

Examining the Influence of Security Perception on Customer Satisfaction: A Quantitative Survey in Vietnam

Ta Thi Nguyet Trang¹, Pham Chien Thang^{2,*} and Tran Quang Quy³

¹ TNU-International School, Thai Nguyen, Vietnam

² TNU-University of Sciences, Thai Nguyen, Vietnam

³ Thai Nguyen University of Information and Communication Technology, Thai Nguyen, Vietnam

Abstract

INTRODUCTION: This study explores the elements that impact consumer satisfaction in e-commerce settings, focusing on the perception of security. The prominence of e-commerce highlights the necessity of understanding customer satisfaction determinants, emphasizing the importance of creating a secure e-commerce environment.

OBJECTIVES: Four hypotheses focused on security perception, customer service, product information, and website design affecting customer satisfaction were established and tested. A sample of Vietnamese consumers was utilized to examine these relationships empirically.

METHODS: This study employed a quantitative research approach. The multiple linear regression analysis was used to test the research hypothesis. The SPSS (IBM) Version 26 software was used for statistical data treatment.

RESULTS: The results revealed that security perception, customer service, and product information significantly influenced customer satisfaction, whereas website design did not. Notably, security perception emerged as a critical determinant of customer satisfaction. The outcomes of this study augment the existing scholarly resources, offering substantiated data concerning the significance of security perceptions in influencing customer gratification.

CONCLUSION: Practical implications for online retailers include prioritizing enhancing security features, improving customer service, and providing comprehensive product information. However, this study may restrict the generalizability of the results, highlighting the need for additional research in various circumstances.

Keywords: Security perception, Customer satisfaction, E-commerce, Internet of Things

Received on 01 December 2023, accepted on 21 February 2024, published on 26 February 2024

Copyright © 2024 T. T. N. Trang *et al.*, licensed to EAI. This is an open access article distributed under the terms of the [CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/), which permits copying, redistributing, remixing, transformation, and building upon the material in any medium so long as the original work is properly cited.

doi: 10.4108/eetiot.5210

*Corresponding author. Email: thangpc@tnus.edu.vn

1. Introduction

The adoption of the Internet and technological advancements have led to a significant expansion in online purchasing activities, offering organizations a unique platform to foster and sustain consumer relationships and interactions [1]. Many retailers are interested in developing online shopping or e-retailing to complement conventional offline retail channels [2], [3].

While online platforms may offer efficient and user-friendly shopping experiences [4], consumer adoption hinges on how much they meet consumer expectations. Satisfied customers are likely to exhibit loyalty to a company over a prolonged period [5], demonstrate increased purchasing behavior when new products are introduced, advocate for the company and its products, provide innovative ideas, show diminished interest in competing brands, and exhibit higher price tolerance [6]. Thus, customer satisfaction is pivotal in fostering purchases.

consider other potential factors such as price, delivery speed, and return policy to provide a more comprehensive understanding of customer satisfaction in e-commerce.

6. Conclusion

This study investigates the factors influencing customer satisfaction in e-commerce, emphasizing the role of security perception. The research objectives are addressed through the development and testing of four hypotheses. The results reveal that website design does not significantly impact customer satisfaction while security perception, customer service, and product informations have a significant influence. Notably, security perception has emerged as a critical factor in customer satisfaction in e-commerce, underscoring the importance of creating a secure online shopping environment.

This research enhances the established literature by introducing empirical proof of the impact of security perception on customer satisfaction, thereby broadening the current comprehension in this domain. These findings offer practical implications for online retailers, suggesting that they should prioritize enhancing security features, improving customer service, and providing comprehensive product information to increase customer satisfaction. Nonetheless, this study has limitations, including its geographic concentration on consumers in Thai Nguyen City, Vietnam, which may restrict the broader applicability of the results. Future research can replicate this study in various contexts and contemplate additional factors influencing customer satisfaction to achieve a more holistic understanding of this intricate phenomenon.

References

- [1] Pappas, I. O., Pateli, A. G., Giannakos, M. N., & Chrissikopoulos, V. Moderating effects of online shopping experience on customer satisfaction and repurchase intentions. *International Journal of Retail and Distribution Management*. 2014; 42(3): 187–204.
- [2] Al-Aziz, A. M. A., Metawie, M. The Role Of Emotions and Social Influence On Consumer Purchase Intention Towards Online Retailers. *IJMS*. 2022; 5(3): 240–253.
- [3] Yu, F., Wenhao, Q., Jinghong, Z. Nexus Between Consumer's Motivations and Online Purchase Intentions Of Fashion Products: A Perspective Of Social Media Marketing. *Front. Psychol*. 2022; 13: 892135.
- [4] Momtaz, H., Islam, A. M., Ariffin, K. H. K., & Karim, A. Customer satisfaction on online shopping in Malaysia. *International Journal of Business and Management*. 2011; 6(11): 162–169.
- [5] Williams, P., & Naumann, E. Customer satisfaction and business performance: a firm-level analysis. *Journal of Services Marketing*. 2011; 25(1): 20–32.
- [6] Kotler, P., & Keller, K. L. *Marketing Management*. 15th ed. New Jersey: Prentice Hall; 2012.
- [7] Maditinos, D. I., & Theodoridis, K. Satisfaction determinants in the Greek online shopping context. *Information Technology and People*. 2010; 23(4): 312–329.
- [8] Trong, V. H., Khanh N. T. V., & Gim, G. Evaluating factors influencing consumer satisfaction towards online shopping in Viet Nam. *Journal of Emerging Trends in Computing and Information Sciences*. 2014; 5(1): 67–71.
- [9] Tandon, U., Kiran, R., & Sah, A. Analyzing customer satisfaction: users perspective towards online shopping. *Nankai Business Review International*. 2017; 8(3): 266–288.
- [10] Ranjbarian, B., Fathi, S., & Rezaei, Z. Factors influencing on customers' E-satisfaction: a case study from Iran. *Interdisciplinary Journal of Contemporary Research in Business*. 2012; 3(9): 1496–1511.
- [11] Chen, Z., Ling, K. C., Ying, G. X., & Meng, T. C. Antecedents of online customer satisfaction in China. *International Business Management*. 2012; 6(2): 168–175.
- [12] Mai Hoang Thinh. Online shopping trends of Vietnamese consumers. *Industry and Trade Magazine*. 2003; 4. Available at: <https://tapchicongthuong.vn/bai-viet/xu-huong-hanh-vi-mua-hang-truc-tuyen-cua-nguoi-tieu-dung-viet-nam-104014.htm>
- [13] Oliver, R. L. *Satisfaction: A Behavioral Perspective on the Consumer*. New York; 2015.
- [14] Giese, J. L., & Cote, J. A. Defining Consumer Satisfaction. *Academy of Marketing Science Review*. 2000; 1: 1–27.
- [15] Flavián, C., Guinaliú, M., & Gurrea, R. The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information and Management*. 2006; 43(1): 1–14.
- [16] Pham, C. T., & Nguyet, T. T. T. Using Media to Influence Consumer Attitudes to Domestic Goods in Vietnam by Framing Public Interest: A Media Framing Effect Analysis. *SAGE Open*. 2022; 12(4).
- [17] Moriuchi, E., & Takahashi, I. Satisfaction trust and loyalty of repeat online consumer within the Japanese online supermarket trade. *Australasian Marketing Journal*. 2016; 24(2): 146–156.
- [18] Szymanski, D. M., & Hise, R. T. E- satisfaction: An initial examination. *Journal of Retailing*. 2000; 76(3): 309–322.
- [19] Dharmesti, M. D. D., & Nugroho, S. S. The Antecedents of online customer satisfaction and customer loyalty. *The Business & Management Review*. 2012; 7(2): 57–68.
- [20] Kim, H. R. Developing an index of online customer satisfaction. *Journal of Financial Services Marketing*. 2005; 10(01): 49–64.
- [21] Yaqub, R. M. S., Azhar, M., Hameed, W. U., Murad, M. Role Of Web Design, E-payment and E-traceability With Mediating Role Of Consumer Behavior To Develop Customer Satisfaction For Emerging Bricks And Clicks Business Model Trends In South Punjab. *REAL*. 2022; 2(5): 123–135.
- [22] Chang, H. H., Chen, S. Consumer Perception Of Interface Quality, Security, and Loyalty In Electronic Commerce. *Information & Management*. 2009; 7(46): 411–417.
- [23] Qalati, S. A., Vela, E. G., Li, W., Dakhan, S. A., Thuy, T. T. H., Merani, S. H. Effects Of Perceived Service Quality, Website Quality, and Reputation On Purchase Intention: The Mediating And Moderating Roles Of Trust And Perceived Risk In Online Shopping. *Cogent Business & Management*. 2021; 1(8): 1869363.
- [24] Veybitha, Y., Alfansi, L., Salim, M., Darta, E. Critical Review: Factors Affecting Online Purchase Intention Generation Z. *JICP*. 2021; 1(4): 354–363.
- [25] Bougie, R., Pieters, R., Zeelenberg, M. Angry Customers Don't Come Back, They Get Back: the Experience And Behavioral Implications Of Anger And Dissatisfaction In

- Services. *Journal of the Academy of Marketing Science*. 2003; 4(31): 377-393.
- [26] Jun, M., Yang, Z., Kim, D. Customers' Perceptions Of Online Retailing Service Quality and Their Satisfaction. *International Journal of Quality & Reliability Management*. 2004; 8(21): 817-840.
- [27] Tabachnick, B. G., & Fidell, L. S. *Using multivariate statistics*. 5th ed. London, UK: Allyn & Bacon/Pearson Education; 2007.
- [28] George, D., & Mallery, P. *IBM SPSS statistics 27 step by step : a simple guide and reference*. 17th ed. Routledge; 2021.
- [29] Hair. J. F., R. E. Anderson., R. L. Tatham and W. C. Black. *Multivariate Data Analysis*. 5th Ed. Prentice-Hall; 1998.
- [30] Pallant. J. *SPSS survival manual. A step by step guide to data analysis using SPSS for Windows (version 12)*. Buckingham, UK: Open University Press; 2005.
- [31] Byrne, B. M. *Structural Equation Modeling With Lisrel, Prelis, and Simplis : Basic Concepts, Applications, and Programming*. In *Structural Equation Modeling With Lisrel, Prelis, and Simplis*. 1st ed. Psychology Press; 1998.
- [32] Evanschitzky, H., Iyer, G. R, Hesse, J., & Ahlert, D. E-satisfaction: A re-examination. *Journal of Retailing*. 2004; 80(3): 239-247.
- [33] K.B.Bhaskar, A.Prasanth, P.Saranya. An energy-efficient blockchain approach for secure communication in IoT-enabled electric vehicles. *International Journal of Communication Systems*. 2022; 35: 1-27.
- [34] P. C. Thang, T. T. N. Trang, B. T. Tai and A. Prasanth. Multimedia Privacy, Security, and Protection within the Blockchain: A Review. 5th International Conference on Contemporary Computing and Informatics (IC3I). Uttar Pradesh, India; 2022. 1171-1176.