# What drives purchase intention on Airbnb? Perspectives of consumer reviews, information quality, and media richness

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ABSTRACT

The owners of idle assets and their potential users create economic benefits through providing or sharing idle assets or skills, and this process has been formalized and monetized at large scales by companies such as Uber, Airbnb, USpace and others. This research seeks to understand the factors affecting the purchase intention on Airbnb users in terms of five key factors: rating, rating volume, review, information quality, and media richness. ANOVA and path analysis are used to test the relationships of these factors with perceived value, satisfaction and purchase intention. Results indicate that perceived value and satisfaction are key determinants of intention to buy, while rating volume, review, information quality, and media richness are important precursors. In addition, gender and usage experiences with Airbnb are also used to classify the sample to assess the difference between each classification. The results of this study can provide a useful reference to researchers and firms and individuals working in the sharing economy.

## 1. Introduction

The sharing economy (Felson and Spaeth, 1978) refers to the redistribution of under-used resources, allowing those in need to borrow resources cheaply while providing resource owners with benefits they might otherwise forego. Sharers directly exchange goods or services, providing economic benefits for both providers and users. The development of the internet has vastly facilitated the emergence of large-scale sharing economies, effectively consolidating economic surpluses into easily-navigated platforms to match supply and demand of various products and services at a global scale, generating new economic benefits and resolving inefficiencies associated with economic surpluses.

Airbnb, an accommodation booking website which matches house and apartment owners with short-term tenants, first entered Taiwan in 2013 and has rapidly emerged as the most popular such service. Accommodations booked through Airbnb are frequently less expensive than hotels, thus attracting many backpackers and independent travelers. People in Taiwan travel frequently, taking nearly 208 million domestic trips in 2016, along with nearly 1.5 million international trips (Tourism Bureau, Ministry of Transportation and Communications R.O.C., 2017). Increasingly, these travelers forego hotel accommodation in favor of shared apartments and homes found through online services such as Airbnb. Since it first entered the Taiwan market in 2013, Airbnb has expanded rapidly and is now the leading online private-home booking service with nearly 11,000 locations listed (H&B Business Group, 2016).

Given the growing popularity of Airbnb and similar services in Taiwan, along with the rapidly growing availability of properties, this study seeks to identify and assess factors which are likely to increase the consumer's willingness to book accommodations

through Airbnb.

## 2. Literature review

### 2.1. Sharing economy

The development and spread of information and communication technologies has driven the emergence of so-called collaborative consumption (CC) through which individuals provide each other with goods and services through an online intermediary. CC can reduce transaction costs to buyers and sellers (Henten and Windekilde, 2016), while potentially reducing certain social problems, such as overconsumption, pollution and poverty (Hamari et al., 2016). The concept has spread rapidly across online social networks, redistributing otherwise idle resources and generating economic benefits, and thereby accelerating the development of sharing economies.

### 2.2. Consumer review method

Online ratings and reviews have already become standard features for many consumer-facing online services, providing useful product and service information to other potential consumers (Engler et al., 2015). Where appropriate, many services also allow sellers to rate purchasers, providing a trust-building and feedback mechanism that facilitates future transactions (Cui et al., 2012). Travel-related services have increasingly migrated to online platforms in recent years, and such services frequently make buyer and seller feedback publicly available. From the consumer's perspective, the travel experience entails three phases: anticipation, experience and reflection. Based on these three phases, travelers gather information, make travel decisions and manage their travel plans (Bae et al., 2016). Goldsmith and Horowitz (2006) pointed out that consumers frequently seek out the opinions of other consumers online to reduce the risk of expectation failure (Kirmani and Rao, 2000).

In recent years, online reviews have become a critical concern in the hospitality industry, with key factors including review quality, quantity, and consistency (Xie et al., 2016). Changes in the volume of reviews will affect the hotel's overall rating and revenue (Xie et al., 2014). The "quality" of electronic word-of-mouth reviews refers to the content and volume of such feedback (Chevalier and Mayzlin, 2006). Therefore, this study treats online reviews as having both quantitative (ratings and rating volume) and qualitative (review content) aspects (Gruen et al., 2006). The evaluation methods in this study were divided into three categories as follows:

- *Rating:* A standardized numeric representation of the consumer's overall satisfaction with the seller's services (e.g., 1–5 stars), generally with a higher score reflecting greater satisfaction (Goodwin and Ross, 1989;Lapidus and Pinkerton, 1995).
- *Rating Volume:* The accumulated number of ratings for each item. Consumers purchasing high priced goods tend to be skeptical of items with few or less recent ratings.
- *Review:* A free-form text comment through which the consumer describes his/her experience with and or perception of the service consumed, providing a useful reference for potential future consumers. Lee and Shin (2014) noted that such reviews have a significant impact on purchase intention.

### 2.3. Information quality

Information quality refers to the accuracy, completeness, clarity, comprehensibility, usefulness, and reliability of information system data outputs. Park and Kim (2006) suggested that consumer's place high value on reliable online product information. Faced with huge amounts of online information of uncertain reliability, consumers place a premium on information quality, and the availability or lack of quality information will influence the consumers' shopping experience and intention to buy products and services online (Ghasemaghaei and Hassanein, 2016). Purchasers are more likely to trust websites which provide what users perceive as being independent product and service reviews from authentic consumers. The provision of accurate, timely and trustworthy information creates a sense of trust on the part of potential consumers (Xie et al., 2017).

### 2.4. Media richness

Daft and Lengel (1983) suggested that different types of communication media convey different levels of information and the richness of information transferred over a period of time depends on the ability of the medium to convey various types of feedback. Richer information inspires greater trust (Lu et al., 2014), thus websites should seek to convey information through rich media formats. However, the selection of media format is dependent on the relationship between technology, environment, and internal organization. The effective integration of social media presence and advertising creates a sense of media richness which can encourage purchase intention.

**Table 1**

Definition of the constructs.

| Construct | Definition |
| --- | --- |
| Rating (RA) | Consumer rates various aspects of the Airbnb accommodations on a scale of 1–5 stars |
| Rating Volume (RV) | The number of consumer ratings for a particular Airbnb property |
| Review (RE) | Text evaluation of the consumer's experience of the property and interaction with the landlord |
| Information Quality (IQ) | Reflection of completeness, accuracy and reliability of the property information provided by the landlord |
| Media Richness (MR) | The ease and speed with which potential consumers can communicate with the seller |
| Perceived Value (PV) | The accommodation value as perceived by the consumer |
| Satisfaction (SA) | Perceived value for money |
| Purchase Intention (PI) | The likelihood of the consumer purchasing accommodation via Airbnb or of recommending the service to friends or family |

## 3. Research method

### 3.1. Research model

Airbnb is an online intermediary between property owners and short-term renters which has expanded very rapidly worldwide since its founding in 2008 (Clampet, 2015). Teubner et al. (2017) suggested that consumers wish to feel "a sense of belonging" even they are away from home, and that this is dependent on a sense of mutual trust between the landlord and the tenant, and this trust is established through information provided by both parties. The buyers seek information including rich-media text and visual depictions of the property, along with reviews of the property provided by previous tenants. The landlords seek information on their potential tenants in terms of reviews the tenant has written about properties he/she has previously rented, and reviews of the tenant provided by other landlords who have previously interacted with the potential tenant.

A questionnaire was developed based on interaction with the Airbnb booking site. Prior to filling out the questionnaire, participants were shown videos produced by Airbnb to introduce the company's services. Descriptive statistics were then applied and hypotheses were tested using factor analysis, validity analysis, and structural equation modeling analysis to determine factors which influence online booking intention for sharing economy services. Operational definitions are listed in Table 1 and Fig. 1 depicts the 8 constructs and 9 hypotheses of the research model.

### 3.2. Research hypotheses

#### 3.2.1. Impact of rating on consumer purchase intention and perceived value

According to Zervas et al., 2014, over half of Airbnb hosts have 5 star ratings. All reviews on Airbnb are written by authenticated guests following their stay. To establish review transparency and credibility, Airbnb hosts are not allowed to delete negative reviews, and the volume and content of these reviews are intended to allow potential tenants to evaluate the quality of the property and the reliability of the landlord.

Consumer reviews are key references for travelers assessing accommodation options and are an important means of reducing travel risk (Papathanassis and Knolle, 2011). Ye et al. (2011) suggested that customer reviews have a significant impact on online sales, with a 10% increase in the volume of customer reviews producing an increase in bookings of > 5%, and positive reviews have a significant impact on purchase intention (Lee and Shin, 2014). Online travel communities with established reputations have better
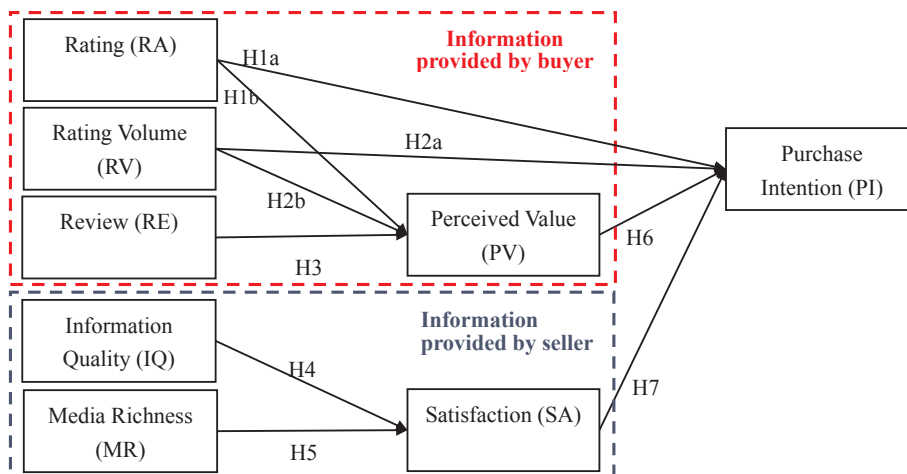


**Fig. 1.** Research Model.

credibility, and reviews from such communities are seen as being more trustworthy by consumers (Casalo et al., 2015).

Consumer perception of online reviews is dependent both on quality (i.e., the content of individual reviews) and quantity (i.e., the overall number of reviews). Thus, this study assesses both rating quality and quantity as separate factors and proposes the following hypotheses:

**H1a.** Guest ratings on Airbnb will positively impact the purchase intention of other potential consumers.

**H1b.** Guest ratings on Airbnb will positively impact the value other potential consumers perceive in a booking.

**H2a.** Guest rating volume on Airbnb will positively impact the purchase intention of other potential consumers.

**H2b.** Guest rating volume on Airbnb will positively impact the value other consumers perceive in a booking.

**H3.** Guest reviews on Airbnb will positively impact the value other potential consumers perceive in a booking.

### 3.2.2. Impact of information quality on consumer satisfaction

Consumer willingness to book hotel rooms online is impacted by user perception of information quality (Li et al., 2017). Information quality also has an impact on user satisfaction, thereby affecting consumers' purchase intention. The information quality of mobile shopping systems has been found to have a positive impact on consumer satisfaction (Park and Kim, 2006; Ghasemaghaei and Hassanein, 2015). Social media websites allow users to exchange information free of time or space constraints. User satisfaction of Instagram has been found to be influenced by word-of-mouth and information quality (Danniswara et al., 2017). Another study showed that intention to use Weibo (China's version of Twitter) is impacted by the joint influence of user satisfaction and habitual Weibo-using behavior, while satisfaction is impacted by system quality and information quality (Zhang et al., 2016). Accordingly, this study evaluated the impact of information quality on consumer satisfaction as follows:

**H4.** Good information quality will positively impact consumer satisfaction.

### 3.2.3. Impact of media richness on consumer satisfaction

Before booking, guests can use the Airbnb's one-on-one messaging function to communicate with the landlord and explain or negotiate additional needs. Once the booking is confirmed, the system shares the landlord's phone number and private email with the guest.

According to the consumer purchasing model, information gathering is the key factor affecting purchase intention. Online consumers cannot touch actual goods and online sellers seek to provide more complete, clear, and transparent product information to reduce the consumer's perceived risk while increasing satisfaction and purchase intention. Websites accomplish this primarily through enhanced media richness, evolving from text and graphics, to interactive virtual experiences, seeking to reduce information asymmetry and transaction costs while increasing buyer satisfaction and confidence. Lai and Chang (2011) pointed that online learning communities provide good media richness, including immediate feedback, multiple cues, personal focus, and multiple languages to increase learner satisfaction and reduce learner uncertainty as a means of optimizing learning outcomes. Accordingly, this study proposes the following hypothesis:

**H5.** The media richness of a website will positively impact the satisfaction consumers experience in making a booking.

### 3.2.4. Impact of perceived value on consumers' purchase intention

Perceived value can be viewed as consumers' cost-benefit assessment of the purchased good or service (Parasuraman et al., 1988). Dodds et al. (1991) suggest that the consumer's perception of value is an important determinant of purchase intention.

Consumers seek to maximize value in each transaction, and this perceived value is the most important indicator of repurchase intention (Parasuraman and Grewal, 2000). Studies have shown that consumer confidence in online transactions is based on the information quality of the website and perceived security (Dodds et al., 1991; Parasuraman and& Grewal, 2000; Ponte et al., 2015). The higher the level of trust, the higher the perceived value, thereby affecting the purchase intention (Ponte et al., 2015). Online purchasing of travel services provide consumers with advantages such as time savings, increased convenience, and reduced costs (Dedeke, 2016). This study evaluates the impact of perceived value on purchase intention and proposes the following hypothesis:

**H6.** Increased perceived value will positively impact the consumer's purchase intention.

### 3.2.5. Impact of satisfaction on consumer purchase intention

Cardozo (1965) suggested that customer satisfaction reflects the gap between a customer's anticipated and actual benefit from a purchase (1965) and that customer satisfaction with a product is a function of the effort expended to acquire the product. Fornell (1992) pointed out that service quality is function of the customer's subjective perception, and customer satisfaction is an emotional response based on the difference between purchase expectations and actual outcome.

Studies have indicated that participation in Facebook enhances the satisfaction of sports fans and increases their purchases of team merchandise (Phonthanukitithaworn and Sellitto, 2017). In the transaction model of P2P online booking, factors such as enjoyment and price enhance consumer satisfaction and increase demand for accommodation (Tussyadiah, 2016). In addition to its impact on purchase intention, Bolton and Drew (1991) argued that customer satisfaction is the emotional response that consumers

generate following a purchase, and that customer satisfaction helps establish a good relationship between buyer and seller. This study evaluates the impact of satisfaction on purchase intention and proposes the following hypothesis:

**H7.** Increased satisfaction will positively impact the consumer's purchase intention.

### 3.3. Questionnaire design and analysis method

This study mainly discusses whether ratings, information quality and media richness impact consumer behavior intention, using Airbnb as a case study. A questionnaire was developed based on the operational definitions of the research specification and selected scales proposed used in previous research which were suitable for this study (Lu et al., 2014; Park & Kim, 2008; Zhang et al., 2016; Suh, 1999; Cocosila and Igonor, 2015; Yu et al., 2013; Mouakket, 2015; Sun and Cheng, 2007). The initial version of the questionnaire was pretested by scholars and experts in e-commerce and social commerce, and amended to improve comprehensibility. Questionnaire items were graded on a Likert 5-point scale from 1 (strongly disagree) to 5 (strongly agree) (see Appendix).

The questionnaire was distributed online. Valid responses were processed using confirmatory factor analysis to determine reliability and validity, and then structural equation model analysis was applied to verify the variables and hypotheses.

## 4. Empirical results and analysis

Of a total of 350 questionnaires collected, 280 were found to be valid and complete, for an effective sample rate of 80%. Given that the questionnaire featured 32 questions, this effective sample rate satisfied the suggestion of Gorsuch (1983) that the number of samples collected should be at least 5 times the number of questions, with a minimum of 100.

### 4.1. Descriptive statistical analysis

Respondents were approximately 50% male, with the majority (60.0%) aged between 31 and 40 years old. Among respondents, 42.1% had average monthly incomes between 660 and 1330 USD, while another 32.9% ranged between 1330 and 2000 USD. Nearly half (49.6%) had made online accommodation bookings between 1 and 5 times, while another 45.4% had made more than six such bookings. Around 5% had never made an online booking, the consumers had once used online booking websites but had not completed online booking. Among respondents, one-third (33.8%) had used Airbnb.

### 4.2. Reliability and validity

As shown in Table 2, the Cronbach's α for each construct exceeded 0.7, indicating a high degree of reliability. For all questionnaire items and dimensions, the factor loading exceeded 0.5, the construct reliability (CR) exceeded 0.7, and the average variance extracted (AVE) exceeded 0.5, indicating good convergence validity and internal consistency.

According to Hair et al. (2010), the level of square root of AVE should exceed the correlation coefficients. The discriminant validity for each construct is shown in Table 3. The diagonal is the square root of AVE and the value is greater than the correlation coefficient between two dimensions, indicating good discriminant validity.

**Table 2**
Results of Reliability and Validity Analysis.

| Constructs & Item | | Cronbach's α | Factor Loading | CR | AVE |
|---|---|---|---|---|---|
| Review (RE) | RE1 | 0.851 | 0.833 | 0.9041 | 0.7588 |
| | RE2 | | 0.893 | | |
| | RE3 | | 0.886 | | |
| Information Quality (IQ) | IQ1 | 0.807 | 0.859 | 0.8446 | 0.7310 |
| | IQ2 | | 0.851 | | |
| Media Richness (MR) | MR1 | 0.902 | 0.719 | 0.8911 | 0.6214 |
| | MR2 | | 0.842 | | |
| | MR3 | | 0.776 | | |
| | MR4 | | 0.788 | | |
| | MR5 | | 0.811 | | |
| Perceived Value (PV) | PV1 | 0.785 | 0.692 | 0.7646 | 0.5207 |
| | PV2 | | 0.780 | | |
| | PV3 | | 0.689 | | |
| Satisfaction (SA) | SA1 | 0.771 | 0.778 | 0.7856 | 0.6471 |
| | SA2 | | 0.830 | | |
| Purchase Intention (PI) | PI1 | 0.892 | 0.829 | 0.8622 | 0.6760 |
| | PI2 | | 0.799 | | |
| | PI3 | | 0.838 | | |

**Table 3**
Analysis of discriminant validity.

|  | RE | IQ | MR | PV | SA | PI |
|---|---|---|---|---|---|---|
| RE | 0.871 |  |  |  |  |  |
| IQ | 0.228 | 0.854 |  |  |  |  |
| MR | 0.169 | 0.427 | 0.788 |  |  |  |
| PV | 0.172 | 0.383 | 0.581 | 0.721 |  |  |
| SA | 0.235 | 0.347 | 0.472 | 0.552 | 0.804 |  |
| PI | 0.163 | 0.392 | 0.533 | 0.593 | 0.515 | 0.822 |

### 4.3. Structural equation analysis

This study used AMOS 21.0 for analysis to obtain the analytical values in Table 4. Hair et al. (2010) pointed out that goodness-of-fit using the indicators such as IFI, GFI, AGFI, RFI, and NFI may change with the sample size, and suggested using the relatively stable NNFI and CFI to assess the model fit. The NNFI of this study was 0.906 and CFI was 0.922, which were both greater than the recommended threshold of 0.9, indicating that the model of this study had good explanatory power.

### 4.4. Research hypothesis verification

Fig. 2 shows the test result of structural equation analysis. Hypothesis verification results explain the significance of the proposed hypotheses.

Rating and rating volume are classified as categorical data while perceived value and purchase intention are classified as continuous data for the variables. Therefore, analysis of variance (ANOVA) was used to verify the relationship of influence and explore the relationship between dependent variables of continuous data and independent variables of categorical data. The results showed that the F value of rating on purchase intention was 1.707, but the $\rho$ value did not reach significance; the F value of rating on perceived value was 2.061, and the $\rho$ value was significant. Therefore, hypothesis H1a is not supported while hypothesis H1b is supported.

Using the same ANOVA analysis, the F value of rating volume on purchase intention was 2.542, and the $\rho$ value was significant, while the F value of rating volume on perceived value was 4.563, but the $\rho$ value was not significant. Therefore, hypothesis H2a is supported while hypothesis H2b is not supported.

Regarding impact of reviews on perceived value, the standardized path coefficient was 0.242 and the $\rho$ value was significant. Therefore, hypothesis H3 is supported. Regarding the impact of information quality and media richness on satisfaction, the path coefficient was respectively 0.231 and 0.472, and the $\rho$ values were both significant. Therefore, hypotheses H4 and H5 are supported. Finally, regarding the impact of perceived value and satisfaction on purchase intention, the standardized path coefficients were respectively 0.408 and 0.538, and the $\rho$ values were both significant. Therefore, hypothesis H6 and H7 are both supported.

Next, post hoc paired comparison tests were conducted for hypotheses H1b and H2a which were found to be significant in ANOVA results. Detailed factor interactions were tested to identify significant groups (McHugh, 2011) with the following results:

(1) Paired comparison of the impact of rating on perceived value

As shown in Table 5, consumers' perceived value decreased with rating value. However, reviews with no rating had a higher perceived value than reviews with a two-star rating, possibly because the lack of a rating suggests the transaction under review is not yet complete, while a two-star rating reflects consumer dissatisfaction.

(2) Paired comparison of the impact of rating volume on purchase intention

**Table 4**
Test of Model-Fit.

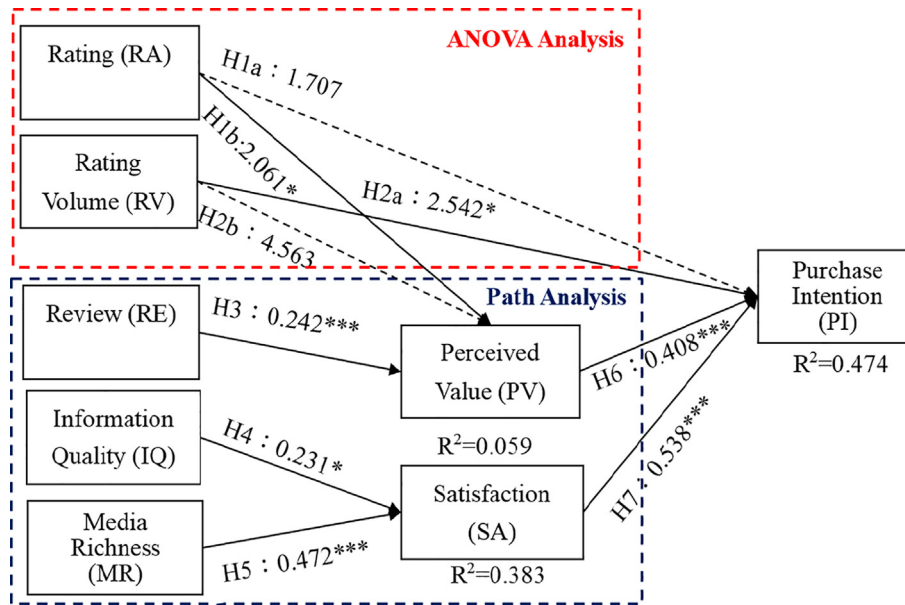| Indexes |  | Suggested | Actual | References |
|---|---|---|---|---|
| Absolute Fit Measures | $x^2/df$ | < 3 | 2.713 | Hair et al. (2010) |
|  | GFI | > 0.8 | 0.893 | Bagozzi and Yi (1988) |
|  | AGFI | > 0.8 | 0.856 | Bagozzi and Yi (1988) |
|  | RMSEA | 0.05–0.08 | 0.078 | Hair et al. (2010) |
| Incremental Fit Measures | IFI | > 0.9 | 0.923 | Bagozzi and Yi (1988); Hair et al. (2010) |
|  | CFI | > 0.9 | 0.922 |  |
|  | NNFI | > 0.9 | 0.906 |  |
| Parsimonious Fit Measures | PNFI | > 0.5 | 0.733 | Bagozzi and Yi (1988); Hair et al. (2010) |
|  | PGFI | > 0.5 | 0.663 |  |

**Fig. 2.** Result of the proposed research model. Note: Significance criteria: $^{***}\rho < 0.001$, $^{**}\rho < 0.01$, $^{*}\rho < 0.05$.

**Table 5**
Paired Comparison of the Impact of Rating on Perceived Value.

| RA(I) | RA(J) | Mean Deviation (I-J) | Standard Deviation | Significance |
|---|---|---|---|---|
| No Rating-1-star | 2-stars | 1.278 | 0.388 | 0.001 |
| No Rating-1-star | 3-stars | 0.502 | 0.269 | 0.063 |
| No Rating-1-star | 4-stars | 0.259 | 0.261 | 0.321 |
| No Rating-1-star | 5-stars | 0.201 | 0.274 | 0.463 |
| 2-stars | 1-star | −1.278 | 0.388 | 0.001 |
| 2-stars | 3-stars | −0.776 | 0.306 | 0.012 |
| 2-stars | 4-stars | −1.019 | 0.299 | 0.001 |
| 2-stars | 5-stars | −1.076 | 0.311 | 0.001 |
| 3-stars | 1-stars | −0.502 | 0.269 | 0.063 |
| 3-stars | 2-stars | 0.776 | 0.306 | 0.012 |
| 3-stars | 4-stars | −0.243 | 0.107 | 0.024 |
| 3-stars | 5-stars | −0.300 | 0.136 | 0.028 |
| 4-stars | 1-stars | −0.259 | 0.261 | 0.321 |
| 4-stars | 2-stars | 1.019 | 0.299 | 0.001 |
| 4-stars | 3-stars | 0.243 | 0.107 | 0.024 |
| 4-stars | 5-stars | −0.058 | 0.119 | 0.627 |
| 5-stars | 1-stars | −0.201 | 0.274 | 0.463 |
| 5-stars | 2-stars | 1.076 | 0.311 | 0.001 |
| 5-stars | 3-stars | 0.300 | 0.136 | 0.028 |
| 5-stars | 4-stars | 0.058 | 0.119 | 0.627 |

As shown in Table 6, rating volume had a significant impact on purchase intention, but properties with 101–250 ratings had greater purchase intention than those with > 250 ratings, possibly because users felt overwhelmed by the volume of ratings.

### 4.5. Comparison of gender difference

This study further assessed the impact of gender on purchase intention. Figs. 3 and 4 show the analytical coefficients of the hypotheses, detailed as follows:

(1) Evaluation method positively impacts male consumers' purchase intention and perceived value

Ratings and reviews impacted the purchase intention for the male consumers via perceived value (F = 3.483, F = 0.377). However, evaluation method had a negligible impact female respondents, suggesting that female consumers are less likely to trust the opinions of strangers and place greater faith in the opinions of people with whom they are already familiar.

**Table 6**
Paired Comparison of the Impact of Rating Volume on Purchase Intention.

| RV(I) | RV(J) | Mean Deviation (I-J) | Standard Deviation | Significance |
|---|---|---|---|---|
| No Rating-100 | 101–250 | −0.379 | 0.197 | 0.055 |
| No Rating-100 | 251–400 | 0.156 | 0.246 | 0.527 |
| No Rating-100 | 401–550 | 0.096 | 0.236 | 0.684 |
| No Rating-100 | Over 551 | 0.016 | 0.233 | 0.946 |
| 101–250 | No Rating-100 | 0.379 | 0.197 | 0.055 |
| 101–250 | 251–400 | 0.535 | 0.189 | 0.005 |
| 101–250 | 401–550 | 0.475 | 0.174 | 0.007 |
| 101–250 | Over 551 | 0.395 | 0.171 | 0.022 |
| 251–400 | No Rating-100 | −0.156 | 0.246 | 0.527 |
| 251–400 | 101–250 | −0.535 | 0.189 | 0.005 |
| 251–400 | 401–550 | −0.060 | 0.229 | 0.793 |
| 251–400 | Over 551 | −0.140 | 0.226 | 0.536 |
| 401–550 | No Rating-100 | −0.096 | 0.236 | 0.684 |
| 401–550 | 101–250 | −0.475 | 0.174 | 0.007 |
| 401–550 | 251–400 | 0.060 | 0.229 | 0.793 |
| 401–550 | Over 551 | −0.080 | 0.214 | 0.709 |
| Over 551 | No Rating-100 | −0.016 | 0.233 | 0.946 |
| Over 551 | 101–250 | −0.395 | 0.171 | 0.022 |
| Over 551 | 251–400 | 0.140 | 0.226 | 0.536 |
| Over 551 | 401–550 | 0.080 | 0.214 | 0.709 |
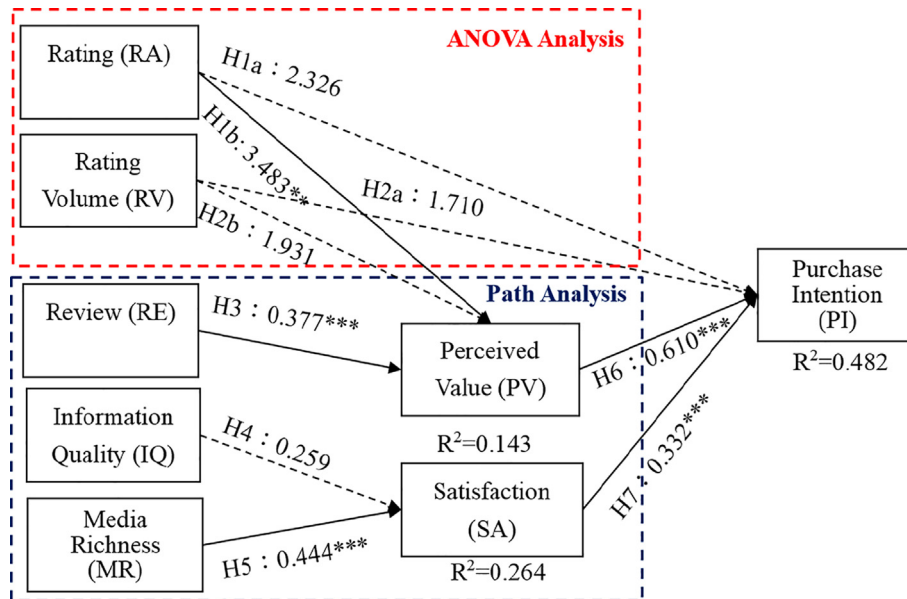


**Fig. 3.** Path analysis results for male consumers.

(2) Information quality positively impacts the satisfaction of female consumers

The impact of information quality on satisfaction was significant (F = 0.268) among female respondents but insignificant (F = 0.259) for male respondents. As noted by Liu et al., (2017), female consumers tend to have higher expectations of information quality, which may reflect a greater need for self-fulfillment among women who place a premium on information quality when expressing their own opinions in virtual communities.

### 4.6. Comparison of those with and without experience using Airbnb

The questionnaire focused on Airbnb, thus we divided the respondents based on experience using Airbnb, with the results depicted in Figs. 5 and 6. Among non-Airbnb users, purchase intention was positively impacted by rating volume (F = 2.453) and media richness (F = 0.609). These findings indicate that all the influential factors on consumers who used Airbnb before were insignificant, consistent with Davis' (1989) TAM theory findings that found "perceived ease of use" had no significant impact on usage intention among users who had previously used a given technology.
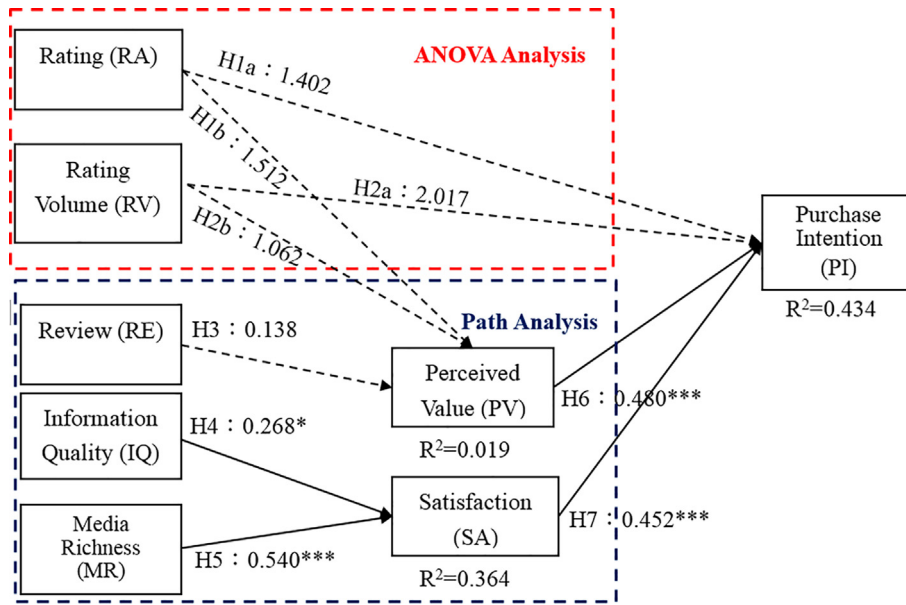
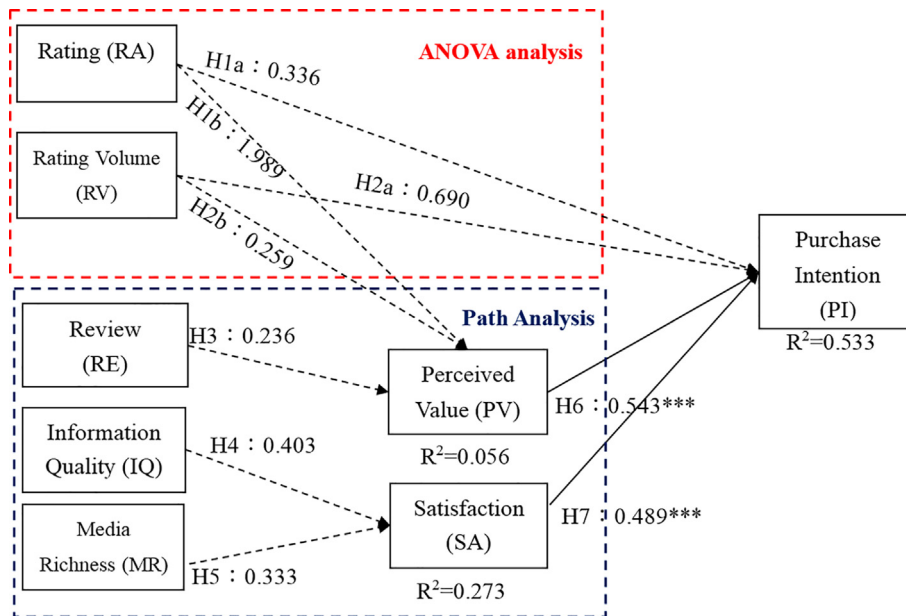**Fig. 4.** Path analysis results for female consumers.



**Fig. 5.** Path analysis results for Airbnb users.

## 5. Conclusion

### 5.1. Research conclusion

#### 5.1.1. Relationship between rating/rating volume and purchase intention/perceived value

Ratings were found to have an insignificant impact on purchase intention, but a significant impact on perceived value, indicating that consumers do not choose a Airbnb because of the rating was 5-star or not to choose a Airbnb because of the rating was 1-star. On the contrary, higher star rating made consumers think the Airbnb was good and may be put into consideration.

On the other hand, rating volume had an insignificant impact on perceived value, but a significant impact on purchase intention. Since every rating represents a completed transaction, a higher rating volume indicates a popular property. However, ANOVA results indicate that the impact was greatest for properties with 101–250 ratings, and that the impact was less pronounced for properties with > 250 ratings. A possible explanation is that consumers may feel overwhelmed by surplus information (Ghasemaghaei and
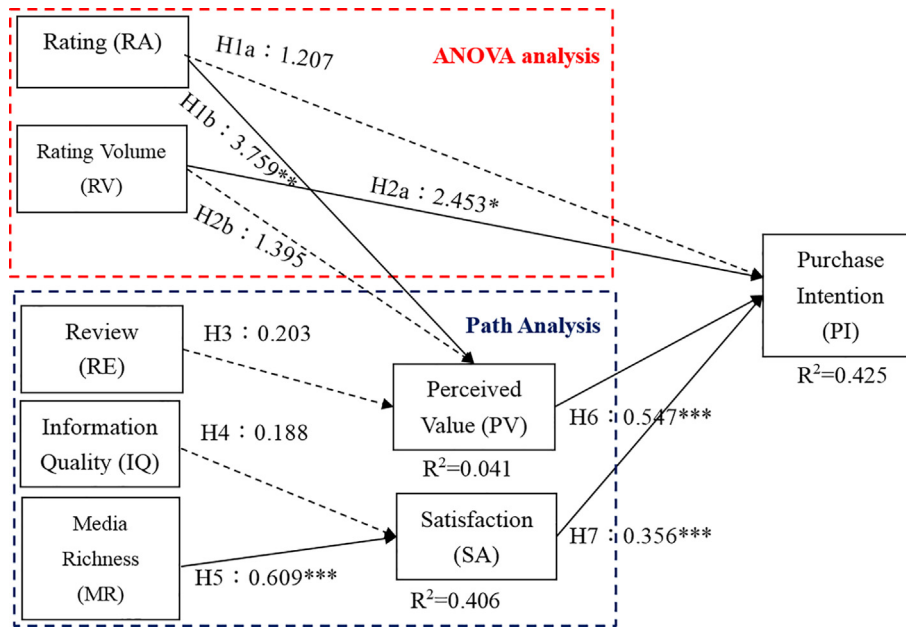
Fig. 6. Path analysis result for non-Airbnb users.

Hassanein, 2015), and the processing of additional reviews entails a prohibitive time and cognitive cost (Engler et al., 2015).

### 5.1.2. Relationship between review and perceived value

Reviews are found to have a positive and significant impact on perceived value. Papathanassis and Knolle (2011) pointed out that consumer reviews constitute a significant and valuable input to holiday decision making, consistent with the research finding that the availability of user reviews reduces risk of expectations failure for users purchasing holiday accommodations and other tourism services online.

### 5.1.3. Impact of information quality on satisfaction

Information quality is found to have a positive and significant impact on satisfaction, consistent with Park and Kim's (2006) proposal that information quality affects user satisfaction, thereby affecting purchase intention.

### 5.1.4. Impact of media richness on satisfaction

Media richness, in the form of one-on-one communication between buyer and seller, is found to have a positive and significant impact on satisfaction by providing both parties with an enhance sense of security.

## 5.2. Managerial implications

### 5.2.1. Theoretical implications

Most prior studies on the impact of product or service evaluation on consumer purchase intention failed to differentiate between assessment quantity and quality. The present study categorizes evaluations by quality (i.e., review content) and quantity (i.e., number of reviews), along with numeric rating values to analyze the relationship between consumer evaluation and purchase intention.

This study also found that perceived value was the most influential factor on purchase intention among potential Airbnb consumers. Therefore, property owners should focus more attention on increasing positive impressions through ratings, rating volume and reviews.

We also found that no significant difference between male and female respondents in terms of the impact of rating, rating volume, and review on purchase intention whether directly or indirectly through perceived value. Nevertheless, for female respondents, information quality had a significant impact on satisfaction. In addition, the purchase intention of respondents who had not previously used Airbnb was found to be significantly influenced by rating volume and media richness in the form of one-on-one communications with the seller.

### 5.2.2. Practical managerial implications

While many product and service transactions are increasingly migrating online, consumers still feel a certain degree of anxiety about such purchases, and enhancing trust between buyer and seller is the key to increasing purchase intention. The results of this study should provide a useful reference to Airbnb hosts, and firms with similar business models. Clearly, hosts must seek to obtain and maintain excellent user feedback including ratings, reviews, and rating volume. Airbnb can enhance user trust through partnering

with third-party accreditation institutions to ensure information security. Finally, consumers place a premium on direct communication with their potential hosts, and service websites should experiment with various technologies to enhance the convenience and reliability of such communication.

### 5.3. Research limitations and future directions

The present study is subject to certain limitations. First, while Airbnb provides booking services worldwide, the research sample was limited to Chinese speakers in Taiwan, and certain cultural factors may have impacted the results. Future studies could expand the sample group to include speakers of other languages in other countries and regions. Second, the sample was primarily made up of white-collar workers, and future work should seek to expand the demographic diversity of the sample. Finally, this study only explored selected factors and future studies should expand the sample group to include consumers from a wider range of backgrounds, and test different impact factors in multiple dimensions.

## Appendix A. Questionnaire items

- **Rating (RA)**

Below what rating would you decline to consider an Airbnb listing?

- **Rating Volume (RV)**

Airbnb properties typically have between 100 and 500 reviews. How many reviews should a property ideally have?

- **Review (RE)**

**RE1:** I think the tenant's comment is objective.
**RE2:** I think the tenant's comment is reliable.
**RE3:** I think the tenant's comment is close to facts.

- **Information Quality**

**IQ1:** I think the information provided by the landlord is reliable.
**IQ2:** I think the information provided by the landlord is closed to the real situation.

- **Media Richness**

**MR1:** I expect I could get a quick response from this landlord.
**MR2:** Airbnb provides various means of communicating with the landlord.
**MR3:** I think I can establish a good relationship with the landlord through Airbnb.
**MR4:** I think direct messaging enhances the efficiency of communicating with the landlord.
**MR5:** If I have further requirements, Airbnb can help me negotiate with the landlord.

- **Perceived Value**

**PV1:** I think Airbnb listings provide good value for money.
**PV2:** I think Airbnb can help with special requirements, such as finding pet-friendly accommodations or arranging a crib.
**PV3:** I think shopping for accommodations on Airbnb is worthwhile.

- **Satisfaction**

**SA1:** I prefer Airbnb over other online accommodation channels.
**SA2:** I think the Airbnb can meet my accommodation needs.

- **Purchase Intention**

**PI1:** I will likely use Airbnb to find future holiday accommodations.
**PI2:** I would recommend Airbnb to my friends.
**PI3:** If I require accommodations, I would prefer to use Airbnb.

## Appendix B. Supplementary data

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.tele.2018.03.019.

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