IPMA'S Analysis of Relationship Mobile Commerce Application (MCA) Service Quality in Blibli Indonesia on Customer Loyalty Intention

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Abstract –*This research is based on the significant growth of in the first quarter of 2023, Indonesia's e-commerce market saw Shopee lead with 158 million visitors, followed by Tokopedia, Lazada, Blibli, and Bukalapak. Despite Blibli lower ranking in visitor count, its inclusion in this study is significant. Blibli has 25.4 million visitors monthly. This study aims to explore the relationship between service quality and customer loyalty intention among Blibli MCA users.The research method used is quantitative with a causal approach. The sample was selected purposively, involving 176 respondents who were taken through a questionnaire using Google Form. Data analysis was carried out with the Partial Least Square Structural Equation (PLS-SEM) model using SmartPLS 3.2.9 software. The results showed that assurance, information quality, personalization, and security variables were positively and significantly related to customer loyalty intention through customer satisfaction. Customer satisfaction is also positively and significantly related to customer loyalty intention. Based on Importance Performance Matrix Analysis (IPMA), customer satisfaction holds the highest importance are in the "keep up the good work" quadrant that influencing customer loyalty intention of Blibli MCA. Assurance, information quality, personalization, and security exhibit moderate importance and performance, while responsiveness have moderate importance with high performance. Reliability and usability show negative importance with high performance that indicating area for potential improvement. Future research is Blilbli MCA should be focusing on service quality dimensions in MCA especially the negatives score that affect customer satisfaction and loyalty intention.*

Keywords – *Blibli, Customer Loyalty Intention, IPMA,* M-Commerce, Service Quality, SmartPLS.

I. INTRODUCTION

Technology transformation has drastically shifted market behavior from conventional to digital platforms. In Indonesia, internet users numbered 175.4 million in 2020, with a 64 percent penetration rate, reflecting a significant preference for online transactions over traditional shopping (HootSuite and We Are Social). Ulya and Djumena (2021) found that 74.5 percent of consumers favor online transactions, posing a challenge for e-commerce platforms to differentiate themselves by offering superior services. The rise of m-commerce, utilizing mobile apps for transactions, underscores a shift in consumer preferences from web-commerce to mobile platforms[1]. M-commerce's advantages include convenience, mobility, and personalized experiences, with usage reaching 72.9% of transactions by 2021[2]. Mobile applications offer users the flexibility to shop anytime, anywhere, enhancing interaction through features like direct notifications and personalized recommendations. The rise of e-commerce in Indonesia reflects a shift in consumer behavior towards digital transactions. Data from early 2023 shows that Shopee leads with 158 million monthly visitors, followed by Tokopedia at 117 million, Lazada with 83.2 million, Blibli at 25.4 million, and Bukalapak at 18.1 million[3]. This distribution highlights the competitive nature of the market, where variations in service quality, customer loyalty, and satisfaction are key factors in a platform's success.

Although Blibli is not the top-ranked platform, it attracts 25.4 million monthly visitors, reflecting its market significance. Blibli's focus on service standards, customer satisfaction, and adapting to digital trends contributes to its strong market presence. Analyzing Blibli provides valuable insights for improving service quality and customer loyalty in the competitive e-commerce sector. This research aims to offer actionable recommendations for enhancing service quality and customer satisfaction. Common complaints include slow shipping, delayed refunds, and poor customer service. Effective management of operations, as noted by Hezer and Reinder (2015), is essential for addressing these issues and staying competitive[4].As Rusdiana (2014) emphasizes, resolving these challenges will improve user experience and support Blibli long-term success in the e-commerce market[5]. For Blibli, operational management involves coordinating various functions to achieve goals, including producing products that meet specifications through efficient processes and anticipating future

technological and consumer needs. As an e-commerce company, Blibli must ensure that its products align with consumer needs in terms of price, quality, and service [5]. Effective operations management significantly improves service quality and customer satisfaction by ensuring products are available, high-quality, and delivered promptly. Monitoring technological advancements and consumer needs allows Blibli to innovate and offer relevant products[6]. Additionally, technical problems with the app, such as long loading times, contribute to a negative user experience[7]. These service shortcomings impact customer satisfaction and, consequently, customer loyalty[8]. Blibli must address these concerns to enhance customer satisfaction and ensure strong, positive loyalty among its users. This study aims to analyze the relationship MCA service quality with customer loyalty intention in Blibli application, because customer loyalty intention has a significant impact on marketing activities, as it reflects customer behaviour in making purchasing decisions, ultimately affecting the product's marketability in the used application [9]. The reference for this study includes previous research by Zariman et al. (2022) titled "Mobile Commerce Applications Service Quality in Enhancing Customer Loyalty Intention: Mediating Role of Customer Satisfaction". In measuring the variable of MCA service quality, the measurement used by Zariman (2022) includes seven indicators such as: Assurance, Information Quality, Personalization, Reliability, Responsiveness, Security, Usability, Customer Satisfaction, and Customer Loyalty Intention [10].

II. LITERATURE REVIEW

1. Operations Management

Operations Management is a series of steps to coordinate the process of converting inputs into outputs in the form of goods or services[5]. According to Heizer & Render (2005), there are three main functions in organizations: marketing to generate demand, finance that manages internal and external transactions, and operations that produce products. Operations Management includes ten strategic decisions, including: goods and services design, quality management, process and capacity design, location strategy, spatial strategy, human resource management, supply chain management, inventory management, schedule determination, and maintenance. These decisions cover various aspects from design planning, quality management, to infrastructure maintenance to maintain operational efficiency. Addsthat Operations Management is the process of providing added value through the interaction of production factors such as raw materials, labor, and machinery in a coordinated order[11].

2. Quality Management

Quality management according to Heizer & Render (2015) is a strategy to meet customer expectations by producing quality products efficiently and consistently. Quality affects all aspects of an organization, from suppliers to customers, and from product design to maintenance. An effective quality strategy starts with customer-oriented practices, continuous improvement, and the application of Total Quality Management (TQM) through measurement and quality management tools. Employee involvement and organizational commitment are also important to achieve customer satisfaction, ultimately creating an effective and efficient organization. In addition, emphasize that operations managers play a vital role in ensuring quality, safe, and compliant products or services, as imperfections in design and production processes can pose risks of injury, legal consequences, and non-compliance [4].

3. Service Quality

Service quality according to Kotler &Keller (2009) is a set of attributes and properties inherent in a product or service, which is able to meet customer needs, either explicitly or implicitly. John F. Welch Jr. from General Electric (GE) states that quality is a fundamental pillar that ensures customer loyalty, strengthens global competitiveness, and is the main method for maintaining company growth and revenue. Additionally that there are five main dimensions in assessing service quality, namely reliability (the company's ability to provide services as promised with accuracy), responsiveness (readiness to respond quickly to customer needs), security (knowledge and polite attitude of employees who foster trust), empathy (the ability to understand and act in the interests of customers with personal attention), and physical evidence (appearance of facilities, equipment, and personnel owned by the company) [12].

4. Electronic Service Quality

According to Chase and Jacobs in Dias et al. (2020), e-service quality is the ability of electronic-based sites to meet customer expectations regarding convenience and comfort in shopping, buying, and distributing goods or services. Puranda et al. (2022) in Rachmad&Hendayani (2023) add that electronic service quality also includes the ability to speed up transactions and product delivery on e-commerce platforms. There is seven important dimensions, namely efficiency, reliability, fulfillment of needs, privacy, responsiveness,

compensation, and interaction, which are divided into two rating scales: core online service and recovery online service[12].

5. Mobile Service Quality

According to Heo, Lim, and Kim (in Berlianne et al., 2020), mobile service quality (MCA service quality) is closely related to e-service quality because customer interaction with mobile devices is at the core of the service. However, that MCA service quality has special characteristics that distinguish it from e-service quality, so it requires its own evaluation scale. This approach is necessary because mobile technology creates a new platform that affects the service sector, making it important to improve customer satisfaction and competitiveness of mobile-based businesses (Heo in Hidayah et al., 2020) [13]. Zariman et al. (2022) identified nine dimensions of mobile service quality, namely: assurance, information quality, personalization, reliability, responsiveness, security, usability, customer satisfaction, and customer loyalty.

6. M-Commerce

M-commerce is a technology that utilizes the internet and mobile devices such as smartphones to access information and conduct transactions, thus enabling the efficient exchange of goods or services. M-commerce services offer convenience through the delivery of goods to customers, save time and effort compared to shopping in physical stores, and reduce the operational costs of sellers[14]. In addition, m-commerce adds flexibility and removes time and place constraints in consumer and seller interactions, different from e-commerce[15].

7. Customer Satisfaction

Customer satisfaction is an affective assessment of individuals based on their experience of a product or service, compared to existing expectations. If the performance does not meet expectations, dissatisfaction will arise, on the other hand, if it matches or exceeds expectations, it will lead to satisfaction or even high satisfaction [16]. There is a correlation between service quality and customer satisfaction [17]. In additionally, that customer satisfaction reflects a psychological condition related to expectations that are met or not[18]. Customer satisfaction measurement methods include complaints or suggestions, ghost shopping, lost customer analysis, and customer satisfaction surveys[19]. The survey can be in the form of directly reported satisfaction, derived satisfaction, problem analysis, and importance-performance analysis, each of which provides insight into the level of satisfaction and areas of improvement.

8. Customer Loyalty Intention

Customer loyalty intention refers to consistent purchasing behavior over time[20],Salemah in Zariman et al. (2022) state that customer satisfaction, especially through MCA services, contributes to loyalty. Research by Kim et al. (2020) shows that customer satisfaction influenced by MCA service quality increases loyalty intentions, supported by Omar et al. (2021) who found a significant impact of these services on customer satisfaction and loyalty intention.

Hypothesis

This study proposes several hypotheses related to the relationship MCA service quality with customer loyalty intention in Blibli MCA users. Figure.1 research model for this study.
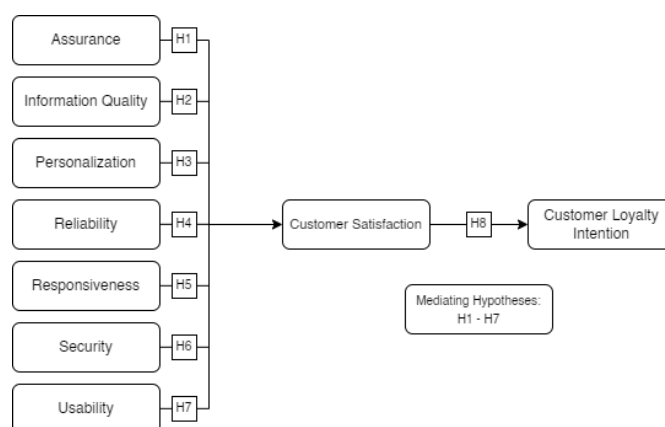

Fig. 1Research Model
Source: Zariman et al. (2022)

Figure 1 explains Zariman et al. (2022) investigation using the SERVQUAL approach. The study analyzes customer satisfaction (X) and customer loyalty intention (Z) using quality indicators from MCA. The variables include assurance, information quality, responsiveness, dependability, security, and usability. Unlike Zariman et al. (2022) work, this study examines Blibli MCA users through various things and locations. Figure 1 depicts the research model of the investigation, based on Zariman et al. (2022) model.In this model, customer satisfaction mediates the link between service quality characteristics (H1-H7) and customer loyalty intention (H8), emphasizing the importance of satisfaction in building loyalty. This study seeks to expand on Zariman et al. (2022) findings by providing more specific insights into how these service quality dimensions influence customer satisfaction and loyalty intention in Blibli MCA, with a focus on practical applications to improve user experience and strengthen competitive positioning in Indonesia's e-commerce market.

III. RESEARCH METHODS

This study uses quantitative methods with the aim of testing theories through data collection that support or reject certain hypotheses. Table 1 provides the variables operational of each construct, tested in this

TABLE. 1
VARIABLES OPERATIONS

Variables	Questionnaire	Item Code
Assurance	The security policy of the Blibli application can be accessed well.	AS.1
	The privacy policy of the Blibli application can be accessed easily.	AS.2
	The Blibli application provides detailed information about the company.	AS.3
	The Blibli application is widely known.	AS.4
	The Blibli application has a good reputation.	AS.5
Information Quality	The Blibli application provides up-to-date information in a timely manner.	IQ.1
	The Blibli application provides information in a timely manner.	IQ.2
	The Blibli application provides accurate information.	IQ.3
	The Blibli application provides relevant information.	IQ.4
	The Blibli application provides detailed information.	IQ.5
	The Blibli application provides the necessary information for transactions	IQ.6
	The Blibli application provides information that is easy to understand.	IQ.7
Personalization	The Blibli application pays attention to transactions.	PS.1
	The Blibli app provides recommendations according to my preferences.	PS.2
	The Blibli application understands my desires.	PS.3
Reliability	The Blibli application delivered the order as promised.	RL.1
	The Blibli application provides confirmation of order details before the transaction.	RL.2
	The Blibli application provides confirmation of order details after the transaction.	RL.3
	The Blibli application provides confirmation for order returns.	RL.4
	The Blibli application provides confirmation of order cancellation.	RL.5
	The Blibli application provides order delivery tracking.	RL.6
	The Blibli application can be used at any time.	RL.7
Responsiveness	The Blibli application helps to solve problems in transactions.	RS.1
	The Blibli application provides fast automatic response services.	RS.2
	The Blibli application provides customer service contact services.	RS.3
	The Blibli application responds to questions with relevant answers.	RS.4
	The Blibli application responds to questions with accurate answers.	RS.5
	The Blibli application provides content that meets the needs.	RS.6
	The Blibli application provides storage for transaction documentation to facilitate product returns.	RS.7
Security	The Blibli application protects my information while transaction.	SC.1
	The Blibli application stores personal data securely.	SC.2
	The Blibli application protects payment method information	SC.3
	The Blibli application has a low risk associated with data security	SC.4
Usability	The Blibli application is well organized.	US.1
	The Blibli application has consistent navigation.	US.2
	The Blibli application has standardized navigation.	US.3
	The Blibli application limits product scrolling for easy searching	US.4
	The Blibli application displays graphics that facilitate user navigation.	US.5
	The Blibli application displays animations that facilitate user navigation	US.6
Customer Satisfaction	Using the Blibli application is the right decision	CS.1
	Satisfied using the Blibli application for transactions	CS.2
	Satisfied with the products offered by the Blibli application.	CS.3
	Satisfied with the services offered by the Blibli application.	CS.4
	Satisfied with the shopping experience on the Blibli Application	CS.5

Variables	Questionnaire	Item Code
Customer Loyalty Intention	The current service of the Blibli application is very satisfying.	CL.1
	Prefer to stay loyal to the Blibli application rather than other apps	CL.2
	The Blibli application is always the first choice for types of purchases.	CL.3
	The Blibli application is the best choice for making purchases.	CL.4
	Often use the Blibli application for online shopping.	CL.5

Source: Data Processed (2024)

Data analysis was carried out using SEM and PLS through SmartPLS for multiple regression analysis, with mediation techniques to test the effect of intervening variables. Hypothesis testing was conducted with multiple regression analysis and coefficient of determination to assess the relationship between servicequality dimensions and customer loyalty intentions.Importance Performance Matrix Analysis (IPMA) is one of the tests that can be conducted in PLS-SEM to estimate path coefficients in an analysis that takes into account the average latent scores of variables [21]. IPMA helps decision-makers identify the areas that need to be improved right away in order to be consistent with their strategic goals. The purpose of conducting IPMA is to assist management in determining and identifying variables that have relatively high importance for the target construct, which shows the results of variables studied in PLS-SEM with strong total effects but low performance[22]. According to Siregar et al. (2023), the IPMA develop into four quadrant, divides priority levels based on the distribution of importance and performance[23], in figure.2.

Fig.2Importance Perfomance Matrix Analysis (IPMA) Quadrant
Source: Siregar et al. (2023)

According to the IPMA quadrants there are, Quadrant I "Keep Up The Good Work" followed by high importance with high performance reflects that the company is performing very well in this zone, indicating an opportunity to achieve or maintain a competitive advantage and is a key strength. Attributes are considered very important, and at the same time, the company appears to have a high level of performance in these activities. quadrant II "Concentrate Here" followed by high importance with low performance. This area requires immediate managerial attention for improvement and represents a major weakness. Service attributes are considered very important to customers, but the level of performance is relatively low. quadrant III "Lower Priority" followed by low importance with low performance represents a minor weakness and does not require additional effort. The company would be better off reallocating resources from this area to others that are more strategically important. And for quadrant IV "Possible Overkill" followed by low importance with high performance. Resources allocated to these attributes are excessive and should be redirected to more important areas, such as quadrant I[23].

IV.RESULTS AND DISCUSSION

This research collects data through forms distributed to active consumers who use the Blibli MCA users. Data collection was carried out by distributing questionnaires via Google Form within a period of three weeks from April 11, 2024 to May 3, 2024 through X social media.This study the set of the data (n=176) of Blibli MCA users The data comprise Assurance (AS.1 – AS.5), Information Quality (IQ.1 – IQ.7), Personalization (PS.1 – PS.2), Reliability (RL.1 – RL.7), Responsiveness (RS.1 – RS.7), Security (SC.1 – SC.3), Usability (US.1 – US.6), Customer Satisfaction (CS.1 – CS.5) and Customer Loyalty Intention (CL.1 – CL.5). Customer Loyalty Intention is the main construct in this study as it aims to assess how other variables respond using the Importance-Performance Matrix Analysis. In this analysis, the IPMA results excluded certain items (AS.1, IQ.4, IQ.6, RL.1, RL.7, and SC.2) because they did not meet the criteria for valid data. PLS-SEM analysis, an indicator is considered valid if the outer loading value is greater than or equal to 0.70, and a construct is deemed to have sufficient convergent validity if the AVE (Average Variance Extracted) value is greater than 0.50. These

criteria ensure the robustness and accuracy of the IPMA results, highlighting the importance of maintaining high standards for data validity in structural equation modelling [24].

Hypothesis Test Results

Hypothesis testing in this study was conducted to determine or test the relationship between one variable and another[25]. According to Zariman et al. (2022), the structural model is tested by assessing the significance and magnitude of the hypothesized relationship using a bootstrapping procedure. Bootstrapping calculations are carried out by looking at the results of significance between constructs, t-statistics, and p-values to accept or reject existing hypotheses. This study tests the direct effect using a significance level of 0.05 or 5% with a t-value greater than 1.974 with a significance level of 0.05 or 5% the p-value must be smaller than 0.05 to conclude that the coefficient is significant[25]. Table.2 Result of bootstrapping.

TABLE. 2
PATH COEFFICIENT BOOTSTRAPPING

Hipotesis	Path	OriginalSample	T Statistic(≥1.974)	P Value	Description
H1	AS -> CS -> CL	0.115	2.184	0.029	Accepted
H2	IQ -> CS -> CL	0.181	2.676	0.008	Accepted
H3	PS -> CS -> CL	0.287	4.976	0.000	Accepted
H4	RL -> CS -> CL	-0.056	1.789	0.074	Rejected
H5	RS -> CS -> CL	0.017	0.583	0.560	Rejected
H6	SC -> CS -> CL	0.158	2.805	0.005	Accepted
H7	US -> CS -> CL	-0.006	0.162	0.871	Rejected
H8	CS -> CL	0.780	29.991	0.000	Accepted

H1: Customer satisfaction mediates the relationship between assurance and customer loyalty intention inBlibli MCA users service quality

The results of the study show that assurance has a positive and significant relationship on customer loyalty intention through customer satisfaction. This means that as assurance growsreflecting customer faith in the serviceso does customer satisfaction, which leads to increased customer loyalty. These findings are consistent with previous research by Zariman et al. (2022), Lady and Sebayang (2024), and Akpan et al. (2022), all of which found that assurance has a positive influence on customer loyalty intention when mediated by customer satisfaction, emphasizing the importance of trust and confidence in longterm loyalty.

H2: Customer satisfaction mediates the relationship between information quality and customer loyalty intention in Blibli MCA users service quality

The results of the study show that information quality has a positive and significant relationshipon customer loyalty intention through customer satisfaction. This means that the MCA platform's information quality improves, so does customer satisfaction, which increase customer loyalty intention. The findings are consistent with prior research by Zariman et al. (2022), Haykal et al. (2023), and Yen et al. (2022), which all confirm that information quality positively affects customer loyalty when mediated by customer satisfaction, emphasizing the critical role of high-quality information in fostering loyalty.

H3: Customer satisfaction mediates the relationship between personalization and customer loyalty intention in Blibli MCA users service quality

The result of the study shows that personalization has a positive and significant relationshipon customer loyalty intention through customer satisfaction. This means that when mobile commerce platforms like Blibli offer personalized services that align with customer preferences, it enhances customer satisfaction, which in turn strengthens their loyalty intention. These findings are consistent with prior research by Zariman et al. (2022) and Hariyanto&Rachmawati (2022), who highlighted that personalization leads to increased customer satisfaction, ultimately driving long-term customer loyalty.

H4:Customer satisfaction mediates the relationship between reliability and customer loyalty intention in Blibli MCA users service quality

The result of the study shows that reliability and customer loyalty intention through customer satisfaction doesn't havea positive significant relationship. This means thatreliability of the Blibli MCA does not significantly improve customer satisfaction or promote client loyalty intentions. According to Zariman et al. (2022), this lack of influence indicates that users may believe the application does not match their reliability

expectations. Furthermore, when a product fails to meet consumer requirements and expectations, it might stifle the growth of customer loyalty. As a result, boosting the perceived reliability of the service may be critical in promoting increased customer happiness and loyalty in the future[26].

H5:Customer satisfaction mediates the relationship between responsiveness and customer loyalty intention in Blibli MCA users service quality

The result of the study shows that responsiveness and customer loyalty intention through customer satisfaction doesn't have a positive significant relationship. This means customers may not regard responsiveness as sufficient to improve their overall satisfaction, affecting their loyalty intention to the brand. This conclusion emphasizes the necessity of considering not only responsiveness but also other aspects that influence customer satisfaction and loyalty intention. According to Kotler and Armstrong (2018), if customers believe the value received does not equal their expenditures, their loyalty would decline. Thus, improving responsiveness alone may not be sufficient to drive consumer loyalty in this scenario.

H6:Customer satisfaction mediates the relationship between security and customer loyalty intention in Blibli MCA users service quality

The result of the study shows that security has a positive and significant relationship on customer loyalty intention through customer satisfaction. This means that a strong emphasis on security features in Blibli MCA not only enhances customer satisfaction but also directly to customer loyalty intention. Users feel more confident and secure when their personal and financial information is well-protected, which leads to increased happiness. This connection emphasizes the need of implementing strong security measures, which play an important role in creating longterm consumer loyalty [27]. Overall, prioritizing security can be an effective strategy for organizations looking to increase client retention in today's competitive mobile commerce landscape.

H7:Customer satisfaction mediates the relationship between usability and customer loyalty intention in Blibli MCA users service quality

The result of the study shows that usability and customer loyalty intention through customer satisfaction doesn't have a positive significant relationship. This means usability of the Blibli MCA does not always result in increased client loyalty intention through improved customer satisfaction. Users may find the program simple to use, but this does not imply a greater commitment to continue using or promoting the service. If a product or service lacks effective usability, a company's ability to retain customers suffers. As a result, organizations must focus not only on usability, but also on other variables that influence consumer loyalty[26].

H8:Customer satisfaction has a positive relationship with customer loyalty intention among Blibli MCA users

The result of the study shows that customer satisfaction and customer loyalty intention has a positive and significant on Blibli MCA users. This means customer satisfaction increases, customers are more likely to be loyal to the Blibli MCA. This finding is consistent with other studies, like Zariman et al. (2022), which found a substantial positive link between customer satisfaction and customer loyalty intention. Furthermore, satisfied mobile commerce customers are more likely to continue using the application, confirming the idea that improving customer satisfaction is critical for developing long term loyalty intention[28].

IPMA Test Results

TABLE. 3
IPMA RESULT ON CUSTOMER LOYALTY INTENTION.

Variable	Total Effect of individual performance (Importance)	Index Value (Performance)
Assurance	0.094	51.072
Information Quality	0.195	50.057
Personalization	0.287	51.047
Reliability	-0.045	78.241
Responsiveness	0.022	76.968
Security	0.162	46.828
Usability	-0.012	80.562
Customer Satisfaction	0.857	51.101

Based on Table 3, the importance value for assurance is 0.094, with a performance value of 51.072. The information quality variable has an importance value of 0.195 with a performance value of 50.057. The personalization variable has an importance value of 0.287 with a performance value of 51.047. The reliability variable shows an importance value of -0.045 with a performance value of 78.241. The responsiveness variable has an importance value of 0.022 with a performance value of 76.968. The security variable has an importance

value of 0.162 with a performance value of 46.828. The usability variable has an importance value of -0.012 with a performance value of 80.562. Finally, the customer satisfaction variable has an importance value of 0.857 with a performance value of 51.101. Figure.3 is the result of IPMA based on its construct.
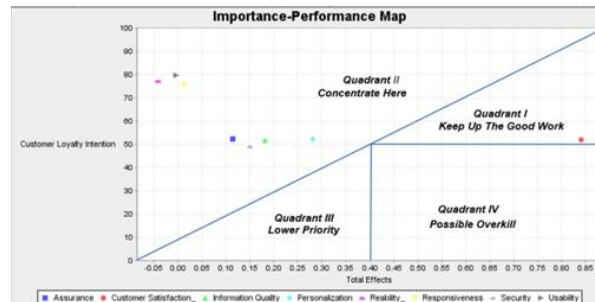

Fig. 3 IPMA based on its constructs
Source: Data Processed (2024)

Based on Figure.3, which shows the results of the importance-performance matrix analysis based on the customer loyalty intention variable, the findings can be summarized as follows:

1. Assurance, information quality, personalization, reliability, responsiveness, security, and usability are located in Quadrant II, also known as "concentrate here." These variables have high importance but low performance, indicating that they require immediate managerial attention for improvement and representmajor weakness. These service attributes are considered highly important to customers.

2. Customer satisfaction is located in Quadrant I, also known as "keep up the good work." This variable has high importance and high performance, indicating an opportunity to achieve or maintain a competitive advantage and represents a key strength. The attribute is considered highly important, and at the same time, the company appears to perform well in these activities.

The following is Figure 4, which presents the results of the IPMA analysis based on the items of the assurance variable with the target construct of customer loyalty intention.
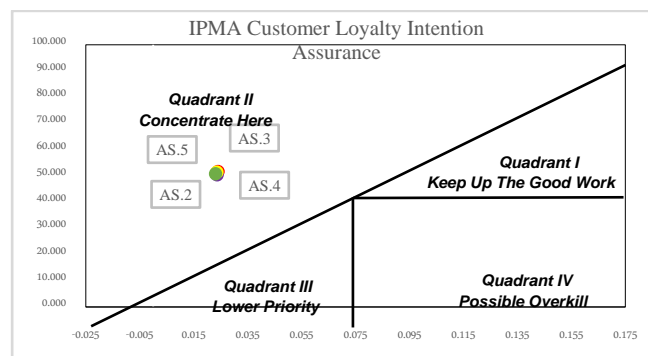

Fig. 4. IPMA – Assurance
Source: Data Processed (2024)

Figure 4 shows that the assurance items AS.2 (Privacy), AS.3 (Availability of company information), AS.4 (Application popularity), and AS.5 (Good reputation) are in Quadrant II ("Concentrate Here"), indicating high importance but low performance. These items require urgent improvement as they represent key weaknesses. This aligns with Figure 3, which also places the assurance variable in Quadrant II. This means these attributes are crucial to Blibli MCA users but currently underperforming. This shortfall risks customer trust and confidence.Figure 5 presents the IPMA results for the information quality variable related to customer loyalty intention.
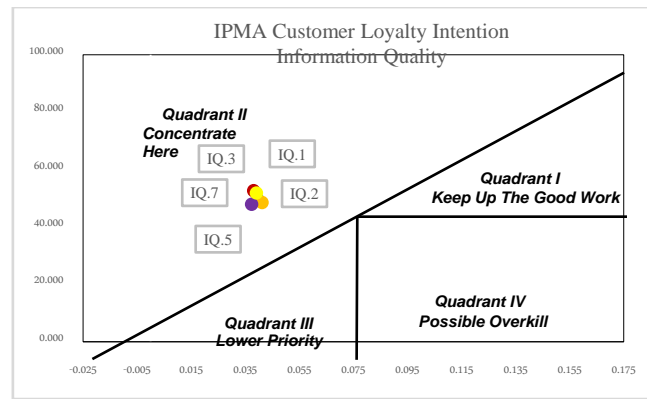
Fig. 5. IPMA – Information Quality
Source: Data Processed (2024)

Figure 5 shows that the information quality items IQ.1 (Information is always current), IQ.2 (Timelyinformation), IQ.3 (Accurate information), IQ.5 (Detailed information), and IQ.7 (Easy to understand information) are in Quadrant II ("Concentrate Here"), indicating high importance but low performance. These items need urgent improvement, reflecting significant weaknesses. Figure 6 presents the IPMA results for the personalization variable related to customer loyalty intention.
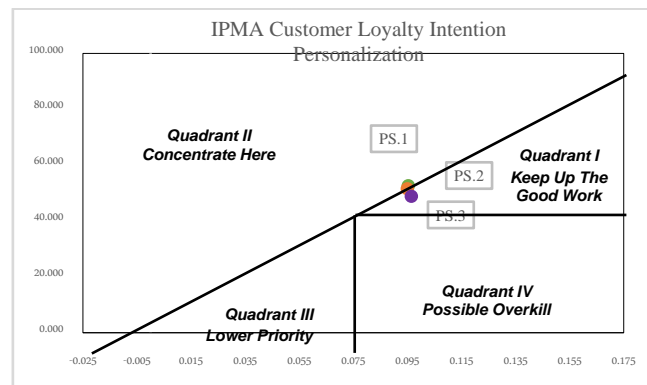
Fig. 6. IPMA – Personalization
Source: Data Processed (2024)

Figure 6 shows thatpersonalization variable in Blibli MCA, items PS.1 (Attention in transactions) and PS.2 (Recommendations according to preferences) are situated in Quadrant I, also known as "keep up the good work." This indicates that both importance and performance are high for these items, reflecting the company's strong performance in these areas. These items are key strengths for Blibli MCA, offering opportunities to maintain or further enhance competitive advantages. On the other hand, PS.3 (Understanding user desires) is placed in Quadrant IV, labelled as "possible overkill". Figure 7 presents the IPMA analysis for the reliability variable related to customer loyalty intention.
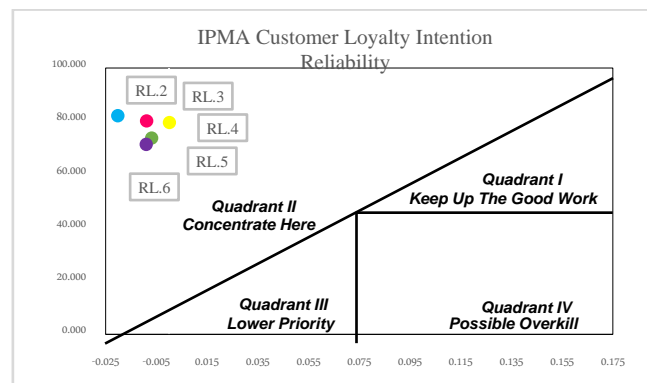

Fig. 7. IPMA – Reliability
Source: Data Processed (2024)

Figure 7 shows that the reliability items RL.2 (Detailed order information before transactions), RL.3 (Confirming order details after transactions), RL.4 (Confirming returns), RL.5 (Confirming order cancellations),

and RL.6 (Tracking shipments) are in Quadrant II ("Concentrate Here"), indicating high importance but low performance. This aligns with Figure 3, which also places the reliability variable in Quadrant II, highlighting the need for focused improvement and strengthening performance in these areas is critical to meeting customer expectations and ensuring a higher level of satisfaction, which in turn, supports the overall goal of improving customer loyalty intention within the Blibli MCA platform Figure 8 presents the IPMA results for the responsiveness variable related to customer loyalty intention.
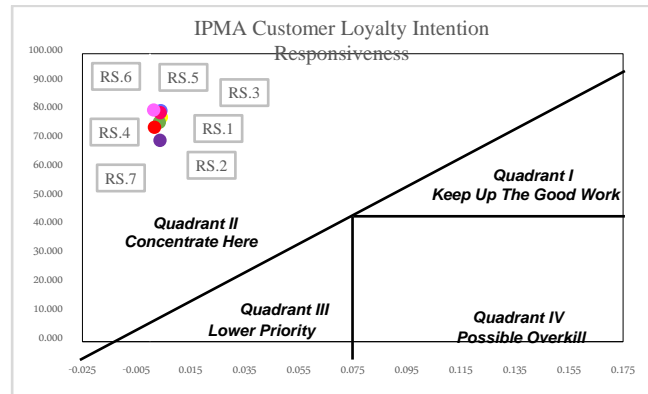

Fig. 8. IPMA – Responsiveness
Source: Data Processed (2024)

Figure 8 shows that all responsiveness items—RS.1 (Helping resolve transaction issues), RS.2 (Quick Automated Responses), RS.3 (Providing customer service contact), RS.4 (Relevant Answering), RS.5 (Giving accurate responses), RS.6 (Presenting content that meets user needs), and RS.7 (Storing transaction documentation to facilitate returns)are in Quadrant II ("Concentrate Here"), indicating high importance but low performance. This suggests these areas need immediate improvement, aligning with Figure 3 placement of responsiveness. Figure 9 shows the IPMA results for the security variable related to customer loyalty intention.
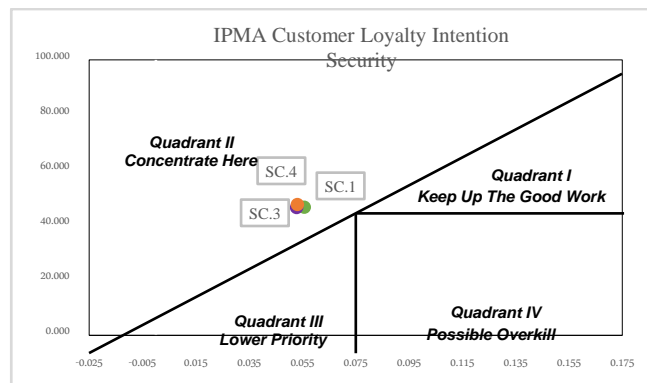

Fig. 9. IPMA – Security
Source: Data Processed (2024)

Figure 8 shows that the security items SC.1 (Protects information during transactions), SC.2 (Securely stores personal data), and SC.3 (Protects payment method information) are in Quadrant II ("Concentrate Here"), indicating high importance but low performance. The placement of these items in Quadrant II underscores the necessity for Blibli's management to prioritize and improve these security features immediately. These items are considered significant weaknesses, and addressing them is essential to enhance customer trust and satisfaction.These items need immediate improvement, consistent with Figure 3 placement of the security variable. Figure 10 presents the IPMA results for the usability variable related to customer loyalty intention.
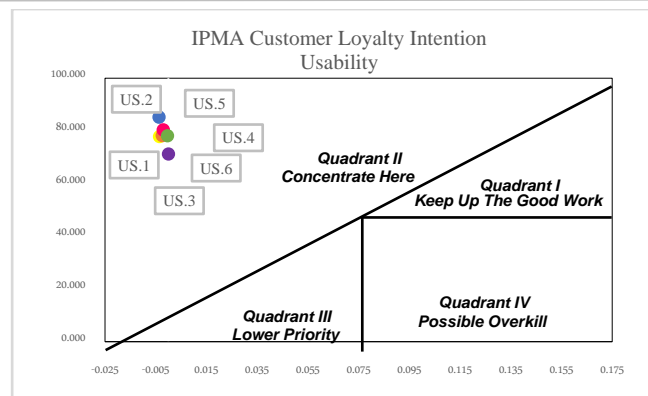
Fig. 10. IPMA – Usability
Source: Data Processed (2024)

Figure 9 shows that all usability itemsUS.1 (Well-organized application), US.2 (Consistent navigation), US.3 (Standardized navigation), US.4 (Limiting product scrolling to facilitate search), US.5 (Displaying graphics that ease navigation), and US.6 (Displaying animations that ease navigation)are in Quadrant II ("Concentrate Here"), indicating high importance but low performance. This aligns with Figure 3, emphasizing the need for targeted improvement.These elements are essential for ensuring a smooth and effective user experience, yet they are not meeting user expectations. Figure 10 presents the IPMA results for the customer satisfaction variable related to customer loyalty intention.
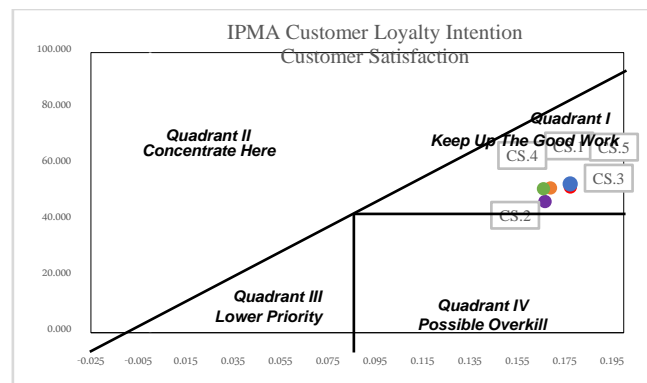

Fig. 11. IPMA – Customer Satisfaction
Source: Data Processed (2024)

Based on Fig.10 the result each item of security variables, which is CS.1 (Using the Blibli app is the right decision), CS.3 (Satisfied with products), CS.4 (Satisfied with services), CS.5 (Satisfied with the shopping experience) are positioned in Quadrant I, also known as "Keep Up the Good Work," where both importance and performance are high. These items are considered key strengths. On the other hand, CS.2 (Satisfied with transactions) is located in Quadrant IV, referred to as "Possible Overkill," where importance is low but performance is high. This suggests that while Blibli excels in transaction satisfaction, the high performance in this area may not be as critical to customers compared to other factors. Therefore, the company may be over-allocating resources to this attribute.

V. CONCLUSIONS AND RECOMMENDATIONS

IPMA Test Results

Based on the results of the analysis, it was found that

1. Assurance has a positive relationship with customer loyalty intention through customer satisfaction. This suggests that the assurance provided by MCA Blibli, such as low privacy scores may raise data security concerns, and insufficient company information can create uncertainty. Similarly, the lower than expected perception of application popularity and a potential decline in the platform's reputation highlight areas where Blibli must take immediate action.

2. Information Quality also has a positive relationship withcustomer loyalty intentions through customer satisfaction, emphasizing the importance of relevant and accurate information to improve user experience. The consistent placement of both the overall Information Quality variable and its individual items in Quadrant II underscores the need for Blibli to prioritize enhancements in these areas.

3. Personalization shows a positive relationship with customer loyalty intentions through customer satisfaction, indicating the need for customization of the user experience to suit individual preferences. While the

personalization variable shows strong performance in certain aspects, there is room for optimization in resource allocation to ensure that the company focuses on areas that are of higher importance to customers.

4. However, reliability and responsiveness did not show a significant relationship with customer loyalty intentions, indicating that MCA Blibli needs to improve the reliability for Blibli to enhance its reliability in areas that directly affect customer experience, particularly in the management of orders, returns, cancellations, and shipment tracking. Responsiveness indicating that these aspects of responsiveness are critical to customers but are currently not meeting their expectations.

5. Security has a positive relationship with customer satisfaction and customer loyalty intentions through customer satisfaction, suggesting that effective security measures are essential for building trust.

6. Finally, usability did not show a significant relationship with customer satisfaction and customer loyalty intentions, signaling that improvements to the user interface and application processes may be needed to improve overall usability.

Recommendations

1) **Reliability**: Blibli MCA should improving in these areas on Quadrant II (concentrate here) such as, detailed order information before transactions (RL.2), confirming order details after transactions (RL.3), confirming returns (RL.4), confirming order cancellations (RL.5), and tracking shipments (RL.6). By addressing these weaknesses, Blibli MCA can bolster its reliability and build a stronger foundation for long term success in the competitive e-commerce landscape.

2) **Usability**: Blibli MCA should improving these areas on Quadrant II (concentrate here) such as, well-organized application (US.1), consistent navigation (US.2), standardized navigation (US.3), limiting product scrolling to facilitate search (US.4), displaying graphics that ease navigation (US.5), and displaying animations that ease navigation (US.6). By focusing on these aspects, Blibli can significantly enhance the overall user experience, which is crucial for maintaining customer satisfaction and loyalty.

3) **Responsiveness**: Blibli MCA should improving these areas on Quadrant II (concentrate here) such as,helping resolve transaction issues (RS.1), quick Automated Responses (RS.2), providing customer service contact (RS.3), relevant answering (RS.4), giving accurate responses (RS.5), presenting content that meets user needs (RS.6), and storing transaction documentation to facilitate returns (RS.7). By focusing on enhancing performance in these specific areas, Blibli MCA can better meet customer needs and improve overall service quality, thereby strengthening customer loyalty intention.

4) **Assurance**: Blibli MCA should implement targeted strategies to enhance performance in these areasQuadrant II (concentrate here)such as, improving privacy protections (AS.2), ensuring greater transparency and accessibility of company information (AS.3), increasing the application's visibility (AS.4), and reinforcing the platform's reputation (AS.5). By doing so, Blibli can better align with customer expectations, ultimately strengthening customer satisfaction and loyalty intentions, which are essential for sustaining its competitive edge in the e-commerce market.

5) **Security**: Blibli MCA should improving these areas on Quadrant II (concentrate here) such as,protectsinformation during transactions (SC.1), securely stores personal data (SC.2), and protects payment method information (SC.3). By focusing improvement efforts to strengthen Blibli's security measures.

6) **Information Quality**: Blibli MCA should improving in these areas on Quadrant II (concentrate here) such as, information is always current (IQ.1),timely information (IQ.2),accurate information (IQ.3), detailed information (IQ.5), and easy to understand information (IQ.7).By addressing these weaknesses, Blibli can better meet customer expectations, ultimately improving the overall customer experience and fostering greater customer loyalty intention.

7) **Personalization**: Blibli MCA should consider reallocating resources from this area to attributes that are more critical and require greater attention on understanding user desires (PS.3). This suggests that while the company performs well in understanding user desires, the importance of this attribute is relatively low.

8) **CustomerSatisfaction**: Maintain or improve the user's level of satisfaction in making transactions to ensure a positive experience with the app.

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