

Determinants of E-Loyalty for Jamsostek Mobile Employment Service Application in Indonesia

Reza Ahmad Fadli, Astri Ayu Purwati, Teddy Chandra

Master of Management Department, Institut Bisnis dan Teknologi Pelita Indonesia, Indonesia

astri.ayu@lecturer.pelitaindonesia.ac.id

Abstract. This research intends to investigate the impact of E-Satisfaction in mediating the effect of E-Service Quality and E-Trust on E-Customer Loyalty on Employment Service Technology in Indonesia, also known as Jamsostek Mobile. The population in this research was Jamsostek Mobile (JMO) users in Pekanbaru City, Indonesia, with a total of roughly 30,000 subscribers each year 2023, and the sample acquired was 110 users. Simple Random Sample was used for the sampling approach. The data analysis method employs a Structural Equation Model (SEM) with Partial least Squares (PLS). The study indicates that for the Jamsostek Mobile Employment Service Application in Indonesia, E-Service Quality and E-Trust significantly and positively impact E-Customer Loyalty. Furthermore, Promotions also exert a substantial positive influence on E-Loyalty among these users. However, despite these positive influences, it was found that E-Satisfaction does not significantly affect E-Loyalty among the users of this service. Additionally, the role of E-Satisfaction as a mediator in the relationship between 1) E-Service Quality 2) E-Trust or 3) Promotion and user loyalty towards this service is not significant.

Keywords: E-Service Quality; E-Trust; E-Loyalty; E-Satisfaction; Promotion

1. Introduction

The Covid-19 pandemic has led to a surge in internet usage in Indonesia, with the current user base constituting less than 77 percent of the country's population. The majority of these users prefer accessing information through smartphones for convenience. Recognizing this trend, BPJS Ketenagakerjaan, an Indonesian company that provides labor services, developed the Jamsostek Mobile (JMO) application. Launched in early 2022, Jamsostek Mobile (JMO) was designed to provide easy access to employment services for its users. Despite boasting a user base of over a million as of mid-2023, only around 35% actively use the application for employment services. This discrepancy indicates potential issues with user retention and loyalty. Moreover, Jamsostek Mobile (JMO)'s average rating on platforms such as Playstore and Appstore is merely 1.6 out of 5. This relatively low rating further underscores the need for improving user experience and satisfaction. Looking at similar applications offering government or employment services worldwide, recent studies show that e-loyalty levels are crucial determinants of an app's success and longevity. For instance, according to a report by Statista in late 2022, apps with higher e-loyalty levels experienced increased user engagement and greater customer retention rates. Given these circumstances and data trends globally and within Indonesia itself, it becomes imperative to conduct further research into factors influencing E-Loyalty among users of Jamsostek Mobile (JMO).

E-customer loyalty refers to customers' readiness to purchase from the website in question and their refusal to switch to another website. (Ghane et al., 2011). E-Customer Loyalty means that consumers are willing to revisit websites or buy from relevant websites in the future. One of the factors that affect E-Service Quality is the service of the internet network as one of the capabilities of a site in providing facilities to customers in shopping, making purchases, and distributing effectively and efficiently (Wilis & Nurwulandari, 2020). Research on e-service quality has grown rapidly in recent decades along with technological developments and the increasingly widespread use of the internet. Many recent studies have developed models and instruments to measure e-service quality more accurately and effectively. In addition to using traditional quality dimensions such as reliability and responsiveness, recent research has also developed new quality dimensions such as personalization and interactivity (Juwaini et al., 2022; Wilis & Nurwulandari, 2020). In addition to the development of measurement indicators, the results from several previous studies have found differences where some studies show that E-Service Quality has a significant positive effect on E-Loyalty (Ellitan & Suhartatik, 2023; Juwaini et al., 2022; Melani, 2021; Wilis & Nurwulandari, 2020). There are other studies with different results that find that E-Service Quality does not significantly impact E-Customer Loyalty, which means that when the E-Service Quality of a system/website is good, it will increase E-Customer Loyalty (Qomariah et al., 2021). E-customer loyalty, which refers to a customer's willingness to maintain purchases from a particular website and resist switching to alternatives (Ghane et al., 2011), is critical in today's digital economy.

Another factor, E-trust is an expectation of online services that vulnerabilities will not be exploited. Trust is an important component in maintaining sustainable customer relationships (Moriuchi & Takahashi, 2016).. Trust also determines commitment in a relationship. Trust is a belief that is shared between one another with an honest and helpful attitude towards one another. Trust in a sales transaction is created when one party feels comfortable in making an exchange with the other party (Ellitan & Suhartatik, 2023). The development of research related to e-trust is increasingly paying attention to the specific context of using electronic services in evaluating e-trust. For example, research on e-trust in the context of e-commerce, online health services, or electronic public services (Ellitan & Suhartatik, 2023). (Ellitan & Suhartatik, 2023; Ghane et al., 2011; Juwaini et al., 2022; Wilis & Nurwulandari, 2020, 2020). Many studies have also developed models and instruments to measure e-trust more accurately and effectively. In addition to using traditional trust dimensions such as security and reliability, recent research has also developed new trust dimensions such as ease of use and transparency. However, some of these studies found different results where E-trust has a significant positive impact on E-Customer Loyalty (Ghane et al., 2011; Melani, 2021). However, some of these studies found

different results where E-trust had a significant positive impact on E-Customer Loyalty (Ghane et al., 2011; Melani, 2021).

Promotion according to as one part of marketing mix has a positive and significant influence on E-Satisfaction (Pi & Huang, 2011). The seller's attempt to connect with its target customers in order to impact consumer attitudes through providing information, ideas, and sentiments is referred to as promotion. E-loyalty, or the amount of client loyalty to services or goods offered via electronic platforms, may be significantly influenced by promotion. E-loyalty measures the amount to which consumers continue to use a service or product, give favorable evaluations, promote it to others, and communicate with the organization through electronic channels. Several studies show that promotion has a positive and significant effect on customer loyalty (Anugrah, 2020; Omotayo et al., 2011; Qomariah et al., 2021). The results show that, the better the promotion of a product, customer loyalty to a product will also increase.

This study aims to address this gap by focusing specifically on the context of Indonesian employment service applications like Jamsostek Mobile (JMO) - an area currently under-researched. It introduces the concept of E-Customer Satisfaction as a mediating variable into this mix - representing the overall online shopping experience which has been shown to positively impact e-Loyalty attitudes (Alnaim et al., 2022; Chou et al., 2015).

By examining how these factors interplay with each other, this study hopes to bring clarity into previous inconsistencies found in prior research, and contribute novel insights into understanding e-customer loyalty within this specific context of Indonesian employment service applications. It distinctly builds upon previous scholarship by offering new perspectives through its unique focus and approach. The significance of this research lies in its potential implications for improving user engagement and retention strategies for such platforms.

2. Literature Review and Hypothesis Development

2.1. E-Loyalty

E-Customer Loyalty refers to a customer's commitment to repurchase or continue using a particular website, resisting the allure of competitors (Syahril et al., 2022). This loyalty can be assessed through indicators such as positive word of mouth, customer retention, and willingness to pay more (Doghan & Albarq, 2022). E-Loyalty is an extension of traditional loyalty concepts applied in the digital realm (Ellitan & Suhartatik, 2023), signifying a long-term behavioral inclination towards recurrent purchases from a specific online service or product.

When examining e-loyalty in the context of e-government/m-government apps specifically, studies have indicated that factors like ease-of-use, perceived usefulness and trust play significant roles in influencing user loyalty. For instance, research by Alshehri and Drew (2017) on m-government apps found that high levels of user satisfaction led to increased e-loyalty. Similarly, Shareef et al. (2018) found that perceived usefulness significantly influenced e-loyalty among users of m-government services.

In comparison with other sectors like e-commerce or online retailing platforms where price competitiveness and variety often dictate e-loyalty trends, government-related apps tend to rely more on service quality and reliability for fostering loyalty. However, across these contexts - be it retail or governmental - aspects such as ease-of-use and trust remain universally crucial for establishing e-loyalty.

To understand the factors that drive e-loyalty in various contexts such as e-commerce or m-government apps, it's beneficial to consider established technology adoption theories like the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). Developed by Venkatesh et al. in 2012, UTAUT2 provides a comprehensive framework for understanding user acceptance and use of technology. It includes constructs like performance expectancy (the degree to which using a system will provide benefits), effort expectancy (ease of use), social influence (perception that important others

believe one should use the new system), facilitating conditions (belief that technical infrastructure exists to support system use), hedonic motivation (fun or pleasure derived from using the system), price value (cognitive trade-off between perceived benefits and monetary cost) and habit (Assabagh & Azeez 2023). Incorporating UTAUT2 into our research model allows us to ground our study in robust theoretical foundations while examining how these constructs influence E-Customer Loyalty within the context of Indonesian employment service applications like Jamsostek Mobile (JMO).

E-Customer Loyalty, which signifies a customer's long-term commitment to a specific online service or product, is a critical factor in the digital marketplace. While extensive research has been conducted on e-loyalty within various contexts such as e-commerce and m-government apps, there remains a significant gap in understanding this concept within the context of employment service applications. Specifically, studies have yet to extensively explore how factors like E-Service Quality and E-Trust influence e-customer loyalty within the realm of employment apps. Additionally, while theories like UTAUT2 provide robust frameworks for understanding technology adoption broadly, their application to this specific context remains largely unexplored (Akbari et al., 2022). Moreover, previous research has often examined these factors - E-Service Quality and E-Trust - separately. There is limited understanding of how they interact collectively within one model to influence e-customer loyalty. The role of other potentially influential factors such as promotion strategies and overall customer satisfaction also remain under-researched in this context.

2.2. E-Service Quality

E-Service Quality is a service given through the internet network as an extension of a site's capacity to successfully and efficiently support buying, shopping, and distribution operations. Two instances are Giovanis and Athanasopoulou (2014). E-Service Quality (sometimes abbreviated as e-servqual) is a subset of service quality (servqual). E-service quality is one of the most researched concerns in marketing because to its relationship with cost, satisfaction, retention, and loyalty. The gap between planned and perceived service quality is often used to characterize e-service quality (Mashaqi et al., 2015). Mashaqi et al., 2020; Wani et al., 2023). E-service quality is defined as the extent to which a website assists shoppers in the purchase and delivery of efficient and effective products and services. E-Service Quality was developed to evaluate the quality of services provided over Internet networks.

If the service satisfies expectations, e-service quality encourages customers to continue using the service supplied by the service provider. E-Service Quality is a customer's evaluation of the service given by an electronic-based platform or service. This service quality comprises features like as speed, dependability, responsiveness, and simplicity of use, as well as other variables that influence the user's experience while using the service. Mashaqi and colleagues (2020). Many researchs back up this claim, revealing a significant link between E-Service Quality and E-Loyalty (Al-dweeri et al., 2017; Al-Khayyal et al., 2020; Ghane et al., 2011; Wilis & Nurwulandari, 2020).

The most essential factor impacting customer satisfaction is the client's perception of service quality.

Satisfaction is determined by the product and service quality. Elements of e-service quality include responsiveness, ease of use, and an intuitive interface. Customers will be happier if they can easily interact with the platform and quickly find what they need (Ma Sabiote et al. 2012). Many researchs back up this claim, revealing a significant link between E-Service Quality and E-Satisfaction (Behjati et al., 2012; elik, 2021; Ma Sabiote et al., 2012). As a result, E-Service Quality of Jamsostek Mobile (JMO) consumers will increase E-Satisfaction, the following hypothesis is formulated:

H1: *E-Service Quality has a significant positive effect on E-Loyalty*

H2: *E-Service Quality has a significant positive effect on E-Satisfaction*

2.3. E-Trust

E-trust is defined as the assumption that vulnerabilities will not be abused in online risk circumstances. (Wilis & Nurwulandari 2020). Consumer trust is cited as a crucial factor in sustaining long-term relationships between all parties engaged in company. In a relationship, trust has a huge impact on

commitment. Trust is also a notion maintained in interactions with coworkers about honesty and aiding one another. When one party feels comfortable exchanging information with another party who is honest and trustworthy, trust is formed. To achieve consumer trust, businesses must communicate effectively, follow rules that customers believe in, and avoid unfavorable judgements (Ghane et al. 2011). Consumer trust is defined as a product or service provider's capacity to carry out the obligation to behave in such a way that customers' long-term interests are served (Wilis & Nurwulandari, 2020; Juwaini et al., 2022). E-Trust serves as the foundation for the establishment and development of connections between consumers and online vendors. E-Trust is a consumer's trust in a firm as an initial form of doing transactions via online media (Wani et al. 2023).

E-trust in electronic services has a significant impact because if a service does not gain consumer trust, it will be difficult to gain user loyalty. There are many studies that support this statement and find a strong relationship between E-Trust and E-Loyalty (Al-Bourini et al., 2021; Al-dweeri et al., 2017; Ellitan & Suhartatik, 2023; Melani, 2021).

E-Trust is a driving factor for e-satisfaction. High trust makes customers feel safe in transacting and interacting with a platform or service. This reduces concerns regarding the security of personal data and financial transactions, which in turn increases customer satisfaction. There are studies that support this statement and find a strong relationship between E-Trust and E-Satisfaction (Ellitan & Suhartatik, 2023; Melani, 2021)..

Based on this explanation, the following hypothesis is formulated:

H3: E-Trust has a significant positive effect on E-Loyalty

H4: E-Trust has a significant positive effect on E-Satisfaction

2.4. Promotion

Promotion is an important component of the marketing mix for firms that sell products. Promotional activities are used not only to communicate between businesses and their clients, but also to encourage individuals to acquire or utilize products that fulfill their needs and goals (Anugrah, 2020). Because some consumers buy a product or service based on coupons and other offers, providing tempting bargains on a consistent basis will keep them relatively loyal to a promoted brand. Effective marketing may raise client awareness of the items or services provided by a platform or company. This may assist catch prospective clients' attention and establish a bigger customer base. According to research, one of the company's promotional methods influences E-Loyalty (Omotayo et al. 2011).

Promotion has a significant impact on e-customer satisfaction. Promotion is a marketing strategy that can help create a positive experience for customers and improve their perception of a product, service or brand (Omotayo et al., 2011). Customers may benefit from promotions such as special deals, discounts, or bundle packages. Customers may be more satisfied as a result of this since they believe they are receiving more advantages from the transaction. The results of previous research state that promotion has a significant effect on customer satisfaction (Istanti et al., 2020; Widodo & Murwatiningsih, 2019)..

Based on this explanation, the following hypothesis is formulated:

H5: Promotion has a significant positive effect on E-Loyalty

H6: Promotion has a significant positive effect on E-Satisfaction

2.5. E-Satisfaction

E-satisfaction is a series of reactions to the use of websites that users have. The website must be pleasant to use and view (Ghane et al., 2011). Satisfaction with a trading site depends on fulfilling needs and achieving consumer expectations on the perceived quality when using a trading site. The overall perception of satisfaction usually results in an overall positive attitude towards the trading site. E-satisfaction according to (Al-dweeri et al., 2017) is when a consumer is psychologically happy to the point that he is no longer exploring for alternatives to the website being utilized at the moment. Customer unhappiness leads to customers looking for other options, creating opportunity for rivals to capitalize on these conditions.

Consumer impressions of online convenience, commerce/transaction techniques, site design, and service all contribute to e-satisfaction (Wilis & Nurwulandari, 2020). E-Satisfaction is important in competing in the market, as well as forming consumer loyalty. If customer expectations are met through online services, customers will feel satisfied and reordering may occur, on the other hand, if customer expectations are not met through online services, customers will look for other online service information. Furthermore, (Juwaini et al., 2022; Wilis & Nurwulandari, 2020) found that there is a significant and positive correlation between customer satisfaction and customer loyalty.

E-Service Quality impacts E-Loyalty via E-Satisfaction. In the existence of E-Satisfaction, the services supplied to customers will be able to affect E-Loyalty. It is about a customer's evaluation of the service quality provided by an electronic-based platform or service. Customer perceptions of service quality are impacted by elements like as response time, promptness, and ease of use, among others. The findings of study (Jeyaprabha & Sundar, 2021; Wani et al., 2023) suggest that E-Service Quality (website) affects E-Loyalty indirectly via the mediation of E-Satisfaction.

Building meaningful interactions between clients and e-based platforms/services requires trust. Customers' trust implies their belief that the platform would secure their personal information, provide trustworthy services, and function in accordance with their expectations. According to research (Alnaim et al., 2022), E-trust has a favorable and substantial influence on E-loyalty through E-satisfaction.

Customers' perceptions of service or product quality may be enhanced by promotions that provide added value, tempting offers, and a delightful shopping experience. This might lead to an increase in emotions of satisfaction. According to other studies (Abd Wahab et al., 2016; Devi & Yasa, 2021), customer satisfaction has a substantial influence on moderating the link between promotion and customer loyalty.

Based on this explanation, the following hypothesis is formulated:

H7: E-Customer Satisfaction has a significant positive effect on E-Loyalty.

H8: E-Satisfaction mediates the effect of E-Service Quality on E-Loyalty

H9: E-Satisfaction mediates the effect of E-Trust Quality on E-Loyalty

H10: E-Satisfaction mediates the effect of Promotion on E-Loyalty.

3. Methodology

3.1. Population and Sample

The population for this study comprises users of the Jamsostek Mobile (JMO) application in Pekanbaru City, Indonesia. The estimated number of users in 2023 is approximately 30,000. To determine an appropriate sample size from this population, we used Slovin's formula, which is a method used to calculate the right amount of respondents needed for a survey or study. With a significance level of 1%, Slovin's formula yielded a minimum required sample size of 100 users. Slovin's formula is given by $N/(1+Ne^2)$, where N represents the total population and e denotes the margin of error (in this case set at 1%). Applying these values into Slovin's formula gives us our minimum required sample size.

For this study, however, we decided to collect responses from 110 JMO users to account for any potential non-responses or unusable data. The simple random sampling method was employed to ensure that every user had an equal chance of being selected. The questionnaire was distributed electronically via email and social media platforms where JMO users are known to be active. Respondents were given a specific timeframe within which they could complete and submit their responses.

In terms of inclusion and exclusion criteria: only current JMO users who reside in Pekanbaru City were considered eligible for participation. Users had to have been using the app for at least six months prior to participating in the survey. Those who did not meet these criteria were excluded from participation. While it's acknowledged that using a single location sample may limit generalizability, Pekanbaru City was chosen due its significant user base and diversity in terms demographics which adequately represent our target population interest - Indonesian employment service app users. Further studies could consider expanding sampling locations for broader representation.

3.2. Research Instrument

This study employs a quantitative research approach. The choice of a quantitative method is justified by the nature of our research objectives and the type of data required. Quantitative methods are particularly suited for studies, like ours, that seek to quantify relationships between variables and make predictions based on statistical analysis. In this case, we aim to examine the relationship between factors such as E-Service Quality, E-Trust, Promotion strategies and overall Customer Satisfaction and their impact on e-customer loyalty among Jamsostek Mobile (JMO) users. These variables can be quantitatively measured using scales or scores that provide reliable and objective data. While qualitative methods provide rich, detailed insights into individual experiences or perceptions, they are less suited for testing hypotheses about causal relationships between variables across larger populations. Therefore, given our study's focus on identifying patterns and relationships across a large user base of an employment service application in Indonesia, a quantitative approach was deemed most appropriate.

Questionnaires were sent in order to gather data using a Likert scale of 1-5, where the scale 1 = Strongly Disagree, 2 = Disagree, 3 = Moderately Agree, 4 = Agree and 5 = Strongly Agree.

Table 1: Research Instruments

Variables	Indicator	Source	Scale
E-Service Quality	1. Efficiency		Interval
	2. Fullfillment		
	3. System Availability		
	4. Privacy		
	5. Responsiveness		
	6. Compensation		
	7. Contact		
E-Trust	1. Ability		Interval
	2. Benevolence		
	3. Integrity		
E-Satisfaction	1. Convenience		Interval
	1. Merchandising		
	2. Site Design		
	2. Financial Security		
Technology Readiness	1. Easiness		Interval
	2. Connectivity		
	3. Efficiency		
	4. Effectiveness		
	5. Productivity		
	6. Problem Solving		
	7. Independence		
E-Loyalty	1. Cognitive		Interval
	2. Affective		
	1. Conative		
	3. Action		

3.3. Validity and Reliability Test

A validity and reliability test were used to determine the feasibility of a questionnaire. A validity test determines the correctness of a research instrument or questionnaire. A questionnaire was regarded legitimate if one of its questions or statements revealed anything that could be assessed by the questionnaire. A coefficient of correlation might be used to assess the questionnaire's correctness. The questionnaire was valid if the coefficient of correlation was greater than 0.3. The reliability test is a questionnaire evaluation that measures the consistency of the respondents' replies. It was accomplished

via the use of a statistical test known as the Cronbach's alpha test. Cronbach's alpha had a limit of greater than or equal to 0.70.

3.4. Data Analysis Technique

This study employs data analysis methods that make use of Smart PLS 3.0 Software, a multivariate statistical methodology that compares many dependent variables and numerous independent factors. PLS is a variant-based SEM statistical approach that is used to address multiple regression issues in data. In the SEM-PLS test carried out in two stages, namely the analysis of the Measurement Model (Outer Model) consisting of test of Convergent, test of Discriminant Validity, test of Composite Reliability and Structural Model Analysis (Inner Model) consisting of R Square and Hypothesis Test.

4. Results

4.1. General Characteristics

The following is the result of a descriptive analysis related to the frequency of respondents in this study.

Table 2: Analysis of Respondent Demography

Demography	Category	Freq	Percentage
Gender	Male	33	30 %
	Female	77	70 %
Age	< 26 Year	17	16 %
	27-42 Year	73	66 %
	> 42 Years	20	18 %
Status	Single	163	35 %
	Married	110	75 %
Education	Senior High School	29	26 %
	Bachelor's Degree	76	69 %
	Master/PhD	5	5 %
Company	Private Sector Employee	98	89 %
	Stated Owned Employee	3	3 %
	Others	9	8 %

Source: Microsoft Excell Processed Data (2023)

Table 2 provides a detailed breakdown of the demographic characteristics of our sample of 110 respondents. These characteristics include gender, age, education level, marital status, and employment status. In terms of gender distribution, the majority (70%) of respondents were female while males constituted 30% of the sample. This suggests that female users are more prevalent among Jamsostek Mobile (JMO) users in Pekanbaru City or at least more willing to participate in such surveys. This could potentially imply differences in how each gender interacts with or perceives the application and its services. The largest age group among our respondents was those aged between 27-42 years old (66%). The smallest group was those aged between 21-26 years old (16%). This suggests that JMO is primarily used by individuals who are likely to be well into their career paths rather than those who are just starting out. It could reflect the types of services offered by JMO and their relevance to different age

groups. Education-wise, most respondents held a Bachelor's Degree (69%), followed by senior high school graduates (26%), with only a small percentage holding a Master's degree (5%). This may indicate that JMO appeals to or is more accessible for individuals with higher educational backgrounds. However, it also demonstrates that it has reach across different educational levels. In terms of marital status, married individuals made up the majority at 68%, compared to unmarried individuals at 32%. This could suggest that married individuals may have greater need for employment services offered by JMO possibly due to familial responsibilities. Lastly, based on work characteristics given as 'married' presumably due to an error since 'married' is not a work characteristic but rather a marital status; we can't provide an interpretation until we have clarification on what this category represents. These descriptive statistics provide valuable insights into the demographic profile of JMO users participating in this study. However, it's important to note these findings may not necessarily generalize across all JMO users given our specific sample selection from Pekanbaru City.

4.2. Test of Convergent Validity

The correlation between item scores is used to measure the convergent validity test. If the outer loading value is more than 0.7 (Hair et al., 2017), the individual reflexive measure is considered to be high.

Table 3: Convergent Validity Test

Variables	Statement	Outer loadings
E-Service Quality	X'1.1	0.978
	X'1.2	0.978
	X'1.3	0.988
	X'1.4	0.994
	X'1.5	0.990
	X'1.6	0.990
	X'1.7	0.984
E-Trust	X'2.1	0.772
	X'2.2	0.752
	X'2.3	0.718
	X'2.4	0.802
Promotion	X'3.1	0.992
	X'3.2	0.996
	X'3.3	0.995
	X'3.4	0.971
	X'3.5	0.995
E-Satisfaction	Y'1.1	0.741
	Y'1.2	0.756
	Y'1.3	0.710
	Y'1.4	0.718
E-Loyalty	Y'2.1	0.728
	Y'2.2	0.778
	Y'2.3	0.719
	Y'2.4	0.758

Source: SEM PLS Processed Data (2023)

From the results of the convergent validity test in table 3 above, it can be seen that the value of each indicator of each variable shows an outer loading value above 0.7. this means that each indicator

on the variable under study is declared valid and shows that the indicator under study can form a variable.

4.3. Discriminant Validity

The discriminant validity test is judged valid if the root AVE value is greater than the correlation value between latent variables (Hair et al., 2017). Table 4 shows the results of the discriminant validity test.

Table 4: Discriminant Test of Validity

	E-Customer Loyalty	E-Satisfaction	E-Service Quality	E-Trust	Promotion
E-Customer Loyalty	0,746				
E-Satisfaction	0,728	0,731			
E-Service Quality	0,648	0,581	0,986		
E-Trust	0,733	0,798	0,591	0,762	
Promotion	0,624	0,559	0,366	0,542	0,990

Source: SEM PLS Processed Data (2023)

According to table 4, the findings of the discriminant test in this research demonstrate that the AVE root value is much bigger than the correlation between latent variables. This means that the constructs in this study are valid.

4.4. Composite Reliability

All variables in this study must be tested for reliability. The test results can be displayed in table 5.

Table 5: Reliability Test Results

Variables	Cronbach's Alpha (>0.70)	Composite Reliability (CR) (>0.70)	Reliability
E-Loyalty (Y2)	0,734	0,834	Reliable
E-Satisfaction (Y1)	0,710	0,821	Reliable
Promotion (X3)	0,995	0,996	Reliable
E-Trust (X2)	0,758	0,847	Reliable
E-Service Quality (X1)	0,995	0,996	Reliable

Source: SEM PLS Processed Data (2023)

If the Cronbach's Alpha score is more than 0.70 ($CA > 0.70$), the variable test findings are considered credible (Hair et al., 2017). The Composite Dependability rating higher than 0.70 ($CR > 0.70$) also indicates reliability. Table 4.8 shows that all variables have Cronbach Alpha and Composite Reliability values better than 0.70. This signifies that all factors in this research are dependable and can be carried over to future test results.

4.5. Multicollinearity Test Results

Multicollinearity test was conducted on all variables in this study. The multicollinearity test results can be displayed in table 6.

Table 6: Multicollinearity Test Results

Variable Name	E-Customer Loyalty	E-Satisfaction
E-Satisfaction (Y1)	3,083	
E-Service Quality (X1)	1,619	1,545
E-Trust (X2)	3,063	1,895
Promotion (X3)	1,511	1,423

Source: SEM PLS Processed Data (2023)

Table 6 shows that the VIF value of all variables in this study is smaller than 10 ($VIF < 10$). This means that in this study there is no multicollinearity (Risher & Hair 2017).

4.6. R Square

The Coefficient of Determination (R^2) test was conducted to see the relationship between exogenous and endogenous variables in this study. The results of the Coefficient of Determination (R^2) test can be displayed in table 7.

Table 7: Determination Coefficient Test Results

Endogenous Variable	R Square	R Square Adjusted
E-Customer Loyalty	0,687	0,674
E-Satisfaction	0,676	0,665

Source: SEM PLS Processed Data (2023)

The coefficient of determination or R square test findings in table 7 reveal that the R^2 Adjusted E-Customer Loyalty value is 0.674, indicating that exogenous factors may impact the endogenous variable by 67.4 percent, with other variables influencing the remaining 32.6 percent. The R^2 Adjusted E-Satisfaction value is 0.665, indicating that the exogenous factors in this research have a 66.5 percent effect on the endogenous variable, with the remaining 33.5 percent affected by other variables such as E-Service Quality, E-Trust, Promotion, and others.

4.7. Hypothesis Testing

The results of hypothesis testing in research are to test the direct effect and indirect effect can be seen in table 8 :

Table 8: Hypothesis Test

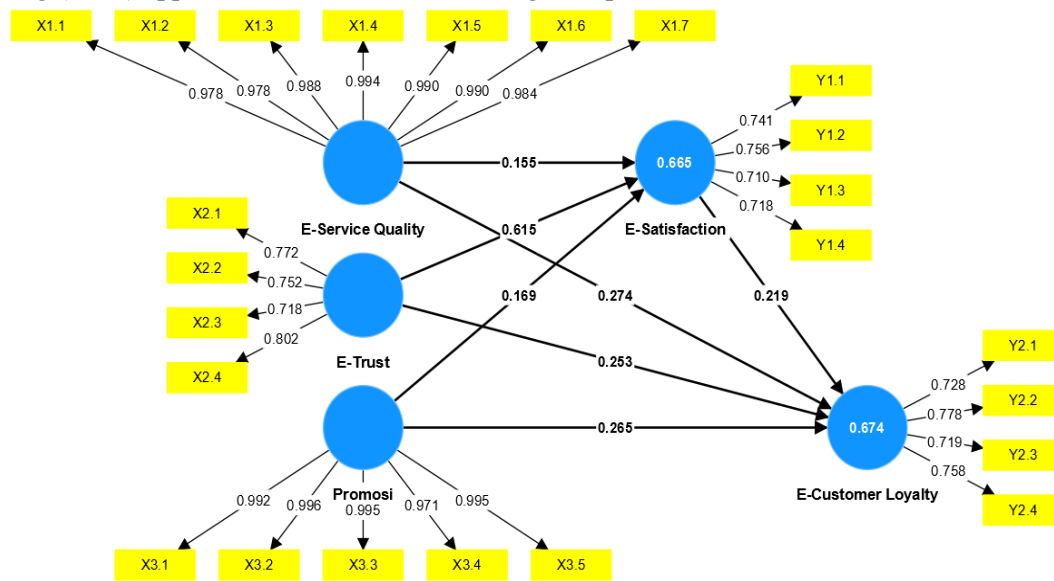
Hypothesis	Variable Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Hypothesis Result
H1	E-Service Quality -> E-Customer Loyalty	0,274	0,274	0,060	4,604	0,000	Accepted
H2	E-Service Quality -> E-Satisfaction	0,155	0,154	0,052	3,000	0,003	Accepted
H3	E-Trust -> E-Customer Loyalty	0,253	0,252	0,098	2,566	0,010	Accepted
H4	E-Trust -> E-Satisfaction	0,615	0,613	0,073	8,388	0,000	Accepted
H5	Promotion -> E-Customer Loyalty	0,265	0,263	0,079	3,353	0,001	Accepted
H6	Promotion -> E-Satisfaction	0,169	0,166	0,072	2,345	0,019	Accepted
H7	E-Satisfaction -> E-Customer Loyalty	0,219	0,219	0,114	1,924	0,054	Rejected
H8	E-Service Quality -> E-Satisfaction -> E-Customer Loyalty	0,034	0,034	0,022	1,537	0,124	Rejected
H9	E-Trust -> E-Satisfaction -> E-Customer Loyalty	0,135	0,135	0,073	1,843	0,055	Rejected
H10	Promotion -> E-Satisfaction -> E-Customer Loyalty	0,037	0,037	0,027	1,389	0,165	Rejected

Source: SEM PLS Processed Data (2023)

Note: sig at $\alpha=0.05$

Hypothesis testing in this study uses the The Smart PLS 3.0 program and the Structural Equation

Modeling (SEM) approach. can also be seen through the picture below:



Source: SEM PLS Processed Data (2023)
Fig 1: Research Model

Table 8 provides the results of our hypothesis testing. The criterion used for determining statistical significance was a p-value less than 0.05. If the p-value is below this threshold, we accept the research hypothesis; if it's above, we reject it. For Hypotheses 1 through 6, all were accepted as their p-values were below the threshold of 0.05. Furthermore, each regression coefficient from the Original Sample Value showed a positive sign (+), suggesting that each exogenous variable has a direct and significant positive effect on the endogenous variable. However, for Hypotheses 7 through 10, these were rejected due to their p-values exceeding 0.05. This suggests that these exogenous variables do not have a significant effect on endogenous variables and that the mediating role of e-customer satisfaction in these relationships could not be substantiated in this study.

5. Discussion

The results of hypothesis 1 testing, E-Service Quality on E-Customer Loyalty show that E-Service Quality has a significant positive relationship to E-Customer Loyalty. This can be interpreted that the better the development and capabilities of the Jamsostek Mobile (JMO) application, the E-Customer Loyalty that is formed will also be good or high, and vice versa. E-Service Quality of the Jamsostek Mobile (JMO) application is considered not good enough to provide digital services to increase E-Loyalty where the descriptive results show that the low response to the statement "Jamsostek Mobile (JMO) has a help feature containing Frequently Asked Question (FAQ)". This means that quite a lot of respondents feel that the FAQ on Jamsostek Mobile (JMO) is not helpful enough during the use of Jamsostek Mobile (JMO). BPJS Ketenagakerjaan should verify and ensure the contents of the (FAQ) are easy to understand for users and prospective users of Jamsostek Mobile (JMO). This must be a concern for BPJS Ketenagakerjaan in order to improve E-Service Quality on Jamsostek Mobile (JMO) even better, thereby increasing the E-Loyalty of its users. The findings of this investigation are consistent with previous studies (Ghane et al., 2011; Wilis & Nurwulandari, 2020) explained in his research which obtained E-Service Quality has a favorable and significant influence on E-Satisfaction.

The results of hypothesis 2 test show that E-Service Quality has a significant positive relationship with E-Satisfaction in using Jamsostek Mobile (JMO). E-Service Quality has a significant positive relationship with E-Satisfaction in using Jamsostek Mobile (JMO) because good electronic service quality tends to increase the level of user satisfaction with the platform or application. E-Service Quality covers characteristics such as simple navigation, intuitive interface design, and application cost. Users

will feel more at ease and avoid annoyance while engaging with Jamsostek Mobile if it is properly designed and simple to use. This ease of use can directly increase the level of user satisfaction. The results of this study are in line with research conducted by E-Service Quality with E-Satisfaction, (Al-Khayyal et al., 2020; Ellitan & Suhartatik, 2023) in their research explained that E-Service Quality has a positive and significant influence on E-Satisfaction.

The results of testing hypothesis 3 show the result that E-Trust has a significant influence on E-Loyalty. This can be interpreted that the strategy of implementing E-Trust is sufficient to influence customer loyalty. Participant trust using the Jamsostek Mobile (JMO) application is considered good enough to build the loyalty of BPJS Ketenagakerjaan participants. The results of descriptive analysis also show that a good response is found in "Jamsostek Mobile (JMO) provides information openly for its users, such as Old Age Security (JHT) balances and wages reported to BPJS Ketenagakerjaan". This means that many respondents believe in the information presented by Jamsostek Mobile (JMO). This must be a concern for BPJS Ketenagakerjaan in order to maintain and increase the trust of prospective users and users of Jamsostek Mobile (JMO) by increasing the competence of employees about Jamsostek Mobile (JMO) digital services.

The results of hypothesis 4 testing related to the influence of E-Trust on E-Satisfaction show that E-Trust has a positive and significant relationship with E-Satisfaction. This can be interpreted that the better the E-Trust in Jamsostek Mobile (JMO) implemented by BPJS Ketenagakerjaan, the customer satisfaction that is formed will also be good or high, and vice versa. In this study it was also found that most JMO participants felt that the data presented for participants who used Jamsostek Mobile (JMO) was correct and accurate so that Jamsostek Mobile (JMO) users were satisfied with the Jamsostek Mobile (JMO) digital service. This study's findings are consistent with previous studies (Ellitan & Suhartatik, 2023; Melani, 2021; Wilis & Nurwulandari, 2020), in their research found that e-satisfaction is influenced by e-trust. These results indicate that the existence of trust in the type of service used will lead to satisfaction for customers. In his research, he mentioned that if trust in security on online sites is good, the higher the level of satisfaction felt.

The results of hypothesis 5 test show that promotion has a positive and significant relationship to e-loyalty. This can be interpreted that the better the promotion of the new features of the Jamsostek Mobile (JMO) application, the e-loyalty of Jamsostek Mobile (JMO) users will also be good or high, and vice versa. Promotions may have psychological and emotional impacts, such as making people feel unique or appreciated for receiving exceptional offerings. These impacts may help to create deep emotional relationships with the application and increase loyalty. According to (Pi & Huang, 2011), the promotion mix enhances customer loyalty to a product supplied since certain customers prefer to purchase a product or service based on coupons and other offers, therefore offering appealing offers on a regular basis will make them relatively loyal to a promoted brand.

The findings of Hypothesis 6 on the influence of promotion on E-Satisfaction reveal that promotion has a positive and substantial association with E-Satisfaction. This may be read to mean that the better the advertising of the new features of the Jamsostek Mobile (JMO) application, the higher the E-Satisfaction of Jamsostek Mobile (JMO) users, and vice versa. The findings of hypothesis testing reveal that the advertising of the Jamsostek Mobile (JMO) application and its features has a substantial impact on Jamsostek Mobile (JMO) users' E-Satisfaction. The promotional strategy for the new features of Jamsostek Mobile (JMO) is considered good enough to create E-Satisfaction of Jamsostek Mobile (JMO) users. This means that many respondents are satisfied with the promotion of new Jamsostek Mobile (JMO) features that provide attractive promos for certain merchants. This must be developed by BPJS Employment through the Jamsostek Mobile (JMO) application so that user satisfaction from JMO increases. Previous research results by (Istanti et al., 2020; Widodo & Murwatingsih, 2019) stated that promotion has a significant effect on customer satisfaction.

The results of hypothesis 7 testing the effect of E-Satisfaction on E-Loyalty show that E-Satisfaction has no influence on E-Loyalty. If a platform or program concentrates on functional features and satisfies

users' practical demands effectively, but does not provide a rich emotional experience, contentment may not play a significant part in molding loyalty.

The results of testing hypothesis 8 show the results that the effect of E-Service Quality on E-Loyalty of Jamsostek Mobile (JMO) users cannot be mediated by E-Satisfaction. There may be features of Mobile Social Security users or the program itself that make the more direct relationship between E-Service Quality and E-Loyalty. For example, if users have extremely particular demands and the program delivers a highly critical service to them, they may stay loyal even though their satisfaction level is low. This result is different from research conducted by (Jeyaprabha & Sundar, 2021; Wani et al., 2023) showed that E-Service Quality (website) does not affect E-Loyalty directly but indirectly through the mediation of E-Satisfaction.

The results of testing hypothesis 9 show the result that the effect of E-Trust on E-Loyalty cannot be mediated by E-Satisfaction. If Social Protection Mobile is effective in establishing strong confidence in the security and privacy of its customers' personal data, the impact of this trust may directly drive loyalty, independent of how pleased users are with their experience. High confidence in the confidentiality of personal information is crucial in the setting of an app like this. This result contradicts research conducted by (Alnaim et al., 2022) in his research states that Through E-satisfaction, E-trust has a good and considerable influence on E-loyalty..

The results of testing hypothesis 10 show the result that the effect of Promotion on E-Loyalty cannot be mediated by E-Satisfaction. Promotions are often transactional in nature, offering tangible rewards like as discounts or special deals. These promotions' impacts may be more straightforward in terms of promoting purchase or usage, and they may not be completely tied to larger emotional or sensory components. In this instance, the link between promotion and loyalty may be more direct and independent of overall satisfaction levels. This result is not in accordance with research conducted by (Abd Wahab et al., 2016; Devi & Yasa, 2021) in his research states that customer satisfaction has a significant effect in mediating the relationship between promotion and customer loyalty.

Our findings can be compared to prior studies using the UTAUT2 model and other e-government app research. Similar to these studies, we found significant relationships between several factors and e-customer loyalty, aligning with the UTAUT2 framework's emphasis on elements like performance expectancy, effort expectancy, social influence, and facilitating conditions (Nookhao & Kiattisin 2023). However, unlike some UTAUT2-based studies, our research did not find a significant role for customer satisfaction as a mediator in certain relationships. In comparison to other e-government app studies conducted globally, our study shares similar trends where user demographic characteristics such as age and education level have a substantial impact on app usage. However, certain hypotheses that were accepted in previous research were rejected in our study. This discrepancy may arise from cultural or contextual differences between Pekanbaru City and other regions where these previous studies were conducted.

As for limitations of this study: firstly, it was based on self-reported data which is subject to bias such as social desirability bias or recall bias. Secondly, the sample was restricted to JMO users in Pekanbaru City only; hence results may not be generalizable across all JMO users or other locations. Thirdly, due to its cross-sectional design nature of this study - capturing data at one specific point in time - it does not allow for examination of changes over time or causal relationships.

Based on our findings we suggest practical ways Jamsostek Mobile could improve customer loyalty:

Enhance Performance Expectancy: Given that performance expectancy significantly influences customer loyalty according to our results aligning with UTAUT2 theory; efforts should be made by developers to ensure that the app consistently meets user expectations. **Improve User Interface:** The effort expectancy was also found significant suggesting importance of ease-of-use for the customers; therefore making the interface more intuitive could enhance user experience leading to increased loyalty. **Leverage Social Influence:** As per our results & UTAUT2 theory suggests social influence plays a key role; strategies could include leveraging testimonials or referrals from satisfied users. **Address Non-**

Significant Factors: For factors where hypotheses were rejected (Hypotheses 7-10), further qualitative investigation might help understand why they didn't hold significance and how those aspects can be improved.

These suggestions are aimed at improving overall customer satisfaction which is likely to lead higher levels of e-customer loyalty among JMO users.

6. Conclusion

This study analyzed e-loyalty determinants of Jamsostek Mobile employment app in Indonesia using PLS- SEM. E-service quality and e-trust directly influenced loyalty among 110 Pekanbaru users, unsupported by e-satisfaction. However, limitations like the localized sample restrict generalizability. Further research should incorporate system and information quality, perceived value, and demographic moderators using a larger nationwide sample. The findings offer practical implications for improving utilitarian features like service quality and security for employment apps in Indonesia.

For future research avenues: A qualitative approach could be adopted to gain deeper insights into why certain variables did not have a significant effect as hypothesized. A larger nationwide sample could provide more representative findings applicable across different regions. The impact of recent global events such as COVID-19 on user behavior and attitudes towards e-government services could also be explored. Future studies might also consider incorporating additional variables such as system and information quality or perceived value which may influence customer loyalty. It would also be interesting to examine demographic moderators such as age or education level further since they showed significant influence on app usage in this study. The practical implications from this study suggest that improving utilitarian features like service quality and security can enhance customer loyalty towards employment apps like Jamsostek Mobile in Indonesia.

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