

Al-Adwan, Ahmad Samed; Alrousan, Mohammad Kasem; Yaseen, Husam; Alkufahy, Amer Muflih; Alsoud, Malek

Article

Boosting online purchase intention in high-uncertainty-avoidance societies: A signaling theory approach

Journal of Open Innovation: Technology, Market, and Complexity

Provided in Cooperation with:

Society of Open Innovation: Technology, Market, and Complexity (SOItmC)

Suggested Citation: Al-Adwan, Ahmad Samed; Alrousan, Mohammad Kasem; Yaseen, Husam; Alkufahy, Amer Muflih; Alsoud, Malek (2022) : Boosting online purchase intention in high-uncertainty-avoidance societies: A signaling theory approach, Journal of Open Innovation: Technology, Market, and Complexity, ISSN 2199-8531, MDPI, Basel, Vol. 8, Iss. 3, pp. 1-20, <https://doi.org/10.3390/joitmc8030136>

This Version is available at:

<https://hdl.handle.net/10419/274437>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>



Article

Boosting Online Purchase Intention in High-Uncertainty-Avoidance Societies: A Signaling Theory Approach

Ahmad Samed Al-Adwan ^{1,*}, Mohammad Kasem Alrousan ², Husam Yaseen ³, Amer Muflih Alkufahy ⁴ and Malek Alsoud ⁵

- ¹ Department of Electronic Business and Commerce, Business School, Al-Ahliyya Amman University, Salt 19328, Jordan
- ² Department of E-Marketing and Social Media, King Talal School of Business Technology, Princess Sumaya University for Technology, Amman 11941, Jordan
- ³ Department of Business Administration, Faculty of Business and Finance, The American University of Madaba, Amman 11821, Jordan
- ⁴ Department of Marketing, Faculty of Business, Jadara University, Irbid 21110, Jordan
- ⁵ Department of Marketing, Business School, Al-Ahliyya Amman University, Salt 19328, Jordan
- * Correspondence: a.adwan@ammanu.edu.jo

Abstract: Despite the fact that online purchase intention has been widely investigated, little is known about the e-retailer-based signals used to reduce online customers' uncertainty perception in high-uncertainty-avoidance (UA) societies. Thus, based on signaling and uncertainty literature, this study investigates return policy leniency (RPL), cash on delivery (COD), and social commerce constructs (SCCs) as the costly signals e-retailers use to increase perceived trust and reduce perceived purchase uncertainty among customers in high-UA societies. An analysis of empirical data from 560 e-commerce users from Jordan reveals that RPL, COD, and SCCs are key enablers of customer trust. Furthermore, customer trust is positively associated with customer purchase intention. The implications for both theory and practice are highlighted.



Citation: Al-Adwan, A.S.; Alrousan, M.K.; Yaseen, H.; Alkufahy, A.M.; Alsoud, M. Boosting Online Purchase Intention in High-Uncertainty-Avoidance Societies: A Signaling Theory Approach. *J. Open Innov. Technol. Mark. Complex.* **2022**, *8*, 136. <https://doi.org/10.3390/joitmc8030136>

Received: 10 June 2022
Accepted: 26 July 2022
Published: 4 August 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: online shopping; signaling theory; uncertainty avoidance; customer trust; cash on delivery; return policy

1. Introduction

Over the past few years, e-commerce has become an essential component of universal retail. The introduction of the Internet has engendered dramatic changes in the retail landscape. In addition, the digitization of modern life has enabled customers around the globe to benefit from online transactions [1]. The number of online shoppers is growing yearly as the availability and usage of the Internet grow steadily. In 2020, around two billion customers purchased products/services online, with worldwide e-commerce sales surpassing USD 4.2 trillion [2]. Across the planet, B2C (business-to-consumer) e-commerce is increasing and progressively becoming an important component in the retail landscape [3]. It is attracting ever more customers due to its price advantages and convenience [4,5]. Furthermore, B2C e-commerce has been recognized as a highly significant alternative for businesses as e-retailers benefit from the lower costs of operations [6]. E-commerce has been already adopted by a considerable number of businesses as an essential trading tool in their daily processes. However, many small and medium enterprises (SMEs) face pressures in adopting e-commerce due to the intense rivalry from large firms [7]. Hence, numerous countries have now recognized the prominence of e-commerce, particularly B2C e-commerce, in their economies and take account of it in their economic development strategies [8].

Nevertheless, the global diffusion of e-commerce remains extremely uneven across nations [9]. Such imbalanced development and the readiness of e-commerce are attributed

to various factors at a national level, such as market factors, GDP, culture, and educational level [10,11]. Ayob [12] points out that the diffusion of e-commerce is not only limited by the quality of formal institutions (e.g., laws, infrastructure), but also by cultural dimensions such as uncertainty avoidance (UA) and risk tolerance. Research has indicated that nations with high UA are content with existing conditions and are resistant to change, consequently, they act conservatively [13]. People in such societies are unlikely to accept risks when trying new technologies and thus are slower in adopting them [14]. Compared to physical stores, e-commerce as a new model of trade is recognized as more uncertain, and only customers with a solid trust value are keen to adopt it. In general, e-commerce is less developed in the Arab world than in other regions [15]. According to a report by [16], e-commerce contributed to 16% and 14% of all retail sales in the UK and the USA, respectively, compared to less than 2% in the Arab world. Although there has been a rapid growth in usage of the Internet, e-commerce is growing at a slow rate in the Arab region [17]. Jordan is an Arabic and developing country located in the Middle East and is considered a high-UA country [18]. Internet penetration in Jordan stood at 66.8% in 2021 (6.84 million Internet users), with social media penetration reaching 61.5% of the population (6.3 million) [19]. E-commerce in Jordan is considered more advanced than in its counterparts in the region. In 2021, 8% of the population in Jordan were reported to have made online purchases and/or paid bills online [19]. According to one report, e-commerce market revenue is likely to report a yearly growth rate of 17.24% in 2022, resulting in an expected market volume of USD 4646 m by 2025 [20]. Despite the development of e-commerce in Jordan, a lack of legislation supporting the e-commerce sphere and protecting consumers has been recognized as the main obstacle impeding e-commerce growth [21].

The primary objective of the present study is to explore how e-retailer-based signals mitigate transaction uncertainty in e-commerce, increasing customers' trust and subsequently their purchase intentions in emerging markets. This study examines e-retailer-based signals from the perspective of e-commerce customers in the emerging market of a developing country (Jordan). A considerable number of micro and small businesses in emerging and developing markets have benefited from e-commerce by reaching a larger number of customers and conducting transactions online. This study offers insights into how, in developing e-commerce environments, customers reduce the uncertainty related to online transactions by relying on specific signals to build trust, which in turn develops purchase intention. Given that online customers cannot physically assess products before purchasing them online, the current study uses signaling theory (ST) and relational signaling theory (RST) to increase knowledge of the retailer-based signals e-commerce customers use to alleviate uncertainty by increasing their trust, thereby positively affecting their online purchase intentions. In particular, ST and RST are used to determine whether e-retailer-based signals such as return policy leniency (RPL), cash on delivery (COD), and social commerce constructs (SCCs) can effectively decrease transaction uncertainty in online transactions. Hence, RPL, COD, and SCCs can be employed as information signals to mitigate uncertainty in e-commerce transactions.

The paper is organized as follows: given that the introduction is the Section 1, the Section 2 provides a review of literature related to the current research, presents the theoretical foundation, and discusses the constructs of the research model and the hypotheses formulated. The research methodology is introduced in Section 3. The statistical analysis is presented in Sections 4 and 5 discusses the study findings. Section 6 then considers the implications of the research The Section 7 summarizes the research objective, main findings, and limitations.

2. Literature Review and Theoretical Foundation

2.1. Uncertainty and E-Commerce

Uncertainty refers to the degree to which future environmental situations cannot be correctly forecasted due to improper or incomplete information [22]. Customers' perceived uncertainty in the online marketplace is explained as the extent to which they cannot antici-

pate the result of a transaction due to uncertainty related to the seller and the product [23]. Seller uncertainty arises when customers are unable to fully monitor the behaviors of sellers, particularly in terms of evaluating their true characteristics and whether they will behave opportunistically [23–25]. In online marketplaces, seller uncertainty might lead to moral hazards and adverse selections [26]. From a principal–agent perspective, [27] examined uncertainty in online marketplaces and hypothesized that customers’ perceptions of fear of information, asymmetry, seller opportunism, and concerns about information privacy/security are all primary determinants of seller uncertainty. Thus, trust has been recognized as an effective strategy for mitigating seller uncertainty and related risks. Because genuine quality information usually remains with sellers, customers tend to employ various strategies to reduce risk and uncertainty in online transactions, including feedback from previous customers [28] and a seller’s rating (negative/positive) [29].

Product uncertainty is closely related to seller uncertainty. It denotes the difficulty of assessing a product’s attributes and anticipating its performance in the future [30]. Product uncertainty is viewed as a multi-dimensional concept that includes uncertainty related to product performance, description, and fit. When a seller fails to accurately explain and represent a product’s attributes online, product description uncertainty arises, whereas the uncertainty of product performance emerges from a customer’s fears about a product’s performance [23]. In a similar vein, [30] developed the concept of product fit uncertainty, which refers to doubts about whether a product (or its attributes) meets customers’ expectations and demands. Product uncertainty is a major obstacle for online marketplaces and is amplified for products (i.e., clothing) that cannot be fully assessed and sensed before purchase. The authors in [23] discovered that the assurance of third-party and diagnostic product descriptions can assist in minimizing uncertainty related to product description and performance in online second-hand automobile markets. Regarding product fit uncertainty, online product forums and media can be used to alleviate this [30].

The increase in uncertainty perceptions among customers may have several negative consequences. For instance, high perceptions of uncertainty may lead to a sharp decline in sales and low purchase/repurchase intention [31,32]. Furthermore, [33] found that although some customers tend to restrict their purchases to products of low value to minimize their losses, other customers refrain from online transactions altogether. Accordingly, the reduction in uncertainty related to online purchasing is likely to increase purchase intentions, attract more customers, and ultimately generate greater sales [34]. Understanding online purchasing behavior has become an important consideration, especially in light of the wide range of e-retailers [35]. According to [36], customers compare the advantages and disadvantages of offline and online purchasing options before deciding which to choose. Previous research has confirmed that customer uncertainty has a negative effect on purchase and repurchase intentions [37,38]. Thus, it is critical to understand how customers’ perceived uncertainty when making an online purchase can be alleviated. Such an understanding can be used to develop effective marketing strategies that facilitate purchase intention and continued online purchasing behavior. It is especially imperative to understand customers’ perceived uncertainty with regard to online purchasing in emerging markets with high-UA cultures. This is because these cultures are more sensitive to uncertain and unknown situations and hence are more threatened by uncertainty and ambiguity [39]. Uncertainty is commonly introduced by change [11]. Shopping habits have been transformed by the introduction of e-commerce, which requires customers to use computers, smartphones, or other devices, which triggers risk and uncertainty. Therefore, customers in high-UA cultures are more likely to resist e-commerce as such change brings uncertainties to shopping behavior [8]. Most importantly, customers in high-UA cultures place greater importance on structure (e.g., regulations, rules, laws) [40]. However, e-commerce, particularly in emerging markets, remains unregulated and lacks legislation to protect customers [41–46]. Hence, customers in these markets prefer institutional assurance.

2.2. Theoretical Foundation

This paper draws on signaling theory (ST) and relational signaling theory (RST) [47–49] to understand customers' online purchase intentions in emerging markets. Sellers and customers in online purchase transactions have access to diverse information, which therefore generates information asymmetry [50]. As suggested by Connelly et al. [51], the information provided by a seller to targeted customers regarding the ability to complete a task might be interpreted as a signal. Sellers often choose how they signal information, whereas consumers decide how to infer and react to the signals they receive. ST is used in this study to elucidate how the asymmetry of information can be decreased by return policy leniency (RPL), cash on delivery (COD), and social commerce constructs (SCCs) as costly and visible signals [52].

ST has been frequently employed in the fields of economics, marketing, and management to explain the impact of information asymmetry in a variety of contexts [53,54]. Signals are often thought of as the qualities of an object that can be altered and manipulated according to the preferences of a signaler and can reveal the hidden quality information of one object to another [55]. In terms of the relationship between customers and e-retailers, ST has been utilized to explain the types of signals e-retailers offer to customers in order to reduce information asymmetry and assist customers in making more accurate judgments of quality when there is limited information about products [55–57]. Information asymmetry in e-commerce settings is becoming increasingly prominent due to the physical separation between sellers and customers [54]. There are two important causes of information asymmetry in online marketplaces: seller quality and product quality [57]. In uncertain settings such as e-commerce, ST is used to describe how signals might be utilized to impact customers' attitudes toward the signaling party. Advertising, branding [58], and unconditional money-back guarantees [59] are all examples of traditional market signals. The concept of signals in e-commerce has been extended as different forms of signals are presented such as money-back guarantees, promotional policies [54], live streaming commerce [53], online word-of-mouth (WOM) [60], third-party assurances, and online product descriptions [23].

The other theoretical base, RST, is used in this study as a bridge to elucidate how trust perception may be developed by decreasing uncertainty through the costly signals of RPL, COD payment options, and SCCs. Uncertainty avoidance is commonly linked to risk tolerance [61] and both are significantly shaped by trust [62]. Trust is a key aspect of e-commerce transactions between the transacting bodies (i.e., customers and e-retailers) where there is little control over each other's behavior and a high degree of uncertainty and risk is involved. According to Six [49], RST is "based on the assumptions that rationality is bounded through framing, that preferences are partially determined by altruism (through a distinction between foreground and background goals), and that an individual's action is influenced by the normative context in which he or she operates" (p. 285) and is fundamental to building trust. Through the lens of RST, signaling through RPL, COD, and SCCs facilitates the formation of trust by limiting "opportunistic behavior, [creating] positive relational signals, avoiding negative relational signals, [and] the stimulation of frame resonance, or the introduction of trust-enhancing . . . policies" ([49], p. 285).

By drawing on the RST, the relationships between RPL, COD, SCCs → trust → purchase intentions are explained (see Figure 1). In doing so, this study makes several contributions. It hypothesizes that RPL, COD, and SCCs will reduce risk and uncertainty relating to a current purchase while also offering a relational signaling methodology to comprehend how repurchase intention develops. By making costly commitments through COD, RPL, and SCCs, e-retailers build essential trust among their customers through relational signaling. Customers perceive higher reliability when an e-retailer is willing to accept their vulnerability by providing more lenient return policies, allowing a COD payment method, and enabling customers to share their purchasing experience through various SCCs as they trust the e-retailers' commitment to being vulnerable by offering these aspects. The impact of lenient return policies and cash on delivery payment options on customer trust has not been extensively explored. In the extant literature, very few studies [50] have examined the

link between return policy leniency and customer trust. Furthermore, although previous research has operationalized cash on delivery as a moderator of the relationships between various related factors and purchase/repurchase intentions [36,63], other scholars have examined the main drivers of adopting cash on delivery [64–66]. Tandon and Kiran [67] found that COD has a significant positive effect on purchase intention in the Indian context. However, no study has examined COD as a direct antecedent of customer trust. This study hypothesizes that RPL and COD can facilitate costly signals to mitigate the uncertainty and risk related to a purchase transaction. Additionally, it proposes that the inclusion of SCCs into a standard e-commerce website is a costly signal that can be effective in boosting customer trust.

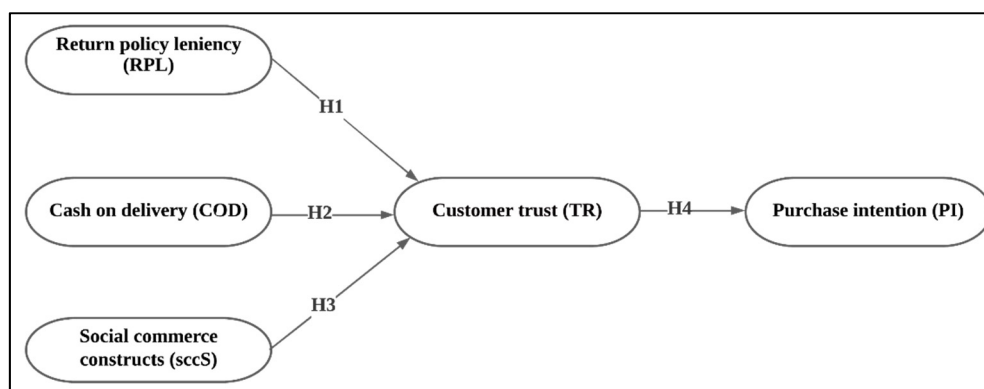


Figure 1. Research model.

Furthermore, this study supports the notion that an online customer’s trust in an e-retailer is an important aspect in translating COD, RPL, and SCCs into a future purchase decision. The logic supporting this argument is rooted in RST, which proposes that customers assess the e-retailer’s provision of RPL, COD, and SCCs in committing themselves to future exchange relationships/purchase intentions. This implies that customers who have purchased in the presence of a COD, RPL, and SCCs from an e-retailer will then repurchase from that e-retailer. As Figure 1 indicates, this study proposes that the effects of COD, RPL, and SCCs on consumer purchase intention are visible through customer trust.

2.3. Hypotheses Development: Return Policy Leniency and Customer Trust

When engaging in online shopping, customers rely on textual imageries and photos that may not be sufficiently useful to make online purchase decisions [68]. Customers cannot see, test, touch, or smell physical products before purchasing, generating additional challenges regarding their attitudes toward e-commerce in high-uncertainty-avoidance societies [69,70]. Thus, many e-retailers employ several strategies (i.e., virtual reality, extensive descriptions) to enhance the online shopping experience, whereas customers rely on WOM to reduce risk and uncertainty in online shopping [50]. Yet a considerable level of uncertainty remains in the online shopping experience.

Return policies have become a competitive strategy and key element for online retailing that can be employed to decrease the risk and uncertainty related to product quality [71]. However, product return is recognized as a key challenge for e-retailers [72]. This refers to a product being returned to e-retailers or crediting a payment to consumers. There are multiple reasons for a product return, including product defects, misfits, and a lack of conformity to consumers’ expectations [73]. As a result, a product return has negative economic effects on the profitability of e-retailers as it involves a set of reverse logistics (i.e., packaging, shipping back, recycling) [21,74–76]. This reduces the margin of profit from the original purchase and leads to additional costs being generated from handling the returned product.

By contrast, lenient return policies are beneficial for e-retailers as they stimulate customers’ purchasing proclivities [77] by decreasing their perceptions of risk and uncertainty

as a result of being unable to physically inspect products [74,78,79]. Janakiraman et al. [80] state that despite the costs associated with processing returned products, e-retailers are keen to provide their customers with lenient return policies because the sales stimulated by these policies more than compensate for the costs of processing returns. Such policies indicate that e-retailers are committed to service quality [81] and service recovery (i.e., wrong items, poor product quality) [82]. Furthermore, Jung and Seock [83] point out that lenient return policies are regarded as a service recovery that is fundamental to decreasing customer turnover and raising revenue. These policies entail the professional management of service recovery by e-retailers [84].

This study recognizes the leniency of a return policy based on five key aspects derived from [80] effort—“involves effortless return process”, time—“provides a longer length of time in which to return products”, scope—“allows a wider range of products to be returned”, money—“does impose monetary restrictions, and exchange—“allows cash refunds”. After reviewing the related literature, it is apparent that the influence of lenient return policies on customers’ trust has not been fully explained, except for a study by [50], which found that customer trust mediates the relationship between return policy leniency and Swadesh customers’ purchase intentions. Wang et al. [85] claimed that cognitive trust is triggered by signaling through RPL. Unlike emotional trust, cognitive trust is defined as an informed assessment of another party’s ability to perform and deliver specific behaviors and is dependent on the perceptions of prior behaviors, exchanges, and leniency. Cognitive trust indicates benevolence, integrity, and competence. By providing a lenient return policy, e-retailers signal their ability and competency to address customer demands. Costly signals conveyed by lenient returns policies also indicate they possess the integrity to continue e-retail operations regardless of the high costs incurred from handling returns. Equally, given that lenient return policies are costly, e-retailers signal benevolence in that these policies are not found to cause harm.

H1. *Return policy leniency (RPL) positively influences customer trust (TR).*

2.4. Cash on Delivery (COD) and Customer Trust

Cash on delivery (COD) refers to a payment option that permits customers to pay cash when the ordered product is delivered [66,67]. Because the consumer receives the products prior to completing a payment, COD is occasionally referred to as a “post payment” method [86]. COD has grown in popularity in recent years in a large number of developing countries including India [63], Pakistan [64], Vietnam [87], Indonesia [88], Nigeria [89], and Arab countries [65]. There are multiple reasons for its wide popularity and acceptance. Given the substantial previous literature, issues with respect to trust, privacy, and security are fundamental motives that make customers uncertain about adopting current e-payment methods (i.e., credit/debit cards) and e-commerce [36,90–93]. In developing countries, customers are still reluctant to use e-payment options due to an insufficient debit/credit card penetration rate and a lack of secure e-payment systems [63,64]. Even with the availability of credit/debit cards, many require bank pre-activation in order to be used for e-commerce transactions, which makes the payment process more complicated. Moreover, e-commerce in developing countries continues to evolve and customers lack experience with e-payments. Furthermore, online payment regulations and cyber laws remain in their infancy, failing to give customers a sufficient sense of security [64,94,95].

Although previous literature has found that customer trust has been recognized as a key determinant of COD use for e-commerce transactions [64,66,96–99], examinations of the impact of COD on customer trust are limited. In e-commerce transactions, mistrust may arise owing to the absence of face-to-face interactions between the seller and the customer, and uncertainty occurs as both parties may act unexpectedly and opportunistically [100]. As a result, avoiding opportunistic behavior [101,102], which can occur with COD, is the key to minimizing such uncertainty and making e-commerce transactions effective. In contrast to an e-payment transaction, COD ensures two key components of customer trust:

(1) the receipt of the expected product leading to trust building, and (2) paying by cash, which protects customers from sharing their credit/debit card information over the Internet and through e-payment systems [65,66].

The risk and distrust of sharing credit/debit card information and receiving a faulty or incorrect product are alleviated to a large extent by using a COD option as customers are allowed to check and approve the products before paying in cash [65,67,88]. Additionally, Chiejina and Olamide [89] have claimed that COD is an effective strategy to compel online retailers to deliver the correct orders, provide faster delivery, and improve customer service, which increases customer satisfaction. COD is viewed as an appropriate solution for reducing customers' perceived risks. Many consumers fear financial hazards, such as losing their money without receiving their products or having the right products delivered, because they must pre-pay [87]. In the same vein, consumers using COD will have the same traditional shopping experience whereby they can inspect the product before paying. According to Li et al. [103], e-retailers are trusted by customers if they are able to sell and deliver products as expected or even superior, which can be assured by offering COD. Furthermore, through online payments, e-retailers are receiving their payments prior to the actual delivery of the order [64]. However, the provision of COD by an e-retailer can be realized as a costly signal of trust. Because customers may refuse to pay if they are not satisfied with the product they have purchased, e-retailers who provide COD as a payment option indicate that they are ready to make a costly commitment due to the costs incurred by returning products. This costly signal is expected to contribute significantly to developing customer trust in e-retailers.

H2. *Cash on delivery (COD) positively influences customer trust (TR).*

2.5. Social Commerce Constructs and Customer Trust

The rapid growth of social media and Web 2.0 technology has brought new e-commerce developments [104,105]. This has offered an opportunity to develop new business models that foster social interactions in terms of attracting more customers, particularly in the sphere of e-commerce [106]. Customers' experiences in online environments facilitated by social media differs from that offline, as they are able to develop social interactions with other customers [107]. In particular, social media and the advent of social platforms, which are used for recommendations and referrals, ratings and reviews, social networks, and communities and forums, allow customers to engage in social interactions [90,104,108]. Such social platforms are referred to as social commerce constructs (SCCs) [104] and are also examined in this study. As explained by Hajli [109], SCCs refer to the embedded features of an e-commerce website that allow customers to interact with other customers and rate, comment, recommend, and shop for products. These constructs are social platforms that enable customers to create content and share their shopping experiences. Customers are empowered to provide advice and share their purchase experiences (opinions) after purchasing through these platforms, which act as an online source of social support [110,111]. Potential customers, through SCCs, can access feedback and information regarding products, services, service quality, and online e-retailers that have been provided by other customers [112]. The concept of word-of-mouth (WOM), which is facilitated by interactions on SCCs, has become an immensely effective way to reach potential customers [113]. Therefore, when potential customers are enabled to access the social experiences and knowledge of previous customers, they can make more accurate informed purchasing decisions [114].

When customers experience uncertainty in online shopping, they tend to seek reliable and trustworthy sources that provide referential and diagnostic information to overcome this [115]. The information provided by an e-retailer is not always recognized as trustworthy and reliable and is generally used by potential customers, whereas the information provided by SCCs is viewed as trustworthy [107,112]. Research has indicated that potential customers are inclined to rely more on WOM provided by their friends and fellow customers on SCCs than the information provided by e-retailers when it comes to developing

a transaction intention before purchasing [116]. In the extant literature, WOM provided through SCCs has been found to be a key predictor of customer trust [110,117,118]. Hajli [104] confirms that SSCs are key enablers of trust. Furthermore, the literature confirms that social presence, which can be conveyed through SCCs, fosters trust levels [119]. Supporting this, other studies have found that the social presence and social applications of e-commerce contribute significantly to making customers feel more secure and therefore more likely to purchase [120].

Customers tend to trust information (WOM) obtained from other customers on SCCs as such information is believed to be independent and safeguarded from interference by e-retailers [115]. Potential customers may therefore have the chance to explore previous customers' shopping experiences, allowing them to evaluate the reliability of an e-retailer, assess services/products before consumption, and shape the expectations of service quality-related purchases. Furthermore, e-retailers are seen as trustworthy when they allow customers to openly discuss and reveal their purchasing experiences and interactions with others and access information via SCCs. Furthermore, SCCs allow e-retailers to enhance their social support, social presence, and interaction with customers [112,121,122]. This demonstrates that e-retailers are transparent, do not conceal information, and do not engage in untrustworthy or opportunistic behavior toward customers.

H3. *Social commerce constructs (SCCs) positively influence customer trust (TR).*

2.6. Customer Trust (TR) and Purchase Intention (PI)

In e-commerce environments, it is difficult to assess whether e-retailers will be committed to protecting the personal information and privacy of customers [41] and/or the security of online transactions [123]. The content of e-retailers' websites can also influence customer trust [124,125]. Furthermore, product uncertainty is largely related to e-retailers in online markets [23,126]. Customers cannot entirely assess whether the descriptions of products are sufficient and whether they will perform properly in the future as claimed by e-retailers [23]. In the meantime, customers are also anxious about whether the e-retailer has abundantly satisfied their personal demands and endorsed products that match their preferences [30]. Thus, the decrease in e-retailer uncertainty may contribute substantially to reducing product uncertainty. Several studies have confirmed that the development of a close relationship and cultivation of trust toward e-retailers is an effective way to decrease e-retailer uncertainty. Belief in the trustworthiness of e-retailers is based on three building blocks: ability, integrity, and benevolence [127,128]. Thus, it is essential for e-retailers to provide trustworthy transaction processes to build trust in customers, who subsequently develop online purchase intentions [129,130].

Defining trust is complicated because it represents an abstract and multifaceted concept. Accordingly, trust has been defined in different ways [131,132]. Trust in e-commerce refers to the belief that customers are vulnerable to the honest intentions of e-retailers after knowing their features [93]. Similarly, Gefen [133] defines trust as the general beliefs in an e-retailer that shape behavioral intentions. Additionally, Kim [123] defines trust, the same definition used in the current study, as a customer's personal belief that the e-retailer will accomplish their transactional commitments (as interpreted by the customers). This definition is closely related to the cognitive trust definition, which denotes an informed assessment of another party's ability (e-retailer) to accomplish and convey expected behaviors based on perceptions of previous behaviors, exchanges, and leniency [85]. Research has investigated how trust in an e-retailer drives a customer's subsequent inclination to purchase from a particular e-retailer. In online transactions, trust can be recognized as a major predecessor belief that generates a positive attitude toward transaction behaviors [134,135], therefore resulting in purchase intention. In previous literature, the influence of trust on purchase intentions is clear [50,136–139]. Thus, customers' trust in e-retailers can reduce the vulnerability and social complexity that customers perceive in e-commerce settings.

H4. Customer trust (TR) positively influences purchase intentions.

3. Methodology

A survey method was employed for this study. The items used to measure the research model’s constructs were adopted from previous research (see Appendix A). All measurement items were assessed on a 5-point Likert scale. Prior to administration, the think-aloud technique was applied to discuss the questionnaire with three academicians and four experienced e-commerce users for content and face validity. Small changes to the phrasing and layout of the measurement items were made based on these conversations, and the final online questionnaire was designed using Google Forms. The first part was dedicated to collecting demographic information about the participants (see Table 1), whereas the second section was composed of 26 items that measure the constructs of the research model (see Appendix A).

Table 1. Demographic profile of the respondents (n = 560).

Demographic		Frequency	%
Gender	Male	298	53%
	Female	262	47%
Age	<20	92	16%
	21–25	151	27%
	26–30	162	29%
	31–35	91	16%
	>35	64	11%
Education	Second school	54	10%
	college	61	11%
	Bachelor	372	66%
	Master	41	7%
	PhD	32	6%
Occupation	Employed	355	63%
	Student	167	30%
	Unemployed	38	7%
Online shopping experience (Year)	<1	103	18%
	1–2	353	63%
	>3	104	19%

Data were collected in Jordan from 15 December 2021 to 18 February 2022. Due to the absence of a sample frame for e-commerce users, the survey link was distributed to potential participants via various WhatsApp groups and social media pages (after obtaining permission from the administrators). This ensured that all recruited participants were conversant with social media and increased the likelihood of finding users who purchased products through e-commerce. Most WhatsApp groups and social media members tend to belong to numerous other groups and pages. Therefore, a snowball sampling method was adopted. The administrators of the WhatsApp groups and social media pages were instructed to distribute the survey link to other pages and groups and to encourage their members to do the same. Accordingly, the online survey resulted in 573 returned questionnaires, 13 of which were discarded due to a high level of incompleteness. Consequently, a total of 560 questionnaires were valid and subjected to analysis. The respondents’ demographic characteristics are displayed in Table 1.

In survey research, Common Method Variance (CMV) is a potential issue [140]. This issue arises for various reasons, including item ambiguity, participants attempting to remain consistent in their responses, scale length, common scale, anchors/formats, and gathering data about independent and dependent variables from the same participant and measuring them in the same location. According to Sharma [141], the validity of the relationships among variables is threatened by CMV, which inflates observed correlations and provides

erroneous support for the hypotheses. Furthermore, Kock [142] states that CMV deflates the size of correlations among variables, hence making the outcomes insignificant. As suggested by Podsakoff [140], CMV was procedurally controlled during the questionnaire design by utilizing clear and simple language, fragmenting the measurement items for independent and dependent variables, eliminating “double-barreled” questions, and separating. These processes were effective in controlling CMV, as the result of a “Harman Single Factor” analysis indicated that the total variance extracted by one factor was 49.01% (<50%), demonstrating no bias in the dataset [140].

4. Data Analysis

The convergent validity of the constructs was assessed by examining the internal consistency of the indicators using the Dijkstra–Henseler’s rho (rho_A) and the “average variance extracted” (AVE). As displayed in Table 2, all rho_A, composite reliability (CR), Cronbach’s alpha (α) (>0.7), and AVE (>0.5) values satisfied the recommended cut-off values [143].

Table 2. Convergent validity.

Construct	Mean	STDEV	α	rho_A	CR	AVE
Cash on Delivery (COD)	1.44	0.45	0.91	0.92	0.92	0.73
Purchase Intention (PI)	1.45	0.44	0.88	0.89	0.89	0.66
Return Policy Leniency (RPL)	1.43	0.44	0.91	0.92	0.92	0.74
Social Commerce Constructs (SCCs)	1.44	0.42	0.93	0.93	0.93	0.68
Customer Trust (TR)	1.40	0.45	0.94	0.94	0.94	0.79

STDEV = Standard deviation.

Hair et al. [143] state that to confirm the presence of discriminant validity, each construct’s \sqrt{AVE} value should be higher than the correlations involving the constructs. The diagonal numbers in Table 3 represent the \sqrt{AVE} . These are larger than the off-diagonal numbers (correlation values) in the corresponding columns and rows, indicating discriminant validity. Additionally, the factor loadings and cross-loadings for each indicator were calculated and are displayed in Table 4. The indicators (items) of each construct yielded a factor loading higher than 0.707, except for RPL5 and SCCs, which had a factor loading less than 0.707 and were consequently deleted. Furthermore, each indicator loads higher on its intended theoretical construct than on any other construct, indicating the presence of adequate discriminant and convergent validities [143]. Finally, the “heterotrait–monotrait ratio of correlations” (HTMT) was employed to examine discriminant validity. Table 5 shows that the values of the HTMT were all <0.85 [143], reconfirming the existence of discriminant validity.

Table 3. Fornell and Larcker’s discriminant validity.

Construct	COD	PI	RPL	SCCs	TR
Cash on Delivery (COD)	0.85				
Purchase Intention (PI)	0.55	0.81			
Return Policy Leniency (RPL)	0.67	0.66	0.86		
Social Commerce Constructs (SCCs)	0.42	0.51	0.46	0.82	
Customer Trust (TR)	0.72	0.67	0.72	0.49	0.89

Note: The diagonal numbers are the construct’s.

SEM-PLS modeling with Smart PLS was utilized to examine the suggested hypotheses. The Kolmogorov–Smirnov test indicates that the goodness of fitness for all the measurement items was <0.05, demonstrating that the data in this study were non-normally distributed [144]. SmartPLS is widely used for SEM and can effectively manage non-normal data and small samples [145]. The results of the hypotheses testing are presented in Table 4. All hypotheses were supported. The RPL ($\beta = 0.371, p < 0.001$), COD ($\beta = 0.411, p < 0.001$), and SCCs ($\beta = 0.15, p < 0.001$) exhibited a significant positive influence on TR. Furthermore,

TR ($\beta = -0.677, p < 0.001$) exhibited a significant positive influence on purchase intention. The total variances explained for PI and TR were 45.9% ($R^2 = 0.459$) and 64% ($R^2 = 0.64$), respectively (see Table 6), indicating that the research model has moderate explanatory power [146]. The indices of model fitness were all within the recommended range [143], including the NFI “Normed Fit Index” = 0.91 (>0.9), SRMR “Standardized Root Mean Square Residual” = 0.063 (<0.9), and RMS Theta = 0.11 (<0.12).

Table 4. Cross loadings.

	COD	PI	RPL	SCCs	TR
COD1	0.87	0.48	0.58	0.37	0.64
COD2	0.84	0.45	0.58	0.35	0.61
COD3	0.85	0.49	0.58	0.37	0.61
COD4	0.85	0.47	0.59	0.34	0.61
PI1	0.48	0.84	0.56	0.42	0.56
PI2	0.47	0.83	0.55	0.41	0.56
PI3	0.43	0.81	0.54	0.44	0.56
PI4	0.43	0.78	0.53	0.39	0.53
RPL1	0.62	0.59	0.89	0.38	0.64
RPL2	0.60	0.57	0.86	0.39	0.62
RPL3	0.60	0.61	0.88	0.40	0.62
RPL4	0.62	0.59	0.89	0.39	0.64
RPL6	0.48	0.54	0.79	0.46	0.59
SCCs1	0.34	0.42	0.35	0.81	0.42
SCCs3	0.36	0.43	0.39	0.86	0.44
SCCs4	0.37	0.36	0.34	0.79	0.43
SCCs5	0.35	0.36	0.35	0.78	0.41
SCCs6	0.34	0.49	0.42	0.88	0.41
SCCs7	0.34	0.43	0.43	0.84	0.38
SCCs8	0.34	0.44	0.40	0.82	0.38
TR1	0.67	0.58	0.65	0.47	0.90
TR2	0.65	0.62	0.65	0.43	0.89
TR3	0.65	0.63	0.65	0.44	0.90
TR4	0.63	0.60	0.63	0.43	0.87

Note: Numbers in bold represent the items loading for each construct.

Table 5. HTMT text.

Construct	COD	PI	RPL	SCCs	TR
Cash on Delivery (COD)	-				
Purchase Intention (PI)	0.55	-			
Return Policy Leniency (RPL)	0.67	0.67	-		
Social Commerce Constructs (SCCs)	0.42	0.51	0.46	-	
Customer Trust (TR)	0.72	0.67	0.72	0.49	-

Table 6. Hypotheses testing.

Hypothesis	Path	β	“Bias-Corrected 95% Confidence Interval”	STDEV	T Statistics	p Values
H1	COD → TR	0.411	[0.274, 0.551]	0.073	5.63	<0.001
H2	RPL → TR	0.371	[0.229, 0.506]	0.074	5.025	<0.001
H3	SCCs → TR	0.15	[0.072, 0.224]	0.039	3.834	<0.001
H4	TR → PI	0.677	[0.611, 0.741]	0.033	20.58	<0.001

As demonstrated in Table 7, all the VIF “variance inflation factor” values for the independent variables (COD, RPL, SCCs) were <3 , indicating that there were no collinearity issues [143]. Although the effect sizes (f^2) of COD (0.246), RPL (0.191), and SCCs (0.048) on TR were all medium (see Table 7), TR exerted a large effect size of 0.847 on PI [147].

Table 7. Explanatory power and effect size.

Construct	VIF	R ²	f ²
Cash on Delivery (COD)	1.90	-	0.246
Purchase Intention (PI)	-	0.459	-
Return Policy Leniency (RPL)	1.99	-	0.191
Social Commerce Constructs (SCCs)	1.31	-	0.048
Trust (TR)	-	0.64	0.847

5. Discussion

This study examined how RPL, COD, and SCCs affect customers’ PI through customer trust. The analysis was based on a structured survey dataset from e-commerce users in Jordan. SEM-PLS was used to validate the research model. The results demonstrate that RPL has a significant positive impact on TR, indicating that H1 is supported. This is consistent with the findings of previous research [50]. This suggests that RPL acts as an effective mechanism to enhance customer trust. The more lenient the return policy, the more customer trust will be increased. Customers evaluate return policies according to their degree of leniency before committing to a purchase. Lenient return policies are considered by customers as a signal that e-retailers are eager to share with customers the transaction-related risks. This builds goodwill and trust, which leads to customers’ purchase intentions. Enabling customers to easily return a wide range of products within a reasonable timeframe and without imposing fees means they are more likely to develop trust.

H2 was also supported. This indicates that COD exerts the strongest significant positive impact on TR. This suggests offering a COD payment option increases customer trust. Although prior research found COD positively affects purchase intentions [67], the effect of COD on customer trust has been less widely explored. Prior payment is likely to be a problem for many customers as they are uncertain as to whether their order will be dispatched or if they will receive the right products. COD solves such uncertainties and reduces customer stress by allowing them to make the payment only after checking the shipment. If customers receive inaccurate or low-quality products, they can instantly return them. Furthermore, COD is a secure payment option that does not require customers to share their financial information online [66]. The simple structure of COD makes it a simple method for making an online transaction, which in turn enables customers with average computer competency to engage in online shopping. Hence, the provision of a COD payment option by e-retailers increases customer trust. Importantly, the effect of COD is higher than RPL on customer trust. A plausible explanation for this is that COD conveys a shopping experience that simulates an offline shopping experience as customers can inspect products before paying and can instantly return products if they are inadequate or faulty.

The results confirm the significant positive effect of SCCs on TR supporting H3. This finding is confirmed by previous research [104,112,115]. It implies that providing customers with social commerce tools (e.g., ratings, social media, recommendation systems, reviews) to access the opinions and feedback of former customers regarding their purchase experiences increases the trust of potential/actual customers in transacting with e-retailers. Through SCCs, customers are able to use different channels to share their purchasing experiences with respected e-retailers and products/services without any interruption from e-retailers. Electronic Word-of-Mouth (EWOM) provided through SCCs is recognized as a trustworthy information source for customers. SCCs are methods used to communicate and exchange information online about e-retailers and products/services between senders (former customers) and receivers (actual or potential customers). For the receivers, the information provided by the senders (former customers) has no commercial intent, and as such is viewed as more credible than other information sources such as advertisements or e-retailers’ websites.

The results suggest that TR is a key enabler of PI as it has a significant positive effect on this variable; hence, H4 is supported. This finding aligns with previous research [50,136,138,139].

This implies that the more customers' trust increases, the more they intend to purchase. Trust is an effective mechanism that reduces the inherent uncertainty and risk related to e-commerce. If customers perceive the integrity, benevolence, and ability of e-retailers to be sufficient they will develop an inclination to be vulnerable to e-retailers. If the extent of a customer's trust in an e-retailer surpasses their perceived risk, then the customer will become involved in a risky relationship with the e-retailer. This means that trust is the main antecedent of purchase intention in online shopping settings where there is a perceived risk of a negative consequence [123].

6. Managerial Implications

The main findings of this study show that to enhance customer trust as a key determinant of purchase intention, e-retailers should provide customers with COD, SCCs, and RPL. The strategic use of return policies by retailers can generate a significant increase in customers' lifetime value [148]. The leniency of return policies was found in this study to be a key predictor of customer trust. Thus, e-retail managers should actively realize the importance of customers' trust in converting return policies into purchase behavior. Although customer trust is a necessary aspect to be considered in product purchasing, e-retailers need to be aware that building higher trust will allow them to introduce new products and renew their offers as customers will trust them in the event of a service recovery [50]. Thus, managers should employ return policies as a method to boost the competitive position of their businesses by gaining customer trust to increase future sales. This requires offering lenient return policies in terms of momentary costs, longer return windows, convenience, a wider range of products that can be returned and exchanged, and full refunds. These aspects should be considered when developing return policies. Furthermore, it is important to determine the main reasons for the returns as the factors that influence the return experience will help to clarify why returns occur, facilitating the process of identifying effective solutions [149]. Importantly, because of technological advancements, unethical/opportunistic returns may not have a substantial impact on e-retailers as they can detect unusually frequent returns by an individual customer.

The effect of SCCs on customer trust in this study was significant. This suggests that Web 2.0 technologies should be considered a key element when designing e-commerce websites. Increasing customer trust requires integrating Web 2.0 technologies into e-commerce websites and connecting these websites to various social network sites (e.g., Facebook). In so doing, customers will be allowed to access more social and trustworthy information based on previous shopping experiences and feedback related to products and e-retailers. By providing customers with credible sources of information other than e-commerce websites, the perceived uncertainty of customers will be reduced. Moreover, the implementation of SCCs will enhance the trustworthiness of e-retailers as it is an indicator of transparency that discourages the act of information concealing from customers. SCCs can also aid e-retailers in monitoring consumer interactions, allowing them to predict and prevent negative WOM that might imperil their reputation and, therefore, reduce customers' willingness to buy their products [110]. Furthermore, these tools can be a valuable source of information for two-way communication as well as assist e-retailers in successfully and promptly resolving consumer problems. Importantly, e-retailers should identify strategies that will encourage customers to use SCCs to generate content and enhance profits as a result of attracting new customers [150]. Positive WOM is an effective marketing approach employed to endorse products/services, attract more customers, and deepen relationships with existing customers. However, e-retailers should also be aware that negative WOM can significantly overshadow positive WOM and thus increase customer uncertainty [31]. High-quality customer service, lenient return policies, and high logistics service quality can increase customer satisfaction, motivating customers to convey positive WOM through SCCs [50,63,151].

The findings indicate that customer trust is increased by the availability of a COD payment option. Thus, e-retailers, particularly new e-retailers planning to enter the e-

market, should consider providing COD as a payment option, among others. It has also been claimed that COD could be employed as a strategic approach for e-retailers to increase sales as it is deemed to appeal to a broader demographic [66]. Furthermore, a study by Kidane and Sharma [152] found that nearly 67% of customers dismiss e-commerce transactions when e-retailers request authentication of their banking information. Hence, COD can be used by e-retailers to decrease customers' anxieties about online fraud. Because COD increases the risk of returns [64], e-retailers and their logistics service providers (LSPs) should ensure that customers' orders are checked with respect to quality and accuracy before shipment [63]. Furthermore, LSPs should bear in mind that delivering the right orders to customers on time with the expected condition(s) requires adequate logistics infrastructures. In addition, it is important for e-retailers to use reliable logistics partners to ensure the accuracy and condition of shipments.

7. Conclusions

Based on uncertainty and signaling literature, this study conceptualized return policy leniency (RPL), cash on delivery (COD), and social commerce constructs (SCCs) as three signals that can cultivate customer trust (TR). The three routes linking RPL, COD, SSCs, and customer purchase intention were tested through an analysis of structured survey data from 560 respondents. The findings indicated that RPL, COD, and SSCs were significant facilitators of customer trust. Furthermore, customer trust was found to be a key enabler of customers' PI. This study verified that the three signals were effective mechanisms for reducing purchasing uncertainty and risk and increasing customer trust, which in turn fostered purchase intention. Finally, it is useful to consider future research related to the development of perceived trust and purchase intention. Given that customers' purchasing behavior differs across product types, it is essential to replicate this study for different types of products to generate more robust conclusions. Such research is expected to help build product-specific strategies, as different product features need different channel capabilities to improve customers' purchasing experiences. This study adopted a cross-sectional design that measured the variables of the framework at a particular point in time; further research should validate the proposed framework using longitudinal analysis. It is also important to test the framework of this study in different countries and to investigate potential cross-cultural variances [153]. Further research may examine additional variables such as information quality, e-retailer reputation, and website design.

Author Contributions: Conceptualization, A.S.A.-A.; methodology, A.S.A.-A.; software, A.S.A.-A.; validation, A.S.A.-A., H.Y. and M.K.A.; formal analysis, A.S.A.-A.; investigation, A.S.A.-A., M.A. and M.K.A.; resources, A.S.A.-A., H.Y., M.A. and A.M.A.; data curation, A.S.A.-A. and M.K.A.; writing—original draft preparation, A.S.A.-A.; writing—review and editing, H.Y., M.K.A., M.A. and A.M.A.; visualization, A.S.A.-A. supervision, A.S.A.-A.; project administration, A.S.A.-A.; funding acquisition, A.M.A. and A.S.A.-A. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Cash on delivery (COD)	COD1	“Cash on delivery mode of payment facilitates easy return of defected products”.	[36,67]
	COD2	“Cash on delivery gives me confidence for future repurchase of products”.	
	COD3	“I plan to pay through cash on delivery mode of payment”.	
	COD4	“I think cash on delivery is a reliable mode to payment”.	
Return policy leniency (RPL)	RPL1	“The e-commerce website returns the goods in original price under any circumstances”.	[50,77]
	RPL2	“The store promises an easy return mode”.	
	RPL3	“The e-commerce website takes charge of the shipping fee of returning the commodities under any circumstances.”	
	RPL4	“The e-commerce website accepts the returns of promotion items”	
	RPL5	“The e-commerce website accepts the returns due to consumers’ preferences or inconsistent expectations.”	
	RPL6	“The e-commerce website permits a relatively long period for returning the commodities”.	
Social commerce constructs (SSCs)	SSCs1	“I feel my friends rating and reviews are generally frank”.	[104,115,150]
	SSCs2	“I feel my friends rating and reviews reliable”.	
	SSCs3	“I feel my friends on forums and communities are generally frank”.	
	SSCs4	“I feel my friends on forums and communities reliable”.	
	SSCs5	“I feel my friends’ recommendations are generally frank”.	
	SSCs6	“I feel my friends’ recommendations are generally reliable”.	
	SSCs7	“I am willing to recommend a new product that is worth buying for my friends on this online community”.	
	SSCs8	“I am interested in reading referrals from other users”.	
Customer trust (TR)	TR1	“This e-commerce website is genuinely interested in customer’s welfare”.	[151,154]
	TR2	“If problems arise, one can expect to be treated fairly by this e-commerce website”.	
	TR3	“This e-commerce website operates scrupulously”.	
	TR4	“You can believe the statements of this e-commerce website”.	
Purchase intention (PI)	PI1	“I am very likely to buy/hire the product/service from same seller”.	[150,155]
	PI2	“I would consider buying the product/services from the same seller and platform in the future”.	
	PI3	“I intend to buy the product/service from the seller”.	
	PI4	“I intend to provide my personal information with the seller”.	

References

1. He, P.; Zhang, S.; He, C. Impacts of logistics resource sharing on B2C E-commerce companies and customers. *Electron. Commer. Res. Appl.* **2019**, *34*, 100820. [CrossRef]
2. Statista. *E-Commerce Worldwide—Statistics & Facts*; Statista: Hamburg, Germany, 2022.
3. Yahia, I.B.; Al-Neama, N.; Kerbache, L. Investigating the drivers for social commerce in social media platforms: Importance of trust, social support and the platform perceived usage. *J. Retail. Consum. Serv.* **2018**, *41*, 11–19. [CrossRef]
4. Nanda, A.; Xu, Y.; Zhang, F. How would the COVID-19 pandemic reshape retail real estate and high streets through acceleration of E-commerce and digitalization? *J. Urban Manag.* **2021**, *10*, 110–124. [CrossRef]
5. Luo, X.; Tu, Y.; Tang, J.; Kwong, C. Optimizing customer’s selection for configurable product in B2C e-commerce application. *Comput. Ind.* **2008**, *59*, 767–776. [CrossRef]
6. Steel, W.; Daghli, T.; Marriott, L.; Gemmell, N.; Howell, B. *E-Commerce and Its Effect upon the Retail Industry and Government Revenue*; Working Paper Series 4333; Victoria University of Wellington, The New Zealand Institute for the Study of Competition and Regulation: Wellington, New Zealand, 2013.

7. Lai, I.-S.; Huang, Y.-F.; Siang, J.-H.; Weng, M.-W. Evaluation of Key Success Factors for Web Design in Taiwan's Bike Case Study. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 927–937. [CrossRef]
8. Xu, J.; Cheng, C. Uncertainty avoidance, individualism and the readiness of Business-to-Consumer E-commerce. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 791–801.
9. Kwak, J.; Zhang, Y.; Yu, J. Legitimacy building and e-commerce platform development in China: The experience of Alibaba. *Technol. Forecast. Soc. Chang.* **2018**, *139*, 115–124. [CrossRef]
10. Rabayah, K.S.; Maree, M.; Alhashmi, S.M. Cultural factors that influence the adoption of e-commerce: A Palestinian case study. *Inf. Dev.* **2021**. online first. [CrossRef]
11. Lim, K.H.; Leung, K.; Sia, C.L.; Lee, M.K.O. Is eCommerce boundary-less? Effects of individualism–collectivism and uncertainty avoidance on Internet shopping. *J. Int. Bus. Stud.* **2004**, *35*, 545–559. [CrossRef]
12. Ayob, A.H. E-commerce adoption in ASEAN: Who and where? *Futur. Bus. J.* **2021**, *7*, 4. [CrossRef]
13. Steenkamp, J.B.E.; Ter Hofstede, F.; Wedel, M. A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness. *J. Mark.* **1999**, *63*, 55–69. [CrossRef]
14. Yeniyurt, S.; Townsend, J.D. Does culture explain acceptance of new products in a country? An empirical investigation. *Int. Mark. Rev.* **2003**, *20*, 377–396. [CrossRef]
15. Al-Omouh, K.S.; Ancillo, A.D.L.; Gavrilu, S.G. The role of cultural values in social commerce adoption in the Arab world: An empirical study. *Technol. Forecast. Soc. Chang.* **2021**, *176*, 121440. [CrossRef]
16. SaleCycle. 2018. Available online: <https://www.salecycle.com/blog/featured/ecommerce-in-the-middle-east-2018-stats-and-trends/> (accessed on 7 April 2022).
17. Makki, E.; Chang, L.C. Understanding the effects of social media and mobile usage on e-commerce: An exploratory study in Saudi Arabia. *Int. Manag. Rev.* **2015**, *11*, 98–109.
18. Al Hawamdeh, N.; Al Qatamin, A. The effect of cultural dimensions on knowledge-sharing intentions: Evidence from higher education institutions in Jordan. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 1079–1089. [CrossRef]
19. DataReportal. Digital in Jordan: All the Statistics You Need in 2021. 2021. Available online: <https://datareportal.com/reports/digital-2021-jordan> (accessed on 8 April 2022).
20. Statista. eCommerce—Jordan | Statista Market Forecast. 2022. Available online: <https://www.statista.com/outlook/dmo/ecommerce/jordan> (accessed on 7 April 2022).
21. Yaseen, H.; Dingley, K.; Adams, C. Capturing the growth of e-commerce in Jordan using a novel research approach. *Int. J. Manag. Commer. Innov.* **2016**, *3*, 811–827.
22. Pfeffer, J.; Salancik, G.R. *The External Control of Organizations: A Resource Dependence Perspective*; Stanford University Press: Redwood City, CA, USA, 2003.
23. Dimoka; Hong; Pavlou On Product Uncertainty in Online Markets: Theory and Evidence. *MIS Q.* **2012**, *36*, 395. [CrossRef]
24. Yaseen, H.; Dingley, K.; Alhusban, M.; Alhosban, A. E-Commerce Adoption Model for Traditional Retailers in Developing Countries. *Int. J. Infonomics* **2017**, *10*, 1296–1306. [CrossRef]
25. Al-maaitah, T.A.; Tha'er Majali, M.A.; Almaaitah, D.A. The Impact of COVID-19 on the Electronic Commerce Users Behavior. *J. Contemp. Issues Bus. Gov.* **2021**, *27*, 784–793.
26. Akerlof, G.A. The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *Q. J. Econ.* **1970**, *84*, 488–500. [CrossRef]
27. Pavlou; Liang; Xue Understanding and Mitigating Uncertainty in Online Exchange Relationships: A Principal-Agent Perspective. *MIS Q.* **2007**, *31*, 105. [CrossRef]
28. Ba, S.; Pavlou, P.A. Evidence of the Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior. *MIS Q.* **2002**, *26*, 243–268. [CrossRef]
29. Wolf, J.; Muhanna, W. Adverse Selection and Reputation Systems in Online Auctions: Evidence fom eBay Motors. In Proceedings of the ICIS 2005, Las Vegas, NV, USA, 11–14 December 2005; Volume 67. Available online: <https://aisel.aisnet.org/icis2005/67>. (accessed on 14 May 2022).
30. Hong, Y.; Pavlou, P.A. Product fit uncertainty in online markets: Nature, effects, and antecedents. *Inf. Syst. Res.* **2014**, *25*, 328–344. [CrossRef]
31. Kanani, R.; Glavee-Geo, R. Breaking the uncertainty barrier in social commerce: The relevance of seller and customer-based signals. *Electron. Commer. Res. Appl.* **2021**, *48*, 101059. [CrossRef]
32. Alsoud, M.A.S.; Othman, I.B.L. The Determinant of Online Shopping Intention in Jordan: A Review and Suggestions for Future Research. *Int. J. Acad. Res. Bus. Soc. Sci.* **2018**, *8*, 441–457. [CrossRef]
33. Maia, C.; Lunardi, G.; Longaray, A.; Munhoz, P. Factors and characteristics that influence consumers' participation in social commerce. *Rev. Gestão* **2018**, *25*, 194–211. [CrossRef]
34. Wang, C.-Y.; Lee, H.-C.; Wu, L.-W.; Liu, C.-C. Quality dimensions in online communities influence purchase intentions. *Manag. Decis.* **2017**, *55*, 1984–1998. [CrossRef]
35. Forsythe, S.; Liu, C.; Shannon, D.; Gardner, L.C. Development of a scale to measure the perceived benefits and risks of online shopping. *J. Interact. Mark.* **2006**, *20*, 55–75. [CrossRef]
36. Hamed, S.; El-Deeb, S. Cash on Delivery as a Determinant of E-Commerce Growth in Emerging Markets. *J. Glob. Mark.* **2020**, *33*, 242–265. [CrossRef]

37. Yang, Z.; Van Ngo, Q.; Chen, Y.; Nguyen, C.X.-T.; Hoang, H.T. Does Ethics Perception Foster Consumer Repurchase Intention? Role of Trust, Perceived Uncertainty, and Shopping Habit. *SAGE Open* **2019**, *9*, 2158244019848844. [[CrossRef](#)]
38. Chiu, T.-S.; Chih, W.-H.; Ortiz, J.; Wang, C.-Y. The contradiction of trust and uncertainty from the viewpoint of swift guanxi. *Internet Res.* **2018**, *28*, 716–745. [[CrossRef](#)]
39. Hofstede, G.H.; Hofstede, G.J.; Minkov, M. *Cultures and Organizations: Software of the Mind*; McGraw-Hill: New York, NY, USA, 2005; Volume 2.
40. Doney, P.M.; Cannon, J.P.; Mullen, M.R. Understanding the influence of national culture on the development of trust. *Acad. Manag. Rev.* **1998**, *23*, 601–620. [[CrossRef](#)]
41. McKnight, D.H.; Choudhury, V.; Kacmar, C. Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Inf. Syst. Res.* **2002**, *13*, 334–359. [[CrossRef](#)]
42. Sleem, A.M. E-Commerce Infrastructure in Developing Countries. In *Electronic Business in Developing Countries: Opportunities and Challenges*; IGI Global: Hershey, PA, USA, 2005; pp. 349–375. [[CrossRef](#)]
43. Prasetyo, E.H. Legitimacy building of digital platforms in the informal economy: Evidence from Indonesia. *J. Entrep. Emerg. Econ.* **2021**. *ahead-of-print*. [[CrossRef](#)]
44. Yaseen, H.; Al-Adwan, A.S.; Al-Madadha, A. Digital marketing adoption among SMEs in Jordan: A mixed-method approach. *J. Theor. Appl. Technol.* **2019**, *97*, 1396–1407.
45. Mareš, N.; Savy, M. Global South countries: The dark side of city logistics. Dualisation vs Bipolarisation. *Transp. Policy* **2020**, *100*, 150–160. [[CrossRef](#)]
46. Goldsmith, E.; McGregor, S.L. E-commerce: Consumer protection issues and implications for research and education. *J. Consum. Stud. Home Econ.* **2000**, *24*, 124–127. [[CrossRef](#)]
47. Spence, M. Job Market Signaling. In *Uncertainty in Economics*; Academic Press: Cambridge, MA, USA, 1978; pp. 281–306. [[CrossRef](#)]
48. Six, F.; Nooteboom, B.; Hoogendoorn, A. Actions that Build Interpersonal Trust: A Relational Signalling Perspective. *Rev. Soc. Econ.* **2010**, *68*, 285–315. [[CrossRef](#)]
49. Six, F.E. Building interpersonal trust within organizations: A relational signalling perspective. *J. Manag. Gov.* **2007**, *11*, 285–309. [[CrossRef](#)]
50. Oghazi, P.; Karlsson, S.; Hellström, D.; Hjort, K. Online purchase return policy leniency and purchase decision: Mediating role of consumer trust. *J. Retail. Consum. Serv.* **2018**, *41*, 190–200. [[CrossRef](#)]
51. Connelly, B.L.; Certo, S.T.; Ireland, R.D.; Reutzel, C.R. Signaling Theory: A Review and Assessment. *J. Manag.* **2010**, *37*, 39–67. [[CrossRef](#)]
52. Spence, M. Signaling in Retrospect and the Informational Structure of Markets. *Am. Econ. Rev.* **2002**, *92*, 434–459. [[CrossRef](#)]
53. Lu, B.; Chen, Z. Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective. *Inf. Manag.* **2021**, *58*, 103509. [[CrossRef](#)]
54. Li, X.; Zhuang, Y.; Lu, B.; Chen, G. A multi-stage hidden Markov model of customer repurchase motivation in online shopping. *Decis. Support Syst.* **2019**, *120*, 72–80. [[CrossRef](#)]
55. Kirmani, A.; Rao, A.R. No Pain, No Gain: A Critical Review of the Literature on Signaling Unobservable Product Quality. *J. Mark.* **2000**, *64*, 66–79. [[CrossRef](#)]
56. Yaseen, H.; Alhusban, M.D.; Alhosban, A.; Dingley, K. Making Sense of E-Commerce Customers Awareness in a Developing Country Context: A Framework for Evaluation. *Electron. J. Inf. Syst. Eval.* **2017**, *20*, 102–115.
57. Mavlanova, T.; Benbunan-Fich, R.; Lang, G. The role of external and internal signals in E-commerce. *Decis. Support Syst.* **2016**, *87*, 59–68. [[CrossRef](#)]
58. Kirmani, A. The Effect of Perceived Advertising Costs on Brand Perceptions. *J. Consum. Res.* **1990**, *17*, 160–171. [[CrossRef](#)]
59. Lee, B.-C.; Ang, L.; Dubelaar, C. Lemons on the Web: A signalling approach to the problem of trust in Internet commerce. *J. Econ. Psychol.* **2005**, *26*, 607–623. [[CrossRef](#)]
60. Cheung, C.; Xiao, B.S.; Liu, I.L. Do actions speak louder than voices? The signaling role of social information cues in influencing consumer purchase decisions. *Decis. Support Syst.* **2014**, *65*, 50–58. [[CrossRef](#)]
61. Frijns, B.; Gilbert, A.; Lehnert, T.; Tourani-Rad, A. Uncertainty avoidance, risk tolerance and corporate takeover decisions. *J. Bank. Financ.* **2013**, *37*, 2457–2471. [[CrossRef](#)]
62. Fjaeran, L.; Aven, T. Creating conditions for critical trust—How an uncertainty-based risk perspective relates to dimensions and types of trust. *Saf. Sci.* **2020**, *133*, 105008. [[CrossRef](#)] [[PubMed](#)]
63. Jain, N.K.; Gajjar, H.; Shah, B.J. Electronic logistics service quality and repurchase intention in e-tailing: Catalytic role of shopping satisfaction, payment options, gender and returning experience. *J. Retail. Consum. Serv.* **2020**, *59*, 102360. [[CrossRef](#)]
64. Anjum, S.; Chai, J. Drivers of Cash-on-Delivery Method of Payment in E-Commerce Shopping: Evidence from Pakistan. *SAGE Open* **2020**, *10*, 2158244020917392. [[CrossRef](#)]
65. Halaweh, M. Implementation of the COD payment method on e-commerce websites in the Arab Region. *Int. J. Bus. Inf. Syst.* **2019**, *32*, 145. [[CrossRef](#)]
66. Halaweh, M. Cash on Delivery (COD) as an Alternative Payment Method for E-Commerce Transactions: Analysis and implications. *Int. J. Sociotechnol. Knowl. Dev.* **2018**, *10*, 1–12. [[CrossRef](#)]

67. Tandon, U.; Kiran, R. Study on drivers of online shopping and significance of cash-on-delivery mode of payment on behavioural intention. *Int. J. Electron. Bus.* **2018**, *14*, 212. [[CrossRef](#)]
68. Fu, Y.; Liu, G.; Papadimitriou, S.; Xiong, H.; Li, X.; Chen, G. Fused latent models for assessing product return propensity in online commerce. *Decis. Support Syst.* **2016**, *91*, 77–88. [[CrossRef](#)]
69. Yao, Y.; Boardman, R.; Vazquez, D. Cultural Considerations in Social Commerce: The Differences and Potential Opportunities in China. In *Social Commerce*; Palgrave Macmillan: Cham, Switzerland, 2019; pp. 43–58. [[CrossRef](#)]
70. Yildirim, E. How Uncertainty Avoidance, Power Distance and Indulgence Affect Social Commerce Expenditure? An Investigation Based on Facebook. *Int. J. Sci. Cult. Sport* **2016**, *4*, 403. [[CrossRef](#)]
71. Abdulla, H.; Abbey, J.D.; Ketzenberg, M. How consumers value retailer's return policy leniency levers: An empirical investigation. *Prod. Oper. Manag.* **2021**, *31*, 1719–1733. [[CrossRef](#)]
72. Kaushik, V.; Kumar, A.; Gupta, H.; Dixit, G. Modelling and prioritizing the factors for online apparel return using BWM approach. *Electron. Commer. Res.* **2020**, 1–31. [[CrossRef](#)]
73. Hsiao, L.; Chen, Y.-J. Returns Policy and Quality Risk in E-Business. *Prod. Oper. Manag.* **2011**, *21*, 489–503. [[CrossRef](#)]
74. Shao, B.; Cheng, Z.; Wan, L.; Yue, J. The impact of cross border E-tailer's return policy on consumer's purchase intention. *J. Retail. Consum. Serv.* **2021**, *59*, 102367. [[CrossRef](#)]
75. Yan, R.; Pei, Z. Return policies and O2O coordination in the e-tailing age. *J. Retail. Consum. Serv.* **2018**, *50*, 314–321. [[CrossRef](#)]
76. Samorani, M.; Alptekinoglu, A.; Messinger, P.R. Product Return Episodes in Retailing. *Serv. Sci.* **2019**, *11*, 263–278. [[CrossRef](#)]
77. Wang, Y.; Anderson, J.; Joo, S.-J.; Huscroft, J.R. The leniency of return policy and consumers' repurchase intention in online retailing. *Ind. Manag. Data Syst.* **2019**, *120*, 21–39. [[CrossRef](#)]
78. Javed, M.K.; Wu, M. Effects of online retailer after delivery services on repurchase intention: An empirical analysis of customers' past experience and future confidence with the retailer. *J. Retail. Consum. Serv.* **2019**, *54*, 101942. [[CrossRef](#)]
79. Pham, T.S.H.; Ahammad, M.F. Antecedents and consequences of online customer satisfaction: A holistic process perspective. *Technol. Forecast. Soc. Chang.* **2017**, *124*, 332–342. [[CrossRef](#)]
80. Janakiraman, N.; Syrdal, H.A.; Freling, R. The Effect of Return Policy Leniency on Consumer Purchase and Return Decisions: A Meta-analytic Review. *J. Retail.* **2016**, *92*, 226–235. [[CrossRef](#)]
81. Lysenko-Ryba, K.; Zimon, D. Customer Behavioral Reactions to Negative Experiences during the Product Return. *Sustainability* **2021**, *13*, 448. [[CrossRef](#)]
82. Autry, C.W. Formalization of reverse logistics programs: A strategy for managing liberalized returns. *Ind. Mark. Manag.* **2005**, *34*, 749–757. [[CrossRef](#)]
83. Jung, N.Y.; Seock, Y.-K. Effect of service recovery on customers' perceived justice, satisfaction, and word-of-mouth intentions on online shopping websites. *J. Retail. Consum. Serv.* **2017**, *37*, 23–30. [[CrossRef](#)]
84. Rao, S.; Lee, K.B.; Connelly, B.; Iyengar, D. Return Time Leniency in Online Retail: A Signaling Theory Perspective on Buying Outcomes. *Decis. Sci.* **2017**, *49*, 275–305. [[CrossRef](#)]
85. Wang, W.; Qiu, L.; Kim, D.; Benbasat, I. Effects of rational and social appeals of online recommendation agents on cognition- and affect-based trust. *Decis. Support Syst.* **2016**, *86*, 48–60. [[CrossRef](#)]
86. Rouibah, K. Electronic Payment Systems Use and Satisfaction in an Arabic Country: Evidence from Kuwait. *Issues Inf. Syst.* **2015**, *16*, 149–160. [[CrossRef](#)]
87. Ha, N.T.; Nguyen, T.L.H.; Pham, T.V.; Nguyen, T.H.T. Factors influencing online shopping intention: An empirical study in Vietnam. *J. Asian Financ. Econ. Bus.* **2021**, *8*, 1257–1266. [[CrossRef](#)]
88. Indiani, N.L.P.; Febriandari, S.N.S. Key antecedents of consumer purchasing behaviour in emerging online retail market. *Cogent Bus. Manag.* **2021**, *8*, 1978370. [[CrossRef](#)]
89. Chiejina, C.; Olamide, S.E. Investigating the Significance of the 'Pay on Delivery' Option in the Emerging Prosperity of the Nigerian e-commerce sector. *J. Mark. Manag.* **2014**, *5*, 120–135.
90. Al-Adwan, A.S.; Kokash, H.; Al Adwan, A.; Alhorani, A.; Yaseen, H. Building customer loyalty in online shopping: The role of online trust, online satisfaction and electronic word of mouth. *Int. J. Electron. Mark. Retail.* **2020**, *11*, 278. [[CrossRef](#)]
91. Sullivan, Y.W.; Kim, D.J. Assessing the effects of consumers' product evaluations and trust on repurchase intention in e-commerce environments. *Int. J. Inf. Manag.* **2018**, *39*, 199–219. [[CrossRef](#)]
92. Fortes, N.; Rita, P. Privacy concerns and online purchasing behaviour: Towards an integrated model. *Eur. Res. Manag. Bus. Econ.* **2016**, *22*, 167–176. [[CrossRef](#)]
93. Pavlou, P.A. Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *Int. J. Electron. Commer.* **2003**, *7*, 101–134. [[CrossRef](#)]
94. Chawla, N.; Kumar, B. E-Commerce and Consumer Protection in India: The Emerging Trend. *J. Bus. Ethics* **2021**, 1–24. [[CrossRef](#)] [[PubMed](#)]
95. Yaseen, H.; Dingley, K.; Adams, C. An empirical study of factors influencing e-commerce customers' awareness in Jordan. In Proceedings of the 2016 International Conference on Information Society (i-Society), Dublin, Ireland, 10–13 October 2016; pp. 63–67. [[CrossRef](#)]
96. Alsoud, M.A.; bin Lebai Othman, I. Factors Influencing Online Shopping Intention in Jordan: An Empirical Study Based on the Tam Model. *Int. J. Curr. Innov. Adv. Res.* **2018**, *1*, 1–13.

97. Alsaoud, M.A. Determinants of Online Shopping Intention among Jordanian's Academicians. Ph.D. Thesis, Universiti Utara Malaysia, Kedah, Malaysia, 2019.
98. Trawnih, A.; Yaseen, H.; Al-Adwan, A.S.; Alsoud, R.; Jaber, O.A. Factors influencing social media adoption among smes during COVID-19 crisis. *J. Manag. Inf. Decis. Sci.* **2021**, *24*, 1–18.
99. Alsoud, A.R.; Al-masaeed, S.; Johar, M.G.M.; Ab-Yajid, M.S.; Abdeljaber, O.; Shukri, S.M. Moderating role of online trust on the relationship between post purchase factors and online purchase intention in malaysia. *Int. J. eBus. eGov. Stud.* **2021**, *13*, 168–186.
100. Jang, H.Y.; Jeong, K.H.; Jeong, D.Y. The consequences of customer trust and the determinants of purchasing intention in internet shopping mall. *Asia Pac. J. Inf. Syst.* **2005**, *15*, 23–49.
101. Halaweh, M. Intention to Adopt the Cash on Delivery (COD) Payment Model for E-commerce Transactions: An Empirical Study. In Proceedings of the IFIP International Conference on Computer Information Systems and Industrial Management, Bialystok, Poland, 16–18 June 2017; pp. 628–637. [\[CrossRef\]](#)
102. Hosmer, L.T. Trust: The Connecting Link Between Organizational Theory and Philosophical Ethics. *Acad. Manag. Rev.* **1995**, *20*, 379–403. [\[CrossRef\]](#)
103. Li, Y.; Fu, Z.T.; Li, H. Evaluating factors affecting the adoption of mobile commerce in agriculture: An empirical study. *N. Z. J. Agric. Res.* **2007**, *50*, 1213–1218. [\[CrossRef\]](#)
104. Hajli, N. Social commerce constructs and consumer's intention to buy. *Int. J. Inf. Manag.* **2015**, *35*, 183–191. [\[CrossRef\]](#)
105. Liang, T.-P.; Turban, E. Introduction to the Special Issue Social Commerce: A Research Framework for Social Commerce. *Int. J. Electron. Commer.* **2011**, *16*, 5–14. [\[CrossRef\]](#)
106. Busalim, A.H.; Hussin, A.C. Understanding social commerce: A systematic literature review and directions for further research. *Int. J. Inf. Manag.* **2016**, *36*, 1075–1088. [\[CrossRef\]](#)
107. Park, D.-H.; Lee, J.; Han, I. The Effect of On-Line Consumer Reviews on Consumer Purchasing Intention: The Moderating Role of Involvement. *Int. J. Electron. Commer.* **2007**, *11*, 125–148. [\[CrossRef\]](#)
108. Lai, L.S.L.; Turban, E. Groups Formation and Operations in the Web 2.0 Environment and Social Networks. *Group Decis. Negot.* **2008**, *17*, 387–402. [\[CrossRef\]](#)
109. Hajli, M. A research framework for social commerce adoption. *Inf. Manag. Comput. Secur.* **2013**, *21*, 144–154. [\[CrossRef\]](#)
110. Hidayanto, A.N.; Ovirza, M.; Anggia, P.; Budi, N.F.A.; Phusavat, K. The Roles of Electronic Word of Mouth and Information Searching in the Promotion of a New E-Commerce Strategy: A Case of Online Group Buying in Indonesia. *J. Theor. Appl. Electron. Commer. Res.* **2017**, *12*, 69–85. [\[CrossRef\]](#)
111. Hajli, N.; Sims, J.; Zadeh, A.H.; Richard, M.-O. A social commerce investigation of the role of trust in a social networking site on purchase intentions. *J. Bus. Res.* **2017**, *71*, 133–141. [\[CrossRef\]](#)
112. Rashid, R.M.; Pitafi, A.H.; Qureshi, M.A.; Sharma, A. Role of Social Commerce Constructs and Social Presence as Moderator on Consumers' Buying Intentions During COVID-19. *Front. Psychol.* **2022**, *13*, 772028. [\[CrossRef\]](#)
113. Meilatinova, N. Social commerce: Factors affecting customer repurchase and word-of-mouth intentions. *Int. J. Inf. Manag.* **2021**, *57*, 102300. [\[CrossRef\]](#)
114. Huang, Z.; Benyoucef, M. From e-commerce to social commerce: A close look at design features. *Electron. Commer. Res. Appl.* **2013**, *12*, 246–259. [\[CrossRef\]](#)
115. Al-Adwan, A.S.; Al-Horani, M.A. Boosting Customer E-Loyalty: An Extended Scale of Online Service Quality. *Information* **2019**, *10*, 380. [\[CrossRef\]](#)
116. Casalo, L.V.; Flavián, C.; Guinaliú, M.; Ekinci, Y. Avoiding the dark side of positive online consumer reviews: Enhancing reviews' usefulness for high risk-averse travelers. *J. Bus. Res.* **2015**, *68*, 1829–1835. [\[CrossRef\]](#)
117. Martínez-Navalón, J.-G.; Gelashvili, V.; Gómez-Ortega, A. Evaluation of User Satisfaction and Trust of Review Platforms: Analysis of the Impact of Privacy and E-WOM in the Case of TripAdvisor. *Front. Psychol.* **2021**, *12*, 750527. [\[CrossRef\]](#) [\[PubMed\]](#)
118. Jalilvand, M.R.; Vosta, L.N.; Mahyari, H.K.; Pool, J.K. Social responsibility influence on customer trust in hotels: Mediating effects of reputation and word-of-mouth. *Tour. Rev.* **2017**, *72*, 1–14. [\[CrossRef\]](#)
119. Gefen, D.; Straub, D.W. Consumer trust in B2C e-Commerce and the importance of social presence: Experiments in e-Products and e-Services. *Omega* **2004**, *32*, 407–424. [\[CrossRef\]](#)
120. Weisberg, J.; Te'Eni, D.; Arman, L. Past purchase and intention to purchase in e-commerce: The mediation of social presence and trust. *Internet Res.* **2011**, *21*, 82–96. [\[CrossRef\]](#)
121. Liu, W.; Fan, X.; Ji, R.; Jiang, Y. Perceived Community Support, Users' Interactions, and Value Co-Creation in Online Health Community: The Moderating Effect of Social Exclusion. *Int. J. Environ. Res. Public Health* **2019**, *17*, 204. [\[CrossRef\]](#)
122. Al-Tit, A.A.; Omri, A.; Hadj, T.B. The driving factors of the social commerce intention of Saudi Arabia's online communities. *Int. J. Eng. Bus. Manag.* **2020**, *12*, 1847979019899746. [\[CrossRef\]](#)
123. Kim, D.J.; Ferrin, D.L.; Rao, H.R. A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decis. Support Syst.* **2008**, *44*, 544–564. [\[CrossRef\]](#)
124. Al-Masaeed, S.; Al-Qaisi, L.; Hunaiti, Z.; Al, M. E-Commerce Adoption at Customer Level in Jordan: An Empirical Study of Philadelphia General Supplies. *Int. J. Adv. Comput. Sci. Appl.* **2016**, *7*, 196–205. [\[CrossRef\]](#)
125. Vila, N.; Kuster, I. Consumer feelings and behaviours towards well designed websites. *Inf. Manag.* **2011**, *48*, 166–177. [\[CrossRef\]](#)
126. Ghose, A. Internet Exchanges for Used Goods: An Empirical Analysis of Trade Patterns and Adverse Selection. *MIS Q.* **2009**, *33*, 263. [\[CrossRef\]](#)

127. Benbasat, I.; Wang, W. Trust in and adoption of online recommendation agents. *J. Assoc. Inf. Syst.* **2005**, *6*, 4. [[CrossRef](#)]
128. Qiu, L.; Benbasat, I. Online Consumer Trust and Live Help Interfaces: The Effects of Text-to-Speech Voice and Three-Dimensional Avatars. *Int. J. Hum.-Comput. Interact.* **2005**, *19*, 75–94. [[CrossRef](#)]
129. Majali, T.; Alsoud, M.; Yaseen, H.; Almajali, R.; Barkat, S. The effect of digital review credibility on Jordanian online purchase intention. *Int. J. Data Netw. Sci.* **2022**, *6*, 973–982. [[CrossRef](#)]
130. Al-Adwan, A.S. Novel research framework for social commerce purchase intentions. *J. Theor. Appl. Inf. Technol.* **2018**, *96*, 4390–40404.
131. Corbitt, B.J.; Thanasankit, T.; Yi, H. Trust and e-commerce: A study of consumer perceptions. *Electron. Commer. Res. Appl.* **2003**, *2*, 203–215. [[CrossRef](#)]
132. Gefen, D.; Karahanna, E.; Straub, D.W. Trust and TAM in Online Shopping: An Integrated Model. *MIS Q.* **2003**, *27*, 51–90. [[CrossRef](#)]
133. Gefen, D. E-commerce: The role of familiarity and trust. *Omega* **2000**, *28*, 725–737. [[CrossRef](#)]
134. Lu, B.; Fan, W.; Zhou, M. Social presence, trust, and social commerce purchase intention: An empirical research. *Comput. Hum. Behav.* **2016**, *56*, 225–237. [[CrossRef](#)]
135. Jarvenpaa, S.L.; Tractinsky, N.; Vitale, M. Consumer trust in an Internet store. *Inf. Technol. Manag.* **2000**, *1*, 45–71. [[CrossRef](#)]
136. Qalati, S.A.; Vela, E.G.; Li, W.; Dakhan, S.A.; Thuy, T.T.H.; Merani, S.H. Effects of perceived service quality, website quality, and reputation on purchase intention: The mediating and moderating roles of trust and perceived risk in online shopping. *Cogent Bus. Manag.* **2021**, *8*, 1869363. [[CrossRef](#)]
137. Imtiaz, R.; Alsoud, M.A.S.; Ramish, M.S.; Aziz, A.; Anwar, A. Impact of Face book on Advertising: Analysis of effectiveness of Face book on enhancing customer purchase intention. *Ilkog. Online* **2021**, *20*, 7130–7149.
138. Ponte, E.B.; Carvajal-Trujillo, E.; Escobar-Rodríguez, T. Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tour. Manag.* **2015**, *47*, 286–302. [[CrossRef](#)]
139. Kim, H.-W.; Xu, Y.; Gupta, S. Which is more important in Internet shopping, perceived price or trust? *Electron. Commer. Res. Appl.* **2012**, *11*, 241–252. [[CrossRef](#)]
140. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.-Y.; Podsakoff, N.P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903. [[CrossRef](#)]
141. Sharma, R.; Yetton, P.; Crawford, J. Estimating the Effect of Common Method Variance: The Method—Method Pair Technique with an Illustration from TAM Research. *MIS Quart.* **2009**, *33*, 473. [[CrossRef](#)]
142. Kock, N. Common Method Bias in PLS-SEM: A full collinearity assessment approach. *Int. J. e-Collab.* **2015**, *11*, 1–10. [[CrossRef](#)]
143. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [[CrossRef](#)]
144. Massey Jr, F.J. The Kolmogorov-Smirnov test for goodness of fit. *J. Am. Stat. Assoc.* **1951**, *46*, 68–78. [[CrossRef](#)]
145. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [[CrossRef](#)]
146. Chin, W.W. The partial least squares approach to structural equation modeling. *Mod. Methods Bus. Res.* **1998**, *295*, 295–336.
147. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed.; Lawrence Erlbaum Associates: Hillsdale, NJ, USA, 1988; ISBN 978-0-8058-0283-2.
148. Rokonzaman, M.; Iyer, P.; Harun, A. Return policy, No joke: An investigation into the impact of a retailer’s return policy on consumers’ decision making. *J. Retail. Consum. Serv.* **2020**, *59*, 102346. [[CrossRef](#)]
149. Rintamäki, T.; Spence, M.T.; Saarijärvi, H.; Joensuu, J.; Yrjölä, M. Customers’ perceptions of returning items purchased online: Planned versus unplanned product returners. *Int. J. Phys. Distrib. Logist. Manag.* **2021**, *51*, 403–422. [[CrossRef](#)]
150. Rashid, R.M.; Rashid, Q.U.A.; Pitafi, A.H. Examining the Role of Social Factors and Mooring Effects as Moderators on Consumers’ Shopping Intentions in Social Commerce Environments. *SAGE Open* **2020**, *10*, 2158244020952073. [[CrossRef](#)]
151. Rita, P.; Oliveira, T.; Farisa, A. The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon* **2019**, *5*, e02690. [[CrossRef](#)] [[PubMed](#)]
152. Kidane, T.T.; Sharma, R.R.K. Factors Affecting Consumers’ purchasing Decision through ECommerce. In Proceedings of the 2016 International Conference on Industrial Engineering and Operations Management, Kuala Lumpur, Malaysia, 8–10 March 2016; Volume 8, pp. 159–165.
153. Al-Adwan, A.S.; Alrousan, M.; Al-Soud, A.; Al-Yaseen, H. Revealing the Black Box of Shifting from Electronic Commerce to Mobile Commerce: The Case of Jordan. *J. Theor. Appl. Electron. Commer. Res.* **2019**, *14*, 51–67. [[CrossRef](#)]
154. Al-Adwan, A.S.; Kokash, H. The Driving Forces of Facebook Social Commerce. *J. Theor. Appl. Electron. Commer. Res.* **2019**, *14*, 15–32. [[CrossRef](#)]
155. Al-Adwan, A.S. Revealing the Influential Factors Driving Social Commerce Adoption. *Interdiscip. J. Inf. Knowl. Manag.* **2019**, *14*, 295–324. [[CrossRef](#)]