

The Effects of Information Quality on Trust in Vendor and Seller Uncertainty on Online Shopping-Decision

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Abstract: This study examines how information quality of online reviews influences trust in vendor and seller uncertainty, respectively, which subsequently influence repeat purchase intention for online shopping decision-making of undergraduate students in China. The findings of this study indicate that information quality positively influence trust in vendor and negatively influence seller uncertainty, whereas trust in vendor has a positive effect on repeat purchase intention and seller uncertainty has a negative effect on repeat purchase intention.

1. Introduction

Consumers usually acquire product information through online reviews for their online shopping decision-making [1]. Online sellers also heavily rely on online reviews for their product sales [2]. Information quality of online reviews can predict sellers' website quality [3] and provides the accuracy, currency, usefulness of information to customers [4], who evaluate the degree of sellers' trustworthiness and uncertainty to make judgments for their online shopping decisions. Thus, information quality is related to sellers' attributes (i.e. trust and uncertainty), which then influence consumers' repeat purchase intentions.

Trust in vendor refers to consumers trust in sellers in online transactions context [5]. It reflects that customers rely on online vendors to provide the best products/services [6] and is a key factor on customers' purchase intentions in e-commerce context [5, 7]. In addition, consumers make judgments on sellers' uncertainty through the feedback from other consumers and the communication and past transactions with sellers in online transactions context [8]. Thus, online review and information quality are pivotal factors and play critical roles on seller uncertainty. Consumers perceive high uncertainty in online context [9]. Risks from uncertainty influence their online shopping decisions.

This study proposes two research questions. How does information quality influence trust in vendor and seller uncertainty? How do trust in vendor and seller uncertainty influence repeat purchase intention respectively? Overall, the results of this study indicate that information quality helps consumers to identify the trustworthiness and uncertainty of online sellers and make their decisions on repeat purchase intentions via trust in vendor and seller uncertainty.

2. Theoretical foundations and research model

2.1 Consequences of information quality

Information quality refers to "the quality of the content of a consumer reviews from the perspective of information characteristics" [2] and involves in an online review [3]. It reflects the strong point of informational content [10] and consumers' perceptions of argument's cogency [11]. Online shopping is full of risk. Online buyers rely on the information provided by website because

they usually do not have enough sources of product/service information. It is crucial that online sellers provide accurate and timely information to customers [12]. Thus, information quality plays a pivotal role of customers' purchasing decisions [13]. They sink into the situation of asymmetric information and rely on others' reviews to judge online sellers' quality. These reviews include deliver time, product information, users' subjective experiences with forms of pictures, videos and words, which provide evidences for consumers' purchasing decisions. Online sellers are more likely to fulfill their obligations if buyers believe that they intend to maintain accurate and current information [13]. In other words, online sellers who provide high quality information can facilitate buyers to believe that they keep their commitments and promises. It improves buyers' trust that online sellers care about their interests. Thus, high quality information is a key factor that influences consumers' trust in vendors in online shopping context. On the contrary, consumers may perceive seller uncertainty when online sellers intentionally provide inaccurate information. Seller uncertainty is related to online sellers are not willing to exposure their true characteristics and potential ex post opportunism [9].

Buyers need to copy with online sellers' opportunistic behavior [14]. Consumers' online reviews provide user-oriented information about product/service quality and electronic word-of-mouth of previous consumers' recommendations [2]. Thus, the information quality of online reviews helps consumers to evaluate their beliefs towards sellers. Consumers infer sellers' true characteristics base on a great quantity of information [9]. This study proposes the following hypotheses.

H1. Information quality positively influences trust in vendor.

H2. Information quality negatively influences seller uncertainty.

2.2 Antecedents of repeat purchase intention

2.2.1 Trust in vendor

Trust has been widely investigated by researchers in different disciplines such as management, sociology and psychology. It is the willingness of one party's vulnerability to another party's behavior. Furthermore, psychologists treat it as the ability of a trustee fulfilling her/his commitment [15]. Trust refers to consumers' repeat trust. Consumers trust vendors through previous transactions with these vendors [15]. Trust is based on the trustee's ability, benevolence and integrity [15]. Ability refers to a trusted party's skill. Benevolence is the trusted vendor's goodwill for consumers. Moreover, integrity refers to the trusted vendor keep her/his honesty and promise [16]. Trust in vendor is defined as a belief that consumers trust e-vendor to show her/his ability, benevolence and integrity and fulfill her/his commitments in online interaction process.

Trust is a central attribute during the process of relationship development in various exchange contexts [17]. The past interaction process generates experiences (e.g., online review) of the primary source of trust toward a vendor [18]. The information quality about an online review is an evidence on trusting in vendor. Buyers expect that online sellers behave in a dependable, ethical and suitable manner and fulfill her/his commitment even if they are vulnerable and dependent [19]. Thus, the trustworthiness determines consumers' purchasing decisions [19]. Trust is regarded as a confident belief that has a positive effect on the willingness of conducting an online transaction in the online context [17]. Trust is an important factor of repeat purchase intention [18]. Thus, this study proposes the following hypothesis.

H3. Trust in vendor positively influences repeat purchase intention.

2.2.2 Seller uncertainty

Seller uncertainty is defined as "the buyer's difficulty in assessing the seller's true characteristics and predicting whether the seller will act opportunistically" [8]. Sellers are more likely to show opportunistic behavior due to self-interest. They may misrepresent their true characteristics that lead consumers to perceive seller uncertainty [8]. Consumers' uncertainty perceptions heavily rely on information inadequacies [9]. Defrauding consumers, delay delivery date, inaccurate information, misrepresentation website description, renege on their agreement with customers lead to seller uncertainty [8], which triggers consumers' perceptions of transaction risk with sellers. Thus, seller

uncertainty has a negative effect on customers' intentions of repeat purchase [9]. Seller uncertainty leads to the risk aversion behavior in online context [9]. Customers are more likely to terminate the ongoing and future transactions with sellers. Thus, this study proposes the following hypothesis.

H4. Seller uncertainty negatively influences repeat purchase intention.

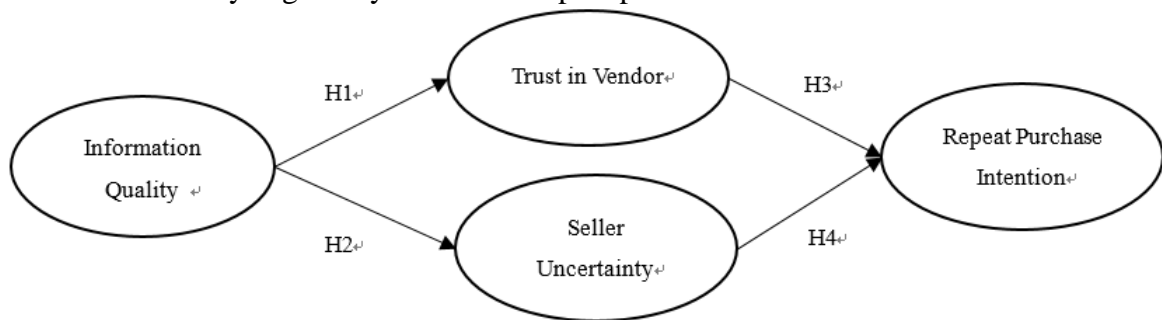


Figure 1 Proposed Research Model.

3. Methods

3.1 Measurement

All measurement items of four constructs were derived from previous research for the online shopping context. Four measurement items of information quality were adapted from Kim and Park [12]. Five measurement items of trust in vendor were adapted from Qureshi et al. [20]. Six measurement items of seller uncertainty were derived from Dimoka et al. [8]. Three measurement items of repeat purchase intention were adapted from Chiu et al. [21]. All measurement items were based on a seven-point Likert-type scale (1-strongly disagree to 7-strongly agree). This study conducted a pretest by one MIS professor and fifteen undergraduate students to ensure the wordings of measurement items. Each respondent at least has one year of online shopping experience.

3.2 Sample

All subjects are undergraduate students who enroll in a major university in Guangdong, China. A total of 189 filled questionnaires were received out of which 160 were valid, which results in a response rate with 84.66%.

3.3 Common method variance

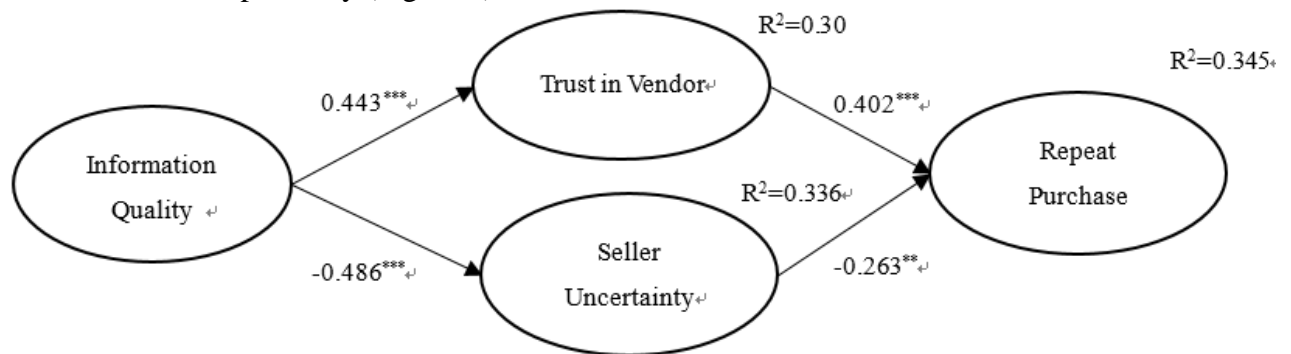
Prevention and post-detection procedures were adopted to mitigate the common method variance (CMV) problem. This study randomized the order of the constructs [22] and adopted Harman's single-factor test for exploratory factor analysis. The result indicates that the most influential factor explained 42.02% of variance. Thus, CMV is not serious concern for this study.

4. Results

The measurement model and structural model [23] with AMOS 22.0 versions of structural equation modeling software were used to analyze data. Meanwhile, this study confirmed composite reliabilities (CR) and average of variance extracted (AVE) for convergent validity by measurement model [24]. The results of the measurement model indicate that factor loadings of all measurement items are higher than 0.5 [25] and composite reliability and Cronbach alphas values all are higher than 0.70 [26, 27]; AVE are higher than 0.5 [26]. This study also verified the discriminant validity with the evidence of the square root of AVE for each construct higher than its correlation coefficients with other constructs. The results indicated acceptable discriminant validity and convergent validity.

This study analyzed the path coefficients by structural model to validate the research hypotheses. The results indicate an adequate model fit: $\chi^2 = 190.792$, $df = 131$, $\chi^2/df = 1.456$, Goodness-of-fit index (GFI) = 0.883, Nonnormed fit index (NFI) = 0.893, Tucker-Lewis index (TLI) = 0.957,

Incremental fit index (IFI) = 0.964, Comparative fit index (CFI) = 0.963, Parsimonious normed-fit index (PNFI) = 0.764, Root mean square error of approximation (RMSEA) = 0.054. The results indicate that information quality has a positive effect on trust in vendor but has a negative effect on seller uncertainty. Trust in vendor positively influences repeat purchase intention, whereas seller uncertainty negatively influences repeat purchase intention. Consequently, H1, H2, H3, H4 are all supported. The R^2 is 30.6%, 33.6% and 34.5% for trust in vendor, seller uncertainty and repeat purchase intention, respectively (Figure 2).



Notes: ** $p < 0.01$, *** $p < 0.001$
 $\chi^2 = 190.792$, $df = 131$, $\chi^2/df = 1.456$, GFI=0.883, AGFI=0.847, NFI=0.893, IFI=0.964, CFI=0.963, RMSEA=0.054

Fig.2 Results of Structural Modelling Analysis.

5. Conclusions

This research investigates how information quality influences consumers' perceptions (e.g., trust in vendor and seller uncertainty) toward online seller for their shopping decision-making in online shopping context. The subjects are undergraduate students from a university in China. The results indicate that information quality positively influences trust in vendor and negatively influences seller uncertainty. In addition, trust in vendor positively influences repeat purchase intention, whereas seller uncertainty negatively influences repeat purchase intention. This study provides practical implications to e-commerce managers. Websites' sellers should encourage consumers to post high quality reviews to other consumers for online shopping purchasing decisions. They also should reduce opportunistic behavior to consumers and build customers' trustworthiness with objective and true information about product and themselves. After all, trust in vendor fosters consumers' repeat purchase intentions, whereas seller uncertainty mitigates their repeat purchase intentions in online shopping context. This research has some limitations. Firstly, most of the respondents are mainly female students. Secondly, this study did not consider other factors such as relationship strength between sellers and consumers in online shopping context. Future research may consider its moderating role. Thirdly, this study only investigated one province in China. Future research can explore more respondents from different universities of other provinces in China to increase the external validity and generalizability.

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