

Empirical Track (Market and Concept Innovations)

Risks, Service Quality and Satisfaction as Antecedents of Loyalty: The Case of Airbnb Guests

Abstract

This study investigates the connections between perceived risks, service quality, guests' satisfaction, and loyalty of Airbnb guests, highlighting challenges, issues, and gaps that require investigation. It uses structured surveys gathered from 301 Airbnb guests in Manila City, Philippines. Partial Least Squares Structural Equation Modeling (PLS-SEM) were used for analysis and development of theory. The development of models that depict how various perceived risks in Airbnb affect service quality and influence guest satisfaction, which in turn fosters platform loyalty, is made possible by this predictive-causal methodology. It also revealed that, to succeed in the competitive lodging industry, hosts must perform community engagement for inclusivity for gender and improve safety standards for guests since, despite risk, guests are willing to book for a unique experience, and in return from host service quality that would impact satisfaction and build loyalty.

Keywords: *Airbnb, perceived risks, service quality, customer satisfaction, hospitality industry*

Introduction

The hospitality sector is rapidly changing with the rise of the sharing economy. Platforms like Airbnb enable users to list and book accommodation worldwide, monetizing personal assets like homes for short-term rentals. In 2022, Airbnb significantly boosted the Philippine economy, contributing P45.7 million to GDP and creating about 103,800 jobs. Guests spent P47.7 million, benefiting businesses like restaurants, retail, and transportation. Domestic tourism also benefited, with P24.2 million spent by Airbnb guests. Airbnb promotes sustainability by encouraging eco-friendly practices. Glamping, a luxurious camping experience, is gaining popularity. Notable glamping domes in the Philippines offer unique experiences like stargazing and private hot tubs. In 2022, Airbnb saw a surge in female hosts in the Philippines, comprising two-thirds of all hosts and making it the second-largest female-driven host community globally.

This study explores the relationship between risk, SERVQUAL, and satisfaction as antecedents of loyalty among Airbnb guests. Li and Tsai (2022) suggest that positive customer emotions lead to satisfaction, attachment, and loyalty. Priporas et al. (2017) found that satisfaction partially mediates the relationship between SERVQUAL and loyalty. This study aims to provide knowledge on how hosts can enhance loyalty by managing perceived risks and improving service quality, resulting in guest satisfaction and loyalty. Using Partial Least Squares Structural Equation Modeling (PLS-SEM), Hierarchical Component, and Mediating Analysis, the study seeks to understand how guests perceive risks, such as safety, property authenticity, and host reliability, when using Airbnb. These risks significantly influence customer trust and willingness to use the platform. The study also investigates the relationship between SERVQUAL and guests' satisfaction, exploring how SERVQUAL can lead to increased satisfaction, whether it mediates satisfaction, and ultimately, loyalty, which is crucial for hosts seeking repeat guests and expanding their market reach in the Philippines. This study

contributes to Airbnb research in the Philippines, as limited studies exist regarding the platform's Filipino perspective, experience, and trust.

Hypotheses

- H1. Performance risk has a significant and negative effect on SERVQUAL
- H2. Financial risk has a significant negative effect on SERVQUAL.
- H3. Physical has a significant and negative effect on SERVQUAL.
- H4. Social has a significant and negative effect on SERVQUAL.
- H5. SERVQUAL has a significant and positive effect on satisfaction.
- H6. SERVQUAL has a significant and positive effect on loyalty.
- H7. Satisfaction has a significant and positive effect on loyalty.
- H8. Satisfaction has a mediating effect on the relationship between SERVQUAL and loyalty.

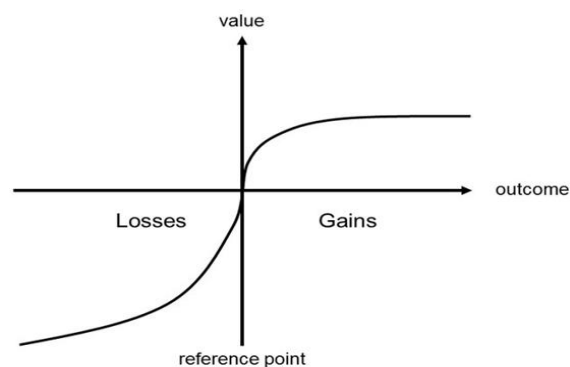


Figure 1. Prospect Theory Value Curve (Kahneman & Tversky, 1979)

The Prospect Theory demonstrated that people often make decisions based on emotions, fears, and how choices are framed, especially when risk or uncertainty is involved (Kahneman & Tversky, 1979). Thus, perceived risk in peer-to-peer accommodation emphasized risks shape guests' behavior and view platforms like Airbnb (Li & Tsai 2022). Furthermore, service quality in Airbnb is recognized as a key determinant of organizational success, particularly service industry (Ding et al., 2021). Lastly, Lalicic and Weismayer (2018) discovered that social and authentic experiences are significant antecedents of loyalty.

Methodology

This study used PLS-SEM, hierarchical component model analysis, and mediating analysis to identify how risk, service quality, and satisfaction become antecedents of loyalty on how risks are viewed by guests, such as concerns about safety and host reliability. An adapted-modified questionnaire was used to survey 301 Airbnb Guest within Manila City. The CA and CR were at least 0.70. In terms of convergent validity, average variance extracted (AVE) and factor loadings were equal to or higher than 0.50.

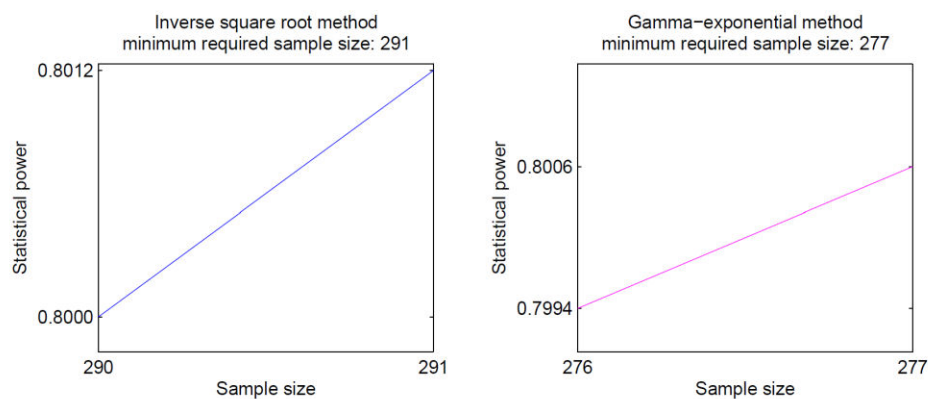


Figure 2. Inverse square root and Gamma-exponential methods to compute the sufficiency of the sample size

The instrument was validated and approved by Airbnb accommodation owners, housekeeping personnel, and hospitality industry experts. The data were gathered online using Microsoft form questionnaires adapted from two previous studies. Leveraging questionnaires from previous studies, researchers built upon knowledge, ensured consistency, and enhanced credibility. A diverse sample will gather data for analysis using statistical methods like PLS-SEM, Hierarchical Component Model Analysis, and Mediation Analysis. The measurement model assessment evaluates item reliability (Cronbach's Alpha and Composite Reliability) and latent construct quality. Kock (2014) states that internal consistency requires CA and CR at least 0.70. Based on Table 1, all lower-order reflective constructs passed the reliability

requirements. Convergent validity requires an Average Variance Extracted (AVE) and factor loading of equal or higher than 0.50, with a p-value equal to or lower than 0.05. Table 4 shows that performance risk (AVE = 0.704), financial risk (AVE = 0.758), physical risk (AVE = 0.807), social risk (AVE = 0.841), tangibility (AVE = 0.744), reliability (AVE = 0.705), responsiveness (AVE = 0.848), assurance (AVE = 0.728), empathy (AVE = 0.759), satisfaction (AVE = 0.793), and loyalty (AVE = 0.777) meet these criteria.

The researchers used social media platforms like Facebook, Instagram, Messenger, and TikTok to gather data. The idea is to create a straightforward survey that asks guests about their experiences, whether they had any concerns like safety or privacy, how they rated the service cleanliness, host responsiveness and how satisfied they were overall. Throughout this process, the researchers will make sure to protect respondents' privacy and get their consent to use their feedback. Online surveys are important for gathering quantitative data, affording researchers direct engagement with respondents, and enabling the acquisition of nuanced insights into guest perceptions and behaviors about Airbnb stays.

Results and Discussion

Table 1: Reliability Measures and Convergent Validity

Lower-order reflective construct and Items	Factor loading	Average variance extracted	Cronbach's alpha	Composite reliability
Performance risk		0.704	0.789	0.877
I worry that the Airbnb place/listing will not match the photos posted online and about the availability of basic amenities such as utensils and other essentials.	0.801			
I am concerned that the Airbnb host/staff would treat me unkindly.	0.841			
I worry that the Airbnb place/listing would not be clean.	0.873			
Financial risk		0.758	0.840	0.904
I am concerned about whether an Airbnb place is more expensive than hotel rooms in the same area.	0.872			
I am concerned if the price of accommodation on the Airbnb website is more expensive compared to other travel websites.	0.890			
I am concerned that an Airbnb place is overpriced considering the quality.	0.849			
Physical risk		0.807	0.880	0.926
I am concerned that staying at an Airbnb place/listing would lead to something bad happening to me.	0.887			
I worry that the Airbnb host/staff may do something bad to me.	0.907			
I am concerned that it may not be safe to stay at an Airbnb place/listing due to social and security.	0.900			
Social risk		0.841	0.905	0.941
Staying at an Airbnb place/listing will adversely affect others' opinion of me.	0.910			
I would be thought of as foolish by people whose opinion I value if I stay at an Airbnb place/listing.	0.936			
The thought of staying at an Airbnb place/listing causes me concern because some friends would think I was just being showy.	0.905			
Tangibility		0.744	0.828	0.897
The atmosphere and equipment are comfortable and appropriate for purpose to stay (beds, chair, room, etc, comfortable, clean and tranquil)	0.849			
The equipment on the property works properly without causing breakdowns.	0.876			
The Airbnb host/staff provides the services at the time it promises to do so.	0.862			
Reliability		0.705	0.788	0.877
The Airbnb host/staff can provide service as promised.	0.878			

The Airbnb host/staff is dependable in handling customer service problems.	0.885			
The Airbnb host/staff keeps guest/customers informed of other services and amenities.	0.748			
Responsiveness		0.848	0.821	0.918
The Airbnb host/staff is always willing to help guest/customers.	0.921			
The Airbnb host/staff treats all guest/customers equally regardless of whether they know someone in the Airbnb.	0.921			
Assurance		0.728	0.813	0.889
The Airbnb host/staff is providing a safe and secure place.	0.824			
It is easy to access property (transportation, car parking, etc.)	0.857			
The property and its facilities have operating hours convenient to all their guest/customers.	0.878			
Empathy		0.759	0.842	0.904
The Airbnb host/staff understand the specific needs of the guest/customers.	0.857			
The Airbnb host/staff is very cooperative to provide guest/customer request service.	0.888			
The Airbnb host/staff give its guest/customer individualized attention.	0.869			
Satisfaction		0.793	0.870	0.920
I am happy with my decision to stay at this Airbnb accommodation.	0.879			
I believe I did the right thing when I stayed at this Airbnb accommodation.	0.902			
Overall, I am satisfied with the decision to stay at this Airbnb accommodation.	0.891			
Loyalty		0.777	0.856	0.913
If possible, I will return to this Airbnb accommodation in the future.	0.859			
I will recommend this Airbnb accommodation to other people.	0.902			
I will encourage guests about the good service of this Airbnb accommodation.	0.883			

Table 2: Discriminant Validity using HTMT2 Ratios

	PR	FR	PH	SR	TA	RE	RS	AS	EM	SA	LO
PR											
FR	0.682										
PH	0.748	0.599									
SR	0.244	0.468	0.532								
TA	0.330	0.258	0.167	0.036							
RE	0.339	0.263	0.163	0.096	0.898						
RS	0.296	0.307	0.159	0.019	0.828	0.882					
AS	0.218	0.238	0.060	0.118	0.742	0.851	0.778				
EM	0.247	0.221	0.092	0.054	0.761	0.890	0.848	0.834			
SA	0.109	0.168	0.040	0.034	0.698	0.780	0.817	0.741	0.786		
LO	0.067	0.090	0.020	0.048	0.601	0.641	0.647	0.625	0.697	0.858	

PR-performance risk; FR-financial risk; PH-physical risk; SR-social risk; TA-tangibility; RE-reliability; RS-responsiveness; AS-assurance; EM-empathy; SA-satisfaction; LO-loyalty.

Table 2 presents the result of the discriminant validity test. Using the Heterotrait-Monotrait Ratio of correlations 2 (HTMT2), each HTMT ratio must be at most 0.90 to claim that all lower-order reflect constructs possess discriminant validity (Gold et al., 2001). Based on the results, all latent constructs passed the discriminant validity test.

In the present study, SERVQUAL was assessed by a higher-order formative construct using a disjoint two-stage approach (Agarwal & Karahanna, 2000; Becker et al., 2012, Lacap & Sicat, 2022). The presence of a higher-order formative construct requires assessment of indicator weight and the corresponding p-value, Variance Inflation Factor (VIF), and Full Collinearity VIF (FCVIF).

Ramayah et al. (2018) noted that each indicator's weight must be significant, where the corresponding p-values be at < 0.05 . Based on the results in Table 5, SERVQUAL as a higher-order formative construct passed the required threshold. Additionally, the VIF of each indicator must be at most 3.30 (Kock, 2014). Whereas the FCVIF threshold must also be 3.30 (Kock, 2015; Kock, 2022) to claim that SERVQUAL as a construct is free from any collinearity problems – lateral and vertical. Based on the results in Table 3, SERVQUAL as a higher-order formative construct passed all the measurement evaluation requirements.

Table 3: Hierarchical Component Model (HCM) Analysis

Higher-order formative construct	Indicator weight	p-value	Variance inflation factor	Full collinearity variance inflation factor
<i>Service quality</i>				2.559
TA	(0.227)	<0.001	2.508	
RE	(0.240)	<0.001	3.239	
RS	(0.232)	<0.001	2.669	
AS	(0.224)	<0.001	2.302	
EM	(0.233)	<0.001	2.761	

TA-tangibility; RE-reliability; RS-responsiveness; AS-assurance; EM-empathy.

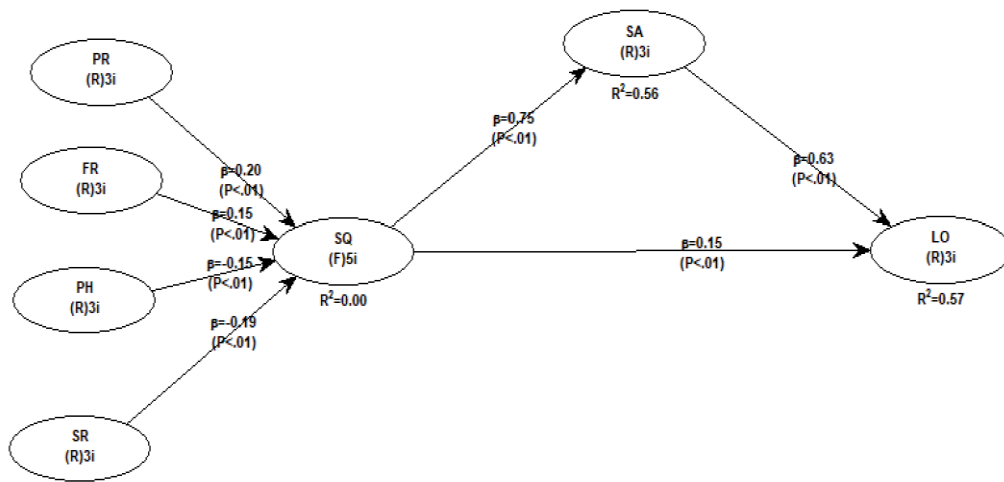


Figure 3. The Structural Model with Parameter Estimates

Results revealed performance risk ($\beta = 0.197$, $p < 0.001$) and financial risk ($\beta = 0.151$, $p = 0.004$) showed significant but positive effects on service quality. Even if p-values are less than 0.05, path coefficients reflect positive values. Contrary to hypotheses where performance and financial risk factors affect service quality. Therefore, H1 and H2 are unsupported, where in fact, those who had used sharing accommodations held some doubt in performance risk. Furthermore, in H2, ($\beta = 0.151$, $p = 0.004$), results revealed that Gen Z are most guests and disregard financial risk that may negatively affect service quality.

Moreover, H3- physical risk ($\beta = -0.146$, $p = 0.005$, $f^2 = 0.059$) and H4-social risk ($\beta = -0.186$, $p < 0.001$, $f^2 = 0.075$) have a significant and negative influence on service quality, with a small effect. Thus, both hypotheses' results were supported. H3 refers to physical risk to hazards such as unsanitary rooms, broken facilities, and safety, which could lead to actual harm or injury. Abror et al. (2020) also revealed factors like facilities, cleanliness, physical conditions contribute to bad reviews and reduced likelihood of repeat customers.

Furthermore, H4 showed that potential guests who hear negative experiences from friends, family, or online reviews create a sense of doubt in terms of safety and quality of Airbnb. Hence, misleading in amenities and uncleanliness lead to negative evaluations (Guttentag, 2015).

Furthermore, service quality found a significant and positive effect on satisfaction ($\beta = 0.749$, $p < 0.001$, $f^2 = 0.560$) and on loyalty ($\beta = 0.154$, $p = 0.003$, $f^2 = 0.097$) with large and small effects. Hence, H5 and H6 are supported. H5 observed service quality impacts satisfaction and influences guest expectations of Airbnb, where good experiences enhance experience that makes their stay memorable. Additionally, H6 analyzed service quality matters for loyalty because good service leads to connection between guest and host. Findings of Kim & Kim (2020) showed service quality influences satisfaction and encourages customers for loyalty.

Additionally, satisfaction and loyalty have a significant and positive relationship ($\beta = 0.632$, $p < 0.001$, $f^2 = 0.472$), reflecting a large effect. Therefore, H7 resulted in satisfied guests having a lot of potential to reuse Airbnb, especially if positive experiences were met during their stay. Xu et al. (2023) mentioned that satisfied customers are more likely to have great experiences, hence increasing their loyalty.

Mediation analysis revealed satisfaction mediates between service quality and loyalty ($\beta = 0.473$, $p < 0.001$), $f^2 = 0.297$) with a medium effect. H8 analyzed that guest satisfaction in Airbnb is due to service quality provided, and clean accommodation would build guest loyalty. In fact, Kamisah et al. (2020) supported that satisfaction really mediates between service quality and loyalty.

Table 4: Direct and Mediating Effects

Hypothesis	Path coefficient	p-value	Standard error	Effect size	Decision
<i>Direct effects</i>					
H1. PR → SQ	0.197	<0.001	0.056	0.079	Unsupported
H2. FR → SQ	0.151	0.004	0.056	0.058	Unsupported
H3. PH → SQ	-0.146	0.005	0.056	0.059	Supported
H4. SR → SQ	-0.186	<0.001	0.056	0.075	Supported
H5. SQ → SA	0.749	<0.001	0.051	0.560	Supported
H6. SQ → LO	0.154	0.003	0.056	0.097	Supported
H7. SA → LO	0.632	<0.001	0.052	0.472	Supported
<i>Mediating effect</i>					
H8. SQ→SA→LO	0.473	<0.001	0.038	0.297	Supported

PR-performance risk; FR-financial risk; PH-physical risk; SR-social risk; SQ-service quality; SA-satisfaction; LO-loyalty. Effect sizes evaluation (Cohen, 1988): 0.02 – small; 0.15 – medium; 0.35 – large.

Table 5: Model Fit and Quality Indices

Model Fit and Quality Indices	Coefficients
Average path coefficient (APC)	0.316, p < 0.001
Average r-squared (ARS)	0.377, p < 0.001
Average adjusted r-squared (AARS)	0.371, p < 0.001
Average block VIF (AVIF)	1.756
Average full collinearity VIF (AFVIF)	2.185
Tenenhaus goodness of fit (GoF)	0.541
Simpson's paradox ratio (SPR)	0.714
R-squared contribution ratio (RSCR)	0.904
Statistical suppression ratio (SSR)	1
Nonlinear bivariate causality direction ratio (NLBCDR)	1

The table above shows the model fit and quality indices. To establish that the model is robust, APC, ARS, and AARS must be significant (p < 0.05). Moreover, AVIF and AFVIF must be at most 5. Based on the results, the model passed the requirements for APC, ARS, AARS, AVIF, and AFVIF.

Implication and Conclusion

These results of the study have an impact on managerial positions in the lodging industry and are not only limited to Airbnb hosts. Addressing risks is crucial and needs to be addressed to improve service quality, exceed expectations, improve satisfaction, and build

loyalty. Practicing high standards of service and mitigating risks would make an enjoyable environment for guests. Moreover, satisfaction has a crucial role influencing loyalty coming from services, accommodation, and communication.

Furthermore, mediation showed that service quality is crucial because it enhances satisfaction that contributes to guests' loyalty. This supports prospect theory regarding the potential losses and gains likewise in Airbnb, despite the risks, guests disregard it in exchange for unique experiences.

Determining perceived risks like performance, financial, physical, and social that significantly impact Airbnb accommodations can help. Each risk influences guests' experiences uniquely. Performance risks are related to unmet expectations, and this study found no negative impact on SERVQUAL. Instead, it's more about how well the host treats their guests.

Financial risks are less relevant in this study on SERVQUAL since certain demographics, especially Generation Z, prioritize budget travel and good experiences over accommodation costs. Physical risks like safety, security, and cleanliness also affect guests' satisfaction and loyalty. Social risks like neighborhood safety, host unfriendliness, and social media criticism further complicate the decision-making process. Addressing these risks is crucial for Airbnb hosts and the platform to improve SERVQUAL, exceed guest expectations, and promote long-term loyalty. High standards of service and risk mitigation create a secure and enjoyable environment for guests. The assessment showed that good SERVQUAL from Airbnb hosts significantly contributes to guest satisfaction and loyalty. Attentive communication, responsiveness to guests' needs, and a welcoming environment are key elements of good SERVQUAL. Satisfied guests are more likely to reuse Airbnb, recommend it, and promote it on social media, fostering loyalty and positive feedback.

The study also suggests that Airbnb hosts can increase loyalty by focusing on these areas, which is vital for standing out in a competitive market. Lastly, Airbnb guests in Manila, Philippines, are predominantly Generation Z, with Boomers being the smallest user segment. This highlights the influence of young travelers on the platform, as they seek unique and memorable experiences on a budget through social media feedback and recommendations.

References

- Abror, A., Patrisia, D., Engriani, Y., Evanita, S., Yasri, Y., & Dastgir, S. (2020). Service quality, religiosity, customer satisfaction, customer engagement and Islamic bank's customer loyalty. *Journal of Islamic Marketing*, 11(6), 1691–1705. <https://doi.org/10.1108/JIMA-03-2019-0044>
- Adel, R. (2023). *Airbnb bookings give P45.7 million boost to Philippine GDP, employment in 2022* — report. Philstar.com.
- Agarwal, R., & Karahanna, E. (2000). Time flies when you're having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly: Management Information Systems*, 24(4), 665–694.
- Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical Latent Variable Models in PLS-SEM: Guidelines for Using Reflective-Formative Type Models. *Long Range Planning*, 45(5–6), 359–394.
- Ding, K., Choo, W. C., Ng, K. Y., Ng, S. I., & Song, P. (2021). Exploring Sources of Satisfaction and Dissatisfaction in Airbnb Accommodation Using Unsupervised and Supervised Topic Modeling. *Frontiers in Psychology*, 12, 659481. <https://doi.org/10.3389/FPSYG.2021.659481/BIBTEX>
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, 18(1), 185–214. <https://doi.org/10.1080/07421222.2001.11045669>
- Guttentag, D. (2015). Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector. *Current Issues in Tourism*, 18(12), 1192–1217. <https://doi.org/10.1080/13683500.2013.827159>
- Kamisah, I., Wan, J., Tin, C., & Phooi M'ng Chan, J. (2021). *The Mediating Role of Customer Satisfaction in the relationship between Service Quality and Customer Loyalty*. *MANAGEMENT and ACCOUNTING REVIEW*, 20. <https://ir.uitm.edu.my/id/eprint/30977/1/30977.pdf>

- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292. <https://doi.org/10.2307/1914185>
- Kim, B., & Kim, D. (2020). Attracted to or Locked In? Explaining Consumer Loyalty toward Airbnb. *Sustainability 2020, Vol. 12, Page 2814, 12(7)*, 2814. <https://doi.org/10.3390/SU12072814>
- 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>
- Kock, N. (2020). WarpPLS User Manual Version 7.0. ScriptWarp Systems. - References - Scientific Research Publishing. (n.d.)
- Lacap, J. P., & Sicat, A. T. (2022). Effects of Experiential Quality on Experiential Loyalty: Evidence from Starbucks Coffee Chains in Pampanga, Philippines. *Asia-Pacific Social Science Review*, 22(2), 14–36.
- Lalicic, L., & Weismayer, C. (2018). A model of tourists' loyalty: the case of Airbnb. *Journal of Hospitality and Tourism Technology*, 9(1), 78–90. <https://doi.org/10.1108/JHTT-02-2017-0020>
- Li, C. Y., & Tsai, M. C. (2022). What makes guests trust Airbnb? Consumer trust formation and its impact on continuance intention in the sharing economy. *Journal of Hospitality and Tourism Management*, 50, 44–54. <https://doi.org/10.1016/J.JHTM.2021.12.001>
- Priporas, C. V., Stylos, N., Vedanthachari, L. N., & Santiwatana, P. (2017). Service quality, satisfaction, and customer loyalty in Airbnb accommodation in Thailand. *International Journal of Tourism Research*, 19(6), 693–704.
- Ramayah, T., Cheah, J. H., Chuah, F., Ting, H., & Memon, M. A. (2016). Partial Least Squares Structural Equation Modeling (PLS-SEM) using Structural Equation Modeling: An Updated and Practical Guide to Statistical Analysis. November, 149.
- Tversky, A., & Kahneman, D. (1991). Loss Aversion in Riskless Choice: A Reference-Dependent Model. *The Quarterly Journal of Economics*, 106(4), 1039–1061. <https://doi.org/10.2307/2937956>
- Xu, F., La, L., Zhen, F., Lobsang, T., & Huang, C. (2019). A data-driven approach to guest experiences and satisfaction in sharing. *Journal of Travel & Tourism Marketing*, 36(4), 484–496. <https://doi.org/10.1080/10548408.2019.1570420>