

# The Impact of System Quality, Perceived Value, and Brand Personality, on Behavior to Subscribe in the Online Streaming Service

Yohanes Nuhadriel<sup>1</sup> Keni Keni<sup>1\*</sup>

<sup>1</sup>*Faculty of Economics and Business, Universitas Tarumanagara, West Jakarta 11470, Indonesia*

*\*Corresponding author. Email: keni@fe.untar.ac.id*

## ABSTRACT

Technology has become one of the most influential industries in the national and global economy. Along with the growth rate of smartphone and internet users due to the Covid-19 pandemic, it has opened up opportunities for the development of the technology industry, however, the pandemic has impacted almost all sectors, especially the film industry. Films that have started to enter the online streaming service sector and have resulted in a higher level of competition in the online streaming industry sector. Therefore, to increase competitive advantage and business continuity, OTT services need to increase the level of commitment and loyalty of consumers to subscribe. This study aims to empirically test 1) system quality, 2) perceived value, and 3) brand personality as a predictor of behavior to subscribe. Sampling was done by non-probability sampling method with convenience sampling technique to 163 online streaming service subscribers. The research hypotheses were tested using Partial Least Square – Structural Equation Modeling (PLS-SEM). The results showed that system quality could not be used as predictors of behavior to subscribe, perceived value and brand personality could be used as predictors of behavior to subscribe.

**Keywords:** *system quality, perceived value, brand personality, behavior to subscribe.*

## 1. RESEARCH INTRODUCTION

Technology is the most influential industry on the national or global economy. This is due to the growing digitalization and the potential market for internet users which grows every year. The presence of the Covid-19 pandemic has created a significant change in consumer behavior and this change also impacts several sectors, such as the film industry, which experienced a decline in income, even losses. Over the top (OTT) services is a service that provides information in the form of messages, voice or video via the internet, and OTT have become an option for the film industry to survive in the midst of the Covid-19 pandemic, because cinemas could not operate normally and movies can only be watched through online streaming services. As a result, the level of competition in the online streaming sector gets higher along with the entry of new competitors who entered the sector. Loyalty and efforts to increase consumer commitment have become a crucial role to maintain amid the Covid-19 pandemic and competition. Behavior to subscribe itself refers to the consumer's commitment to use the same service/product in the long term. Consumers' commitment has become an important aspect for businesses that need to be improved in the midst of competition and pandemic conditions.

Consumers tend to be loyal and committed when the online streaming service system is easy, fast, and convenient to use [9]. The higher the quality, the higher the consumer loyalty. The quality of the system itself has also become fundamental in the technology industry, especially the online streaming sector.

Furthermore, when consumers feel that certain services/products are worth it, especially when the added value provided cannot be found in other services, consumers tend to be loyal to using the same service. [11] Finally, consumers tend to choose a brand that has a similar identity with themselves, which is in accordance with the theory of social identity [19]. The more the brand's character matches the consumer's character, the more loyal consumers will use the service [14].

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1. System Quality

System quality can be interpreted as a condition where a system is fast, easy to use, robust, experienced, flexible, and so on. [1]. Furthermore, system quality can also be

interpreted as a term used to describe the characteristics possessed by an information system [2]. In this study, system quality can be defined as an important description of an information system in meeting the aspects required by users of the system such as convenience, speed, usability and other components.

**2.2. Perceived Value**

Perceived value can be defined as a consumer evaluation of the benefits obtained when using the product/service and the costs that have been paid [3]. Perceived value is all customer assessments of the usefulness of a brand, based on personal perceptions and comparing what is received such as satisfaction, benefits, and quality with what is sacrificed such as energy, time, or material goods such as money [4]. It can be concluded that perceived value is a consumer's assessment of the exchange of value given in the form of price or other sacrifices with what value is received.

**2.3. Brand Personality**

Brand personality can be defined as the set of human characteristics associated with a brand [5]. Furthermore, brand personality can also be defined as all personality traits used to characterize a person and associated with a brand, is a concept within the field of relational marketing [6]. In this study, brand personality can be defined as the entire human personality that is applied and relevant to a particular brand that forms a match.

**2.4. Behavior to Subscribe**

Behavior to subscribe can be defined as an action or behavior to subscribe to a service or a product. The act of loyalty can be interpreted as a deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having potential to cause switching behavioral [7]. Furthermore, brand loyalty can also be defined as a measure of how often consumers buy a given brand; whether or not they switch brands and, if they do, how often; and the extent of their commitment to buying the brand regularly [8]. In this study, behavior to subscribe can be defined as a deep commitment behavioral to make repeated purchases of a particular service/product consistently in the future without switching brands and that there has been a bond between consumers and brands.

**2.5. The Effect of System Quality on Behavior to subscribe**

A previous study that examined users of retail coffee shop applications found that a good quality application system encourages consumers to want to use the same product/service in the future [9]. Other studies also found a significant effect of system quality on continued intention [10]. Based on previous research, the writer can formulate the following hypothesis

H1: There is a positive and significant effect of system quality on behavior to subscribe.

**2.6. The Effect of Perceived Value on Behavior to Subscribe**

When consumers perceive that competitors have no advantage and when consumers feel that the service is worth it, then consumers will reuse the service in the future [11]. Furthermore, other studies also found similar research results and that even though the price of the service is expensive, if consumers feel that it is worth it, commitment and loyalty ensues [12]. Based on previous research, the writer can formulate the following hypothesis:

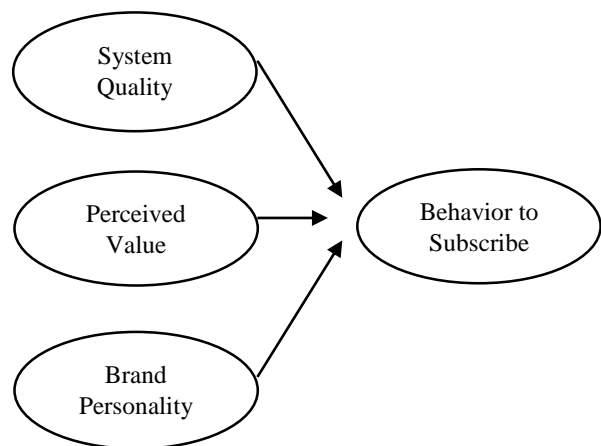
H2: There is a positive and significant effect of Perceived value on behavior to subscribe.

**2.7. The Effect of Brand Personality on Behavior to Subscribe**

Previous research that examines Islamic bank customers found that customers can be loyal to become loyal customers due to the similarity of customer characteristics with Islamic banks [13]. When customers identify the bank according to themselves, it can directly encourage consumer behavioral to use the same service. Furthermore, other studies also show that brand personality plays an important role and has a positive influence on behavior to subscribe [14]. It can be concluded that consumers tend to be loyal to brands that have similar characters with themselves and based on previous research, the authors formulate the following hypothesis:

H3: There is a positive and significant influence of brand personality on behavior to subscribe.

From the framework above, the research model is formed as follows:



**Figure 1** Research Model

### 3. RESEARCH METHODOLOGY

This research is a cross sectional descriptive study. Samples were taken using a non-probability sampling method, with a convenience sampling technique to facilitate and speed up data collection. A total of 221 people have participated as respondents, but only 163 respondents can be used because 58 respondents do not meet the research criteria, such as having subscribed to online streaming services for at least 3 months and all respondents must subscribe to the same online streaming service. Due to the Covid-19 pandemic, all questionnaires were distributed online using Google form. All data was processed using the PLS-SEM method with the Smart PLS 3 software application. Furthermore, the indicators that will be used have been adapted from previous research using a Likert scale with a scale of 1 indicating strongly disagree and 5 indicating strongly agree. Table 1 shows the instruments used in the study for each variable and the references used.

### 4. RESULTS & DISCUSSIONS

With a total of 163 respondents who have been analyzed using the PLS-SEM method in this study, the results of the analysis will be used for indicators and to test whether a hypothesis can be supported or rejected. By using the PLS-

SEM method, there are three main steps carried out in this study.

Based on the respondent's profile, on average, women made up 56% of the respondents compared to 44% men, 91 respondents or 59% aged 21-30 years, 144 respondents or 88% are students, and all of these respondents have used the same online streaming service for a minimum period of 3 months to show that all respondents are proven to be loyal customers.

After describing the respondent's profile, measurement and structural model testing were conducted to ensure the validity and reliability of this study, and shows statistical results showing whether the hypothesis is supported or rejected. Based on measurement model testing, the authors conclude that all items, data, and research models are valid. It is shown from the factor loading value, Average Variance Extracted (AVE), from each variable and indicator that has met the minimum requirements of 0.7 and 0.5 [15], so it is concluded that the data has passed the convergent validity test. Furthermore, due to the HTMT analysis and each HTMT value of each variable is less than 0.9 it can be seen that all variables have passed the discriminant validity test. After testing the validity, the reliability test results from this study have also met the requirements, where the Cronbach's alpha and composite reliability values have each met the requirements and are above the minimum requirements [15].

**Table 1** Measurements or Indicators of Each Variable

<b>Variables</b>	<b>Indicators</b>
System quality	This OTT service system quickly outputs graphic visuals.
	This OTT service system quickly outputs all text.
	This OTT service system is visually eye-catching.
Perceived Value	I consider the price of this OTT service still acceptable.
	This OTT service is said to be value for money.
	Based on what I paid, I feel that I got what I paid for.
Brand Personality	This brand is a competent brand.
	This brand is an up to date brand
	This brand is a superior brand.
	This brand is a trendy brand.
	This brand is a authentic brand.
	This brand is a natural brand.
	This brand is a positive brand.
	This brand is an interesting brand.
	This brand is an energetic brand.
This brand is a unique brand.	
Behavior to subscribe	If one day I need the service of online streaming, I will use the same OTT service.
	I will leave a positive comment regarding this OTT service.

	I am willing to pay more for this OTT service than other services.
	I am thinking of sticking with this OTT service in the future.
	I will recommend my friends regarding this OTT service.
	I will recommend my family regarding this OTT service.
	I have always been loyal to a brand that delivers the value I need.

**Table 2** Convergent Validity and Reliability Test Results

Variables	Denotations	AVE	Factor Loadings	Composite Reliability	Cronbach's Alpha
System Quality	X101	0.584	0.822	0.808	0.892
	X102		0.724		
	X103		0.743		
Perceived Value	X201	0.671	0.785	0.859	0.756
	X202		0.843		
	X203		0.828		
Competence	X301	0.623	0.602	0.868	0.797
	X302		0.595		
	X303		0.718		
	X304		0.756		
Excitement	X305	0.686	0.737	0.867	0.769
	X306		0.761		
	X307		0.668		
Sincerity	X308	0.747	0.763	0.899	0.830
	X309		0.794		
	X310		0.769		
Behavior to subscribe	Y101	0.609	0.754	0.916	0.649
	Y102		0.708		
	Y103		0.707		
	Y104		0.850		
	Y105		0.819		
	Y106		0.829		
	Y107		0.782		

**Table 3** Discriminant Validity Heterotrait-Monotrait Ration

Variables	Behavior to subscribe	Brand Personality	Perceived Value
Brand Personality	0.743		
Perceived Value	0.722	0.489	
System Quality	0.671	0.748	0.712

After processing the results of the validity and reliability of the data, structural model testing was conducted to find out the relationship between variables, and to find out whether the hypotheses in the study are supported or rejected. The hypothesis will be accepted if the significant value of each

relationship between variables is below 0.05 (with a 95% confidence level), when the significant value is above 0.05, it indicates that the hypothesis is rejected in this study. The results of these tests will be presented in Table 4.

**Table 4** Path Coefficient and Hypotheses Testing Results

Hypotheses	Original Sample (O)	T Statistics ( O/STDEV )	P Values	Results
There is a positive and significant effect of system quality on behavior to subscribe	0.066	0.898	0.369	H1 Not Supported
There is a positive and significant effect of perceived value on behavior to subscribe	0.372	3.904	0	H2 Supported
There is a positive and significant influence of brand personality on behavior to subscribe	0.476	5.713	0	H3 Supported

The results of the structural model testing are shown in table 4. The R-Squared result of 0.578 means that all independent variables, namely system quality, perceived value, and brand personality have a combined effect of 57.8% in explaining the effect of behavior to subscribe, while rest, 42, 2% is explained by other variables outside of this study. Furthermore, the results of the predictive relevance test ( $Q^2$ ) is 0.339. This shows that the variables used in this study can be used to predict the research model.

The results of testing the first hypothesis show that there is no significant positive effect of system quality on the behavior to subscribe. The results of this study are in line with previous research [16] which states that there is no significant effect when a good quality system does not encourage consumers to continue using a particular product/service. This is because the features of an information system are ubiquitous and easy enough for competitors to adapt, therefore although the quality of the system has become a fundamental aspect in the technology industry, especially the online streaming sector, it is not enough to have a strong influence to encourage consumers to become loyal customers. Furthermore, the results of this study differ from previous studies which state that system quality has a significant positive effect on the behavior to subscribe [9] [10].

Furthermore, hypothesis testing H2 has proven that perceived value significantly affects the behavior to subscribe. In line with previous research [12] [17] [18], the results of previous studies show that perceived value positively and significantly affects behavior to subscribe, when consumers feel a sense of worth it and the added value obtained when buying or using a product/service, the consumer will use the same service in the future to get more value. Online streaming services can also focus on providing added value that competitors do not have to increase consumer commitment.

Brand personality has become an important key for a business because it has been proven to have the strongest influence on behavior to subscribe, therefore H3 is not rejected. This is in line with previous studies [13] [14]. Wahyuni and Fitriani (2016) explained that Islamic bank customers can remain loyal to using Islamic bank services and never change to using another bank. This is due to the similarity of personality between bank customers and the bank. This study proves that brand personality is able to increase the level of loyalty of Islamic bank customers.

When consumers identify a brand according to themselves, it will encourage consumer behavioral to continue to use the brand in the future.

## 5. CONCLUSION

Based on all the discussion in this study, the authors conclude that system quality does not have a significant effect on behavior to subscribe, while perceived value and brand personality have a positive and significant influence on behavior to subscribe for online streaming service subscribers in Indonesia. Although the quality of the system has become the basis for building digital services in the form of online streaming services, this study proves that system quality is not the main factor to increase consumer loyalty and commitment. Consumers tend to be loyal because of the added value when using the online streaming service so that consumers feel that the service is worth it or when a brand has the right character and is in accordance with the customer's character

Related to the conclusion above, all online streaming services need to provide added value in the form of content that cannot be accessed on other online streaming services, such as creating original series or movies. With this differentiation, customers tend to find it difficult to replace online streaming services with competitors and will commit to subscribing for a long time, as long as they don't find the same content on other online streaming services.

In addition, online streaming services need to build a brand character that is unique, authentic, and fun to use. Streaming online services can focus on promoting these characters rather than just improving the quality of the system from the information system, because a good quality system is very easy to imitate by other brands so that consumers find it difficult to identify differences in the quality of a good system with an ordinary one. Furthermore, perceived value and brand personality can be improved because it is not easy to be adapted by other companies and consumers will immediately feel the difference between services, so companies can focus on having differences and unique characters that will not be found in other online streaming services.

## 6. LIMITATIONS & SUGGESTIONS FOR FUTURE RESEARCH

Although the authors used a unique and rigorous approach to conducting this research, this research is still not free from limitations, where the majority of this research was conducted in Jakarta and although Jakarta is the capital and largest city in Indonesia, it does not rule out the possibility that there are differences in research results from other areas in Indonesia. Second, there are other variables and factors that influence the behavior to subscribe which were not examined in this study, which can be used for future research, so that they can add broader insights. Furthermore, the results of this study may be different if the majority of respondents different from the characteristics of the research respondents.

## ACKNOWLEDGMENT

The authors would like to appreciate the LPPM. The Institution for Research and Community Service of Universitas Tarumanagara for financial support with contract No. 1677-Int-KLPPM/UNTAR/XI/2021. Authors also would like to express his/her sincere gratitude to Dr. Keni, S.E., M.M. as a supervising lecturer who gave encouragement to joint in this research, and for the instruction, advice, suggestions, for authors in the completion of this paper. Furthermore, the authors would like to thank all of the respondents who are willing to take their time to fill out the online questionnaire.

## REFERENCES

- [1] Gorla, N., Somers, T. M., & Wong, B. (2010). Organizational impact of system quality, information quality, and service quality. *Journal Strategic Information System*, 19(3), 207–228.
- [2] Ali, F., Terrah, A., Wu, C., Ali, L. & Wu, H. (2021). Antecedents and consequences of user engagement in smartphone travel apps. *Journal of Hospitality and Tourism Technology*, 12(2), 355-371.
- [3] Kotler, P. & Kevin, L.K. (2016). *Marketing management*. (15<sup>th</sup> ed.).
- [4] Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.
- [5] Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3), 347-356.
- [6] Louis, D., & Lombart, C. (2010). Impact of brand personality on three major relational consequences (trust, attachment, and commitment to the brand). *Journal of Product & Brand Management*, 19(2), 114–130.
- [7] Oliver, R. L. (1999). Whence consumer loyalty. *Journal of Marketing*, 63, 33-44.
- [8] Schiffman, L. G., & Wisenblit, J. (2015). *Consumer Behavioral*. (11<sup>th</sup> ed.).
- [9] Hsiao, K.L., Lin, K.Y., Wang, Y.T., Lee, C.H. & Zhang, Z.M. (2018). Continued use intention of lifestyle mobile applications: the Starbucks app in Taiwan. *The Electronic Library*, 37(5), 893-913.
- [10] Raman, P. & Aashish, K. (2021). To continue or not to continue: a structural analysis of antecedents of mobile payment systems in India. *International Journal of Bank Marketing*, 39(2), 242-271.
- [11] Jeong, Y. & Kim, S. (2020). A study of event quality, destination image, perceived value, tourist satisfaction, and destination loyalty among sport tourists. *Asia Pacific Journal of Marketing and Logistics*, 32(4), 940-960.
- [12] Atulkar, S. (2020). Brand trust and brand loyalty in mall shopper. *Marketing Intelligence & Planning*, 38(5), 559-572.
- [13] Wahyuni, S. & Fitriani, N. (2017). Brand religiosity aura and brand loyalty in Indonesia Islamic banking. *Journal of Islamic Marketing*, 8(3), 361-372.
- [14] Shetty, K. & Rodrigues, L.L. (2017). Dynamics of brand personality congruence and its influence on trust, customer satisfaction and loyalty in banking: An empirical study. *International Journal of Applied Business and Economic Research*, 15(3), 95-106.
- [15] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis*, (8<sup>th</sup> ed.).
- [16] Noh, M.J. & Lee, K.T. (2015). An analysis of the relationship between quality and user acceptance in smartphone apps. *Information Systems and e-Business Management*, 14(2), 273-291.
- [17] Putra, T.W. & Keni. (2020). Brand experience, perceived value, brand trust untuk memprediksi brand

loyalty: brand love sebagai variabel mediasi. *Jurnal Muara Ilmu Ekonomi dan Bisnis*, 4(1), 184-193.

[18] Su, J. & Chang, A. (2018). Factors affecting college students' brand loyalty toward fast fashion: A consumer-based brand equity approach. *International Journal of Retail & Distribution Management*, 46(1), 90-107.

[19] Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. *The social psychology of inter-group relations*, 4(3)33-47.