behavioral patterns of procurement personnel engaged in e-procurement activities in [B2B e-marketplaces](#). The differences between the B2C and C2C trust models were identified.

One of this study's contributions is a trust model of [B2B e-marketplaces](#) that explains the behavioral intentions of procurement personnel in an organization context. The study clearly distinguished three types of trust, intermediary trust, seller trust, and trust in commodity information, and then investigated the influence of these three types of trust separately. It found that trust in commodity information influences the perceived value of the intermediary, which in turn influences online purchase intention. This study also determined that intermediary trust is more important than seller trust to procurement personnel in [B2B e-marketplaces](#).

As procurement personnel reference commodity information in e-marketplaces when they are making purchases, the operators and sellers in [B2B e-marketplaces](#) must frequently update their commodity information and renew the platform's contents, as a reliable intermediary improves procurement personnel's assessment of perceived value. Sellers operating in [B2B e-marketplaces](#) must demonstrate an honest attitude and emphasize the legitimacy of their commodities to increase the trust of procurement personnel. Sellers must provide valuable and legitimate commodity information to improve the perceived value, as procurement personnel consider product search scope, product descriptions and properties, security policies, and guarantees as important factors in their purchase decisions. Consequently, procurement personnel will consider the commodity references in the e-marketplaces when forming their purchasing strategies.

The respondents in this study were the procurement personnel for small and medium-sized enterprises, and transaction security and confidentiality were important for their procurement operations. This made it difficult to obtain a larger sample. The resulting small sample size, although valid, may be deemed a limitation. Future research should use a sample of procurement personnel in various positions to determine the range of commodity information use and its effect on purchase intentions. Furthermore, researchers could obtain a statistically stronger sample by inviting more participants to respond to the research questionnaire.

Although this study investigated procurement personnel's trust in commodity information, perceived value, and purchase intentions, the effects of other factors, such as perceived risk, information protection, relationship quality, and long-term relationships, could be considered in future studies. Moreover, a longitudinal study could be developed to verify this study's findings. The interactive relations between [B2B e-marketplaces](#) and sellers could also be explored further.

Conflict of interest

The authors verify that there is no conflict of interest against the policy of Computer Standards & Interface.

Credit author statement

Yin-Yih Chang: Conceptualization, Methodology, Supervision, Funding acquisition

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Appendix: Questionnaire

Item	Scale
<i>Seller trust</i>	
ST1	The seller is honest.
ST2	I believe that the seller usually fulfills its commitments.
ST3	I believe that the seller is sincere.
ST4	I have confidence in the promises that the seller makes.
ST5	I believe that the seller does not make false statements.
<i>Intermediary trust</i>	
IT1	I believe that the intermediary usually fulfills its commitments.
IT2	I believe that the intermediary is sincere and honest.
IT3	I have confidence in the promises that the intermediary makes.
IT4	The intermediary is characterized by frankness and clarity.
<i>Trust in commodity information</i>	
TR1	The commodity information is characterized by value and clarity.
TR2	I believe that the commodity information is reliable.
TR3	I have confidence in the promises that the commodity information makes.
TR4	I believe the statements of the commodity information are true.
<i>Perceived value</i>	
PV1	The commodity can expand its search scope in the enterprise procurement context.
PV2	The commodity enables enterprises to conduct effective procurement.
PV3	The commodity can reduce time costs for enterprises' procurement personnel.
PV4	The commodity provides an excellent reference for enterprise procurement.
PV5	The security policies formulated for the commodity protect enterprises' procurement personnel.
<i>Online purchase intention</i>	
OPI1	The commodity information provided in the e-marketplace assists me in making purchases.
OPI2	I would list desired commodities from the e-marketplace as a reference for enterprise procurement.
OPI3	I will purchase from the e-marketplace for enterprise procurement.