COSTING: Journal of Economic, Business and Accounting
Volume 8 Nomor 3, Tahun 2025
e-ISSN : 2597-5234

THE EFFECT OF SERVICE QUALITY, PERCEIVED VALUE, AND PRICE FAIRNESS ON SELLER LOYALTY THROUGH SELLER SATISFACTION IN THE CONTEXT OF E-COMMERCE: GREENPLACE

PENGARUH KUALITAS LAYANAN, NILAI YANG DIRASAKAN, DAN KEADILAN HARGA TERHADAP LOYALITAS PENJUAL MELALUI KEPUASAN PENJUAL DALAM KONTEKS E-COMMERCE: GREENPL

Wita Tasya Aliyani Zaynur[1], Prawira Fajarindra Belgiawan[2], Mohammad Hamsal[3]
Institut Teknologi Bandung[1,2,3]
wita_zaynur@sbm-itb.ac.id[1], fajar.belgiawan@sbm-itb.ac.id[2], mohammad.hamsal@sbm-itb.ac.id[3]

ABSTRACT

The rapid development of the online shopping sector in Indonesia is driven by increasing internet penetration, widespread smartphone adoption, and a growing middle class. E-commerce platforms such as Greenplace are becoming a dynamic competitive arena, especially in the beauty category. This study aims to examine the influence of e-service quality, perceived value, and price fairness on seller satisfaction and loyalty in Greenplace. Descriptive quantitative method was used with a sample of 240 beauty category sellers who have been active for at least six months, analyzed using PLS-SEM. Results show that all three variables significantly influence seller satisfaction, which in turn has a positive impact on loyalty. Price fairness contributes the most to satisfaction, while perceived value is most dominant in shaping loyalty. Satisfaction and loyalty also play a role in driving sellers' innovation intention, which is important for platform sustainability and competitiveness. The findings confirm that transparent price management strategies, increased perceived value, and improved e-services are key in strengthening long-term relationships between platforms and sellers. Greenplace is therefore advised to focus on strengthening perceived value and price fairness, along with continuous improvement of digital service quality, to create an adaptive and innovative business ecosystem.

***Keywords**: E-Service Quality, Indonesian E-Commerce, Innovation, Perceived Value, Price Fairness, Seller Loyalty, Seller Satisfaction*

ABSTRAK

Perkembangan pesat sektor belanja daring di Indonesia didorong oleh penetrasi internet yang meningkat, adopsi smartphone yang meluas, serta pertumbuhan kelas menengah. Platform e-commerce seperti Greenplace menjadi arena persaingan yang dinamis, terutama dalam kategori kecantikan. Penelitian ini bertujuan untuk menguji pengaruh kualitas layanan elektronik (e-service quality), persepsi nilai (perceived value), dan keadilan harga (price fairness) terhadap kepuasan dan loyalitas penjual di Greenplace. Metode kuantitatif deskriptif digunakan dengan sampel 240 penjual kategori kecantikan yang telah aktif minimal enam bulan, dianalisis menggunakan PLS-SEM. Hasil menunjukkan bahwa ketiga variabel tersebut secara signifikan memengaruhi kepuasan penjual, yang pada gilirannya berdampak positif pada loyalitas. Keadilan harga memberikan kontribusi terbesar terhadap kepuasan, sedangkan persepsi nilai paling dominan dalam membentuk loyalitas. Kepuasan dan loyalitas juga berperan dalam mendorong niat berinovasi penjual, yang penting untuk keberlanjutan dan daya saing platform. Temuan ini menegaskan bahwa strategi pengelolaan harga yang transparan, peningkatan nilai yang dirasakan, serta perbaikan layanan elektronik menjadi kunci dalam memperkuat hubungan jangka panjang antara platform dan penjual. Oleh karena itu, Greenplace disarankan untuk fokus pada penguatan persepsi nilai dan keadilan harga, disertai peningkatan berkelanjutan kualitas layanan digital, guna menciptakan ekosistem bisnis yang adaptif dan inovatif.

Kata Kunci: E-Commerce Indonesia, E-Service Quality, Inovasi, Kepuasan Penjual, Loyalitas Penjual, Perceived Value, Price Fairness

INTRODUCTION

The online shopping sector in Indonesia has experienced significant expansion over the past five years, emerging as one of the most dynamic and competitive industries within the national economy. This rapid growth

has been primarily driven by increased internet penetration, the widespread adoption of smartphones, and the growing size of the middle-class population. Indonesia recorded approximately 221.56 million internet users, representing around 80% of the total population. This digital transformation has positioned Indonesia as the leading e-commerce hub in Southeast Asia.

In parallel with rising internet usage, the number of e-commerce users in Indonesia has also grown substantially. From 38.72 million users in 2020, the figure 1 rose to 65.65 million by 2024, accounting for 29.63% of all internet users in the country (PSDI, 2024). On a global scale, Indonesia recorded the highest e-commerce growth rate in 2024, reaching 30.5%three times the global average (Yonatan, 2024). Projections indicate that by 2029, the e-commerce user base in Indonesia will reach approximately 99.10 million (PSDI, 2024). Figure 1 illustrates this growth trend from 2020 to 2029, including forecasted data.

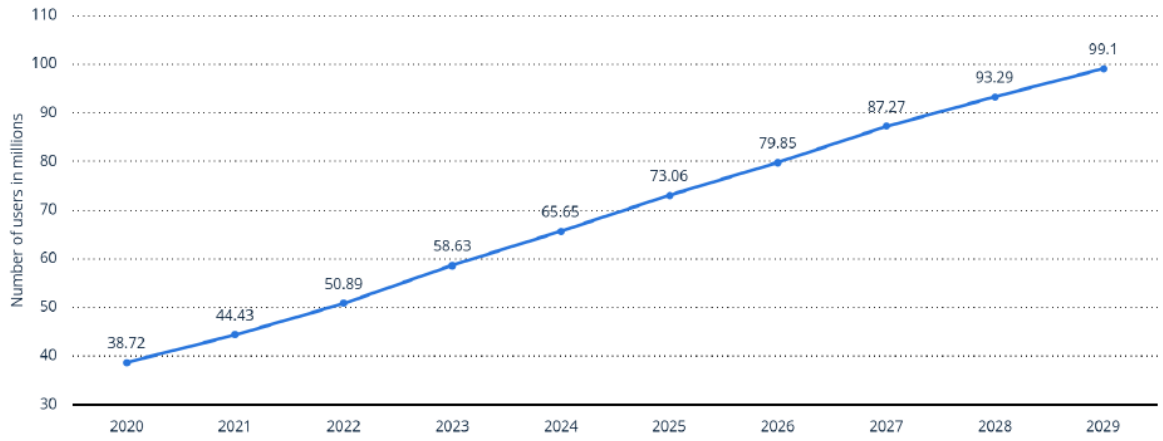

Figure 1. Number of Indonesia's e-commerce users from 2020 to 2029
Source: PSDI (2024)

The primary drivers of this growth include high levels of internet and smartphone penetration, the ongoing digitalization of daily life, the convenience of online shopping, and a robust e-commerce ecosystem offering a diverse range of products (Nimda, 2024). Gross Merchandise Value (GMV), which reflects the total value of goods sold through e-commerce platforms, increased significantlyfrom $25 billion in 2019 to $48 billion in 2021. By 2023, GMV reached $62 billion, solidifying Indonesia's position as the largest e-commerce market in Southeast Asia (PSDI, 2024). Forecasts suggest this value will climb to $82 billion in 2025 and potentially double to $160 billion by 2030.

Indonesian consumers' growing preference for online shopping indicates a sustained enthusiasm, contributing to heightened competition among e-commerce platforms striving for market dominance. The five leading players in the Indonesian e-commerce market are Shopee (40%), Greenplace (30%), TikTok Shop (11%), Lazada (9%), and Blibli (4%) (Putri&Setiawan, 2024), with Shopee and Greenplace holding the largest shares.

Among the most successful segments in e-commerce is Fast-Moving Consumer Goods (FMCG). According to the *Compas Market Insight: Indonesian FMCG E-commerce Report* (2023), FMCG sales reached IDR 57.6 trillion in 2023. Notably, the

Beauty Care category accounted for 49% of FMCG sales, reflecting a strong consumer interest in personal care and cosmetics. This was followed by the Food & Beverage (20.4%), Health (18.7%), and Mother & Baby (11.9%) categories, underscoring the importance of health and nutrition in online purchasing decisions. This trend is further supported by the convenience of online transactions and innovative marketing strategies employed by sellers (Lintin, 2024).

Given the rapid expansion and potential of Indonesia's e-commerce marketparticularly in the FMCG Beauty categorymany individual sellers and businesses are leveraging e-commerce platforms to drive both financial and non-financial growth. Some sellers began operations exclusively online and later expanded to offline channels. This evolution presents both a responsibility and a challenge for e-commerce platforms: to ensure seller satisfaction and foster loyalty in order to maintain competitiveness and secure market leadership (Rodriguez, 2020).

In the e-commerce ecosystem, the primary stakeholders include sellers, buyers, and platform management. Sellers aim to maximize profits while minimizing transaction costs, whereas buyers seek quality products at low prices. Platform management, on the other hand, profits from service and transaction fees. Importantly, from a platform management perspective, sellers are considered customers as well. A higher number of sellers translates to more product diversity and lower transaction costs for buyers, ultimately enhancing the platform's value proposition (Lee et al., 2024). Therefore, while attracting new sellers is important, retaining existing sellers through loyalty strategies is crucial for long-term sustainability (Purwanto, 2024).

Sellers are categorized as high-power and high-interest stakeholders due to their vital role in supplying products and generating sales that drive platform revenue. They also heavily depend on platform infrastructure and are active participants in enhancing platform performance. Failure to maintain seller satisfaction and loyalty can result in decreased product diversity, lower sales volumes, and reduced platform competitiveness. Hence, platforms must prioritize seller needs, offering high-quality services to foster satisfaction and loyalty (Ngah et al, 2021).

Research by Faraoni et al. (2019) emphasized that focusing on customer loyalty is essential for sustaining competitiveness in the long term. Similarly, Griva (2022) found that customer satisfaction directly contributes to loyalty, which in turn strengthens a company's competitive advantage. Rodriguez (2020) highlighted the importance of e-service quality in enhancing seller satisfaction and loyalty. Moreover, factors such as perceived value and price fairness significantly affect seller satisfaction and influence their continued engagement with the platform (Ahmed et al., 2022; Paulose & Shakeel, 2021).

Greenplace, established in 2009 by William Tanuwijaya and Leontinus Alpha Edison, is currently the second-largest e-commerce platform in Indonesia. The company was founded with the vision of promoting digital economic equality by empowering Indonesiansespecially micro, small, and medium enterprises (MSMEs)to enter the online marketplace. Greenplace offers a wide array of both physical and digital products accessible through mobile applications and desktop platforms. Its five primary business models include the Marketplace,

Official Store, Interactive Commerce, Mitra Greenplace, and Instant Commerce (Greenplace, 2024).

Greenplace has demonstrated remarkable growth, supporting a wide spectrum of sellers ranging from individual entrepreneurs and MSMEs to large national and multinational corporations. Currently, Greenplace hosts over 14 million registered sellers. The platform provides logistical support, order fulfillment services, and marketing tools designed to increase visibility, customer reach, and sales conversion rates. Approximately 2% of Indonesia's economic activity is facilitated through Greenplace, highlighting its substantial role in the digital economy (Greenplace, 2024).

One of Greenplace's core strengths lies in its commitment to MSME empowerment and its continuous innovation. The platform supports around 90% of Indonesia's micro-scale sellers, helping them to survive and grow through digital adoption. Greenplace reports that 70% of its sellers have experienced an increase in sales volume of up to 133%, while 76.4% find it easy to manage their businesses on the platform. Marketing innovations such as campaign participation, influencer partnerships, and live streaming further enable sellers to boost engagement and sales. Greenplace's most recent innovationinteractive commerceallows sellers to market and sell products in real time via livestream sessions, enhancing both visibility and customer interaction. From the background explanation above, this study aims to analyze the Effect of Service Quality, Perceived Value, and Price Fairness on Seller Loyalty through Seller Satisfaction in the E-Commerce Context: Greenplace.

RESEARCH METHODS

The type of research is determined by the objectives, data type, and contextual considerations. In general, two primary approaches are employed in research: qualitative and quantitative. Qualitative research is interpretative, aiming to understand the essence of social phenomena, focusing on abstract elements such as meaning, values, attitudes, and motivations (Ghafar, 2023). In contrast, quantitative research seeks to objectively measure and analyze relationships between variables using statistical methods to generalize findings. This study adopts a quantitative research approach as it aims to test hypotheses regarding the relationships between variables through the analysis of numerical data, ensuring objectivity, measurability, and generalizability. Specifically, the study employs a descriptive quantitative design, which aims to describe patterns and relationships among variables related to seller loyalty in the beauty category of the Greenplace platform using statistical analysis (Bougie & Sekaran, 2019; Pakpahan et al., 2021).

The unit of analysis refers to the primary entity being examined. These can include individuals, dyads, groups, organizations, or cultures (Bougie & Sekaran, 2019). Given the objective of this study is to analyze factors influencing seller loyalty, the individual is selected as the unit of analysis specifically, individual sellers operating in the beauty category on the Greenplace platform. The object of research encompasses the conceptual focus of the study, namely: e-service quality, perceived value, price fairness, seller satisfaction, and seller loyalty. The subject of research refers to the data sources in this case, individual sellers from the beauty category on

Greenplace Indonesia (Pakpahan et al., 2023).

This study defines its variables both conceptually and operationally, and applies an interval scale for measurement purposes. The interval scale is ideal for assessing the degree of respondent agreement, allowing for advanced statistical analyses. A five-point Likert scale is employed, with scale points ranging from 1 (strongly disagree) to 5 (strongly agree) (Bougie & Sekaran, 2019). The population comprises all sellers in the beauty category on the Greenplace Indonesia platform. The sample represents a subset of this population, consisting of sellers who meet specific criteria relevant to the study objectives (Bougie & Sekaran, 2019).

This study applies a non-probability purposive sampling technique. Non-probability sampling is appropriate when the research requires specific criteria to be met and when random sampling is not feasible (Pakpahan et al., 2021). The purposive approach ensures the inclusion of beauty category sellers who have been actively operating on the Greenplace platform for at least six months, allowing the study to target experienced participants. Determining an adequate sample size is critical for ensuring the robustness of quantitative analyses. Following the "10-times rule" by Hair et al. (2018). which recommends at least 10 respondents per indicator the sample size for this study is set at 240 respondents (10 × 24 indicators). This sample size satisfies requirements for Partial Least Squares Structural Equation Modeling (PLS-SEM) and enhances the generalizability and statistical reliability of the findings (Taherdoost, 2017; Bougie & Sekaran, 2019).

Primary data are collected through structured online questionnaires administered to selected respondents. Secondary data are derived from academic books, peer-reviewed journals, relevant publications, and online sources (Bougie & Sekaran, 2019). The primary data collection instrument is an online questionnaire consisting of closed-ended questions. Online questionnaires are time-efficient, cost-effective, and capable of reaching a broad respondent base. Closed-ended formats offer standardized responses, simplifying analysis and enhancing comparability (Bougie & Sekaran, 2019; Pakpahan et al., 2021). A 5-point Likert scale is used to gauge respondent agreement across all items.

RESULTS AND DISCUSSIONS

Results

Outer Model

The initial stage in inferential statistical analysis using the PLS-SEM method is to evaluate the outer model. The outer model is used to describe the relationship between observational indicators and the underlying latent constructs. In this stage, a reliability and validity test was carried out on 250 data obtained from the research respondents. This test includes testing the reliability of the indicator, the reliability of the construct, the validity of the convergence, and the validity of the discriminant (Kock & Hadaya, 2016). The visualization of the outer model can be seen in Figure 2.

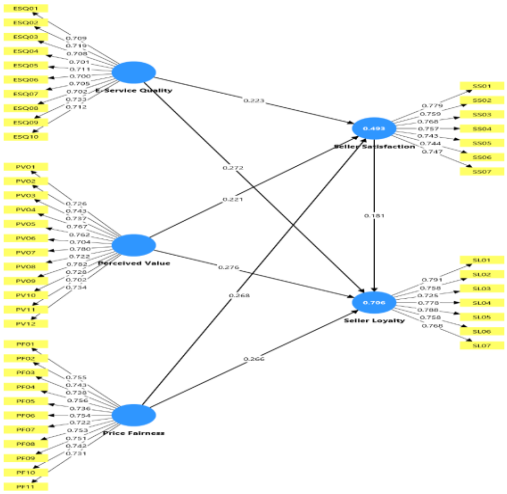

Figure 1. Outer Model

Source: Statistical Analysis Result Using SmartPLS (2025)

Indicator Reliability Test

Table 1 displays the outer loading value for each indicator of the research variables, namely *e-service quality*, *perceived value*, *price fairness*, *seller satisfaction*, and *seller loyalty*. The entire outer loading value exceeded the threshold of 0.70, which according to Hair et al. (2018) indicates that the reliability of the indicator has been adequately met.

Table 1. Outer Loading Actual Test

	E-Service Quality	Perceived Value	Price Fairness	Seller Loyalty	Seller Satisfaction
ESQ01	0.709				
ESQ02	0.719				
ESQ03	0.708				
ESQ04	0.701				
ESQ05	0.711				
ESQ06	0.700				
ESQ07	0.705				
ESQ08	0.702				
ESQ09	0.733				
ESQ10	0.712				
PF01			0.765		
PF02			0.752		
PF03			0.741		
PF04			0.755		
PF05			0.735		
PF07			0.725		
PF08			0.754		
PF09			0.755		
PF10			0.743		
PF11			0.721		
PV01		0.726			
PV02		0.744			
PV03		0.736			
PV04		0.762			
PV05		0.757			
PV06		0.715			
PV07		0.770			
PV08		0.707			
PV09		0.772			
PV10		0.729			
PV11		0.713			
PV12		0.726			
PV13		0.724			
SL01				0.791	
SL02				0.758	
SL03				0.725	
SL04				0.778	
SL05				0.788	
SL06				0.758	
SL07				0.768	

SS01	0.779
SS02	0.759
SS03	0.768
SS04	0.757
SS05	0.743
SS06	0.744
SS07	0.747

Source: Statistical Analysis Result Using SmartPLS (2025)

Construct Reliability Test

Table 2 presents the results of Cronbach's Alpha and Composite Reliability tests for each of the study variables. All values are above 0.70, as stated by Hair et al. (2018) that Cronbach's Alpha and Composite Reliability values above 0.70 indicate good internal consistency in the tested constructs.

Table 2. Cronbach's alpha and Composite Reliability Actual Test

Variable	Cronbach's Alpha	Composite Reliability	Rule of Thumb	Result
E-Service Quality	0.891	0.910	0.70	Reliable
Perceived Value	0.930	0.939		Reliable
Price Fairness	0.911	0.926		Reliable
Seller Loyalty	0.883	0.909		Reliable
Seller Satisfaction	0.876	0.904		Reliable

Source: Statistical Analysis Result Using SmartPLS (2025)

Convergent Validity Test

Table 3 shows the Average Variance Extracted (AVE) values for each study construct. All AVE values exceed 0.50, which means that the construct is able to explain more than 50% of the variance of its indicators. This indicates that the convergent validity has been met (Hair et al., 2018).

Table 3. AVE Actual Test

Variable	Average Variance Extracted (AVE)	Rule of Thumb	Result
E-Service Quality	0.504	>0.50	Valid
Perceived Value	0.543		Valid
Price Fairness	0.555		Valid
Seller Loyalty	0.588		Valid
Seller Satisfaction	0.573		Valid

Source: Statistical Analysis Result Using SmartPLS (2025)

Discriminating Validity Test

Table 4 shows the Heterotrait-Monotrait Ratio (HTMT) values between different construct pairs. All HTMT values are below the limit of 0.90, in accordance with the recommendations of Hair et al. (2018), who state that discriminant validity is achieved when the HTMT value is below 0.90 for conceptually interrelated constructs. Thus, this measurement model has met the reliability and validity criteria that are feasible to proceed to the *internal model* analysis stage.

Table 4. HTMT Actual Test

	E-Service Quality	Perceived Value	Price Fairness	Seller Loyalty	Seller Satisfaction

E-Service Quality				
Perceived Value	0.823			
Price Fairness	0.849	0.840		
Seller Loyalty	0.846	0.846	0.845	
Seller Satisfaction	0.718	0.719	0.722	0.766

Source: Statistical Analysis Result Using SmartPLS (2025)

Inner Model

After the evaluation process of the outer model is completed, the analysis is continued to the inner model to test the relationships between constructs in the conceptual model. This evaluation includes multicollinearity tests, determination coefficients, effect *size*, model *fit*, predictive relevance, and hypothesis testing (Hair et al., 2018). The inner visualization of the model is shown in Figure 3.

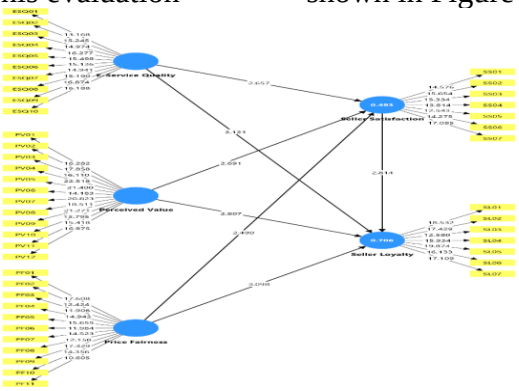

Figure 3. Inner Model

Source: Developed for this Research (2025)

Multicollinearity Test

Table 5 shows the value of the Variance Inflation Factor (VIF) for the relationship between constructs. All VIF values were below 5, indicating that there were no significant multicollinearity issues between variables (Sarstedt et al., 2022).

Table 5. VIF Actual Test

Variable	E-Service Quality	Perceived Value	Price Fairness	Seller Loyalty	Seller Satisfaction
E-Service Quality				3.007	2.911
Perceived Value				3.117	2.973
Price Fairness				3.370	3.220
Seller Loyalty					
Seller Satisfaction				1.985	

Source: Statistical Analysis Result Using SmartPLS (2025)

Coefficient of Determination (R^2)

Table 6 shows the value of the determination coefficient (R^2) for *the variables of seller satisfaction* and

seller loyalty. The R^2 value for *seller satisfaction* is 0.493, which means that 49.3% of the variance is explained by *e-service quality*, *perceived value*, and *price fairness*, while the rest is explained by other factors not included in the model. The R^2 value for *seller loyalty* is 0.706, which indicates that 70.6% of the variance is explained by the four constructs. According to Hair et al. (2018) this R^2 value shows that the model has a low explanatory power for *seller satisfaction*, but medium for *seller loyalty*.

Table 6. R-square Actual Test

Variable	R-square	Category
Seller Loyalty	0.708	Moderate
Seller Satisfaction	0.496	Weak

Source: Statistical Analysis Result Using SmartPLS (2025)

Predictive Relevance (Q^2)

Table 7 shows the Q^2 values which are all greater than zero, both for *seller satisfaction* and *seller loyalty*. This shows that the model has predictive relevance, with a moderate predictive rate for *seller satisfaction* and a high level for *seller loyalty* (Hair et al., 2018).

Table 7. Q-square Actual Test

Variable	Q-square	Predictive Power
Seller Loyalty	0.673	Large
Seller Satisfaction	0.471	Medium

Source: Statistical Analysis Result Using SmartPLS (2025)

Effect Size (F^2)

Table 8 shows the value of F-square, which shows the contribution of each predictor construct to the dependent construct. The relationship between *price fairness* and *seller satisfaction* has a high F^2 value, indicating a great influence on these variables (Hair et al., 2018).

Table 8. F-square Actual Test

Variable	F-square	Effect Size
E-Service Quality → Seller Loyalty	0.057	Small Effect
E-Service Quality → Seller Satisfaction	0.033	Small Effect
Perceived Value → Seller Loyalty	0.083	Small Effect
Perceived Value → Seller Satisfaction	0.048	Small Effect
Price Fairness → Seller Loyalty	0.076	Small Effect
Price Fairness → Seller Satisfaction	0.047	Small Effect
Seller Satisfaction → Seller Loyalty	0.053	Small Effect

Source: Statistical Analysis Result Using SmartPLS (2025)

Hypothesis Testing and Discussion

H1: E-service quality positively influences seller satisfaction on Greenplace Indonesia.

The hypothesis is supported, with a t-statistic of 2.655 and a p-value of 0.004, indicating a significant relationship at a 95% confidence level. The standardized path coefficient is 0.221, suggesting a positive and

meaningful influence. These findings confirm that aspects of e-service quality such as platform efficiency, data security, and responsiveness enhance seller satisfaction by exceeding expectations (Celik, 2021). This aligns with previous studies emphasizing the significant role of e-service quality in increasing satisfaction (Fanani, 2020; Rahman et al., 2022; Rodríguez et al., 2020; Yum & Yoo, 2023).

H2: Perceived value positively influences seller satisfaction on Greenplace Indonesia.

With a t-statistic of 2.792 and a p-value of 0.003, this hypothesis is supported. The standardized coefficient is 0.269, reflecting a strong positive impact. Sellers perceive greater satisfaction when Greenplace offers value across economic, functional, social, and emotional dimensions. These perceptions elevate brand value and satisfaction (Yin & Lertbuasin, 2021), consistent with prior findings (Alzoubi & Inairat, 2021; Rather & Camilleri, 2020; Kim & Park, 2016; Paulose & Shakeel, 2021).

H3: Price fairness positively influences seller satisfaction on Greenplace Indonesia.

This hypothesis is also supported (t = 2.588; p = 0.005; coefficient = 0.275). When pricing is perceived as fair and aligned with the seller's expectations, it promotes both hedonic and utilitarian satisfaction. Fair pricing ensures the perceived value justifies the cost, thereby enhancing satisfaction (Ahmed et al., 2022; Huang & Nuangjamnong, 2023; Hirde et al., 2021; Konuk, 2019; Malik et al., 2020).

H4: E-service quality positively influences seller loyalty on Greenplace Indonesia.

With a t-statistic of 3.213 and p-value of 0.001, the relationship is statistically significant, and the path coefficient is 0.223. High-quality service encourages seller retention through trust and platform reliability (Al-Khayyal et al., 2020), in line with literature on e-service quality and loyalty (Khan et al., 2019; Rahman et al., 2022; Rodríguez et al., 2020; Yum & Yoo, 2023).

H5: Perceived value positively influences seller loyalty on Greenplace Indonesia.

The hypothesis is supported with a t-statistic of 3.005, p-value of 0.001, and coefficient of 0.274. Sellers tend to remain loyal when the benefits of using the platform outweigh the associated costs, as perceived value consistently shapes positive behavior (Yum & Kim, 2024; Hermantoro & Albari, 2022; Khasbulloh & Suparna, 2022; Paulose & Shakeel, 2021; Tzavlopoulos et al., 2019).

H6: Price fairness positively influences seller loyalty on Greenplace Indonesia.

Supported by a t-statistic of 3.280 and p-value of 0.001, with a coefficient of 0.273, this result affirms that fair pricing reinforces seller trust and strengthens long-term engagement with the platform (Ahmed et al., 2022), corroborating existing literature. (Huang & Nuangjamnong, 2023; Hirde et al., 2021; Nikbin et al., 2016).

H7: Seller satisfaction positively influences seller loyalty on Greenplace Indonesia.

Finally, this hypothesis is validated with a t-statistic of 2.724, p-value of 0.003, and a coefficient of 0.175. High satisfaction, both rational and emotional, leads to stronger seller commitment and continued use of the platform. This confirms the role of satisfaction as a key determinant of loyalty (Huang et al., 2023).

Importance-Performance Map Analysis (IPMA)

As a follow-up part of the PLS-SEM analysis, *Importance-Performance Map Analysis* (IPMA) is used to evaluate the significance and performance of latent variables and indicators in a research model. IPMA facilitates the determination of more targeted business strategies, especially for the organizations that are the object of the study, by identifying factors that must be maintained or improved (Sarstedt et al., 2020).

The interpretation of the IPMA results is categorized into four quadrants, namely (Table 9):

1. High Importance – High Performance ("Keep up the good work"): Indicates that a company's attributes are considered important by customers and that the company has demonstrated satisfactory performance against those attributes.
2. Low Importance – High Performance ("Possible overkill"): Indicates high performance on attributes that are not actually considered important by the customer, allowing for resource efficiency.
3. High Importance – Low Performance ("Concentrate here"): Indicates that the customer considers the attribute to be very important, but the company has not yet demonstrated optimal performance, so it needs immediate attention and improvement.
4. Low Importance – Low Performance ("Low priority"): Indicates attributes that are not considered important by customers and also have low performance; hence, it is not a top priority to address.

Table 9. IPMA Indicator

Variable	Indicator	Importance	Performance	Importance	Performance	Meaning
E-Service Quality	ESQ01	0.038	79.800	High Importance	High Performance	Keep up the good work
	ESQ02	0.039	77.100	High Importance	High Performance	Keep up the good work
	ESQ03	0.038	77.200	High Importance	High Performance	Keep up the good work
	ESQ04	0.038	76.500	High Importance	High Performance	Keep up the good work
	ESQ05	0.037	78.800	High Importance	High Performance	Keep up the good work
	ESQ06	0.035	79.000	Low Importance	High Performance	Possible overkill
	ESQ07	0.036	75.700	Low Importance	Low Performance	Low priority
	ESQ08	0.035	75.600	Low Importance	Low Performance	Low priority
	ESQ09	0.039	77.900	High Importance	High Performance	Keep up the good work
	ESQ10	0.034	77.600	Low Importance	High Performance	Possible overkill
Price Fairness	PF01	0.054	75.900	High Importance	Low Performance	Concentrate here
	PF02	0.051	76.000	High Importance	Low Performance	Concentrate here
	PF03	0.047	76.400	High Importance	Low Performance	Concentrate here
	PF04	0.043	76.400	High Importance	Low Performance	Concentrate here
	PF05	0.036	73.600	Low Importance	Low Performance	Low priority
	PF07	0.038	77.000	High Importance	High Performance	Keep up the good work
	PF08	0.037	77.300	High Importance	High Performance	Keep up the good work
	PF09	0.041	73.333	High Importance	Low Performance	Concentrate

						here
	PF10	0.045	77.500	High Importance	High Performance	Keep up the good work
	PF11	0.040	78.300	High Importance	High Performance	Keep up the good work
Perceived Value	PV01	0.031	78.500	Low Importance	High Performance	Possible overkill
	PV02	0.036	81.100	Low Importance	High Performance	Possible overkill
	PV03	0.033	79.200	Low Importance	High Performance	Possible overkill
	PV04	0.034	75.100	Low Importance	Low Performance	Low priority
	PV05	0.036	82.500	Low Importance	High Performance	Possible overkill
	PV06	0.032	78.100	Low Importance	High Performance	Possible overkill
	PV07	0.032	76.000	Low Importance	Low Performance	Low priority
	PV08	0.035	75.300	Low Importance	Low Performance	Low priority
	PV09	0.035	72.800	Low Importance	Low Performance	Low priority
	PV10	0.032	76.100	Low Importance	Low Performance	Low priority
	PV11	0.033	75.700	Low Importance	Low Performance	Low priority
	PV12	0.033	76.300	Low Importance	Low Performance	Low priority
	PV13	0.035	77.400	Low Importance	High Performance	Possible overkill
Seller Satisfaction	SS01	0.035	76.900	Low Importance	High Performance	Possible overkill
	SS02	0.032	70.900	Low Importance	Low Performance	Low priority
	SS03	0.032	73.800	Low Importance	Low Performance	Low priority
	SS04	0.032	72.100	Low Importance	Low Performance	Low priority
	SS05	0.033	71.400	Low Importance	Low Performance	Low priority
	SS06	0.033	73.500	Low Importance	Low Performance	Low priority
	SS07	0.035	77.900	Low Importance	High Performance	Possible overkill
Average		0.037	76.438			

Source: Statistical Analysis Result Using SmartPLS (2025)

The results of the IPMA analysis based on indicators show that the average *importance* value is 0.037 and the average *performance* value is 76.438. Indicators such as ESQ01, ESQ02, ESQ03, ESQ04, ESQ05, ESQ09, PF07, PF08, PF10, and PF11 fall into the "keep up the good work" quadrant, which means it is important in increasing seller *loyalty* and showing high performance. This reflects Greenplace's strength and competitive advantage that needs to be maintained to maintain this loyalty.

In contrast, indicators PF01, PF02, PF03, PF04, and PF09 are included in the "concentrate here" quadrant, which shows the importance of these attributes in building seller loyalty, but their performance is still not optimal. Therefore, Greenplace should prioritize performance improvement on these indicators.

Meanwhile, the ESQ07, ESQ08, PF05, PV04, PV07, PV08, PV09, PV10, PV11, PV12, SS02, SS03, SS04, SS05, and SS06 indicators are categorized as "low priority", indicating that these attributes are not considered important and have low performance. Although not directly threatening, Greenplace could consider diverting resources from these indicators to areas of greater need.

Finally, the ESQ06, ESQ10, PV01, PV02, PV03, PV05, PV06, PV13, SS01, and SS07 indicators fall into the "possible overkill" quadrant, which means these attributes are high-performing, but not very important to the customer. Greenplace is advised to maintain performance standards while considering the efficiency of resource allocation.

Table 10. IPMA Variable

Variable	Importance	Performance	Importance	Performance	*Meaning*
E-Service Quality	0.261	77.593	Low Importance	High Performance	Possible overkill
Perceived Value	0.322	77.417	High Importance	High Performance	Keep up the good work
Price Fairness	0.321	76.164	High Importance	Low Performance	Concentrate here
Seller Satisfaction	0.175	73.975	Low Importance	Low Performance	Low priority
Average	0.270	76.287			

Source: Statistical Analysis Result Using SmartPLS (2025)

Furthermore, the results of IPMA based on antecedent variables (Table 10) show that perceived value is Greenplace's main competitive advantage in increasing seller loyalty. On the other hand, price fairness is considered very important, but it has not shown optimal performance, so it needs to be a top priority to be improved. Meanwhile, e-service quality and seller satisfaction have quite good performance and are important to maintain, but they are not the top priority in terms of strategic resource allocation. The results of this IPMA are visualized graphically in Figure 4.

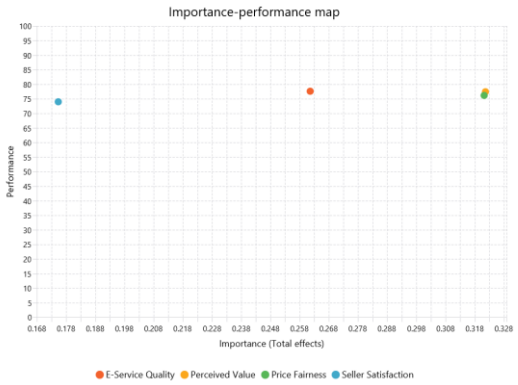

Figure 4. IPMA
Source: Statistical Analysis Result Using SmartPLS (2025)

Discussion

In a digital ecosystem such as the Greenplace Indonesia platform, the quality of information and systems are proven to be the two main factors that affect seller satisfaction. The results of the first hypothesis testing show that the quality of accurate, relevant, and timely information contributes significantly to increased satisfaction. Sellers feel more confident and comfortable when the information provided supports their business decisions. On the other hand, the second hypothesis test showed that the quality of the system that was reliable, easy to use, and responsive also had a positive impact on satisfaction. This shows that technical and information aspects must go hand in hand to create an optimal user experience. These findings are in line with previous research that emphasizes the importance of digital service quality as a determinant of user satisfaction.

In addition to technical and information aspects, the perception of price fairness has also been proven to affect the level of seller satisfaction. The test results show that sellers who

feel the price, commission, or service fee set by the platform is fair tend to be more satisfied. Price fairness reflects how the platform values the contribution and value of sellers. When sellers feel valued proportionately, then they build trust in the system and service. This perception of fairness also creates a healthy collaborative atmosphere between platform providers and business partners. Thus, a transparent and fair pricing policy is a strategic factor in building long-term relationships with users.

Seller satisfaction has proven to play a key role in forming loyalty to the Greenplace Indonesia platform. The results of the fourth hypothesis test showed a very strong and significant relationship between satisfaction and loyalty. Loyalty in this context includes the intention to continue using the platform, recommending it to others, and maintaining long-term relationships. A high level of satisfaction encourages sellers to remain loyal despite offers from competitor platforms. This factor suggests that maintaining service quality is an important investment in emotionally and functionally engaging users. These findings reinforce consumer behavior models that place satisfaction as a key mediator in the formation of loyalty. Interestingly, satisfaction not only impacts loyalty, but also encourages sellers to innovate.

The results of the fifth hypothesis reveal that satisfied sellers are more motivated to develop products, adopt new technologies, or try different marketing strategies. This shows that there is a positive relationship between user experience and innovative behavior in the digital ecosystem. Satisfaction creates a safe psychological space for sellers to take risks in order to increase competitiveness. When a platform is able to meet the expectations and needs of sellers, then there is a trust to experiment creatively. Therefore, satisfaction must be seen as the foundation for adaptive and dynamic growth among business actors.

In addition to satisfaction, loyalty has also proven to be an important factor in encouraging sellers' intention to innovate. Loyal sellers show high attachment and trust in the platform, so they are more daring to try new approaches in running their business. The results of the sixth hypothesis test showed a positive influence between loyalty and innovation intention. Loyalty forms a long-term mentality that allows sellers to continue to grow with the platform. In the long run, this relationship will create an innovative, adaptive, and highly competitive digital ecosystem. Therefore, loyalty is not only the end goal of the service, but also the social capital for sustainable transformation.

CONCLUSION AND SUGGESTION

Based on the analysis of statistical data conducted, this study successfully answered the objectives and research questions related to the influence of e-service quality, perceived value, and price fairness on seller satisfaction and loyalty on the Greenplace platform. The results of the study show that these three variables have a positive and significant effect on seller satisfaction, which in turn has a significant impact on seller loyalty. In other words, the higher the quality of service, value perception, and price fairness that sellers feel, the higher their satisfaction and loyalty to the platform. Among the three variables, price fairness has the greatest influence on seller satisfaction, while e-service quality has the least influence. Meanwhile, for loyalty, perceived value is the variable with the greatest influence, and again e-service

quality is the weakest even though it is still significant. Based on these findings, it is suggested that Greenplace focus on improving the perception of value and price fairness, along with continuous improvement in the electronic services aspect.

As a follow-up to the research findings, a strategic implementation plan was prepared to increase seller loyalty in the Greenplace beauty category. This plan is designed to be run for one year, starting from the third quarter (Q3) of 2025 to the second quarter (Q2) of 2026, with phases divided per quarter so that implementation can be monitored and evaluated periodically. Key strategies include improving the perception of price fairness through cost transparency and re-evaluation of cost structures such as add-on programs, platform fees, advertising, and delivery. Furthermore, increasing the perception of value is done by consistently communicating the benefits obtained by the seller, both tangible and intangible. Although the quality of electronic services has the least influence, Greenplace still needs to maintain service standards such as ease of order management, logistics support, service to sellers, and performance analytics. This plan is outlined in detail in Table V.1 as a guide to the implementation of a structured and results-oriented loyalty strategy.

REFERENCES

[1] Adan, J. L. (2023). Promotional strategies and consumers' purchase intention on Garment Bazaar retailers. *Open Journal of Business and Management*, *11*(02), 613–645. https://doi.org/10.4236/ojbm.2023.112033

[2] Ahdiat, A. (2024). TikTok Shop Gabung Greenplace, Ini Jumlah Penggunanya. *Katadata*. https://databoks.katadata.co.id/teknologi-telekomunikasi/statistik/a6be2d006205170/tiktok-shop-gabung-Greenplace-ini-jumlah-penggunanya

[3] Ahmed, S., Asheq, A. A., Ahmed, E., Chowdhury, U. Y., Sufi, T., & Mostofa, M. G. (2022). The intricate relationships of consumers' loyalty and their perceptions of service quality, price and satisfaction in restaurant service. *The TQM Journal*, *35*(2), 519–539. https://doi.org/10.1108/tqm-06-2021-0158

[4] Al-Khayyal, A., Alshurideh, M., Al Kurdi, B., & Aburayya, A. (2020). The impact of electronic service quality dimensions on customers'e-shopping and e-loyalty via the impact of e-satisfaction and e-trust: A qualitative approach. *International Journal of Innovation, Creativity and Change*, *14*(9), 257-281.

[5] Alzoubi, H. M., & Inairat, M. (2020). Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context. *Uncertain supply chain management*, 8(3), 579-588. doi: 10.5267/j.uscm.2020.2.005

[6] Andi, D. (2024). Minat Belanja Online Tinggi, Bisnis E-Commerce di Indonesia Terus Tumbuh. *kontan.co.id*. https://industri.kontan.co.id/news/minat-belanja-online-tinggi-bisnis-e-commerce-di-indonesia-terus-tumbuh

[7] Annur, C. M. (2023). TikTok Shop Ditutup di Indonesia, Ini Nilai Transaksinya di Asia Tenggara sejak 2021. *Katadata*. https://databoks.katadata.co.id/teknologi-telekomunikasi/statistik/764ac3e031271bd/tiktok-shop-ditutup-di-indonesia-ini-nilai-transaksinya-di-asia-tenggara-sejak-2021

[8] Beins, B. C., & McCarthy, M. A. (2017). *Research methods and statistics*. Cambridge University Press.

[9] Bestari, N. P. (2023). TikTok Shop Tutup, Pedagang Terima "Surat Cinta" Ini Isinya. *CNBC Indonesia*. https://www.cnbcindonesia.com/tech/20231227095532-37-500479/tiktok-shop-tutup-pedagang-terima-surat-cinta-ini-isinya

[10] Bougie, R. & Sekaran, U. (2019). Research Methods For Business A Skill-building Approach (8th Edition)

[11] Cachero-Martínez, S., & Vázquez-Casielles, R. (2021). Building consumer loyalty through e-shopping experiences: The mediating role of emotions. Journal of Retailing and Consumer Services, 60, 102481. https://doi.org/10.1016/j.jretconser.2021.102481

[12] Cachero-Martínez, S., & Vázquez-Casielles, R. (2021). Building consumer loyalty through e-shopping experiences: The mediating role of emotions. Journal of Retailing and Consumer Services, 60, 102481. https://doi.org/10.1016/j.jretconser.2021.102481

[13] Cassia, F., Cobelli, N., & Ugolini, M. (2017). The effects of goods-related and service-related B2B brand images on customer loyalty. *Journal of Business and Industrial Marketing*, *32*(5), 722–732. https://doi.org/10.1108/jbim-05-2016-0095

[14] Çelik, K. (2021). The effect of e-service quality and after-sales e-service quality on e-satisfaction. *Business & Management Studies: An International Journal*, *9*(3), 1137-1155.doi: https://doi.org/10.15295/bmij.v9i3.1898

[15] Choi, I. Y., Moon, H. S., & Kim, J. K. (2019). Assessing personalized recommendation services using expectancy disconfirmation theory. *Asia Pacific Journal of Information Systems*, *29*(2), 203–216. https://doi.org/10.14329/apjis.2019.29.2.203

[16] Collier, J. E. (2020). *Applied Structural Equation Modeling using AMOS: Basic to Advanced Techniques*. Routledge.

[17] Coolen, F. P., & Himd, S. B. (2020). Nonparametric predictive inference bootstrap with application to reproducibility of the two-sample Kolmogorov–Smirnov test. Journal of Statistical Theory and Practice, 14, 1-13.

[18] Creswell, J. W., & Creswell, J. D. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. United Kingdom: SAGE Publications.

[19] Czinkota, M. R., Kotabe, M., Vrontis, D., & Shams, S. M. R. (2021). Direct marketing, sales promotion, and public relations. In *Springer texts in business and economics* (pp. 607–647). https://doi.org/10.1007/978-3-030-66916-4_13

[20] Dahbi, S., & Benmoussa, C. (2019). What Hinder SMEs from Adopting E-commerce? A Multiple Case Analysis. *Procedia Computer Science*, *158*, 811–818. https://doi.org/10.1016/j.procs.2019.09.118

[21] Dalati, S. (2018). Measurement and measurement scales. In *Progress in IS* (pp. 79–96). https://doi.org/10.1007/978-3-319-74173-4_5

[22] Dam, S. M., & Dam, T. C. (2021). Relationships between Service Quality, Brand Image, Customer Satisfaction, and Customer Loyalty. *Journal of Asian Finance Economics and Business*, *8*(3), 585–593. https://doi.org/10.13106/jafeb.2021.vol8.no3.0585

[23] Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, *173*, 121092. https://doi.org/10.1016/j.techfore.2021.121092

[24] De Meyer-Heydenrych, C. F., & Struweg, I. (2021, September 30). *The influence of transaction cost variables on e-buyer satisfaction and loyalty: An e-business-to-consumer retailer context*. De Meyer-Heydenrych | Journal of Economic and Financial Sciences. https://jefjournal.org.za/index.php/jef/article/view/565/1315

[25] De Toni, D., Eberle, L., Larentis, F., & Milan, G. S. (2017). Antecedents of perceived value and repurchase intention of organic food. *Journal of Food Products Marketing*, *24*(4), 456–475. https://doi.org/10.1080/10454446.2017.1314231

[26] Delima, A., Ashary, H. M., & Usman, O. (2019). Influence of service quality, product quality, price, brand image, and promotion to consumer satisfaction affecting on consumer loyalty (Online shop). *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3308707

[27] Deny, S. (2023). TikTok Shop Kembali Buka di Indonesia, Seller Siap-Siap Raup Cuan Lagi. *liputan6.com*. https://www.liputan6.com/bisnis/read/5480461/tiktok-shop-kembali-buka-di-indonesia-seller-siap-siap-raup-cuan-lagi

[28] Dewi, I. R. (2024). Gabung TikTok Shop, Greenplace Masih Kalah Lawan Shopee. *CNBC Indonesia*. https://www.cnbcindonesia.com/tech/20240717124003-37-555364/gabung-tiktok-shop-Greenplace-masih-kalah-lawan-shopee

[29] Elsäßer, M., & Wirtz, B. W. (2017). Rational and emotional factors of customer satisfaction and brand loyalty in a business-to-business setting. *Journal of Business and Industrial Marketing*, *32*(1), 138–152. https://doi.org/10.1108/jbim-05-2015-0101

[30] Fanani, R. I. Z. (2020). The Impact of E-Service Quality on E-Satisfaction and Implications on B2C shopee. com the online Repurchase: A case study of Indonesia. *International Journal of Advances in Scientific Research and Engineering (IJASRE)*, *6*(7), 1-9. DOI: 10.31695/IJASRE.2020.33842

[31] Faraoni, M., Rialti, R., Zollo, L., & Pellicelli, A. C. (2018). Exploring e-Loyalty antecedents

in B2C e-Commerce. *British Food Journal*, *121*(2), 574–589. https://doi.org/10.1108/bfj-04-2018-021

[32] García-Fernández, J., Fernández-Gavira, J., Sánchez-Oliver, A. J., Gálvez-Ruíz, P., Grimaldi-Puyana, M., & Cepeda-Carrión, G. (2020). Importance-Performance Matrix Analysis (IPMA) to evaluate Servicescape fitness consumer by gender and age. *International Journal of Environmental Research and Public Health*, *17*(18), 6562. https://doi.org/10.3390/ijerph17186562

[33] Ghafar, Z. N. (2023). Evaluation research: a comparative analysis of qualitative and quantitative research methods. *Middle East Research Journal of Linguistics and Literature*, *3*(02), 25-32. DOI: 10.36348/merjll.2023.v03i02.003

[34] Ghozali, I. (2018). Aplikasi Analisis Multivariate dengan Program IBM SPSS. Badan Penerbit Universitas Diponegoro: Semarang.

[35] Griva, A. (2022). "I can get no e-satisfaction". What analytics say? Evidence using satisfaction data from e-commerce. *Journal of Retailing and Consumer Services*, *66*, 102954. https://doi.org/10.1016/j.jretconser.2022.102954

[36] Hair, J. F., & Sarstedt, M. (2019). Factors versus Composites: Guidelines for Choosing the Right Structural Equation Modeling Method. *Project Management Journal*, 50(6), 619–624. https://doi.org/10.1177/8756972819882132

[37] Hair, J. F., Jr, Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, *1*(2), 107. https://doi.org/10.1504/ijmda.2017.10008574

[38] Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2018). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/ebr-11-2018-0203

[39] Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2022), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage, Thousand Oaks, CA.

[40] Hauff, S., Richter, N. F., Sarstedt, M., & Ringle, C. M. (2024). Importance and performance in PLS-SEM and NCA: Introducing the combined importance-performance map analysis (cIPMA). *Journal of Retailing and Consumer Services*, *78*, 103723. https://doi.org/10.1016/j.jretconser.2024.103723

[41] Hermantoro, M., & Albari, N. (2022). E-Servicescape analysis and its effect on perceived value and loyalty on e-commerce online shopping sites in Yogyakarta. International Journal of Business Ecosystem and Strategy (2687-2293), 4(4), 39–49. https://doi.org/10.36096/ijbes.v4i4.354

[42] Hallikainen, H., Luongo, M., Dhir, A., & Laukkanen, T. (2022). Consequences of personalized product recommendations and price promotions in online grocery shopping. Journal of Retailing and Consumer Services, 69, 103088.

https://doi.org/10.1016/j.jretconser.2022.103088

[43] Hride, F. T., Ferdousi, F., & Jasimuddin, S. M. (2021). Linking perceived price fairness, customer satisfaction, trust, and loyalty: A structural equation modeling of Facebook-based e-commerce in Bangladesh. *Global Business and Organizational Excellence*, *41*(3), 41–54. https://doi.org/10.1002/joe.22146

[44] Huang, J., & Nuangjamnong, C. (2023, December 27). *The impact of customer satisfaction on customer loyalty in Chinese E-Commerce platforms in China*. https://assumptionjournal.au.edu/index.php/eJIR/article/view/7807

[45] Huang, P., Lee, B. C., & Chen, C. (2017). The influence of service quality on customer satisfaction and loyalty in B2B technology service industry. *Total Quality Management & Business Excellence*, *30*(13–14), 1449–1465. https://doi.org/10.1080/14783363.2017.1372184

[46] Janita, M. S., & Miranda, F. J. (2013). The antecedents of client loyalty in business-to-business (B2B) electronic marketplaces. Industrial Marketing Management, 42(5), 814–823. doi:10.1016/j.indmarman.2013.01.006

[47] Jiang, L., Jun, M., & Yang, Z. (2015). Customer-perceived value and loyalty: how do key service quality dimensions matter in the context of B2C e-commerce? *Service Business*, *10*(2), 301–317. https://doi.org/10.1007/s11628-015-0269-y

[48] Jin, N., Merkebu, J., & Line, N. D. (2019). The examination of the relationship between experiential value and price fairness in consumers' dining experience. *Journal of Foodservice Business Research*, *22*(2), 150–166. https://doi.org/10.1080/15378020.2019.1592652

[49] Kanaan, A., Al-Hawamleh, A., Abulfaraj, A., Al-Kaseasbeh, H., & Alorfi, A. (2023). *The effect of quality, security and privacy factors on trust and intention to use e-government services*. https://m.growingscience.com/beta/ijds/5780-the-effect-of-quality-security-and-privacy-factors-on-trust-and-intention-to-use-e-government-services.html

[50] Keshavarz, Y., & Jamshidi, D. (2018). Service quality evaluation and the mediating role of perceived value and customer satisfaction in customer loyalty. International Journal of Tourism Cities, 4(2), 220–244. doi:10.1108/ijtc-09-2017-0044

[51] Khan, M. A., Zubair, S. S., & Malik, M. (2019). An assessment of e-service quality, e-satisfaction and e-loyalty. *South Asian Journal of Business Studies*, 8(3), 283–302. doi:10.1108/sajbs-01-2019-0016

[52] Khasbulloh, A. H. K., & Suparna, G. (2022). Effect of Perceived Risk and Perceived Value on Customer Loyalty through Customer Satisfaction as Intervening Variables on Bukalapak Users. *European Journal of Business Management and Research*, *7*(4), 22–28. https://doi.org/10.24018/ejbmr.2022.7.4.1472

[53] Kim, K., & Park, D. (2016). Relationships among perceived value, satisfaction, and loyalty: Community-Based ecotourism in Korea. *Journal of Travel &*

Tourism Marketing, *34*(2), 171–191. https://doi.org/10.1080/10548408.2016.1156609

[54] Kittur, P., & Chatterjee, S. (2020). Goods and services related brand image and B2B customer loyalty: effects of construal level. *Journal of Business and Industrial Marketing*, *36*(1), 17–30. https://doi.org/10.1108/jbim-06-2019-0284

[55] Kivits, R., & Sawang, S. (2021). The Dynamism of Stakeholder Engagement. *Contributions to Management Science*. doi:10.1007/978-3-030-70428-5

[56] Konuk, F.A. (2019), "The influence of perceived food quality, price fairness, perceived value and satisfaction on customers' revisit and word-of-mouth intentions towards organic food restaurants", Journal of Retailing and Consumer Services, Vol. 50, pp. 103-110

[57] Lee, S., Lee, S. Y., & Ryu, M. H. (2019). How much are sellers willing to pay for the features offered by their e-commerce platform? *Telecommunications Policy*, *43*(10), 101832. https://doi.org/10.1016/j.telpol.2019.101832

[58] Lim, L. G., Tuli, K. R., & Grewal, R. (2020). Customer satisfaction and its impact on the future costs of selling. *Journal of Marketing*, *84*(4), 23–44. https://doi.org/10.1177/0022242920923307

[59] Lindner, T., Puck, J., & Verbeke, A. (2022). Beyond addressing multicollinearity: Robust quantitative analysis and machine learning in international business research. *Journal of International Business Studies*, *53*(7), 1307–1314. https://doi.org/10.1057/s41267-022-00549-z

[60] Lintin, I. Y. (2024). Data Penjualan FMCG: Compas.co.id Ungkap Market FMCG di E-commerce Mencapai Rp57,6 Triliun Sepanjang 2023! -. *Compas*. https://compas.co.id/article/data-penjualan-fmcg-e-commerce-2023/

[61] Magno, F., Cassia, F., & Ringle, C. M. (2022). A brief review of partial least squares structural equation modeling (PLS-SEM) use in quality management studies. *The TQM Journal*. https://doi.org/10.1108/tqm-06-2022-0197

[62] Malik, S.A., Akhtar, F., Raziq, M.M. and Ahmad, M. (2020), "Measuring service quality perceptions of customers in the hotel industry of Pakistan", Total Quality Management and Business Excellence, Vol. 31 Nos 3-4, pp. 263-278.

[63] Memon, M. A., Ting, H., Cheah, J., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: Review and recommendations. *Journal of Applied Structural Equation Modeling*, *4*(2), i–xx. https://doi.org/10.47263/jasem.4(2)01

[64] Mendez, M., Bendixen, M., Abratt, R., Yurova, Y., & O'Leary, B. (2015). Sales promotion and brand loyalty: some new insights. *International Journal of Education and Social Science*, *2*(1), 103-117.

[65] Miao, M., Jalees, T., Zaman, S. I., Khan, S., Hanif, N., & Javed, M. K. (2021). The influence of e-customer satisfaction, e-trust and

perceived value on consumer's repurchase intention in B2C e-commerce segment. *Asia Pacific Journal of Marketing and Logistics*, *34*(10), 2184–2206. https://doi.org/10.1108/apjml-03-2021-0221

[66] Molinillo, S., Aguilar-Illescas, R., Anaya-Sánchez, R., & Liébana-Cabanillas, F. (2021). Social commerce website design, perceived value and loyalty behavior intentions: The moderating roles of gender, age and frequency of use. Journal of Retailing and Consumer Services, 102404. doi:10.1016/j.jretconser.2020.102404

[67] Ngah, A. H., Anuar, M. M., Rozar, N. N., Ariza-Montes, A., Araya-Castillo, L., Kim, J. J., & Han, H. (2021). Online Sellers' reuse behaviour for Third-Party Logistics Services: an Innovative model development and E-Commerce. *Sustainability*, 13(14), 7679. https://doi.org/10.3390/su13147679

[68] Nikbin, D., Marimuthu, M. and Hyun, S.S. (2016), "Influence of perceived service fairness on relationship quality and switching intention: an empirical study of restaurant experiences", Current Issues in Tourism, Vol. 19 No. 10, pp. 1005-1026.

[69] Nimda. (2024, May 29). *Pesatnya Perkembangan E-Commerce di Indonesia yang Wajib Kamu Tahu - Universitas Pasundan*. Universitas Pasundan. https://www.unpas.ac.id/pesatnya-perkembangan-e-commerce-di-indonesia-yang-wajib-kamu-tahu/

[70] Oktavanny, A. Y., & Sulistiadi, W. (2022). The Determinant Factors of Customer Satisfaction: Promotion, Service quality and Brand image. *IJEBD (International Journal of Entrepreneurship and Business Development)*, *5*(2), 312-322.

[71] Omar, H. F. H., Saadan, K. B., & Seman, K. B. (2015). Determining the influence of the reliability of service quality on customer satisfaction: the case of Libyan E-Commerce customers. *International Journal of Learning and Development*, *5*(1), 86. https://doi.org/10.5296/ijld.v5i1.6649

[72] Pakpahan, A. F., Prasetio, A., Negara, E. S., Gurning, K., Situmorang, R. F. R., Tasnim, T., Sipayung, P. D., Sesilia, A. P., Rahayu, P. P., Purba, B., Chaerul, M., Yuniwati, I., Siagian, V., & Rantung, G. A. J. (2021). *Metodologi Penelitian Ilmiah*. Yayasan Kita Menulis.

[73] Pandey, N., Tripathi, A., Jain, D., & Roy, S. (2019). Does price tolerance depend upon the type of product in e-retailing? Role of customer satisfaction, trust, loyalty, and perceived value. Journal of Strategic Marketing, 28(6), 522–541. https://doi.org/10.1080/0965254x.2019.1569109

[74] Paulose, D., & Shakeel, A. (2021). Perceived Experience, Perceived Value and Customer Satisfaction as Antecedents to Loyalty among Hotel Guests. *Journal of Quality Assurance in Hospitality & Tourism*, *23*(2), 447–481. https://doi.org/10.1080/1528008x.2021.1884930

[75] Prabowo, A. J., & Sitio, A. (2020). The Impact of Brand Image, Sales Promotion, Service Quality Towards Customer Satisfaction

and Its Implications on Customer Loyalty at X Department Store Kota Kasablanka Jakarta. *Dinasti International Journal of Education Management and Social Science*, *2*(2), 267–278. https://doi.org/10.31933/dijemss.v2i2.656

[76] PSDI. (2024). *Perdagangan Digital (E-Commerce) Indonesia Periode 2023*. Pusat Data dan Sistem Informasi Sekertariat Jendral Kementrian Perdagangan. https://satudata.kemendag.go.id

[77] Purwanto, A. (2022). The Role of Digital Leadership, e-loyalty, e-service Quality and e-satisfaction of Indonesian E-commerce Online Shop. *International Journal of Social and Management Studies*, *3*(5), 51-57. DOI: https://doi.org/10.5555/ijosmas.v3i5.180

[78] Putri, R. S., & Setiawan, K. (2025). Bukalapak dan Persaingan E-commerce. *Tempo*. https://www.tempo.co/ekonomi/bukalapak-dan-persaingan-e-commerce-1193717

[79] Rachmawati, I. (2020). Importance-Performance (IPMA) analysis of loyalty in Indonesia cellular operator during COVID-19 pandemic. *Jurnal Manajemen Teknologi*, *19*(2), 177–195. https://doi.org/10.12695/jmt.2020.19.2.5

[80] Rahman, S., Fadrul, F., Yusrizal, Y., Marlyna, R., & Momin, M. M. (2022). Improving the satisfaction and loyalty of online shopping customers based on e-commerce innovation and e-service quality. *Gadjah Mada International Journal of Business*, 24(1), 56-81. https://search.informit.org/doi/10.3316/informit.289848833328877

[81] Rather, R. A., & Camilleri, M. A. (2019). The effects of service quality and consumer-brand value congruity on hospitality brand loyalty. *Anatolia*, *30*(4), 547–559. https://doi.org/10.1080/13032917.2019.1650289

[82] Rodríguez, P. G., Villarreal, R., Valiño, P. C., & Blozis, S. (2020). A PLS-SEM approach to understanding E-SQ, E-Satisfaction and E-Loyalty for fashion E-Retailers in Spain. *Journal of Retailing and Consumer Services*, *57*, 102201. https://doi.org/10.1016/j.jretconser.2020.102201

[83] Sardinha, I. B. (2015). *E-loyalty in e-commerce: A study at GIRISSIMA.COM*. https://www.semanticscholar.org/paper/E-loyalty-in-e-commerce%3A-A-study-at-GIRISSIMA.COM-Sardinha/07a04042cd8683191eef0607516a6ebe944870b1

[84] Sarstedt, M., Hair, J.F., Pick, M., Liengaard, B.D., Radomir, L. and Ringle, C.M. (2022), "Progress in partial least squares structural equation modeling use in marketing research in the last decade", Psychology and Marketing, Vol. 39 No. 5, pp. 1035-1064.

[85] Sharma, P.N., Liengaard, B.D., Hair, J.F., Sarstedt, M. and Ringle, C.M. (2022), "Predictive model assessment and selection in composite-based modeling using PLS-SEM: extensions and guidelines for using CVPAT", European Journal of Marketing (In press).

[86] Shmueli, G., Sarstedt, M., Hair, J.F., Cheah, J., Ting, H., Vaithilingam, S. and Ringle, C.M. (2019), "Predictive model

assessment in PLS-SEM: guidelines for using PLSpredict", European Journal of Marketing, Vol. 53 No. 11, pp. 2322-2347.

[87] Taherdoost, H. (2017). Determining sample size; How to calculate survey sample size. *International Journal of Economics and Management Systems*, *2*(2), 237–239. http://www.iaras.org/iaras/journals/ijems

[88] Ting, O. S., Ariff, M. S. M., Zakuan, N., & Sulaiman, Z. (2016). Relationship between e-Service quality, e-Satisfaction and e-Loyalty in B2C e-Commerce. *Advanced Science Engineering and Medicine*, *8*(10), 819–825. https://doi.org/10.1166/asem.2016.1935

[89] Greenplace. (2024). *Tentang Kami*. https://www.Greenplace.com/about/our-business

[90] Tsagris, M., & Pandis, N. (2021). Multicollinearity. American journal of orthodontics and dentofacial orthopedics, 159(5), 695-696.

[91] Tufa, F. B., & Workineh, M. (2022). The effect of sales promotion on brand awareness and brand loyalty: Assessment of Walia beer Brand Management practices. *International Journal of Marketing and Business Communication*, *10*(1), 2021. http://publishingindia.com/ijmbc/

[92] Wardhana, B. (2024). Compas.co.id FMCG Report Semester I 2024: Boikot Picu Perubahan Peta Persaingan Produk Global & Lokal di. *Compas*. https://compas.co.id/article/fmcg-report-2024-boikot-picu-perubahan-peta-persaingan-produk-global-lokal/

[93] Yin, W., & Lertbuasin, S. (2022). Perceived Value Effect of customer satisfaction and behavioral intentions the case study of China's cross-border E-Commerce platforms in Thailand. Journal of Roi Kaensarn Academi, 7(1), 304-320.

[94] Yonatan, A. Z. (2024). *Makin Maju, Pertumbuhan E-Commerce Indonesia yang Diprediksi Tertinggi di Dunia*. GoodStats Data. https://data.goodstats.id/statistic/makin-maju-pertumbuhan-e-commerce-indonesia-yang-diprediksi-tertinggi-di-dunia-QiN5h

[95] Yum, K., & Kim, J. (2024). The influence of perceived value, customer satisfaction, and trust on loyalty in entertainment platforms. *Applied Sciences*, 14(13), 5763. https://doi.org/10.3390/app14135763

[96] Yum, K., & Yoo, B. (2023). The Impact of Service Quality on Customer Loyalty through Customer Satisfaction in Mobile Social Media. *Sustainability*, *15*(14), 11214. https://doi.org/10.3390/su151411214

[97] Yuwono, D., Kasie, J. N., & Sugiharto, T. (2024). Using the expectancy disconfirmation model in analysis of the effect of service quality on tourist's satisfaction and revisiting tourist's in Bali. *Yuwono | Jurnal Bisnis Dan Manajemen*. https://doi.org/10.26905/jbm.v11i1.12621