

Perceived Risk, Trust and Familiarity of Online Multi-Sided Pure-Play Platforms Selling Physical Offerings in an Emerging Market

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Abstract

Understanding how customers perceive trust and risk when engaging with online pure-play multi-sided platforms (MSPs), has become critical to the performance of digital marketing strategies. This study explored the relationship between perceived trust, perceived risk and user familiarity associated with MSPs. For the purpose of this study, MSPs are conceptualised as firms that operate only online, that seek to provide transacting services to buyers and sellers, and that sell physical offerings in an emerging market context. Primary data were collected through an online instrument across five MSPs and the study reported the results pertaining to differences and similarities between groups and platforms. The results show that while familiarity drives trust, its impact is moderated by perceived risk. Contrary to common belief, the results show gender differences, but do not confirm age differences in trust and the moderation effect of risk. Moreover, the results also show that the influence of familiarity is not significantly different across MSPs.

Keywords: multi-sided platforms; online; South Africa; perceived risk; perceived trust; familiarity

Introduction

Among other things, the internet is often considered a resource that can assist businesses to ensure that costs and prices are contained, while achieving greater levels of customer engagement. The internet also promotes competition among suppliers, and because it



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facilitates the flow of information, firms find it problematic to maintain an operational advantage in this environment. Therefore, for some businesses, a differentiated strategic position seems to be a more viable way of developing and maintaining a competitive advantage (Banker, Mashruwala and Tripathy 2014; Porter 2001). Such differentiation attempts are often reliant on customer decision-making processes on the internet. Key influences on customer behaviour when using the internet entail how users perceive the risks associated with conducting online business (Rao, Truong, Senecal and Le 2007; Liebermann and Stashevsky 2002)—and to what extent users trust the online vendor to deliver on its promise (Hu, Wu, Wu and Zhang 2010).

Many authors (Mai, Yoshi and Tuan 2014; Reichheld and Scheffer 2000) cite the importance of risk in online purchasing and the poor levels of trust in the ability of MSPs to fulfil internet orders as key limitations of e-commerce (Hu et al. 2010). It is, therefore, not surprising that trust is viewed as critical in stimulating online purchases (Bart, Shankar, Sultan and Urban 2005; Kumar, Scheer and Steenkamp 1995; Mai et al. 2014; Moorman, Zaltman and Deshpande 1992). Trust, specifically perceived trust, is hardly a new phenomenon in business research, and over time it has been shown to be rather complex. At its most basic level, trust is defined as “the extent to which one party is willing to participate in a given action with a given partner, considering the risks and incentives involved” (Ruohomaa and Kutvonen 2005, 79). Within the e-commerce environment, perceived trust refers to a belief or an expectation that both the service provider and the seller can be relied on to deliver on the promise they made. In addition, trust in an e-commerce environment means that the underlying technological infrastructure can support the transaction with integrity (Cao, Zhang and Seydel 2006; Luo and Lee 2011; Morgan and Hunt 1994; Ranaweera and Prabhu 2003; Sirdeshmukh, Singh and Sabol 2002).

MSPs, or so-called “pure plays,” are business entities that do not have the conventional brick-and-mortar, customer-facing store presence. Rather, they sell products only via the internet (Boyer 2001; Colle 2018). These entities seek to facilitate Consumer-to-Consumer (C2C), Business-to-Consumer (B2C) as well as Business-to-Business (B2B) transactions. In addition, MSPs consist of pure plays selling digital offerings, and those selling physical offerings (Ungerer, Ungerer and Herholdt 2016). Research intended to understand and measure perceived risk and perceived trust has aided both these types of MSPs (Becerra, Badrinarayanan and Kim 2013; Chen et al. 2016; Corbitt, Thanasankit and Yi 2003; Costante, Den Hartog and Petkovic 2015; Ranaweera and Prabhu 2003; Shehryar 2008). The research confirms that for both online and physical environments, if the risk is perceived to be high, the buyer is less likely to purchase a product (Chang and Tseng 2013). However, the literature exhibits limited evidence of the role of such decision-making influences in the online purchasing behaviour of emerging market customers. This gap is the main motivation behind the current study, as it poses the question: What are the relationship risks and trust in the context of MSPs operating in an emerging market? In responding to this gap, the current study considers the association between trust, risk and familiarity in South Africa. The selection of

context is appropriate, because multi-sided platforms (MSPs), a form of pure plays, are very popular in South Africa. Gumtree, for example, a subsidiary of the American NASDAQ-listed eBay MSP company, was one of the first MSPs in South Africa after it had established an online presence in 2005 (Gumtree 2017).

Given the preceding discussion, the research objectives for the current study were firstly, to empirically investigate the association between perceived risk and trust associated with an MSP. Secondly, the study also aimed to simultaneously explore the relationship between familiarity and trust of a particular MSP. Thirdly, the study sought to establish if familiarity moderates the relationship between perceived risk and trust, as well as to investigate whether this interaction occurs across all MSPs under consideration. Such findings should help to illuminate the importance of relational constructs in an online emerging market context.

In the section to follow the authors contextualise MSPs in the South African environment. Then the paper presents a review of the literature, focusing on the three main constructs (perceived trust; perceived risk; and familiarity), with particular reference to contributions in emerging market contexts, but not limited to emerging markets. This allows for the operationalisation of constructs and the development of hypotheses. After describing the research methodology, the paper reports on the findings of an online survey carried out in South Africa, before concluding with managerial implications and suggestions for further research.

Multi-sided Pure-Play Platforms in South Africa

The battle for market share is ever intensifying in an environment where technology is driving innovation and competitiveness associated with speed and cost savings. The internet, given its vast access to information, allows customers to compare prices and product offering within and across country borders much easier than in the past. However, some authors (Dash 2012; Reichheld and Schefter 2000) caution against a careless simplification to suggest that the behaviour of e-customers are mostly a result of their desire for novel and trendsetting ideas or lower prices.

This complexity is manifested in the various kinds of e-commerce formats. Some firms are moving toward becoming hybrid operators, meaning that although they have physical stores, sales are also generated on their online platform. These two domains and their interaction have been extensively researched and reported on from multiple perspectives—including (for example) marketing (Naik and Peters 2009; Shankar, Smith and Rangaswamy 2003) and general business management (Harris, Grewal, Mohr and Bernhardt 2006; Kollmann and Hasel 2008). However, in emerging markets, comparatively fewer firms have managed to establish themselves as purely online entities (Pauwels and Weiss 2008; Reichheld, Markey and Hopton 2000). In South Africa, online vendors like Takealot (general retail) and Spree (clothing) are examples of such online businesses.

Some argue that MSPs can be described as a third type of online platform (Hardy 2018) with the aim to facilitate sales. On such platforms, the owner of the platform does not sell the goods or services that are for sale (Hagiu and Wright 2015; Weyl 2010). Thus, an MSP platform facilitates the linkage between buyer and seller. Using the example of eBay, Reichheld and Schefter (2000) advance that an MSP addresses the perceived risk of both the seller and buyer, by using either of two methods. First, the sellers and buyers evaluate each other after every transaction, and this rating is made public through being posted on the site. Such a rating allows other sellers and buyers first to gauge the possible risk associated with doing business with the particular party concerned. Second, every transaction automatically carries an insurance fee (\$200 in the case of eBay) for both parties. The first insurance fee associated with a transaction is initially held in retention—only to be released once both parties are satisfied with the result of the transaction.

MSPs are often considered exceptional as a successful MSP is very hard to develop (Hagiu 2014). Some key obstacles include: a) MSPs need both sellers and buyers to start, as no sellers will offer products if they are not convinced that there are enough buyers of the right quality—resulting in the proverbial chicken and egg dilemma; b) sometimes key buyers will resist a new MSP, especially if the MSP is perceived to limit the buyer's purchasing freedom, such as in cases where a supplier only offers its products via the selected MSP; and c) MSPs are very complex businesses to run because of the high demands for technology and the diversity of relationships it needs to maintain. Typically, an MSP can include individuals, firms and the platform itself as suppliers—while both business and individuals are typical customers of MSPs. Information, products and money flow between these participants, and therefore it is in the interests of the MSP to enhance the loyalty of both suppliers and customers.

While many scholars agree that the internet has changed the rules of business, most e-customers still exhibit a clear proclivity towards loyalty (Reichheld and Schefter 2000). From a business management perspective, loyalty refers to a buyer's overall attachment or deep commitment to a supplier, brand or product (Čater and Čater 2010; Lam, Shankar, Erramilli and Murthy 2004). In firms where customer loyalty is dominant, customer retention and delivering a consistently superior experience is a high priority. Such a focus also has the added benefit that it often results in lower overall customer acquisition cost (Reichheld and Schefter 2000). Moreover, authors agree that trust is an essential element of loyalty (Mallapragada, Chandukala and Liu 2016). In this context, some authors also cite the importance of value that mediates the relationship between trust and loyalty (Sirdeshmukh et al. 2002). This notion suggests that the advantages associated with trust are conditional on the presence of value for the customer. The literature on trust in business relationships is vast in scope and depth, but the measurement of trust remains complicated, and is less than perfect as it is a human social phenomenon. Therefore, researchers should not lose sight of the notion that trust is, at best, perceived (Flavián, Guinalfú and Gurrea 2006; Kim, Ferrin and Rao 2008; Pan and Chiou 2011; Roca, García and De la Vega 2009).

Perceived Trust

Trust is defined as “assured reliance on the character, ability, strength, or truth of someone or something,” and the “dependence on something in the future” (The Merriam-Webster Dictionary 2017). However, trust has been explored by many in a variety of contexts, resulting in a substantial body of knowledge citing many definitions. In the fields of psychology and sociology, Szcześniak, Colaço and Rondón (2012) and Gambetta (2000) explain that trust is seen as a concept that governs most human-to-human relationships—particularly when cooperation is needed.

Gefen, Karahanna and Straub (2003) advance that building online trust can employ four belief categories: a) a belief that the suppliers have nothing to gain by being dishonest; b) a belief that built-in safety mechanisms of websites offer adequate protection to customers; c) a belief that the interface is typical for a particular business; d) a belief that easier-to-use websites are more trustworthy. Consistent with the views of Gefen et al. (2003), the current study expands on these categories by arguing that trust can be seen as:

- a) The probability a person attaches to the behaviour of another party, believing that the said party will deal in a cooperative manner underpinned with integrity and benevolence—to achieve the desired objective that contains an element of risk (Castaldo, Premazzi and Zerbini 2010; Henshel, Cains, Hoffman and Kelley 2015; Lin and Leung 2014).
- b) Allowing oneself to be vulnerable to the actions of other people (Dietz 2011; Lount and Pettit 2012).
- c) An appreciation that that people are trustworthy, and this is reflected in their intention which is based on trust (Gefen 2000; Jiménez and Mendoza 2013; Levine, Bitterly, Cohen and Schweitzer 2018; Moorman et al. 1992).
- d) The care that people exhibit is grounded in feelings of confidence and security (Cook, Jacobs and Kim 2010; Pieters 2011).
- e) A combination of all these elements.

The literature shows strong support that the online environment has enhanced the complexity of the trust relationship (Hennig-Thurau et al. 2010; Shankar et al. 2003; Walsh et al. 2010). Thus, in order to create trustworthy marketplaces, it is important to understand how users perceive trust when they engage in online activity (Costante et al. 2015). In the case of inter-human transactions, signals (such as body language) help individuals to evaluate trust in the relationship. This is in contrast to online transacting where a signal like body language may not be present. Online trust, therefore, demands the identification of alternative signals for trust (Costante et al. 2015). This view is not always supported, as Friedman, Kahn and Howe (2000) argue that “people trust people, not technology.” The argument is primarily supported by the notion that systems do not have consciousness and agency—making trusting intent by the system impossible. Because trusting intent is applicable in only some of the trust categories, it is not a prerequisite for trust. Moreover, Kim et al. (2008) also dispute the view of Friedman et

al. (2000) by observing that, in contrast with the traditional transaction in brick-and-mortar stores where trust is more focused toward face-to-face personal relationships, trust in an online environment is focused on transaction processes.

The study of internet shopping yielded a conceptual model of trust that appears to enjoy wide acceptance (Belanger, Hiller and Smith, 2002; Cheung and Lee, 2000; Tontini, 2016; Zhang et al. 2003; Zhang et al. 2015). In this conceptualisation, it is argued that trust is built from the trustworthiness of the internet vendor, the external environment, and is moderated by one's propensity to trust (Cheung and Lee 2000). Here trust is not considered an absolute. Rather the focus is on how a specific individual interprets trust in each situation, and this denotes perceived trust.

Because each individual's knowledge base, frame of reference, and personality are different, no two individuals will hold the same level of perceived trust. The individual's propensity to trust—also known as a disposition to trust—benefits from a substantial research stream. Studies outside South Africa, in the United States of America, South Korea and Europe, have demonstrated that the individual's propensity to trust affects his/her trust in e-commerce (Becerra et al. 2013; Casaló, Flavián and Guinalú 2008; Kim et al. 2008). Moreover, models aimed at identifying factors affecting trust in human-to-computer relationships, are being conceived.

The factors defined in each model had some degree of overlap with other models explaining trust in a brick-and-mortar environment. Building on the work of Costante et al. (2015), the website-related factors for e-commerce trust are summarised in table 1:

Table 1: Summary of literature on website-related factors for e-commerce trust

Contract	Conceptualisation	Author(s)
Risk	The user's degree of loss/damage brought about by the use of the website	Cheung and Lee (2003); Corritore, Kracher and Wiedenbeck (2003); McKnight, Choudhury and Kacmar (2000)
Reliability and availability	The functional performance and consistent availability of the website	Hoffman, Lawson-Jenkins and Blum (2006); Camp (2003); Suh and Han (2003)
Third-party seals	Certificates and third-party logo are present on website pages, which confirms that the website is controlled.	Hsu (2008); Jones and Leonard (2008); Corritore et al. (2003); Suh and Han (2003); McKnight et al. (2000)
Privacy	The manner in which the website claims how the personal data of users are handled	San-Martín and Camarero (2012); Hsu (2008); Hoffman et al. (2006); Camp (2003); Cheung and Lee (2003)
Security	The application of security mechanisms to secure transactions and protect users	San-Martín and Camarero (2012); Hsu (2008); Hoffman et al. (2006); Camp (2003); Cheung and Lee (2003)
Quality, and look and feel	Characteristics such as good design, an attractive user interface, and the absence of syntactic and semantic errors	Corritore et al. (2003); McKnight et al. (2000); Jones and Leonard (2008); Hsu (2008); San-Martín and Camarero (2012)
Reputation	The way others see the website	San-Martín and Camarero (2012); Hsu (2008); Hoffman et al. (2006); Corritore et al. (2003); McKnight et al. (2000)
Brand name	Familiarity with the brand behind the website	Cheung and Lee (2003); Madsen and Gregor (2000)
Usability	How easy it is for users to use the functions of the website	Hoffman et al. (2006); Suh and Han (2003); Madsen and Gregor (2000)

Introducing a time dimension, Costante et al. (2015) advance that once the individual has established his/her perceived trust in a specific website, the transaction can commence. This trust-based decision is essentially the action of choosing whether the perceived trust is adequate to commence with the transaction. *A posteriori* trust, the trust that a user perceives after the transaction has occurred, is another time element of the transaction. The current study focuses on perceived trust at the point in time of the trust decision. Although many authors contributed to the inverse relationship between perceived trust and perceived risk, such evidence based on South African MSPs is scant (Cheung and Lee 2003; Corbitt et al. 2003; Salam, Rao and Pegels 2003).

Perceived Risk

Despite diverse views, the perceived risk (first introduced in a consumer-behaviour context by Bauer 1960), associated with the behaviour of the other party, remains a key

theme in online transacting (Gefen 2000; Hu et al. 2010; Luo, Zhang and Shim 2010; Pavlou 2016). Bauer (1960) defined perceived risk as a function of uncertainty and the seriousness of the outcome involved. Luo et al. (2010) maintained this thread by simply referring to perceived risk as people’s perceptions about their susceptibility to various threats. Perceived risk, like perceived trust, is also multidimensional and has received considerable research attention that yielded many definitions. Table 2 summarises the different dimensions of perceived risk within a commerce transaction, as explained by Luo et al. (2010).

Table 2: Dimensions of perceived risk existing within a commerce transaction

Aspect of Risks	Definition	Literature Support
Performance risk	“The possibility of the product malfunctioning and not performing as it was designed and advertised, and therefore failing to deliver the desired benefits.”	(Featherman and Pavlou 2003)
Financial risk	“The potential monetary outlay associated with the initial purchase price as well as the subsequent maintenance cost of the product. The current financial services research context expands this facet to include the recurring potential for financial loss due to fraud.”	(Featherman and Pavlou 2003)
Time risk	“Consumers may lose time when making a bad purchasing decision by wasting time researching and making the purchase, learning how to use a product or service only to have to replace it if it does not perform to expectations.”	(Featherman and Pavlou 2003)
Psychological risk	The risk associated with weaker self-image as a result of the service that a user received.	(Yang, Pang, Liu, Yen and Tarn 2015; Kauffman, Lai and Lin 2010)
Social risk	The risk that using a product or service may lead to embarrassment before one’s social group.	(Zheng, Favier, Huang and Coat 2012; Baek, Kim and Yu 2010)
Security and privacy risk	“Potential loss of control over personal information, such as when information about you is used without your knowledge or permission.”	(Featherman and Pavlou 2003)
Physical risk	The risk to the buyer’s or others’ safety in using products.	(Yang et al. 2015; Masoud 2013)
Overall risk	“A general measure of perceived risk when all criteria are evaluated together.”	(Featherman and Pavlou 2003)

Source: Adapted from Luo et al. (2010).

In Table 2 (based on the 2010 list of Luo et al.), privacy risk is included. LaRose and Rifon (2006) argue that website proprietors seem to tacitly follow a model of online privacy behaviour, in which factual information about privacy risks is commonly presented along with inducements to surrender personal information. These include reminders of the benefits that will be supplied or denied as a consequence of consumer privacy behaviours—as well as links to self-protective information that may be intended to allay privacy concerns. Using social contract theory, Fogel and Nehmad (2009) argue that social networking websites should inform potential users that risk-taking and privacy concerns are potentially relevant and important concerns, before individuals sign up and create social networking websites. Their findings are consistent with Seock and Chen-Yu (2007), who reported that in website evaluation criteria for clothing purchases, the privacy/security category had the highest mean score from the five website evaluation criteria categories across three shopping orientation groups. Moreover, Toch, Wang and Cranor (2012) analysed privacy risks associated with personalisation trends and considered user attitudes toward privacy and personalisation, as well as technologies that can help reduce privacy risks. They (Toch et al. 2012) concede that although there is no silver bullet for designing privacy-protective personalisation systems, technologies and principles can be used to eliminate, reduce and mitigate privacy risks.

Based on the discussion above, it is conceivable that perceived risk and perceived trust appear to be joined at the hip. Comparing the trust elements in table 1 with the risk facets in table 2, suggests that such an association is plausible. An example is the case of privacy, which is an aspect of trust, while privacy risk is also considered to be a facet of risk. Security and privacy have been shown to be relevant aspects within an online environment (Liebermann and Stashevsky 2002). In addition, various examples of risk are being cited in the literature. These examples include risks of varying degrees such as spam e-mail, counterfeit products, theft of personal information, credit card thefts, products that were tampered with, pornography, product non-supply cases, unreliable information, material depicting violence, and even inappropriate advertising (Clemons et al. 2016; Liebermann and Stashevsky 2002). In order to counter these risks, a common position is that websites must be “designed for trust.” This implies providing the customer with new signals of trust applicable in an online environment (Shneiderman 2000).

Another stronger mitigating measure that enjoys literature support is the use of third-party seals. Hu et al. (2010) found that online suppliers can achieve a higher level of consumer trust by exhibiting a web assurance seal. Challenging this view are Kim et al. (2008), who found that a third-party seal does not strongly influence consumer trust.

In addition, as far back as 1979, Luhmann (1979) claimed that familiarity is a precondition for trust. This proposition served as a key building block in the study of trust in managerial sciences, and Luhmann (2000) cautioned that trust and familiarity should not be confused. While familiarity is said to be an unavoidable fact of life, trust

is a solution for specific problems of risk. However, trust has to be achieved within a familiar world, and changes may occur in the familiar features of the world that will have an impact on the possibility of developing trust (Luhmann 2000). One such change in the business and managerial environment is the rapid expansion of the internet and the growth of online purchasing. Therefore, familiarity in this virtual context is worthy of research attention in order to understand its effect on trust in e-commerce.

Familiarity

It is widely argued that as individuals gain a better understanding of their environment, they exhibit an associated decline in social uncertainty (Luhmann 1979). This understanding denotes familiarity, and the concept has benefited from many definitions. For example, while Guo, Shim and Otondo (2010) define familiarity as the degree to which an individual is aware of a concept, Hsu (2008, 166) defines familiarity as “the experience with the what, who, how, and when of what is happening.” Importantly, the observation by Luhmann (1979) describes the relationship between familiarity and risk, and it is also advanced that because familiarity with an environment or product creates an appropriate context to interpret the behaviour of other parties—it builds trust (Luhmann 1979). This view is well supported by Hsu (2008), who argues that familiarity reduces social uncertainty through an increased understanding of current actions.

Komiak and Benbasat (2006) generalise that familiarity relies on preceding interactions and experiences and this promotes the idea that it serves as a precondition for trust, and therefore enables individuals to develop confidence in each others’ trustworthiness (Luhmann 1979). Thus, familiarity is said to allow individuals to have comparatively safe expectations about the future—assuming asymmetric conditions between parties (Luhmann 2000; Mittendorf 2018). Consequently, in an online environment, familiarity is not only a precondition for trust, but increased familiarity also builds trust over time (Gefen 2000). This notion of trust development over time is extended upon, and while it is accepted that although there are many reasons and origins of trust (Hsu 2008), the current study limits its focus to familiarity that is gained through experience. The preceding discussions on perceived trust, perceived risk and familiarity allow for the construction of three hypotheses:

- H1: Users’ familiarity positively influences their perceived trust in an MSP.
- H2: Users’ perceived risk negatively influences their perceived trust in an MSP.
- H3: The relationship between familiarity with an MSP and the perceived trust of that MSP, is moderated by the perceived risk associated with the MSP.

Beyond the influence of familiarity and risk on trust, as described above, many authors point to the heterogeneity embedded in the design of MSPs and the role they might play in the variability of these influences between websites (San-Martín and Camarero 2012). For example, Sia et al. (2009) reported that on a bookstore platform using an experimental design, the impact of peer customer endorsements on trust perceptions

differs between country contexts. More specifically, Ou and Sia (2010) showed that specific website design attributes have distinct effects on shaping consumer trust and distrust. These findings seem to enjoy emerging market support, as the relative importance of website characteristics contributing to trust in travel portals across customers of varying psychographic and demographic values in India, was also demonstrated (Ganguly, Dash and Cyr 2011). Moreover, while customer service signals and brand reputation are often among the most important website attributes to engender trust, San-Martín and Camarero (2012) showed that how customers experience website characteristics varies across cultural contexts. These findings are somewhat supported by Cyr (2013), who stated that while country economic and technological conditions may temper user perceptions in some instances, overall culture is a stronger predictor of customer perceptions.

Closer to the focus of the current study, research results also confirmed that perceived website social presence and perceived security/privacy exert strong and positive impacts on website credibility and benevolence (Toufaily, Souiden and Ladhari 2013). In this vein, not only is it demonstrated that trustful and distrustful user experiences differ in terms of perceived honesty, competence, and benevolence, but this also suggests that different website characteristics help to enhance trust or to prevent distrust, and may impact on the allocation of design resources (Seckler et al. 2015). In turn, this notion is illuminated by the more recent contributions of McDowell, Wilson, and Kile (2016), who showed that certain website design features explain a sizeable portion of the variance converting e-commerce visitors to purchasers. Finally, while Hasan (2016) also reported that website design characteristics had significant negative effects on perceived irritation in an online shopping context, Pengnate and Sarathy (2017)—also employing an experimental design—showed that visual appeal and ease of use are contributing factors in developing online trust among male customers, with visual appeal dominating trust formation among female customers. This suggested gender-based differences. Based on these arguments, it is also hypothesised that:

- H4: The relationship between familiarity and perceived trust differs significantly across the following groups: Males and females (H4a), Younger and older customers (H4b), and across all paired combinations of participating MSPs (H4c) that are identified as H4c₁ (Gumtree and Junk Mail), H4c₂ (Gumtree and OLX), H4c₃ (Gumtree and Bid or Buy), H4c₄ (Gumtree and Locanto), H4c₅ (Junk Mail and OLX), H4c₆ (Junk Mail and Bid or Buy), H4c₇ (Junk Mail and Locanto), H4c₈ (OLX and Bid or Buy), H4c₉ (OLX and Locanto), and H4c₁₀ (Bid or Buy and Locanto).
- H5: The moderation effect of perceived risk on the relationship between familiarity and perceived trust differs significantly across the following groups: Males and females (H5a), Younger and older customers (H5b), and across all paired combinations of participating MSPs (H5c) that are identified as H5c₁ (Gumtree and Junk Mail), H5c₂ (Gumtree and OLX), H5c₃ (Gumtree and Bid or Buy), H5c₄ (Gumtree and Locanto), H5c₅ (Junk Mail and OLX), H5c₆ (Junk

Mail and Bid or Buy), H5c₇ (Junk Mail and Locanto), H45₈ (OLX and Bid or Buy), H5c₉ (OLX and Locanto) and H5c₁₀ (Bid or Buy and Locanto).

Hypotheses one through five are depicted in the theoretical framework in figure 1.

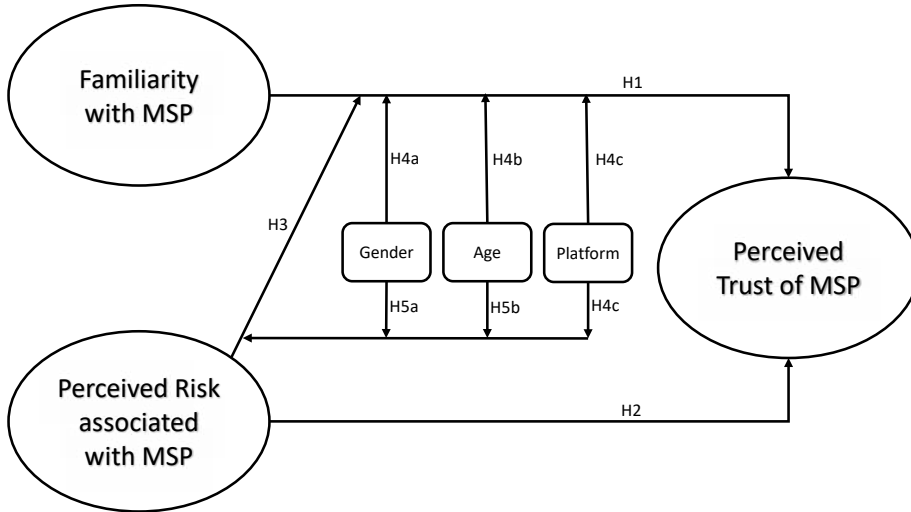


Figure 1: Theoretical framework

Research Methodology

In the context of this study, and given the research objectives, the researchers defined the population as all people who purchase physical products online. The sample frame narrowed the population to include only purchases made in South Africa from six selected websites during the past 12 months, by people older than 18 years. Resource constraints limited the study to South Africa and most platforms in the country allow only people older than 18 years to buy online. Therefore, younger people were excluded. The sampling also only considered purchases done in the 12 months prior to the data collection, in order to limit the potential effect of poor recall.

A non-probability snowball sampling procedure was used by posting a link to the survey on LinkedIn, and this invited members to complete the online survey and share the link on social media. To ensure that respondents were part of the population, screening questions were asked in order to ensure that respondents were older than 18 years, had bought a physical product online during the past 12 months, and used one of the South African websites selected for this study. Although the population size was not known, it was assumed to be more than 500 000. At a 95 per cent confidence level, and with an expectation of not more than five percentage points of error, a sample size of at least 310 was required. The realised sample of 526 was then reduced to 380, as only respondents that completed all the questions for each of the five websites were

included—to ensure measurement invariance between the different MSPs. This translated into 1 900 observations across all five platforms.

All scale items included in the survey were adapted from Kim et al. (2008) on customer decision-making in an online environment—and attempted to measure trust, perceived risk, and familiarity. Five well-known South African MSPs were selected for the study. These included Gumtree, Junk Mail, Bid or Buy, OLX, and Locanto (table 3). A screenshot of each MSP was provided, and participants were asked to respond to multiple statements on a five-point Likert-type scale pertaining to each of the MSPs. The data were analysed using variance-based path analysis procedures in the software package SmartPLS, and its associate mediation analysis and multi-group analysis functionality.

Table 3: Description of selected MSPs

MSP	General description of website*
Gumtree	Gumtree is a platform that puts buyers and sellers in contact with each other. It is part of the international eBay classifieds group, and has been in South Africa for more than 12 years.
Junk Mail	In 1992, Junk Mail started to provide advertising services in the Gauteng Province of South Africa from a garage in Pretoria. Originally, it operated as a weekly community newspaper and in 1997 Junk Mail Publishing launched the world’s first job classified free advertising paper, Job Mail, which was published fortnightly. In 1998, Junk Mail Online was launched as one of the first commercial websites in South Africa.
Bid or Buy	Bidorbuy.co.za is an English-language e-commerce website based on an internet auction and online marketplace model allowing individuals and businesses to trade with each other.
OLX	The OLX group describes itself as a global online marketplace, operating in 45 countries. It was founded in 2006 and the South African media group Naspers is the majority shareholder.
Locanto	Yalwa is a thriving internet company based in Wiesbaden, Germany. Klaus Gapp founded Yalwa in 2006. In South Africa, Yalwa created Locanto to promote local trade.

* Based on publically available sources

Results

Unexpectedly, the non-probability snowball procedure yielded a female (73%) bias sample, with most respondents (44%) aged 35 to 49 years, and 80 per cent (of all the respondents) indicated a gross monthly income of more than 24 000 ZAR per month. Moreover, 86 per cent of respondents were aged 25 to 49 years. Thus, it is clear that the sample included mostly middle-aged people with a reasonably good income at South African parity.

The measurement model, employing only reflective measures, yielded satisfactory results, as all items loaded as expected (table 4) and exhibited good reliability (table 4), with Cronbach alpha coefficients and composite reliability exceeding the 0.7 benchmark (Hair et al. 2017; Nunnally 1978), and with AVE scores above 0.5 (Bagozzi and Yi 1988).

Table 4: Reliability and discriminant validity

Cross-loadings				Reliability and Validity Diagnostics			
	Familiarity	Risk	Trust		Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
FAM1	0.910	0.280	0.386	Familiarity	0.966	0.966	0.876
FAM2	0.935	0.252	0.416	Risk	0.892	0.892	0.734
FAM3	0.956	0.199	0.456	Trust	0.868	0.868	0.688
FAM4	0.943	0.178	0.460				
RISK1	0.257	0.807	-0.148				
RISK2	0.289	0.895	-0.16				
RISK3	0.077	0.866	-0.362				
TRUST1	0.397	-0.263	0.903				
TRUST2	0.421	-0.159	0.833				
TRUST3	0.319	-0.229	0.744				

Further discriminant validity was confirmed by the Fornell and Larcker (1971) method and the heterotrait-monotrait (HTMT) (Henseler, Ringle and Sarstedt 2014) method. While the Fornell and Larcker method compares the square root of AVE in the diagonal with the correlation coefficients in the same row for each construct, the HTMT-method is based on a comparison of the heterotrait-heteromethod correlations and the monotrait-heteromethod correlations. When the HTMT value is below 0.90 (Teo, Srivastava and Jiang 2008) or 0.85 (Kline 2011)—then discriminant validity is established between two constructs. Therefore, the measure exhibits satisfactory discriminant validity (table 5).

Table 5: Discriminant Validity

	Fornell and Larcker*			HTMT		
	FAM	RISK	TRUST	FAM	RISK	TRUST
FAM	0.936			FAM		
RISK	0.242	0.857		RISK	0.243	
TRUST	0.459	-0.262	0.829	TRUST	0.457	0.261

* Square root of AVE on diagonal

We used the full collinearity assessment approach proposed by Kock (2015) to test for common method bias, and considered the variance inflation factor (VIF) scores for each latent variable separately (table 6). These observations allowed us to conclude that it is unlikely that common method bias influences the results—as all the factor level VIF scores were below the 3.3 benchmark.

Table 6: Factor level VIF scores

	FAMILIARITY	RISK	TRUST
FAMILIARITY		1.228	1.028
RISK		1.036	1.028
TRUST		1.036	1.228

The satisfactory performance of the measurement model allowed for consideration of the structural model and the hypothesised relationships between constructs. Before reporting on the results pertaining to the hypothesised paths, as suggested by the structural model, readers are alerted that the objective in testing the structural model in the current is not aimed at parsimony, but rather to facilitate the multi-group analysis. Therefore, consistent with the recommendations of Hensler, Dijkstra and Sarstedt (2014) and Hair, Sarstedt and Ringle (2019) the current study does not report any fit statistics. Hair, Risher, Sarstedt and Ringle (2018) acknowledge that the comprehensive analysis of fits statistics for PLS-SEM remains incomplete and, therefore, the current study advanced that the inclusion of such statistics remains controversial.

The relationship between familiarity and trust ($\beta = 0.555$; $t=28.219$) was, as expected, positive and significant at the $p<0.05$ level—thus supporting H1. Similarly, the results for the relationship between perceived risk and perceived trust ($\beta = -0.396$; $t = 9.678$) supported H2 and confirmed the significant ($p<0.0$) negative relationship. Moreover, familiarity and risk explained 34.9 per cent ($R^2 = 0.349$) of the variance in trust, and although it should be acknowledged that R^2 is not an absolute measure—this result would be considered moderate if the Cohen (1988) criterion is applied. In support of H3, the moderation effect ($\beta = -0.124$; $t = 3.556$) of perceived risk on the relationship between familiarity and perceived trust was also significant ($p<0.05$). This confirms that

users' perception of the risk associated with an MSP reduces the impact of familiarity on trust for the MSP (see figure 2).

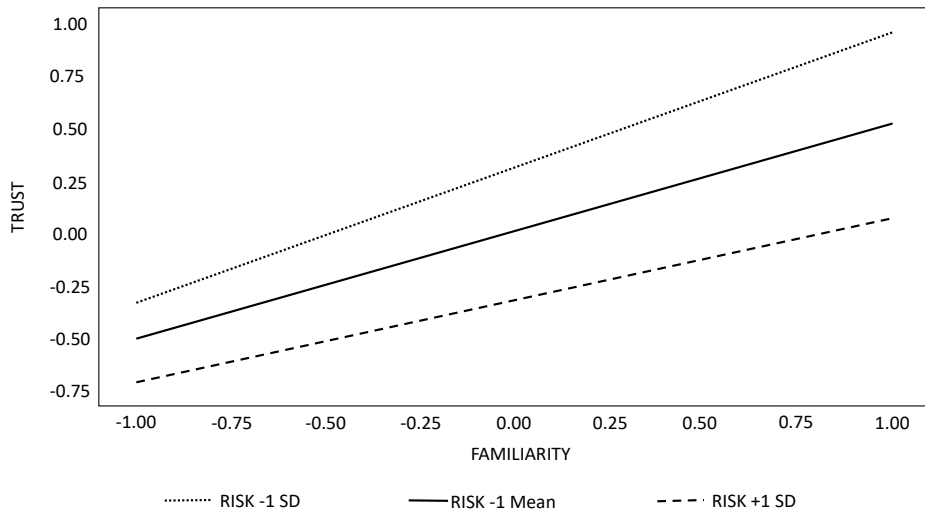


Figure 2: Moderation effect of risk on the relationship between familiarity and trust

In order to test for differences between groups, it has become good practice in SEM to establish measurement invariance (Byrne 2003). However, in the current study, all the measures for all of the websites were exactly the same and were administered to exactly the same respondents simultaneously. Therefore, there is no need to consider measurement invariance—allowing us to proceed with the parametric test in PLS multi-group analysis. In support of H4a, the results ($\Delta\beta = 0.099$, $t = 2.651$, $p < 0.05$) show that the relationship between familiarity and trust differs significantly between males and females. The coefficient for females is higher than for males. However, no statistically significant difference ($\Delta\beta = 0.020$, $t = 0.262$, $p > 0.05$) was observed for the moderation effect of risk on the familiarity to trust relationship—and therefore H5a could not be supported. Similarly, comparing younger and older users showed no statistically significant difference in results for the familiarity to trust relationship ($\Delta\beta = 0.050$, $t = 1.47$, $p > 0.05$), or for the moderation effect of risk on this relationship ($\Delta\beta = 0.017$, $t = 0.257$, $p > 0.05$). This result indicates that age does not influence user perceptions of MSPs, and therefore H4b and H5b could not be supported.

The same parametric approach was applied to compare all possible paired combinations of the MSP included in the study. The results (table 7) showed that for the relationship between familiarity and trust, statistically significant differences were observed for the comparisons between Gumtree and Bid or Buy (H4c₃), Gumtree and Locanto (H4c₄), Junk Mail and Bid or Buy (H4c₆), Junk Mail and Locanto (H4c₇), OLX and Locanto (H4c₉), and Bid or Buy and Locanto (H4c₁₀). Thus, for the test for differences in the

effect of familiarity on trust, six of the 10 hypotheses (H4c₃, H4c₄, H4c₆, H4c₇, H4c₉, H4c₁₀) are supported. In contrast, for the moderation effect of risk on the familiarity to trust relationship, only the comparison between Gumtree and Bid or Buy was significant, and thus only H5c₃ is supported.

Table 7: Comparison of all paired combinations of participating MSP

MSP pairing	Familiarity to Trust				Moderation Effect of Risk			
	H4c	$\Delta\beta$	t	P	H5c	$\Delta\beta$	t	p
Gumtree and Junk Mail	1	0.001	0.015	0.988	1	0.183	1.127	0.260
Gumtree and OLX	2	0.051	0.919	0.359	2	0.134	0.985	0.325
Gumtree and Bid or Buy	3	0.193	3.634	0.000	3	0.210	2.057	0.040
Gumtree and Locanto	4	0.425	3.529	0.000	4	0.014	0.088	0.930
Junk Mail and OLX	5	0.052	0.853	0.394	5	0.049	0.290	0.772
Junk Mail and Bid or Buy	6	0.194	3.142	0.002	6	0.027	0.187	0.852
Junk Mail and Locanto	7	0.424	3.429	0.001	7	0.168	0.868	0.386
OLX and Bid or Buy	8	0.141	2.487	0.013	8	0.076	0.631	0.528
OLX and Locanto	9	0.476	3.961	0.000	9	0.120	0.673	0.501
Bid or Buy and Locanto	10	0.618	5.130	0.000	10	0.196	1.251	0.538

Discussion

As expected, the current study also confirms the relationship between MSP familiarity and trust in the MSPs. This result is consistent with the literature in general, but in particular extends the importance of experience-based familiarity as supported by Mittendorf (2018), Hsu (2008), Komiak and Benbasat (2006), Gefen (2000), and Luhmann (1979). Such a conceptualisation is, therefore, much deeper than mere awareness and depends on the interactions and series of interactions between customers and the platform. A series of interactions allows customers to develop an expectation that serves as a precondition for perceived trust. Such an expectation is, however, not static, and variability within a particular band may be tolerated by the customer. However, if the boundaries of the band are exceeded either too frequently or too much, perceived trust may be altered accordingly.

The results also confirmed the notion that the perceived risk associated with an MSP reduces the perceived trust in the MSP. Moreover, the current study also confirmed the effect of risk on the relationship between familiarity and trust. Thus, the positive

influence of familiarity on trust is reduced by the presence of perceived risk associated with the MSP. This result is consistent with a substantial body of knowledge (Fogel and Nehmad 2009; LaRose and Rifon 2006; Luo et al. 2010; Seock and Chen-Yu 2007; Toch et al. 2012)—and it is clear that perceived risk and perceived trust are intertwined. The sources of risk (for example privacy and security) are also subject to variability and appear to have the ability to reinvent themselves continuously.

Our study demonstrated statistically significant differences between males and females for the association between familiarity and trust. To the contrary, while males and females differ significantly in terms of the association between familiarity and trust, no significant gender-based difference for the moderation effect of risk on the said relationship was observed. In business studies, gender differences have been observed across a variety of contexts (see, for example Coleman and Kariv 2013; Wood et al. 2014). Both the results for the significant difference in the direct effect and the non-significant difference in the indirect effect, enjoy literature support. Cyr and Bonanni (2005) showed that while perceptions about security do not differ significantly between males and females, significant gender differences in perceptions of website design and website satisfaction were observed. Moreover, Flavián et al. (2006) suggest that there is increasing evidence that women and men differ in their decisions to trust. In a functional magnetic resonance imaging (fMRI) study, these authors (Flavián et al. 2006) showed that most brain areas that encode trustworthiness differ between women and men, and this is argued to confirm the empathising-systemising theory—which predicts gender differences in neural information processing modes. In a more recent study, Hasan (2016) demonstrated significant gender differences across three attitudinal components of online shopping, and in particular large differences in cognitive attitude between males and females.

Our results also showed that the direct effect of familiarity on the trust of an MSP, and the indirect effect of risk, showed no significant differences between younger and older users, thereby suggesting that age does not play an important role in these relationships. This result is, however, somewhat surprising, as the general inclination is to assume that younger generations (generation Y for example) are more familiar with MSPs and should reveal stronger relationships between the tested constructs. The authors are somewhat sceptical about this result, and it is acknowledged that the spread of the sample is mostly concentrated in the middle-age groups (86% in the 25 to 49-year category). Nevertheless, Sorce, Perotti and Widrick (2005) cite age as one of the important factors influencing online shopping behaviour, and, in particular, is a moderator of the online shopping acceptance model. However, Hernández, Jiménez and José Martín (2011) argue that the internet has become a marketplace suitable for all ages and incomes and both genders—and thus the prejudices linked to the advisability of selling certain products should be revised. More to the point of the current study, Lian and Yen (2014) use the Unified Theory of Acceptance and the Use of Technology and Innovation Resistance Theory to demonstrate that the major factors driving older adults toward online shopping are performance expectation and social influence—which is

similar to that of younger users. On the other hand, the major barriers for older users include value, risk, and tradition—which differ from younger users. Looking from the perspective of the type of item purchased from an MSP, Wan, Nakayama and Sutcliffe (2012) demonstrated an interaction effect between age and web shopping experience for a credence product. Therefore, the results remain inconclusive in terms of their consistency with prevailing literature—and more research is needed to understand the effect of age on MSP trust.

Corresponding with the idea of Wan et al. (2012) in relation to understanding the effect of different product offerings in the online environment, this study also considered the difference between MSPs. The results showed a single difference between MSPs for the moderation effect of risk, but six differences were observed for the main effect of familiarity on trust. To attempt an explanation for this result, the characteristics of particular websites need to be compared. From table 7, it is clear that significant differences between Gumtree and Bid or Buy were observed for direct and interaction effects. This finding is interesting, as both MSPs are free to users and both offer a mobile application. Both websites have some form of user registration (and protection), and both seem to develop varying levels of business-to-business facilitation. Thus, considering the characteristics (table 8) of each MSP may explain the differences between the MSPs included in the multi-group analysis.

Table 8: Comparing MSPs

Characteristic	Gumtree	Junk Mail	Bid or Buy	OLX	Locanto
Online marketplace	X		X	X	
Free	X	X	X	X	
Mobile application	X	X	X	X	X
Allow adult content			X		X
Allow personal classifieds					X
International reach				X	
Link to social media platforms				X	
Facilitate payment			X		
Premier advertising/account options	X	X			X
B2B facilitation	X		X		
Advertising limitations	X				
Registration required	X	X	X	X	X
Shipping options			X		
Omni-channel options			X		

Table 8 compares the MSPs on selected criteria, including: whether they are positioned as an online marketplace (rather than an online store); using the platform is free; the MSP has an accompanying mobile application; adult content and personal classifieds

are allowed; being part of a global MSP; offers user an interface with social media platforms; the MSP facilitates payment (versus the transaction is completely outside of the MSP); users and advertisers have the option to upgrade to premium accounts; the MSP facilitates B2B interactions (not just transactions between individuals); the MSP facilitates shipping at a fee; and the MSP accommodates multiple channels of interaction. From this comparison of characteristics (table 8), it is clear that the MSPs are heterogeneous, and this may explain the underlying variance in the behaviour of the theoretical model.

Managerial Implications

Familiarity, trust and risk in an internet-based business are not only theoretical. These are aspects that managers seeking to optimise the customer experience and the benefits for the MSPs are confronted with on a daily basis. It is clear that users cannot trust an MSP with which they are not familiar. Thus, the first challenge for managers is how to ensure greater familiarity. The core of this challenge is located in the marketing strategy of the firm, and in particular the integrated marketing communication strategy that pushes and pulls customers towards the website. A comprehensive marketing strategy should not only lure users to the MSP, but also ensure that they become seasoned users. The key to achieving this goal remains the issue of ensuring that the MSP has a comprehensive and growing understanding of the user. It is important to stand in the proverbial customer's shoes and to consider the offering of the MSP in its totality. This emphasises the importance of higher-order aspects such as strategic brand management (values and relevance), but also emphasises micro-level foundations such as website, advertiser and advertisement credibility (Choi and Rifon 2002).

The second important challenge is to jointly manage trust and risk. Trust is awash with a profound body of knowledge that benefits from multiple conceptualisations applied in various contexts. A holistic approach to building trust that includes design, human and institutional factors can assist firms in building trust in online transacting and websites (Pavlou and Gefen 2004). Another approach to building website trust is offered by Neil Patel (see <https://neilpatel.com>) who suggests that a firm should consider both reputation (assurance and design) as well as security (SSL Certificates and Anti-Malware and Hacker Safe) aspects to enhance trust. There is no escape, and MSP managers need to continuously enhance trust in the MSP and mitigate risks that can deduct from the customer's experience and negatively affect their willingness to use the MSP. According to Li (2014), for example, a user's deposition towards the MSPs reputation and its concern for the privacy of the user, are very important to ensure enhanced trust and limitation of risk. Similar approaches should be given managerial priority.

Limitations and Future Research

The current study is limited to the MSP platform considered in this quasi-experimental design, and it is therefore limited to these cases only. Furthermore, conceptualisation is,

although intentional, very limited. Obviously the reality of trust in MSPs is far more complex. Thus, future research can employ more parsimonious approaches and consider a wider net of MSPs. Methodologically the study was also constrained. The design and empirical data limited the type of analysis that could be performed. Larger and more complex datasets should facilitate analytical complexity that yields deeper insight. In particular, the distribution of the sample, as a result of the non-probability approach, also limits the study. Employing a completely random sample should ensure better measurement.

Trust is especially well documented in the prevailing literature and many, if not most, studies in this domain employ trust as an antecedent or as an intervening variable. The current study focused on trust as a dependent variable, and, although novel, it should be remembered that trust is a means to an end rather than an end in itself. Moreover, perhaps equally as many studies use familiarity as an antecedent or intervening variable, and very few studies seem to build a compelling argument for what familiarity is and what its antecedents are. Rather it appears that, like trust, familiarity also often gets “off-the-shelf” treatment. Future studies can, therefore, focus on a more in-depth consideration of familiarity in the context of MSPs.

References

- Baek, T. H., Kim, J., and Yu, J. H. 2010. “The Differential Roles of Brand Credibility and Brand Prestige in Consumer Brand Choice.” *Psychology and Marketing* 27 (7): 662–678. <https://doi.org/10.1002/mar.20350>.
- Bagozzi, R. P., and Yi, Y. 1988. “On the Evaluation of Structural Equation Models.” *Journal of the Academy of Marketing Science* 16 (1): 74–94. <https://doi.org/10.1007/BF02723327>.
- Banker, D., Mashruwala, R., and Tripathy, A. 2014. “Does a Differentiation Strategy Lead to more Sustainable Financial Performance than a Cost Leadership Strategy?” *Management Decision* 52 (5): 872–896. <https://doi.org/10.1108/MD-05-2013-0282>.
- Bart, Y., Shankar, V., Sultan, F., and Urban, G. L. 2005. “Are the Drivers and Role of Online Trust the Same for all Web Sites and Consumers? A Large-Scale Exploratory Empirical Study.” *Journal of Marketing* 69 (4): 133–152. <https://doi.org/10.1509/jmkg.2005.69.4.133>.
- Bauer, R. A. 1960. “Consumer Behavior as Risk Taking.” In *Dynamic Marketing for a Changing World*, 389–398, edited by R. S. Hancock. Chicago: American Marketing Association.
- Becerra, E. P., Badrinarayanan, V., and Kim, C. H. 2013. “Influence of Thinking Tendencies on Online Transaction of Hybrid Retailers.” *Journal of Business Research* 66 (3): 336–344. <https://doi.org/10.1016/j.jbusres.2011.08.014>.

- Belanger, F., Hiller J. S., and Smith, W. J. 2002. "Trustworthiness in Electronic Commerce: The Role of Privacy, Security, and Site Attributes." *Journal of Strategic Information Systems* 11 (3–4): 245–270. [https://doi.org/10.1016/S0963-8687\(02\)00018-5](https://doi.org/10.1016/S0963-8687(02)00018-5).
- Boyer, K. K. 2001. "E-operations: A guide to Streamlining with the Internet." *Business Horizons* 44 (1): 47–54. [https://doi.org/10.1016/S0007-6813\(01\)80008-2](https://doi.org/10.1016/S0007-6813(01)80008-2).
- Byrne, B. M. 2003. "The Issue of Measurement Invariance Revisited." *Journal of Cross-Cultural Psychology* 34 (2): 155–175. <https://doi.org/10.1177/0022022102250225>.
- Camp, L. J. 2003. "Designing for Trust." In *Trust, Reputation and Security: Theories and Practice*, 15–29, edited by R. Falcone, and S. Bap. Berlin, Heidelberg: Springer. https://doi.org/10.1007/3-540-36609-1_3.
- Cao, M., Q. Zhang, and Seydel, J. 2006. "B2C E-Commerce Web Site Quality: An Empirical Examination." *Industrial Management and Data Systems* 105 (5): 645–661. <https://doi.org/10.1108/02635570510600000>.
- Casaló, L. V., Flavián, C., and Guinalfú, M. 2008. "Fundamentals of Trust Management in the Development of Virtual Communities." *Management Research News* 31: 324–338. <https://doi.org/10.1108/01409170810865145>.
- Castaldo, S., Premazzi, K., and Zerbini, F. 2010. "The Meaning (s) of Trust. A Content Analysis on the Diverse Conceptualizations of Trust in Scholarly Research on Business Relationships." *Journal of Business Ethics* 96 (4): 657–668. <https://doi.org/10.1007/s10551-010-0491-4>.
- Čater, T., and Čater, B. 2010. "Product and Relationship Quality Influence on Customer Commitment and Loyalty in B2B Manufacturing Relationships." *Industrial Marketing Management* 39 (8): 1321–1333. <https://doi.org/10.1016/j.indmarman.2010.02.006>.
- Chang, E. C., and Tseng, Y. F. 2013. "Research Note: E-Store Image, Perceived Value and Perceived Risk." *Journal of Business Research* 66 (7): 864–870. <https://doi.org/10.1016/j.jbusres.2011.06.012>.
- Chen, H. M., Wu, C. H., Tsai, S. B., Yu, J., Wang, J., and Zheng, Y. 2016. "Exploring Key Factors in Online Shopping with a Hybrid Model." *SpringerPlus* 1–19. <https://doi.org/10.1186/s40064-016-3746-4>.
- Cheung, C., and Lee, M. K. O. 2000. "Trust in Internet Shopping: A Proposed Model and Measurement Instrument." *AMCIS 2000 Proceedings* 681–689. Accessed May 23, 2017. <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1852%7B&%7Dcontext=amcis2000>.
- Cheung, C. M. K., and Lee, M. K. O. 2003. *An Integrative Model of Consumer Trust in Internet Shopping*. ECIS Proceedings Paper 48.

- Choi, S. M., and Rifon, N. J. 2002. "Antecedents and Consequences of Web Advertising Credibility: A Study of Consumer Response to Banner Ads." *Journal of Interactive Advertising* 3 (1): 12–24. <https://doi.org/10.1080/15252019.2002.10722064>.
- Clemons, E. K., Wilson, J., Matt, C., Hess, T., Ren, F., Jin, F., and Koh, N. S. 2016. "Global Differences in Online Shopping Behavior: Understanding Factors Leading to Trust." *Journal of Management Information Systems* 33 (4): 1117–1148. <https://doi.org/10.1080/07421222.2016.1267531>.
- Cohen, J. 1988. *Statistical Power Analysis for Behavioral Sciences*, 2nd edition. Mahwah, NJ: Lawrence Erlbaum.
- Coleman, S., and Kariv, D. 2013. "Gender, Performance and Financial Strategy: A Dynamic Capabilities Perspective." *Journal of Developmental Entrepreneurship* 18 (3): 1–24. <https://doi.org/10.1142/S1084946713500209>.
- Colle, D. 2018. "Multi-sided Platforms for the Internet of Things." In *Business Modeling and Software Design: 8th International Symposium, BMSD 2018, Vienna, Austria, July 2–4, 2018, Proceedings* (Vol. 319: 372). Springer.
- Cook, F. L., Jacobs, L. R., and Kim, D. 2010. "Trusting What You Know: Information, Knowledge, and Confidence in Social Security." *The Journal of Politics* 72 (2): 397–412. <https://doi.org/10.1017/S0022381610000034>.
- Corbitt, B. J., Thanasankit, T., and Yi, H. 2003. "Trust and E-Commerce: A Study of Consumer Perceptions." *Electronic Commerce Research and Applications* 2 (3): 203–215. [https://doi.org/10.1016/S1567-4223\(03\)00024-3](https://doi.org/10.1016/S1567-4223(03)00024-3).
- Corritore, C. L., Kracher, B., and Wiedenbeck, S. 2003. "On-Line Trust: Concepts, Evolving Themes, a Model." *International Journal of Human Computer Studies* 58 (6): 737–758. [https://doi.org/10.1016/S1071-5819\(03\)00041-7](https://doi.org/10.1016/S1071-5819(03)00041-7).
- Costante, E., Den Hartog, J., and Petkovic, M. 2015. "Understanding Perceived Trust to Reduce Regret." *Computational Intelligence* 31 (2): 327–347. <https://doi.org/10.1111/coin.12025>.
- Cyr, D. 2013. "Website Design, Trust and Culture: An Eight Country Investigation." *Electronic Commerce Research and Applications* 12 (6): 373–385. <https://doi.org/10.1016/j.elerap.2013.03.007>.
- Cyr, D., and Bonanni, C. 2005. "Gender and Website Design in E-business." *International Journal of Electronic Business* 3 (6): 565–582. <https://doi.org/10.1504/IJEB.2005.008536>.
- Dash, A. 2012. "Online Shopping and Customer Satisfaction: An Empirical Investigation." *International Journal of Research in Management, Economics and Commerce* 2 (11): 42–49.

- Dietz, G. 2011. "Going Back to the Source: Why Do People Trust Each Other?" *Journal of Trust Research* 1 (2): 215–222. <https://doi.org/10.1080/21515581.2011.603514>.
- Featherman, M. S., and Pavlou, P. A. 2003. "Predicting E-Services Adoption: A Perceived Risk Facets Perspective." *International Journal of Human Computer Studies* 59 (4): 451–474. [https://doi.org/10.1016/S1071-5819\(03\)00111-3](https://doi.org/10.1016/S1071-5819(03)00111-3).
- Flavián, C., Guinalú, M., and Gurrea, R. 2006. "The Role Played by Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty." *Information and Management* 43 (1): 1–14. <https://doi.org/10.1016/j.im.2005.01.002>.
- Fogel, J., and Nehmad, E. 2009. "Internet Social Network Communities: Risk Taking, Trust, and Privacy Concerns." *Computers in Human Behavior* 25 (1): 153–160. <https://doi.org/10.1016/j.chb.2008.08.006>.
- Fornell, C., and Larcker, D. F. 1981. "Evaluating Structural Equation Models with Unobservable Variables and Measurement Errors." *Journal of Marketing Research* 18: 39–50. <https://doi.org/10.2307/3150980>; <https://doi.org/10.1177/002224378101800104>; <https://doi.org/10.1177/002224378101800313>; <https://doi.org/10.2307/3151312>.
- Friedman, B., Kahn, P. H., and Howe, D. C. 2000. "Trust Online." *Communications of the ACM* 43 (12): 34–40. <https://doi.org/10.1145/355112.355120>.
- Gambetta, D. 2000. "Can We Trust Trust?" In *Trust: Making and Breaking Cooperative Relations* (electronic edition), 213–237, edited by D. Gambetta. Oxford: Department of Sociology, University of Oxford. <https://www.csee.umbc.edu/~msmith27/readings/public/gambetta-1988a.pdf>.
- Ganguly, B., Dash, S. B., and Cyr, D. 2011. "The Interrelationship of Personal Variables, Website Characteristics and Trust in Online Travel Portals." *Tourism Recreation Research* 36 (1): 57–68. <https://doi.org/10.1080/02508281.2011.11081660>.
- Gefen, D. 2000. "E-commerce: The Role of Familiarity and Trust." *Omega* 28 (6): 725–737. [https://doi.org/10.1016/S0305-0483\(00\)00021-9](https://doi.org/10.1016/S0305-0483(00)00021-9).
- Gefen, D., Karahanna, E., and Straub, D. W. 2003. "Trust and TAM in Online Shopping: An Integrated Model." *MIS Quarterly* 27 (1): 51–90. <https://doi.org/10.2307/30036519>.
- Gumtree. 2017. Gumtree ZA support—Gumtree basics—About us. https://help.gumtree.co.za/articles/KB_Article/About-Us?vgroup1=PublicKB&vcategory1=PublicKB%3AGumtree_Basics&vcategory2=About_us.
- Guo, C., Shim, J. P., and Otondo, R. 2010. "Social Network Services in China: An Integrated Model of Centrality, Trust, and Technology Acceptance." *Journal of Global Information Technology Management* 13 (2): 76–99. <https://doi.org/10.1080/1097198X.2010.10856515>.

- Hagiu, A. 2014. "Strategic Decisions for Multisided Platforms." *MIT Sloan Management Review* 55 (2): 71–80.
- Hagiu, A., and Wright, J. 2015. "Multi-sided Platforms." *International Journal of Industrial Organization* 43: 162–174. <https://doi.org/10.1016/j.ijindorg.2015.03.003>.
- Hair, J. F., Hult, T. M., Ringle, C. M. and Sarstedt, M. 2017. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd edition. Los Angeles: Sage. <https://doi.org/10.15358/9783800653614>.
- Hair, J. F., Risher, J. J., Sarstedt, M., and Ringle, C. M. 2018. "When to Use and how to Report the Results of PLS-SEM." *European Business Review*, (just-accepted), 00–00.
- Hair J. F., Sarstedt M., and Ringle C. M. 2019. "Rethinking Some of the Rethinking of Partial Least Squares." *European Journal of Marketing*, forthcoming. <https://doi.org/10.1108/EJM-10-2018-0665>.
- Hardy, J. 2018. "Branded Content: Media and Marketing Integration." In *The Advertising Handbook*, 102–117, edited by J.. Hardy, I. Macrury, and H. Powell. New York: Routledge. <https://doi.org/10.4324/9781315558646-8>.
- Harris, K. E., Grewal, D., Mohr, L. A., and Bernhardt, K. L. 2006. "Consumer Responses to Service Recovery Strategies: The Moderating Role of Online Versus Offline Environment." *Journal of Business Research* 59 (4): 425–431. <https://doi.org/10.1016/j.jbusres.2005.10.005>.
- Hasan, B. 2016. "Perceived Irritation in Online Shopping: The Impact of Website Design Characteristics." *Computers in Human Behavior* 54: 224–230. <https://doi.org/10.1016/j.chb.2015.07.056>.
- Hennig-Thurau, T., Malhotra, E. C., Frieger, C., Gensler, S., Lobschat, L., Rangaswamy, A., and Skiera, B. 2010. "The Impact of New Media on Customer Relationships." *Journal of Service Research* 13 (3): 311–330. <https://doi.org/10.1177/1094670510375460>.
- Henseler, J., Ringle, C. M., and Sarstedt, M. 2014. "A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modelling." *Journal of the Academy of Marketing Science* 43 (1): 115–135. <https://doi.org/10.1007/s11747-014-0403-8>.
- Henseler, J., Dijkstra, T. K., Sarstedt, M., et al. 2014. "Common Beliefs and Reality about Partial Least Squares: Comments on Rönkkö and Evermann." *Organizational Research Methods* 17 (2): 182–209. <https://doi.org/10.1177/1094428114526928>.
- Henshel, D., Cains, M. G., Hoffman, B., and Kelley, T. 2015. "Trust as a Human Factor in Holistic Cyber Security Risk Assessment." *Procedia Manufacturing* (3): 1117–1124. <https://doi.org/10.1016/j.promfg.2015.07.186>.

- Hernández, B., Jiménez, J., and José Martín, M.. 2011. "Age, Gender and Income: Do they really Moderate Online Shopping Behaviour?" *Online Information Review* 35 (1): 113–133. <https://doi.org/10.1108/14684521111113614>.
- Hoffman, L. J., Lawson-Jenkins, K., and Blum, J. 2006. "Trust Beyond Security." *Communications of the ACM* 49 (7): 94–101. <https://doi.org/10.1145/1139922.1139924>.
- Hsu, C. J. 2008. "Dominant Factors for Online Trust." *Proceedings of the 2008 International Conference on Cyberworlds*, 165–172. <https://doi.org/10.1109/CW.2008.21>.
- Hu, X., Wu, G., Wu, Y., and Zhang, H. 2010. "The Effects of Web Assurance Seals on Consumers' Initial Trust in an Online Vendor: A Functional Perspective." *Decision Support Systems* 48 (2): 407–418. <https://doi.org/10.1016/j.dss.2009.10.004>.
- Jiménez, F. R., and Mendoza, N. A. 2013. "Too Popular to Ignore: The Influence of Online Reviews on Purchase Intentions of Search and Experience Products." *Journal of Interactive Marketing* 27(3): 226–235. <https://doi.org/10.1016/j.intmar.2013.04.004>.
- Jones, K., and Leonard, L. N. K. 2008. "Trust in Consumer-to-Consumer Electronic Commerce." *Information and Management* 45 (2): 88–95. <https://doi.org/10.1016/j.im.2007.12.002>.
- Kauffman, R. J., Lai, H., and Lin, H. C. 2010. "Consumer Adoption of Group-Buying Auctions: An Experimental Study." *Information Technology and Management* 11 (4): 191–211. <https://doi.org/10.1007/s10799-010-0068-z>.
- Kim, D. J., Ferrin, D. L., and Rao, H. R. 2008. "A Trust-Based Consumer Decision-Making Model in Electronic Commerce: The Role of Trust, Perceived Risk, and their Antecedents." *Decision Support Systems* 44 (2): 544–564. <https://doi.org/10.1016/j.dss.2007.07.001>.
- Kline, R. B. 2011. *Principles and Practice of Structural Equation Modeling*. New York: Guilford Press.
- Kock, N. 2015 "Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach." *International Journal of e-Collaboration* 11 (4): 1–10. <https://doi.org/10.4018/ijec.2015100101>.
- Kollmann, T., and Hasel, M. 2008. "Cross-Channel Cooperation: On the Collaborative Integration of Online and Offline Business Models of E-Entrepreneurs and Traditional SMEs." *International Journal of Entrepreneurship and Small Business* 6 (2): 212–229. <https://doi.org/10.1504/IJESB.2008.018629>.
- Komiak, S. Y., and Benbasat, I. 2006. "The Effects of Personalization and Familiarity on Trust and Adoption of Recommendation Agents." *MIS Quarterly* 941–960. <https://doi.org/10.2307/25148760>.

- Kumar, N., Scheer, L. K., and Steenkamp, J. E. M. 1995. "The Effects of Perceived Interdependence on Dealer Attitudes." *Journal of Marketing Research* 32 (3): 348–356. <https://doi.org/10.1177/002224379503200309>; <https://doi.org/10.2307/3151986>.
- Lam, S. Y., Shankar, V., Erramilli, M. K., and Murthy, B. 2004. "Customer Value, Satisfaction, Loyalty, and Switching Costs: An Illustration from a Business-to-Business Service Context." *Journal of the Academy of Marketing Science* 32 (3): 293–311. <https://doi.org/10.1177/0092070304263330>.
- LaRose, R., and Rifon, N. 2006. "Your Privacy is Assured of Being Disturbed: Websites with and without Privacy Seals." *New Media and Society* 8 (6): 1009–1029. <https://doi.org/10.1177/1461444806069652>.
- Levine, E. E., Bitterly, T. B., Cohen, T. R., and Schweitzer, M. E. 2018. "Who Is Trustworthy? Predicting Trustworthy Intentions and Behavior." *Journal of Personality and Social Psychology* 115(3): 468–494. <https://doi.org/10.1037/pspi0000136>.
- Li, Y. 2014. "The Impact of Disposition to Privacy, Website Reputation and Website Familiarity on Information Privacy Concerns." *Decision Support Systems* (57): 343–354. <https://doi.org/10.1016/j.dss.2013.09.018>.
- Lian, J. W., and Yen, D. C. 2014. "Online Shopping Drivers and Barriers for Older Adults: Age and Gender Differences." *Computers in Human Behavior* (37): 133–143. <https://doi.org/10.1016/j.chb.2014.04.028>.
- Liebermann, Y., and Stashevsky, S. 2002. "Perceived Risks as Barriers to Internet and E-Commerce Usage." *Qualitative Market Research: An International Journal* 5 (4): 291–300. <https://doi.org/10.1108/13522750210443245>.
- Lin, X., and Leung, K. 2014. "What Signals Does Procedural Justice Climate Convey? The Roles of Group Status, and Organizational Benevolence and Integrity." *Journal of Organizational Behavior* 35 (4): 464–488. <https://doi.org/10.1002/job.1899>.
- Lount Jr, R. B., and Pettit, N. C. 2012. "The Social Context of Trust: The Role of Status." *Organizational Behavior and Human Decision Processes* 117 (1): 15–23. <https://doi.org/10.1016/j.obhdp.2011.07.005>.
- Luhmann, N. 1979. *Trust and Power*. Chichester, UK: John Wiley and Sons.
- Luhmann, N. 2000. "Familiarity, Confidence, Trust: Problems and Alternatives." In *Trust: Making and Breaking Cooperative Relations*, 94–107, edited by G. Diego. Hoboken, NJ: Blackwell.
- Luo, S. F., and Lee, T. Z. 2011. "The Influence of Trust and Usefulness on Customer Perceptions of E-Service Quality." *Social Behavior and Personality: An International Journal* 39 (6): 825–837. <https://doi.org/10.2224/sbp.2011.39.6.825>.

- Luo, X., Li, H., Zhang, J., and Shim, J. P. 2010. "Examining multi-dimensional trust and multi-faceted risk in initial acceptance of emerging technologies: An empirical study of mobile banking services." *Decision Support Systems* 49 (2): 222–234. <https://doi.org/10.1016/j.dss.2010.02.008>.
- Madsen, M., and Gregor, S. 2000. "Measuring Human-Computer Trust." *Proceedings of 11th Australasian Conference on Information Systems*, 6–8.
- Mai, N. T. T., Yoshi, T., and Tuan, N. P. 2014. "Determinants of Online Customer Satisfaction in an Emerging Market: A Mediator Role of Trust." *International Journal of Contemporary Management* 13 (1): 8–30.
- Mallapragada, G., Chandukala, S. R., and Liu, Q. 2016. "Exploring the Effects of 'What' (Product) and 'Where' (Website): Characteristics on Online Shopping Behaviour." *Journal of Marketing* 80 (2): 21–38. <https://doi.org/10.1509/jm.15.0138>.
- Masoud, E. Y. 2013. "The Effect of Perceived Risk on Online Shopping in Jordan." *European Journal of Business and Management* 5 (6): 76–87.
- McDowell, W. C., Wilson, R. C., and Kile, C. O. 2016. "An Examination of Retail Website Design and Conversion Rate." *Journal of Business Research* 69 (11): 4837–4842. <https://doi.org/10.1016/j.jbusres.2016.04.040>.
- McKnight, D. H., Choudhury, V., and Kacmar, C. J. 2000. "Trust in E-Commerce Vendors: A Two-Stage Model." *Proceedings of the 21st International Conference on Information Systems*. Association for Information Systems, 532–536.
- Merriam-Webster Dictionary. 2017. "Definition of Trust." <https://www.merriam-webster.com/dictionary/trust>.
- Mittendorf, C. 2018. "Collaborative Consumption: The Role of Familiarity and Trust among Millennials." *Journal of Consumer Marketing* (in press). <https://doi.org/10.1108/JCM-12-2016-2040>.
- Moorman, C., Zaltman, G., and Deshpande, R. 1992. "Relationships between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations." *Journal of Marketing Research* 29 (3): 314–328. <https://doi.org/10.2307/3172742>; <https://doi.org/10.1177/002224379202900303>
- Morgan, R. M., and Hunt, S. D. 1994. "Theory of Relationship Marketing." *Journal of Marketing* 58 (3): 20–38. <https://doi.org/10.2307/1252308>; <https://doi.org/10.1177/002224299405800302>.
- Naik, P. A., and Peters, k. 2009. "A Hierarchical Marketing Communications Model of Online and Offline Media Synergies." *Journal of Interactive Marketing* 23 (4): 288–299. <https://doi.org/10.1016/j.intmar.2009.07.005>.

- Nunnally, J. C. 1978. "Assessment of Reliability." In *Psychometric Theory*, 245, 2nd edition, edited by J. C. Nunnally. New York: McGraw-Hill.
- Ou, C. X., and Sia, C. L. 2010. "Consumer Trust and Distrust: An Issue of Website Design." *International Journal of Human-Computer Studies* 68 (12): 913–934. <https://doi.org/10.1016/j.ijhcs.2010.08.003>.
- Pan, L. Y., and Chiou, J. S. 2011. "How much Can you Trust Online Information? Cues for Perceived Trustworthiness of Consumer-Generated Online Information." *Journal of Interactive Marketing* 25 (2): 67–74. <https://doi.org/10.1016/j.intmar.2011.01.002>.
- Pauwels, K., and Weiss, A. 2008. "Moving from Free to Fee: How Online Firms Market to Change their Business Model Successfully." *Journal of Marketing* 72 (3): 14–31. <https://doi.org/10.1509/JMKG.72.3.014>; <https://doi.org/10.1509/jmkg.72.3.14>.
- Pavlou, P. 2016. "Consumer Acceptance of Electronic Commerce : Integrating Trust and Risk with the Technology Acceptance Model." *International Journal of Electronic Commerce* 7 (3): 101–134. <https://doi.org/10.1080/10864415.2003.11044275>.
- Pavlou, P. A., and Gefen, D. 2004. "Building Effective Online Marketplaces with Institution-Based Trust." *Information Systems Research* 15 (1): 37–59. <https://doi.org/10.1287/isre.1040.0015>.
- Pengnate, S. F., and Sarathy, R. 2017. "An Experimental Investigation of the Influence of Website Emotional Design Features on Trust in Unfamiliar Online Vendors." *Computers in Human Behavior* 67: 49–60. <https://doi.org/10.1016/j.chb.2016.10.018>.
- Pieters, W. 2011. "Explanation and Trust: What to Tell the User in Security and AI?" *Ethics and Information Technology* 13 (1): 53–64. <https://doi.org/10.1007/s10676-010-9253-3>.
- Porter, M. 2001. "Strategy and the Internet." *Harvard Business Review* 79 (3): 63–78.
- Ranaweera, C., and Prabhu, J. 2003. "The Influence of Satisfaction, Trust and Switching Barriers on Customer Retention in a Continuous Purchasing Setting." *International Journal of Service Industry Management* 14 (4): 374–395. <https://doi.org/10.1108/09564230310489231>.
- Rao, S. S., Truong, D., Senecal, S., and Le, T. T. 2007. "How Buyers' Expected Benefits, Perceived Risks, and E-Business Readiness Influence their E-Marketplace Usage." *Industrial Marketing Management* 36 (8): 1035–1045. <https://doi.org/10.1016/j.indmarman.2006.08.001>.
- Reichheld, F. F., and Schefter, P. 2000. "E-loyalty: Your Secret on the Web." *Harvard Business Review* 78 (4): 105–113.
- Reichheld, F. F., Markey Jr R. G., and Hopton, C. 2000. "E-Customer Loyalty: Applying the Traditional Rules of Business for Online Success." *European Business Journal* 12 (4): 173.

- Roca, J. C., García, J. J., and De la Vega, J. J. 2009. "The Importance of Perceived Trust, Security and Privacy in Online Trading Systems." *Information Management and Computer Security* 17 (2): 96–113. <https://doi.org/10.1108/09685220910963983>.
- Ruohomaa, S., and Kutvonen, L. 2005. "Trust Management." *Proceedings of the 3rd International Conference*, 77–92, iTrust, Paris, France, May 23–26. https://doi.org/10.1007/11429760_6.
- Salam, A. F., Rao, H. R., and Pegels, C. C. 2003. "Consumer-Perceived Risk in E-Commerce Transactions." *Communications of the ACM* 46 (12): 325. <https://doi.org/10.1145/953460.953517>.
- San-Martín, S., and Camarero, C. 2012. "A Cross-National Study on Online Consumer Perceptions, Trust, and Loyalty." *Journal of Organizational Computing and Electronic Commerce* 22 (1): 64–86. <https://doi.org/10.1080/10919392.2012.642763>.
- Seckler, M., Heinz, S., Forde, S., Tuch, A. N., and Opwis, K. 2015. "Trust and Distrust on the Web: User Experiences and Website Characteristics." *Computers in Human Behavior* 45: 39–50. <https://doi.org/10.1016/j.chb.2014.11.064>.
- Seock, Y. K., and Chen-Yu, J. H. 2007. "Website Evaluation Criteria among US College Student Consumers with Different Shopping Orientations and Internet Channel Usage." *International Journal of Consumer Studies* 31: 204–212. <https://doi.org/10.1111/j.1470-6431.2006.00502.x>.
- Shankar, V., Smith, A. K., and Rangaswamy, A. 2003. "Customer Satisfaction and Loyalty in Online and Offline Environments." *International Journal of Research in Marketing* 20 (2): 153–175. [https://doi.org/10.1016/S0167-8116\(03\)00016-8](https://doi.org/10.1016/S0167-8116(03)00016-8).
- Shehryar, O. 2008. "The Effect of Buyers' Gender, Risk-Proneness, and Time Remaining in an Internet Auction on the Decision to Bid or Buy-it-now." *Journal of Product and Brand Management* 17 (5): 356–365. <https://doi.org/10.1108/10610420810896112>.
- Shneiderman, B. 2000. "Designing Trust into Online Experiences." *Communications of the ACM* 43 (12): 57–57. <https://doi.org/10.1145/355112.355124>.
- Sia, C. L., Lim, H. H., Leung, K., Lee, M. K., Huang, W. W., and Benbasat, I. 2009. "Web Strategies to Promote Internet Shopping: Is Cultural-Customization Needed?" *MIS Quarterly* 33 (3): 491. <https://doi.org/10.2307/20650306>.
- Sirdeshmukh, D., Singh, J., and Sabol, B. 2002. "Consumer Trust, Value and Loyalty in Relational Exchanges." *Journal of Marketing* 66: 15–37. <https://doi.org/10.1509/jmkg.66.1.15.18449>.
- Sorce, P., Perotti, V., and Widrick, S. 2005. "Attitude and Age Differences in Online Buying." *International Journal of Retail and Distribution Management* 33 (2): 122–132. <https://doi.org/10.1108/09590550510581458>.

- Suh, B., and Han, I. 2003. "The Impact Of Customer Trust And Perception of Security Control on the Acceptance of Electronic Commerce." *International Journal of Electronic Commerce* 7 (3): 135–161. <https://doi.org/10.1080/10864415.2003.11044270>.
- Szcześniak, M., Colaço, M., and Rondón, G. 2012. "Development of Interpersonal Trust among Children and Adolescents." *Polish Psychological Bulletin* 43 (1): 50–58. <https://doi.org/10.2478/v10059-012-0006-5>.
- Teo, T. S. H., Srivastava, S. C., and Jiang, L. 2008. "Trust and Electronic Government Success: An Empirical Study." *Journal of Management Information Systems* 25 (3): 99–132. <https://doi.org/10.2753/MIS0742-1222250303>.
- Toch, E., Wang, Y., and Cranor, L. F. 2012. "Personalization and Privacy: A Survey of Privacy Risks and Remedies in Personalization-Based Systems." *User Modeling and User-Adapted Interaction* 22 (1–2): 203–220. <https://doi.org/10.1007/s11257-011-9110-z>.
- Tontini, G. 2016. "Identifying Opportunities for Improvement in Online Shopping Sites." *Journal of Retailing and Consumer Services* (31): 228–238. <https://doi.org/10.1016/j.jretconser.2016.02.012>.
- Toufaily, E., Souiden, N., and Ladhari, R. 2013. "Consumer Trust toward Retail Websites: Comparison between Pure Click and Click-and-Brick Retailers." *Journal of Retailing and Consumer Services* 20 (6): 538–548. <https://doi.org/10.1016/j.jretconser.2013.05.001>.
- Ungerer, M., Ungerer, G., and Herholdt, J. 2016. "Navigating Strategic Possibilities: Strategy Formulation and Execution Practices to Flourish." Johannesburg, SA: Knowledge Resources.
- Walsh, G., Hennig-Thurau, T., Sassenberg, K., and Bornemann, D. 2010. "Does Relationship Quality Matter in E-services? A Comparison of Online and Offline Retailing." *Journal of Retailing and Consumer Services* 17 (2): 130–142. <https://doi.org/10.1016/j.jretconser.2009.11.003>.
- Wan, Y., Nakayama, M., and Sutcliffe, N. 2012. "The Impact of Age and Shopping Experiences on the Classification of Search, Experience, and Credence Goods in Online Shopping." *Information Systems and e-Business Management* 10 (1): 135–148. <https://doi.org/10.1007/s10257-010-0156-y>.
- Weyl, E. 2010. "Imperfect Platform Competition: A General Framework." *Net Institute Working Paper*, 10–17. New York: New York University.
- Wood, J. A., Johnson, J., Boles, J. S., and Barksdale, H. 2014. "Investigating Sales Approaches and Gender in Customer Relationships." *Journal of Business and Industrial Marketing* 29 (1): 11–23. <https://doi.org/10.1108/JBIM-01-2012-0014>.

- Yang, Q., Pang, C., Liu, L., Yen, D. C., and Tarn, J. M. 2015. "Exploring Consumer Perceived Risk and Trust for Online Payments: An Empirical Study in China's Younger Generation." *Computers in Human Behavior* (50): 9–24. <https://doi.org/10.1016/j.chb.2015.03.058>.
- Zhang, P., Lazar, J., McCoy, S., Nah, F. F. H., Hess, T., and Kim, J. 2003. "Proceedings." 2nd Pre-ICIS Annual Workshop on HCI Research in MIS, December 12–13, Seattle, Washington.
- Zhang, W., Yang, X., Wang, Q., Zheng, C., and Sia, C. L. 2015. "Investigation on the Factors Determining Consumers' Use of Online Intermediated Shopping (OIS)." *Journal of Organizational and End User Computing* 27 (1): 77–97. <https://doi.org/10.4018/joeuc.2015010104>.
- Zheng, L., Favier, M., Huang, P., and Coat, F. 2012. "Chinese Consumer Perceived Risk and Risk Relievers in E-Shopping FOR Clothing." *Journal of Electronic Commerce Research* 13 (3): 255.