Analysis Of E-Servqual Dimensions Influencing E-Customer Satisfaction Of My First Media Application Users

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Abstract.

The internet's growth in Indonesia has reshaped lifestyles and opened new avenues for businesses. This study examines the impact of e-service quality dimensions on e-customer satisfaction among users of the myFirstMedia application—an innovative digital service ensuring 24/7 customer connectivity. However, there is a noticeable gap between service quality and user expectations. The research, utilizing a quantitative method, combines primary data from Google Forms surveys with secondary data from news articles and previous research. Employing non-probability purposive sampling, the study involves 385 respondents and applies Structural Equation Modeling (SEM) using SmartPLS 4.0 software. Statistical tests reveal that (1) the reliability dimension significantly influences e-customer satisfaction, (2) the responsiveness dimension positively impacts e-customer satisfaction, (3) the security/privacy dimension has a significant positive effect on e-customer satisfaction, (4) the fulfillment dimension significantly contributes to e-customer satisfaction, and (5) the efficiency dimension positively affects e-customer satisfaction. The R-Square coefficient of determination indicates a 52.6% influence of electronic service quality dimensions on e-customer satisfaction. Statistical analysis results confirm the impact of the reliability dimension on e-customer satisfaction. Descriptive analysis highlights that the fulfillment dimension exhibits the lowest percentage value, particularly concerning information on package prices, promotions, and other content within the My First Media application.

Keywords: E-Service Quality, E-customer Satisfaction and myFirstMedia.

I.   INTRODUCTION

Globalization and information technology have transformed the lifestyle of the Indonesian society. Internet user growth reached 8.9% in 2020, with 73.7% of the population connected to the internet. Java Island, with 56.4% internet users, has become the focus of telecommunication businesses. This has facilitated access to information and interaction without time and place limitations, increasing dependence on information technology. The internet has altered communication and business, becoming the primary platform for transactions and social interactions (Tama et al., 2019). According to the APJII 2020 survey, internet users in Indonesia engage in social media (51.5%), messaging (32.9%), entertainment (5.2%), and searching for information on goods/services (2.9%). Despite its potential, the penetration of fixed broadband in the market remains low, at only 4% in 2021. Intense competition in the broadband business has impacted service quality and rates, with download speeds reaching only 20.13 Mbps. Indihome dominates the market with 87% of customers.First Media offers fiber optic broadband services and the myFirstMedia mobile application to enhance customer service. This application facilitates self-registration, provides features for bill checking, package information, promotions, additional services, and allows customers to report issues without direct contact with customer service. Service quality is crucial for customer satisfaction and loyalty. Research indicates that e-service quality significantly influences customer satisfaction. Reports from mediakonsumen.com (2022) reveal various complaints from users of the MyFirstMedia application. On July 15, 2022, complaints were lodged about poor service, delayed responses, and a sluggish application.

Other complaints on July 13, 2022, highlighted the lack of informativeness in the application, particularly regarding subscription status. On July 5, there were reports of unclear customer service information and unsatisfactory solutions. On June 6, a user experienced issues with double payment transactions and slow refund processes. Other complaints include application access problems (February 14),

slow loading speeds, and unresponsive customer service (January 20), as well as payment status not being updated with inadequate customer service (June 20). These complaints encompass slow service, unclear information, and technical issues. Reviews of myFirstMedia indicate its inability to address customer issues. Zeithaml (2017) identified several dimensions of electronic service quality, including reliability (accurate service execution), responsiveness (assisting customers quickly), privacy (guaranteeing user information security), efficiency (structured and easily accessible websites), and fulfillment (service accuracy, order availability, and on-time delivery). Internet Broadband application ratings in Indonesia on the PlayStore and AppStore platforms in 2022 provide an overview of user satisfaction with the MyFirstMedia application, receiving a rating of 2.8 on PlayStore and only 1.3 on AppStore.

This lower rating may reflect various issues or user dissatisfaction with the service quality and performance of the MyFirstMedia application. The ratings on the myFirstMedia application indicate consumer responses, both positive and negative, to the service provided by the myFirstMedia application. Consumer satisfaction levels also reflect the success and effectiveness of First Media in implementing myFirstMedia as part of its business activities. Consumer satisfaction or dissatisfaction with the myFirstMedia application will impact its future. If consumers are satisfied, they are likely to continue subscribing to First Media through the myFirstMedia application. Satisfied consumers will also provide positive referrals for the myFirstMedia application to others. However, dissatisfied consumers are more likely to unsubscribe and seek services deemed more capable of satisfying them. These ratings provide valuable feedback and can serve as a basis for improving the myFirstMedia application in terms of service quality. For mobile app-based companies, e-satisfaction (electronic satisfaction) is an evaluation of e-service quality (electronic service quality). E-satisfaction measures the benefits provided by the quality of electronic services to users of online company websites. Electronic service quality, or e-service quality, is defined as the ability of applications or websites to facilitate various activities effectively and efficiently (Ting et al., 2016). Rahmawaty et al. (2021) define electronic customer satisfaction as the level of satisfaction of buyers after comparing their online purchasing experience with their expectations. It has a 5-dimensional scale reflecting online service quality from the customer's perspective, which is also a crucial factor in the adoption of electronic services (Zeithaml, 2017).

This phenomenon is interesting for research because it has the potential to influence the improvement of the service quality of the myFirstMedia application, which can enhance consumer satisfaction. Based on the above phenomenon, the author is interested in conducting this research, as it can be seen that there are numerous complaints about the services provided by the myFirstMedia application, considering the importance of service quality in maintaining consumer satisfaction with the myFirstMedia application. Therefore, the author chose the title: 'Analysis of E-Servqual Dimensions Influencing E-Customer Satisfaction for Users of the MyFirstMedia Application.

II.   METHODS

This conclusive research, rooted in a positivistic paradigm and utilizing a quantitative method, employs deductive theory development to formulate specific hypotheses for testing. The study focuses on e-service quality (independent variable, X) and its impact on e-customer satisfaction (dependent variable) using a Likert scale for measurement. Employing non-contrived survey methods in a cross-sectional design for cost efficiency, the target population consists of First Media subscribers using the myFirstMedia application, sampled through purposive sampling across various covered regions. With 385 respondents, data is collected via Google Forms and validated through document studies. Validity testing includes construct validity, covering convergent and discriminant validity. Reliability is assessed through Composite Reliability and Cronbach's Alpha. Data analysis involves descriptive analysis to evaluate dimensions' influence on satisfaction, followed by Structural Equation Modeling (SEM) for Bivariate analysis, outer and inner model evaluation, and hypothesis testing. This comprehensive approach aims to deepen understanding of variable relationships and model fit to observed data.

III.   RESULT AND DISCCUSIONS
Result Outer Model

Tabel 1. Factor Laodings pada First Order

Dimensi/Variabel	Kode Item	Factor Loadings	Tinjauan
Reliability	X1.1	0.889	Valid
	X1.2	0.889	Valid
	X1.3	0.835	Valid
Responsiveness	X2.1	0.843	Valid
	X2.2	0.893	Valid
	X2.3	0.903	Valid
Security/Privacy	X3.1	0.829	Valid
	X3.2	0.843	Valid
	X3.3	0.855	Valid
	X3.4	0.824	Valid
Fulfillment	X4.1	0.901	Valid
	X4.2	0.899	Valid
	X4.3	0.889	Valid
Efficiency	X5.1	0.865	Valid
	X5.2	0.890	Valid
	X5.3	0.878	Valid
E-Customer Satisfaction	Y1.1	0.864	Valid
	Y1.2	0.851	Valid
	Y1.3	0.845	Valid

Based on Table 1 above, it can be observed that all statement indicators are considered accurate as the loading factors are ≥ 0.70. Thus, the model evaluation process can proceed. Subsequently, the Average Variance Extracted (AVE) test is conducted to determine whether a variable meets the criteria for reflecting each construct in this study (Indrawati, 2015). The expected AVE value is > 0.50 (Hair et al., 2019). The AVE calculation using the SmartPLS software is as follows:

Tabel 2. Uji Validitas Average Variance Extracted (AVE)

Dimensi/Variabel	Average Variance Extracted (AVE)
E-customer satisfaction	0.728
Efficiency	0.770
Fulfillmen	0.803
Reliability	0.759
Responsiveness	0.775
security/privacy	0.703

Berlandaskan Tabel 2 di atas bisa dilihat bahwa seluruh variabel akurat karena nilai AVE ≥ 0,5. Selanjutnya disriciminat validity dapat juga dilihat pada nilai cross-loading.

Tabel 3. Uji Validitas Cross-Loading

	E-customer satisfaction	efficiency	fulfillmen	reliability	responsiveness	security/privacy
X1.1	0.460	0.387	0.411	0.889	0.521	0.325
X1.2	0.484	0.406	0.447	0.889	0.558	0.358
X1.3	0.491	0.409	0.425	0.835	0.520	0.397
X2.1	0.504	0.428	0.385	0.525	0.843	0.395
X2.2	0.524	0.426	0.438	0.552	0.893	0.403
X2.3	0.555	0.487	0.464	0.540	0.903	0.422
X3.1	0.427	0.326	0.588	0.340	0.364	0.829
X3.2	0.428	0.314	0.610	0.336	0.364	0.843
X3.3	0.496	0.352	0.676	0.400	0.449	0.855
X3.4	0.382	0.287	0.556	0.301	0.363	0.824
X4.1	0.494	0.365	0.901	0.422	0.446	0.659
X4.2	0.460	0.309	0.899	0.447	0.437	0.639
X4.3	0.485	0.317	0.889	0.453	0.430	0.662
X5.1	0.469	0.865	0.305	0.429	0.493	0.321
X5.2	0.499	0.890	0.369	0.418	0.425	0.386
X5.3	0.512	0.878	0.298	0.368	0.425	0.303
Y1.1	0.864	0.469	0.474	0.478	0.510	0.459

Y1.2	0.851	0.486	0.409	0.429	0.488	0.441
Y1.3	0.845	0.486	0.486	0.499	0.536	0.434

Based on the Table 3 above, it can be determined that the cross-loading validity test is fulfilled. This can be observed from the cross-loading values of each item-statement variable for the variable itself, which are greater than the correlation values. This means that all indicators have good discriminant validity. In addition to cross-loading, the Fornell-Larcker values are also used to determine discriminant validity. The following Table 4 shows the results of the Fornell-Larcker:

Tabel 4. Uji Validitas Fornell Larcker

	E-customer satisfaction	efficiency	fulfillmen	Reliability	responsiveness	security/privacy
E-customer satisfaction	0.853					
Efficiency	0.563	0.878				
Fulfillmen	0.536	0.369	0.896			
Reliability	0.550	0.461	0.491	0.871		
responsiveness	0.600	0.509	0.488	0.612	0.880	
security/privacy	0.521	0.384	0.729	0.414	0.462	0.838

The results in Table 4 above indicate that the Fornell-Lacker values for each variable's indicators are higher than the row or column correlations with other variables. Thus, it can be concluded that overall, each variable's constructs have good discriminant validity or can be considered valid. The final discriminant test was conducted by examining the Heterotrait-Monotrait (HTMT) values representing the maximum values for each related factor.The Heterotrait-Monotrait (HTMT) ratio test, as an additional discriminant test, shows the maximum values between factors. San et al. (2020) suggests HTMT values below 1 for significant differences between factors. Juhria et al. (2021) study indicates that the HTMT approach has higher specificity and sensitivity, reaching 97-99% compared to Fornell-Larcker and cross loadings. Table 5 shows the HTMT scores for each item:

Tabel 5. Uji Validitas HTMT

	E-customer satisfaction	efficiency	fulfillmen	reliability	responsiveness	security/privacy
E-customer satisfaction						
efficiency	0.676					
fulfillmen	0.632	0.426				
reliability	0.663	0.545	0.572			
responsiveness	0.719	0.597	0.563	0.722		
security/privacy	0.618	0.446	0.834	0.482	0.536	

Based on Table 5, HTMT values below 0.9 indicate that each variable's constructs have good discriminant validity. Therefore, it can be concluded that overall, each variable's constructs have good discriminant validity or can be considered valid.

Tabel 6. Uji Reliabilitas

	Cronbach's Alpha	Composite Reliability
E-customer satisfaction	0.813	0.889
Efficiency	0.851	0.910
Fulfillmen	0.877	0.924
Reliability	0.841	0.904
Responsiveness	0.854	0.912
security/privacy	0.859	0.904

In the results of Table 6 above, it is shown that the alpha coefficient (Cronbach's Alpha) and Composite Reliability have values > 0.7. Thus, it can be explained that the research variables are reliable or have high reliability, indicating high accuracy to be considered as variables for the study.

Inner Model

Tabel 7. Inner VIF

	E-Customer Satisfaction
Efficiency	1.454
Fulfillment	2.383
Reliability	1.796
Responsiveness	1.909
Security/privacy	2.238

Based on Table 7, the Inner VIF estimation results are less than 5, indicating a low level of multicollinearity among the variables. This outcome suggests that the parameter estimates in smartPLS 4.0 are robust (unbiased).

Tabel 8. Uji Hipotesis dan Signifikansi

Hipotesis	Path Diagram	Path Coefficients	T Statistics	P Values	F2	Tinjauan
H1	reliability -> E-customer satisfaction	0.155	3.731	0	0.101	H1 diterima
H2	responsiveness->E-customer satisfaction	0.235	3.566	0	0.018	H1 diterima
H3	security/privacy->E-customer satisfaction	0.142	2.105	0.018	0.028	H1 diterima
H4	fulfillmen -> E-customer satisfaction	0.144	2.02	0.022	0.061	H1 diterima
H5	efficiency -> E-customer satisfaction	0.264	5.238	0	0.019	H1 diterima

In the structural model testing, this research analyzes hypotheses and their significance. Path values are used to measure the significance of variable influence, and the bootstrap procedure is employed to determine the t-value. The study also evaluates the percentage of variance or $R2$ for latent dependent variables (Indrawati, 2015). With a significance level of 5%, a t-statistic greater than 1.65 and a p-value less than 0.05 indicate a significant relationship between independent and dependent variables. The interpretation of direct effect values is 0.02 (low), 0.15 (moderate), and 0.35 (high) (Hair et al., 2020). The results of hypothesis testing are obtained from data processing as follows:

a. The hypothesis testing results in a T-statistic value > 1.65, specifically 3.731, with a P-Value < 0.05, namely 0.000. This indicates that reliability significantly and positively influences e-customer satisfaction.

b. The hypothesis testing results in a T-statistic value > 1.65, specifically 3.566, with a P-Value < 0.05, namely 0.000. This indicates that responsiveness significantly and positively influences e-customer satisfaction.

c. The hypothesis testing results in a T-statistic value > 1.65, specifically 2.105, with a P-Value < 0.05, namely 0.018. This indicates that security/privacy significantly and positively influences e-customer satisfaction.

d. The hypothesis testing results in a T-statistic value > 1.65, specifically 2.020, with a P-Value < 0.05, namely 0.022. This indicates that fulfillment significantly and positively influences e-customer satisfaction.

e. The hypothesis testing results in a T-statistic value > 1.65, specifically 5.238, with a P-Value < 0.05, namely 0.000. This indicates that efficiency significantly and positively influences e-customer satisfaction.

R-Square Testing

In this study, the inner model diagram will reflect the structure of relationships among latent variables, which is the focus of analysis to evaluate the validity and performance of the model. The determination impact analysis in SEM analysis is employed to understand the amount of contribution from exogenous variables to endogenous variables, as seen from their R-square values. The coefficient of determination ($R2$) essentially measures the model's ability to explain the variation in endogenous variables.

Tabel 9. Uji Koefisien Determinasi (R-Square)

	R Square	R Square Adjusted
E-customer satisfaction	0.526	0.520

This study yielded an R-Square value of 0.526 for the e-customer satisfaction variable, indicating that e-service quality influences e-commerce customer satisfaction by 52.6%, with the remaining influence stemming from other factors beyond the research model."

Q-Square

Q-square measures the predictive relevance of a model. Q-square assesses the predictive relevance of endogenous constructs in a model. A Q-square value above zero indicates a well-reconstructed value and signifies predictive relevance in the model. However, Hair et al. (2019) added that the qualitative interpretation of Q Square values is 0 (low), 0.25 (moderate), and 0.50 (high). The following is a summary of the Q Square results in this study

Tabel 10. Uji Q-Square

	SSO	SSE	Q² (=1-SSE/SSO)
E-customer satisfaction	1197.000	749.243	0.378
Efficiency	1197.000	1197.000	
Fulfillmen	1197.000	1197.000	
Reliability	1197.000	1197.000	
responsiveness	1197.000	1197.000	
security/privacy	1596.000	1596.000	

This study indicates that the value of e-customer satisfaction Q² is greater than zero, demonstrating the model's predictive relevance. The researcher employed the Goodness of Fit Index (GoF Index) to assess the suitability and feasibility of the model, encompassing the evaluation of both the measurement and structural models. The formula for the GoF Index is as follows:

$$\text{GoF Index} = \sqrt{\text{Communality} \times R2} \quad \text{GoF Index} = \sqrt{0{,}726 \times 0{,}369} \quad \text{GoF Index} = 0{,}518$$

According to Raza et al. (2020), the interpretation of the GoF Index values is 0.1 (low GoF), 0.25 (medium GoF), and 0.36 (high GoF). The calculated result indicates that the GoF model value is 0.533, falling into the high GoF category. The empirical data is capable of explaining the measurement model with high fitness.

Discussion

The Bootstrap approach is employed as a nonparametric representation to measure the accuracy of estimations. In the Partial Least Squares (PLS) method, decision-making regarding the acceptance or rejection of hypotheses is based on the significance value (P-Value) and Total Effects-List to evaluate the direction and extent of the influence of independent variables on dependent variables. The results of hypothesis testing can be explained as follows:

1) H1: Reliability influences e-customer satisfaction

    Kotler and Keller (2012) define reliability in e-commerce as a company's ability to provide consistent and dependable services. High reliability contributes positively to e-commerce customer satisfaction, indicating that the more reliable the service, the higher the customer satisfaction. San et al. (2020) also consider reliability as a crucial dimension of service quality because customers are satisfied with reliable and non-disappointing services.

2) H2: Responsiveness influences e-customer satisfaction

    Kotler and Keller (2012) define responsiveness in e-commerce as a company's ability to provide quick and responsive services. High responsiveness enhances e-commerce customer satisfaction, meaning that the faster and more responsive the service, the higher the customer satisfaction. Raza et al (2020) support this, indicating that responsiveness is an important dimension of service quality, contributing to customer satisfaction when services are delivered quickly, responsively, and solution-oriented.

3) H3: Security/privacy influences e-customer satisfaction

    Kotler and Keller (2012) emphasize that security and privacy in e-commerce involve protecting customer information from misuse. Data security and customer information significantly affect e-commerce customer satisfaction. Better security and privacy mean higher customer satisfaction. Giovanis and Athanasopoulou (2014) also consider security and privacy as important dimensions of service quality, ensuring that customers feel satisfied and secure when their privacy is maintained.

4) H4: Fulfillment influences e-customer satisfaction

    Kotler and Keller (2013) describe fulfillment as a company's ability to meet customer needs and expectations. Research shows that positive fulfillment influences e-commerce customer satisfaction, where more suitable services increase satisfaction. Faisal et al. (2020) support this by stating that fulfillment is an essential dimension of service quality for customer satisfaction.

5) H5: Efficiency influences e-customer satisfaction

    Kotler and Keller (2012) define efficiency as a company's ability to provide low-cost services that meet customer expectations. In e-commerce, efficiency means fast, precise, and accurate services. Research indicates that efficiency enhances e-commerce customer satisfaction. This viewpoint is

reinforced by Juwaini et al. (2022), who mention efficiency as a crucial dimension of service quality for customer satisfaction, particularly in terms of speed, precision, and accuracy of services.

Discussion of Descriptive Analysis Results

This study aims to determine the presence or absence of two independent variables and four mediating variables in influencing a selected variable. The researcher obtained 399 respondents using the My First Media application. Descriptive analysis can be employed to illustrate respondents' perceptions regarding the dimensions of e-service quality and e-customer satisfaction concerning the My First Media application.The research findings indicate that the responsiveness dimension has a response percentage of 84.06%, reliability has a percentage of 82.81%, security/privacy has a percentage of 82.33%, efficiency has a percentage of 82.09%, and fulfillment has a percentage of 80.97%. The responsiveness dimension is the highest-rated dimension, falling into the good category. This implies that the My First Media application provides reliability for the respondents. Reliability is the company's ability to deliver consistent services. On the other hand, fulfillment is the dimension with the lowest percentage but still falls into the good category. This means that the majority of respondents believe that the company has the capacity to meet the needs and expectations of customers in the My First Media application. Fulfillment can be interpreted as the company's ability to provide services that align with the needs and desires of customers.

IV.   CONCLUSION

Based on the research results titled "Analysis of E-Servqual Dimensions Influencing e-Customer Satisfaction in the myFirstMedia Application," several conclusions are obtained to address some research questions. The conclusions obtained from the study are as follows:

1) Based on the results of descriptive analysis, it is found that the responsiveness dimension has the highest respondent response score at 84.06%, categorized as good, followed by the reliability, security/privacy, efficiency dimensions, and the dimension with the lowest score, which is fulfillment, at 80.97%, categorized as good.

2) Based on the results of descriptive analysis, it is found that the e-customer satisfaction variable has a respondent response score of 82.82%, categorized as good.

3) The reliability dimension has a significant positive influence on e-customer satisfaction at 0.101 (moderate level); the responsiveness dimension has a significant positive influence at 0.018 (low level); the security/privacy dimension has a significant positive influence at 0.028 (low level); the fulfillment dimension has a significant positive influence at 0.061 (low level); and the efficiency dimension has a significant positive influence at 0.019 (low level) on e-customer satisfaction.

V.   ACKNOWLEDGE

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