

## Factors that Determine Repeat Purchases on E-Commerce

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### **Abstract**

In recent years, online loyalty has grown more significant in the context of electronic commerce (e-commerce). Customers that are loyal to a company bring in long-term income and are seen as a valuable asset. However, in a competitive Internet environment, businesses lose consumers due to a lack of trust, contentment, and online loyalty. With an emphasis on consumer purchase intention development, this study shows how online loyalty, trust, and satisfaction form in e-commerce. Based on the literature study, a conceptual framework was created. Data was gathered from e-customers of online forms in a number of Indonesian cities. Confirmatory factor analysis was performed when the data was clarified. The theories were tested using structural equation modeling. Consumer

benefits have a good influence on consumer online satisfaction, and comfort has a good influence on customer online satisfaction, according to the findings

## Keywords

E-Commerce, repeat purchase, factors

## 1. Introduction

Since the benefits of e-commerce for commerce, online loyalty has been a significant topic in the research of e-commerce in recent years. Online loyalty is defined as a customer's dedication and good attitude toward online businesses, and it leads to repurchasing. (Nisar, 2017)

In e-commerce, dependability refers to a person's intention to make another purchase from the same company based on previous transactions. Online loyalty is divisive, and there are few debates over how to build an online reward program. Clients that are loyal offer long-term advantages to businesses and are seen as a valuable resource. Steadfast clients welcome unused clients to buy from their top pick company and are a wealthy asset for benefit [2] (Brashear, 2016). Online loyalty diminishes the working costs since faithful clients purchase more than other clients. Despite the fact that the expenses of establishing an online loyalty program are higher than those of establishing a loyalty program in traditional commerce, the advantages and growth occur more quickly after the connection has been established. (Fang,2016)

The comes about of past inquire about point to the significance of loyalty improvement in e-commerce. In portraying loyalty arrangement, online trust and online satisfaction play a crucial part (Giao, 2020)

This inquire about tries to appear that once clients appreciate, advantage and comfort, and are acquainted with online obtaining (Abou, 2017) (Duarte, 2018). They are fulfilled which when there's security, a clear shopping handle, dependable installment framework and generosity, they trust the online companies. Finally, online happiness and trust lead to repurchases and the establishment of online loyalty (Aggarwal, 2018)(Pham,2018),(Shin,2013)

## 2. Literature Review

### A. *Online satisfaction*

Client fulfillment has pulled in significant consideration from scholastic and e-commerce companies in later a long time. Clients who have been satisfied with their previous online purchasing are more inclined to repurchase from the same firm (Pappas, 2014). In most inquire about in this space, fulfillment is the most calculate within the arrangement of dependability. Fulfilled clients will buy once more and bring long-term benefits for companies (Malik, 2012)

Previous research examined client fulfillment in terms of common and particular setting. The comes about of their examination uncovered that seen ease of utilize and value influence client fulfillment and fulfillment impacts dependability in e-commerce (Kassim, 2010). Scholars have repeatedly highlighted system and information quality, as well as consumer perception (ease of use and utility) as variables that lead to customer satisfaction (Setia, 2013). Satisfaction as the most calculate that impacts client network and fulfillment with the e-commerce framework. Indulgence (sense of joy) has too been considered as a figure that impacts online satisfaction and loyalty (Bashar, 2013)

### B. *Customer pleasure*

The term "customer pleasure" relates to how pleasurable it is to connect to the computer system. Customer satisfaction is influenced by perceived pleasure, which also relates to cognitive information processing (Niranjanamurthy, 2013). The impact of convenience, security, and enjoyable purchasing on online satisfaction. (Norhidayah,2016)

Shopping that is pleasurable leads to increased online purchases and e-commerce loyalty. Consumer satisfaction in Internet buying is increased by a pleasurable shopping experience and consideration of customer advantages, according to the findings. (Bauer,2020) (Cai,2011)

### C. *Comfort*

Comfort is characterized as the degree to which clients feel that the site is client neighborly, straightforward and natural. Openness of data and effortlessness of the exchange prepare have a noteworthy impact on client

fulfillment (Salehi,2012).When customers can't find their way around the structure, they leave e-commerce websites without taking any action or making a purchase. Hernandez investigated the e-purchasing involvement's directional influence on e-commerce. The clients in their research group center were divided into two groups: (Nisar,2017) experienced e-customers and clients with little or no e-commerce experience(Brashear,2016). The motivations that drive clients to buy for the first time on the Internet are not the same as those that drive repurchasing behavior. More e-commerce encounters lead to e-commerce comfort and co In every business activity, trust is critical, and it may be a communal and institutional asset that is used to achieve certain goals.. (Hernández,2010),. The look office within the e-commerce framework empowers clients to get the data that they require, and giving open data and perceivability are imperative components for e-customer comfort (Sridharan,2013)

#### *D. Trust*

In any commercial movement, trust plays a imperative part and could be a collective and institutional property that's drawn upon to attain specific objectives. Trust too energizes accomplices to coordinate in exchanges (Lin , 2011). The transactions are between two individuals, businesses, or individuals and businesses. Many experts have discussed trust from various perspectives, including mechanical, organizational, and administrative, behavioral and mental, financial, and amusement theoretic methods (Kirs,2012).

Unlike conventional commerce, e-commerce trust is built on the customer's belief in the process. The importance of trust in the success of e-commerce and its impact on consumer online loyalty has been recognized. The e-shopping obstacles, with a focus on non-shopper behavior. According to the findings of their study, the most important hurdles to customers purchasing over the Internet are trust and security concerns (Iglesias, 2013).

#### *E. Protection*

It is widely acknowledged that determining the level of protection fosters client trust, which in turn leads to client repurchases and a slew of other benefits for businesses (Hung, 2012).

E-Commerce frameworks save customer data additionally the data concerning their exchanges amid Web shopping Client data can be deconstructed for a variety of reasons, increasing the risk to clients. As a result, clients perceive framework security to be a crucial factor in e-commerce. The notion of perceived protection is the most significant barrier for customers who want to buy products or services on the internet. Client protection recognition is influenced by confirmation, protection, and encryption. Clients are aware that their data is gathered, recorded, and may be used for unintended purposes in the future, which is always a worry. As a result, visible protection may be a subjective possibility for e-commerce clients that their money-related and personal data will not be revealed, saved, or stolen throughout the transaction (Kim,2012)

#### *F. Trusty payment system*

E-commerce is founded on the Electronic Installment Framework (EPS), which is one of the most important aspects of e-commerce's success (Shree,2020). Simple installment, security, unwavering quality, security, adequacy, versatility and namelessness are the components that impact EPS and are the diverse angles in comparison with conventional installment strategies (Kamble,2018)

Within the e-commerce context, transactions take place without any prior customer interaction or human interaction. Threats to e-commerce security from interpersonal systems or the media have prompted people to consider EPS security (Helmy, 2018)

#### *G. Clear shopping process*

Understanding the online shopping handle to set up and support e-commerce is vital for retailers and companies (Bilgihan,2016) Understanding how to set up and support e-commerce requires a thorough understanding of the online buying process.

The shopping prepare includes data look, item mindfulness, item trial, exchange and conveyance. Shopping exercises part since of numerous stages. Because shopping forms are completed at various times, locations, and phases of the purchasing process, they are divided into a few sub-processes. (Cao, 2012)

### **3. Conceptual Model and Hypothesis**

This study uses a quantitative method with a Likert scale, testing 8 hypotheses This research employs a quantitative approach., testing theory and theory consistency from previous research (Joseph,2017) and data processing using the SMART PLS professional version 3 program (Mumtaz, 2018)

The purpose of PLS does not require a large sample size, the distribution does not need to be normal, and explains the relationship of latent variables or more to predict. The number of questions is 35 items and 70 respondents. The distribution of questionnaires uses the Q form the following are the terms used in the hypothesis: The term comfort refers to the pleasure of connecting to an e-commerce system and purchasing. Benefits refers to e-commerce benefits such as time and money savings, avoiding traffic, robbery, and accidents, and earning incentives and discounts, among others.

Convenience In terms of information accessibility and transaction convenience, this phrase refers to how customers feel about the e-commerce system. Security This refers to the security of the e-commerce system in terms of financial and personal information. A simple purchasing procedure the buying process is simple to comprehend. Trusty payment system that is dependable in terms of financial transactions, the system's reliability. Online Satisfaction refers to a customer's impression of satisfied fulfillment as a result of a transaction. The sense of trust in the exchange's dependability and integrity is referred to as online Trust. Online Loyalty is defined as a pattern of purchase behavior over a period of time.

- H1: Comfort has a positive effect on customer online satisfaction.
- H2: Customer benefits have a positive effect on customer online satisfaction.
- H3: Customer pleasure has a positive effect on customer online satisfaction.
- H4: Protection has a positive effect on customer online trust.
- H5: Simple shopping procedure has a positive effect on customer online trust.
- H6: Trusty payment system has a positive effect on customer online trust.
- H7: Satisfaction has a positive effect on customer online loyalty.
- H8: Trust has a positive effect on customer online loyalty.

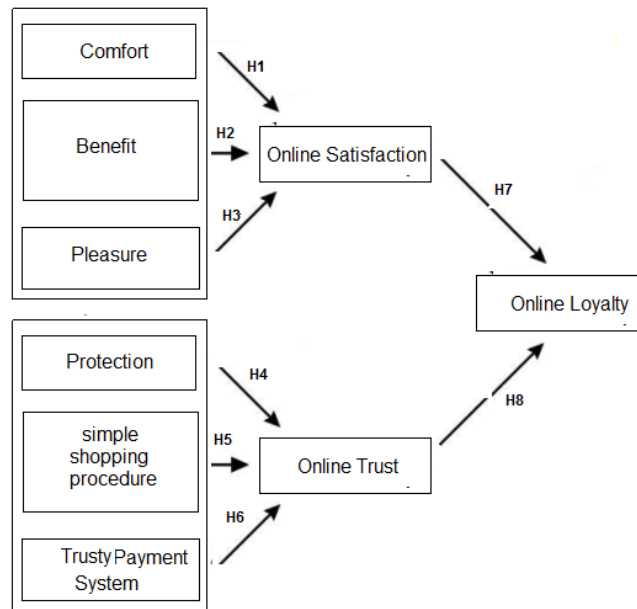


Figure 1. Online loyalty model

#### 4. Results and Discussion

There are 4 stages of suitability analysis for the research model. First, the Partial Least Square Model meets the goodness of fit because the criteria for having a chi-square 2 value of 1246.230 above the threshold of 0.05 and an SRMR of 0.089, are interpreted as fit because it is standardized with a threshold that must be less than 0.08 (Hu, 1999). Fulfillment of the fit requirements of the overall model so that the next stage of testing can be carried out. Second, the measurement of Outer loading where the indicator is understood by the respondent and is related to the measured latent variable and is supported by a high convergent validity value > 0.7 (Mumtaz, 2018) and a significant p-value < 0.05. Third, the construct size can be relied upon if the convergent validity and variable

reliability can be seen from the Cronbach's Alpha value  $> 0.05$ ,  $\rho_A > 0.05$ , composite variable  $> 0.7$  and Average Variance Extracted  $> 0.5$  as discriminant validity (Hair et al., 2018). This study was accepted for further processing. Fourth, the inner model fit is indicated by the coefficient of determination R-Square or  $R^2$  of the endogenous construct (figure 2). Chin argues that if the endogenous  $R^2$  value  $> 0.67$  then endogenous trust is 0.744, satisfaction is 0.695 and online loyalty is 0.804 very strongly determined by the exogenous variable.

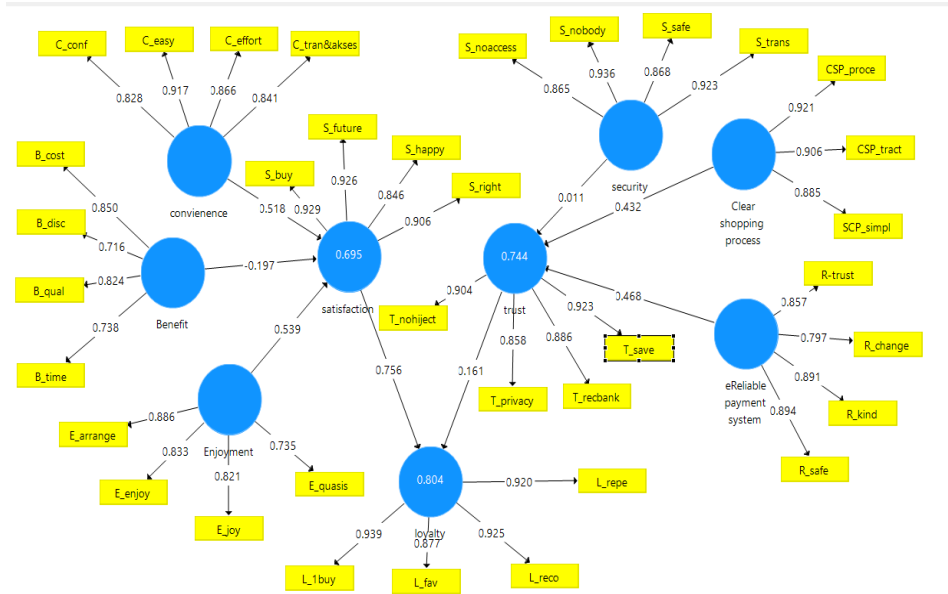


Figure 2 Model PLS Algorithm

Table 2. Hypothesis results

	path	P value	result
H1: Comfort has a positive effect on customer online satisfaction.	0.518	0.000	proved
H2: Customer benefits have a positive effect on customer online satisfaction.	-0.197	0.240	Did not proved
H3: Customer pleasure has a positive effect on customer online satisfaction.	0.539	0.00	proved
H4: Protection has a positive effect on customer online trust.	0.011	0.929	Did not proved
H5: Simple shopping procedure has a positive effect on customer online trust.	0.432	0.00	proved
H6: Reliable payment system has a positive effect on customer trust.	0.468	0.002	proved
H7: Online satisfaction has a positive effect on customer online loyalty.	0.756	0.00	proved
H8: Online Trust has a positive effect on customer online loyalty.	0.161	0.275	Did not proved

## 5. Conclusion

The factor of customer loyalty to e-commerce companies is one of the factors that customers buy back products from e-commerce companies. It is difficult to develop online loyalty in e-commerce businesses, and the study's findings demonstrate that online trust and happiness have a good impact on customer loyalty in e-commerce, as well as consumer repurchase of the company's items. How is online trust and online customer satisfaction for the company's e-commerce? The results of the research show that a reliable payment system and simple purchasing procedures have an effect on customer online trust. Meanwhile, online satisfaction is determined from the comfort and pleasure of the customer

The number of e-commerce companies due to the trend of higher customer interest in buying via e-commerce, the easier it is for customers to move from one e-commerce company to an e-commerce company or in other words online loyalty can be very low if the company does not know what factors only that can increase customer online loyalty which will have an impact on customer repurchase of the company's products. The conclusion from the results of the study explains that the ease of purchasing process, comfort, pleasure will cause customers to buy back the company's e-commerce products, thus the e-commerce website that is built must pay attention to the above factors in order to generate online loyalty of the company and customers will repurchase the company's product

## References

- Nisar, T. M., & Prabhakar, G. (2017). What factors determine online satisfaction and consumer spending in e-commerce retailing?. *Journal of retailing and consumer services*, 39, 135-144.
- Brashear-Alejandro, T., Kang, J., & Groza, M. D. (2016). Leveraging loyalty programs to build customer-company identification. *Journal of Business Research*, 69(3), 1190-1198.
- Fang, J., Shao, Y., & Wen, C. (2016). Transactional quality, relational quality, and consumer online loyalty: Evidence from SEM and fsQCA. *International Journal of Information Management*, 36(6), 1205-1217.
- Giao, H., Vuong, B., & Quan, T. (2020). The influence of website quality on consumer's loyalty through the mediating role of online trust and online satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351-370
- Abou-Shouk, M. A., & Khalifa, G. S. (2017). The influence of website quality dimensions on e-purchasing behaviour and e-loyalty: a comparative study of Egyptian travel agents and hotels. *Journal of Travel & Tourism Marketing*, 34(5), 608-623.
- Duarte, P., e Silva, S. C., & Ferreira, M. B. (2018). How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM. *Journal of Retailing and Consumer Services*, 44, 161-169
- Aggarwal, A., & Rahul, M. (2018). The effect of perceived protection on consumer purchase intentions in electronic commerce. *International Journal of Public Sector Performance Management*, 4(1), 1-20.
- Pham, Q. T., Tran, X. P., Misra, S., Maskeliūnas, R., & Damaševičius, R. (2018). Relationship between convenience, perceived value, and repurchase intention in online shopping in Vietnam. *Sustainability*, 10(1), 156.
- Shin, J. I., Chung, K. H., Oh, J. S., & Lee, C. W. (2013). The effect of site quality on repurchase intention in Internet shopping through mediating variables: The case of university students in South Korea. *International Journal of Information Management*, 33(3), 453-463
- Pappas, I. O., Pateli, A. G., Giannakos, M. N., & Chrissikopoulos, V. (2014). Moderating effects of online shopping experience on customer satisfaction and repurchase intentions. *International Journal of Retail & Distribution Management*.
- Malik, M. E., Ghafoor, M. M., & Hafiz, K. I. (2012). Impact of Brand Image, Service Quality and price on customer satisfaction in Pakistan Telecommunication sector. *International journal of business and social science*, 3(23).
- Kassim, N., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and online loyalty in e-commerce settings. *Asia pacific journal of marketing and logistics*.
- Setia, P., Setia, P., Venkatesh, V., & Joglekar, S. (2013). Leveraging digital technologies: How information quality leads to localized capabilities and customer service performance. *Mis Quarterly*, 565-590
- Bashar, A., & Wasiq, M. (2013). Online satisfaction and Loyalty of Consumers Shopping Online. *Global Sci-Tech*, 5(1), 6-19

- Niranjanamurthy, M., Kavyashree, N., Jagannath, S., & Chahar, D. (2013). Analysis of e-commerce and m-commerce: advantages, limitations and security issues. *International Journal of Advanced Research in Computer and Communication Engineering*, 2(6), 2360-2370
- Norhidayah, A. (2016). The mediating effect of online satisfaction and the moderating effect of comfort towards loyalty among Internet banking users in northern region of Malaysia (Doctoral dissertation, Universiti Utara Malaysia).
- Bauer, J. C., Linzmajer, M., Nagengast, L., Rudolph, T., & D'Cruz, E. (2020). Gamifying the digital shopping experience: games without monetary participation incentives increase customer satisfaction and loyalty. *Journal of Service Management*.
- Cai, S., & Xu, Y. (2011). Designing not just for pleasure: effects of web site aesthetics on consumer shopping value. *International Journal of Electronic Commerce*, 15(4), 159-188
- Salehi, F., Abdollahbeigi, B., Langroudi, A.C. & Salehi, F., 2012, 'The impact of website information convenience on e-commerce success of companies', *Procedia – Social and Behavioral Sciences* 57, 381–387. <http://dx.doi.org/10.1016/j.sbspro.2012.09.1201>
- Hernández, B., Jiménez, J. & Martín, M.J., 2010, 'Customer behavior in electronic commerce: The moderating effect of e-purchasing experience', *Journal of Business Research* 63(9–10), 964–971. <http://dx.doi.org/10.1016/j.jbusres.2009.01.019>
- Sridharan, R., & Simatupang, T. M. (2013). Power and trust in supply chain collaboration. *International journal of value chain management*, 7(1), 76-96.
- Lin, C.-C., Wu, H.-Y. & Chang, Y.-F., 2011, 'The critical factors impact on online customer satisfaction', *Procedia Computer Science* 3, 276–281. <http://dx.doi.org/10.1016/j.procs.2010.12.047>
- Kirs, P. & Bagchi, K., 2012, 'The impact of trust and changes in trust: A national comparison of individual adoptions of information and communication technologies and related phenomenon', *International Journal of Information Management* 32(5), 431–441. <http://dx.doi.org/10.1016/j.ijinfomgt.2012.02.003>
- Iglesias-Pradas, S., Pascual-Miguel, F., Hernández-García, Á. & Chaparro-Peláez, J., 2013, 'Barriers and drivers for non-shoppers in B2C e-commerce: A latent class exploratory analysis', *Computers in Human Behavior* 29(2), 314–322. <http://dx.doi.org/10.1016/j.chb.2012.01.024>
- Hung, S. W., Cheng, M. J., & Chen, P. C. (2012). Reexamining the factors for trust in cultivating online customer repurchase intentions: The moderating effect of perceived waiting. *International Journal of Human-Computer Interaction*, 28(10), 666-677.
- Kim, C., Galliers, R.D., Shin, N., Ryoo, J.-H. & Kim, J., 2012, 'Factors influencing internet shopping value and customer repurchase intention', *Electronic Commerce Research and Applications* 11(4), 374–387. <http://dx.doi.org/10.1016/j.elerap.2012.04.002>
- Shree Ganesh, S., Delin Dechamma, K. U., & Dechamma, K. D. (2020). Digital Marketing: An Insight Towards Electronic Payment System And Its Impact On Indian Youths. *Advance and Innovative Research*, 303.
- Kamble, P. R., & Afza, N. (2018). Emerging Trends In Banking. *International Journal of Management Research and Reviews*, 8(5), 1-7
- Helmy, O. (2018). Airline Carriers E-Ticketing Mechanism Utilizing Online Reservations Management System. *International Journal of Tourism and Hospitality Management*, 1(1), 132-151.
- Bilgihan, A., Kandampully, J., & Zhang, T. C. (2016). Towards a unified customer experience in online shopping environments. *International Journal of Quality and Service Sciences*.
- Cao, X., 2012, 'The relationships between e-shopping and store shopping in the shopping process of search goods', *Transportation Research Part A: Policy and Practice* 46(7), 993–1002. <http://dx.doi.org/10.1016/j.tra.2012.04.007>
- Joseph F Hair Jr, Christian Ringle, Marko Sarstedt, Siegfried P Guderganm 2017, *Advanced Issues in Partial Least Square Structural Equation Modeling*, SAGE, [https://books.google.co.id/books?hl=en&lr=&id=-flrDgAAQBAJ&oi=fnd&pg=PP1&ots=vYZ0fpJ1cY&sig=TIYJaEt7cBhwvJnGnIrs\\_789p4&redir\\_esc=y#v=onepage&q&f=false](https://books.google.co.id/books?hl=en&lr=&id=-flrDgAAQBAJ&oi=fnd&pg=PP1&ots=vYZ0fpJ1cY&sig=TIYJaEt7cBhwvJnGnIrs_789p4&redir_esc=y#v=onepage&q&f=false)
- Mumtaz Ali Memon T Ramayah, Jacky Cheah, Francis Chuah, Hiram Ting 2018, *Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0: An Updated Guide and Practical Guide to Statistical Analysis*,
- Hu, L.T. and Bentler, P.M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling*, 6 (1), 1-55.
- Audrain-Pontevia, A.-F., N'Goala, G. & Poncin, I., 2013, 'A good deal online: The impacts of acquisition and transaction value on E-satisfaction and E-loyalty', *Journal of Retailing and Consumer Services* 20 (2013) 445–452.

- Auh, S. & Johnson, M.D., 2005, 'Compatibility effects in evaluations of satisfaction and loyalty', *Journal of Economic Psychology* 26(1), 35–57. <http://dx.doi.org/10.1016/j.joep.2003.10.002>
- Bechwati, N.N. & Xia, L., 2003, 'Do computers sweat? The impact of perceived effort of online decision aids on consumers' satisfaction with the decision process', *Journal of Consumer Psychology* 13(1/2), 139–148. <http://dx.doi.org/10.1207/s153276603768344852>
- Alshare, K. A., Freeze, R. D., Lane, P. L., & Wen, H. J. (2011).

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