DIGITAL TRANSFORMATION OF PT POS: CUSTOMER LOYALTY IN THE ERA OF SECURITY AND DATA TECHNOLOGY

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ABSTRACT

Digital transformation can increase competitiveness and customer loyalty and become a business strategy, especially in the context of data security and trust. This study aims to empirically analyze the impact of digital transformation on customer loyalty, emphasizing the mediating role of customer trust at PT Pos Indonesia Pematangsiantar branch. Quantitative research using explanatory surveys of 100 customers selected by purposive sampling technique. The data collection instrument, with the distribution of questionnaires with a Likert scale of 5, has been tested for validity and reliability. Partial Least Squares-Structural Modeling based on SmartPLS 3. The results showed that digital transformation had a significant impact on customer loyalty trust (β = 0.836; p < 0.001) and loyalty (β = 0.906; p < 0.001). However, trust did not significantly impact loyalty (β = 0.076; p < 0.181). The study found that digital transformation can foster loyalty by providing a personalized, secure, and transparent service experience. This study's theoretical and practical implications are the strengthening of trust-based digital strategies for the postal services sector in developing countries.
Keywords: Digital Transformation, Loyalty, Data Security

ABSTRAK

Transformasi digital mampu meningkatkan daya saing dan loyalitas pelanggan dan menjadi strategi bisnis terutama dalam konteks keamanan data dan kepercayaan. Penelitian ini bertujuan menganalisis secara empiris dampak transformasi digital terhadap loyalitas pelanggan dengan penekanan pada peran mediasi kepercayaan pelanggan di PT Pos Indonesia cabang Pematangsiantar. Penelitian kuantitatif dengan menggunakan survey explanatory terhadap 100 pelanggan yang dipilih dengan teknik purposive sampling. Instrumen pengumpulan data dengan penyebaran kuesioner dengan skala Likert 5 yang telah diuji validitas dan reliabilitasnya. Partial Least Squares-Structural Modeling berbasis SmartPLS 3. Hasil menunjukkan bahwa transformasi digital berdampak signifikan terhadap kepercayaan loyalitas pelanggan (β = 0,836; p < 0,001) dan loyalitas (β = 0,906; p < 0,001). Namun, kepercayaan tidak berdampak signifikan terhadap loyalitas (β = 0,076; p < 0,181). Studi ini menemukan bahwa transformasi digital dapat menumbuhkan loyalitas dengan memberikan pengalaman layanan yang terpersonalisasi, aman, dan transparan. Implikasi teoritis dan praktis penelitian ini adalah penguatan strategi digital berbasis kepercayaan untuk sektor jasa pos di negara berkembang.
Kata Kunci: Transformasi Digital, Loyalitas, Keamanan Data

INTRODUCTION

Digital transformation has changed the industrial sector by leveraging blockchain, big data, and omnichannel technology. This technology changes how customers interact and creates organizational value through enhanced capabilities and efficiency (Ali et al., 2020; Bhatti et al., 2021). This process enables businesses to enhance operational efficiency, strengthen competitiveness, and create value by utilizing new

technologies. Indonesia's digital technology transformation offers excellent economic growth opportunities with efficiency and competitiveness. However, the success of this transformation requires appropriate policy support, technology adoption, infrastructure improvement, and digital literacy (Bhatti et al., 2021). Digital transformation in companies significantly impacts operational performance improvement and the change of organizational culture that is adaptive to technology (Yu et al., 2022). As the oldest courier company, PT Pos Indonesia faces significant challenges in the increasingly competitive technology-based shipping industry. To remain competitive, PT Pos Indonesia needs to adopt new strategies and technologies that can enhance the efficiency and effectiveness of its operations (Kurniawan & Chandra, 2001; Timperio et al., 2020). Pos can enhance customer loyalty while addressing data privacy and cybersecurity with several strategies based on customer trust and value theory (Fianto, 2023; Shankar & Jebarajakirthy, 2019; Yanu Alif Fianto, 2023).

One of the main issues in this research is how digital transformation can enhance customer loyalty, especially amidst the challenges of privacy and data security that can diminish customer trust (Kothapalli, 2022). Additionally, it is necessary to understand how PT Pos Indonesia can effectively implement digital technology to create sustainable loyalty. This research focuses on how technology can create a more secure and transparent loyalty system.

Although many studies discuss the importance of digital technology in enhancing customer loyalty, there is still a gap in the literature regarding technology implementation in the goods delivery sector, particularly in developing countries like Indonesia. Most of the research focuses more on the retail or banking sectors, thus paying less attention to the complexities faced by postal services in digital transformation (Jayanthi et al., 2022; Kilay et al., 2022a, 2022b; Nastia, 2024; Setiawan et al., 2021; Trinugroho et al., 2022).

This research raises a crucial issue in the digital transformation era, especially for state-owned companies like PT Pos Indonesia that face stiff competition from technology-based logistics services. The urgency of this research lies in the need for PT POS, one of the largest postal service providers, to compete in the digital era. With the increasing customer expectations for personalization and security in services, the company must be able to meet the challenge by providing relevant innovations. Customer trust in digital systems is very important because, without trust, customer loyalty is difficult to build, even with advanced technology.

The contribution of this research is twofold. First, this research empirically validates the relationship between digital transformation and customer loyalty with customer trust as a mediating variable, using a robust quantitative method (PLS-SEM based on SmartPLS 3). Second, this research offers practical insights for service providers in building digital trust amid concerns over data privacy. The novelty of the research lies in its focus on the postal service sector in developing countries, which has been rarely studied, unlike the literature that predominantly highlights the retail or banking sectors. Moreover, the finding that trust does not significantly affect loyalty offers a new perspective and opens up space for theory development in the digital trust model.

THEORETICAL STUDY

Digital transformation in postal services can be explained using the trust and customer value theory. Studies show that digital transformation in postal services can enhance customer value and company performance by improving the quality of systems, information, and services, as well as by building better relationships between the company and customers (Kamalaldin et al., 2020; Kim & Yang, 2024; Kumar, 2024; Yang et al., 2024). The theory of trust highlights the importance of trust in the company-customer relationship, especially in addressing privacy and data security issues. Trust is crucial for addressing customer concerns regarding the vulnerability of their data (Grosso et al., 2020; Martin et al., 2017). The customer value theory emphasizes the importance of personalization and technological innovation in creating value that can enhance customer loyalty. Technologies such as blockchain and big data play an important role in strengthening this relationship (Fernández-Rovira et al., 2021; Wassouf et al., 2020).

Digital transformation is crucial in enhancing customer loyalty in the banking sector and personalizing services in the retail sector. In banking, omnichannel strategies and big data are key to achieving this goal (Sandhya Kona, 2020; Varsha et al., 2024). However, the implementation in the postal service sector, especially in developing countries, is still very minimal to discuss despite the importance of data privacy and operational efficiency issues. Blockchain has

become an important innovation in loyalty systems, offering more flexible and secure peer-to-peer loyalty point management. This technology addresses various weaknesses of traditional loyalty programs, such as high costs, low security, and less attractive customer incentives. (Bozkurt et al., 2022; Santos et al., 2023) Advancements in data offerings and artificial intelligence (AI) have enhanced the personalization of customer service, which in turn can strengthen trust and drive customer loyalty. However, this also poses challenges related to data protection and privacy (Meurisch & Mühlhäuser, 2022). Integrating blockchain technology into postal services can enhance operational efficiency and address data privacy issues. Blockchain offers solutions with unique characteristics such as traceability, immutability, transparency, and decentralization, which can be used to redesign postal services efficiently. PT Pos Indonesia needs to adopt this innovation to enhance its competitiveness.

The impact of digital transformation on customer loyalty

The theory states that customer satisfaction is the main prerequisite for creating loyalty. In the context of digital transformation, the utilization of information technology not only optimizes operational efficiency but also enhances interaction experiences through responsive digital services, personalization with the help of big data, and transparency in digital communication. This customer-centric approach, as supported by experiential marketing theory, mediates the relationship between digital service performance and loyalty, so satisfied customers tend to show higher loyalty (Aufa Nadya, 2020).

In the empirical realm, several studies have confirmed that positive relationship. For example, research in the banking sector shows that integrating digital systems that combine physical and virtual environments significantly enhances service quality and customer loyalty (Kamath et al., 2019). The same is also observed in research on digital customer experience, where the study revealed that a satisfying digital experience can strengthen customer loyalty through the mediating roles of satisfaction and emotional marketing (Yessi Claudia et al., 2023). Furthermore, research on digital marketing on e-commerce platforms states that personalization, the use of data in Customer Relationship Management (CRM) systems, and overall digital marketing strategies can enhance customer trust and engagement,

indicating that digital transformation acts as a catalyst for loyalty (Kurniawan et al., 2023).

However, some studies showshowing that implementing digital transformation that is not aligned with customer needs and expectations can reduce satisfaction and, consequently, decrease loyalty. Research conducted in the context of Go-Jek's digital services shows that suboptimal e-service quality, such as complex interfaces or lack of personal touch, does not have a positive impact on customer loyalty; conversely, factors such as perceived value become the main influence (Zarkasyi et al., 2023). These findings emphasize that the effectiveness of digital transformation is contextual and highly dependent on how a customer-centric approach is integrated into digital services. Based on the explanation above:

H1: Digital transformation has a significant positive influence on customer loyalty.

The Influence of Customer Trust on Customer Loyalty

Based on the Commitment-Trust Theory proposed by Morgan and Hunt (Rahma & Prayoga, 2022). This theory emphasizes the importance of trust as a key element in building long-term relationships between customers and companies. In this context, trust reflects customers' confidence in the company's integrity, ability to fulfill promises, and commitment to data protection and service quality. When customers feel confident that the company is reliable, their likelihood of remaining loyal, making repeat purchases, and recommending the service to others increases significantly (Rahma & Prayoga, 2022). Furthermore, trust is an emotional bond that underlies the interaction between customers and the brand, strengthening long-term loyalty (Rachman & Oktavianti, 2021).

Various empirical studies have consistently supported the relationship between customer trust and loyalty. The study by (Dewantari et al., 2024) shows that trust significantly influences customer loyalty, with customer satisfaction as a mediator (Dewantari et al., 2024). Additionally, research by (Rachman & Oktavianti, 2021) in Prologia found that consumer trust directly contributes to customer loyalty in the use of online payment systems, emphasizing the importance of trust in the context of digital business (Rachman & Oktavianti, 2021). Martin et al. also highlight that trust in digital service providers is a key predictor of customer loyalty, especially in the e-commerce sector, where threats to information security and privacy are increasing (Dewantari et al., 2024).

Similar findings were also presented in the research by (Kurniasih et al., 2023), which showed that strong promotions can increase trust, which drives consumer loyalty. Although this interaction is complex, the results indicate that building trust through efficient and transparent communication methods is key to maintaining customer loyalty (Kurniasih et al., 2023). Additionally, research by (Yasin et al., 2021) emphasizes the multidimensional role of trust in e-commerce, showing that the quality of information and security protection significantly influence consumer loyalty (Yasin et al., 2021). Based on the explanation above:

H2: There is a significant positive influence of Customer Trust on Customer Loyalty

The Influence of Digital Transformation on Customer Trust

The relationship between digital transformation and customer trust can be understood through two main theories: the Technology Acceptance Model (TAM) and the Trust-Based Relationship Theory. TAM assesses that perceptions of ease of use and the benefits of technology influence customer attitudes, which can foster trust in service providers (Pristiyono et al., 2022). On the other hand, trust-based relationship theory emphasizes that trust emerges when customers feel that technology optimization provides significant added value, particularly regarding data security and transparency (WU & Dahlan, 2023). In digital services, customers will develop trust if they feel the technology aligns with their interests and keeps their data secure (Portes et al., 2020).

Several empirical studies confirm this hypothesis. For example, research by (Pristiyono et al., 2022) shows that digital transformation in the banking sector significantly increases customer trust, emphasizing information transparency and data security. Additionally, (Rodi et al., 2023) indicate that using advanced technologies, such as artificial intelligence and big data analytics, can strengthen the perception of system reliability, thereby building long-term trust between customers and digital services. Research by (Mujianto et al., 2023) also found that when companies demonstrate a commitment to data protection and provide transparent services, customer trust significantly increases, supporting the claim that effective digital transformation can strengthen the relationship between companies and customers.

However, not all research aligns with that hypothesis. Meurisch & Mühlhäuser (Portes et al., 2020) found that although customers actively use digital services, they remain skeptical about managing and storing their data. Trust does not automatically increase because of digital transformation, especially if the technology is non-transparent or difficult. In the context of micro, small, and medium enterprises (MSMEs) in developing countries, research by Kilay et al. (Johri & Kumar, 2023) reveals that low digital literacy and regulatory uncertainty are significant barriers to building trust, even though digitalization has been implemented. These findings indicate that customer trust is greatly influenced by the social context and the existing technological readiness, as well as how companies communicate about their use of technology. Based on the explanation above:

H3: There is a significant positive influence of Digital Transformation on Customer Trust

The Influence of Digital Transformation on Customer Loyalty with Customer Trust as a Mediating Variable

Trust-Based Relationship Theory, customer trust in digital systems functions as a psychological mechanism that reinforces the impact of digital transformation on customer loyalty. In the SDL model, trust is considered an essential mediating element because customers not only evaluate the outcome (output) of the service but also the process and relational value offered by technology (Albarq, 2023). In the digital context, customers who feel secure, trust data protection and perceive digital services as transparent tend to develop stronger and more consistent loyalty (WU & Dahlan, 2023).

Many studies support the relevance of this hypothesis. Research by Kamalaldin et al. (Yessi Claudia et al., 2023) in Industrial Marketing Management shows that digital transformation strengthens the relationship between providers and customers by building trust through improved service quality and information systems. Research by Matarazzo et al. supports this argument by showing that digitalization creates customer value through the trust gained during the digital interaction, directly impacting customer loyalty (Puspaningrum, 2020). Additionally, Fernández-Rovira et al. (Yessi Claudia et al., 2023) emphasize the importance of personalization and data-driven engagement to build digital trust, which fosters customer loyalty. In this context, trust serves as a crucial psychological mediator

between the utilization of technology and long-term relational decisions.

However, not all findings support this hypothesis. Independent research shows that customer trust does not significantly mediate the relationship between digital transformation and loyalty. This indicates that although digital transformation can enhance trust, that trust may not be strong enough to bridge the impact of digital transformation on customer loyalty (Dewi et al., 2024). In a study by Meurisch & Mühlhäuser (Chalirafi et al., 2021) published in ACM Computing Surveys, it was revealed that although advanced digital systems are available, low transparency in data usage and lack of digital education can diminish the positive impact of trust on loyalty. In many cases, more loyal customers may be influenced by other factors, such as convenience, price, and efficiency, rather than just their trust in the digital system itself.

Based on the explanation above:

H4: There is a significant positive influence of Customer Loyalty with Customer Trust as a Mediating Variable

RESEARCH METHOD
Population and Sample

This research uses a quantitative approach to analyze the relationship between digital transformation, customer trust, and customer loyalty at the PT POS Indonesia branch in Pematangsiantar. The research population consists of 2,303 customers who used PT POS Indonesia's services during the last year of 2024 in Pematangsiantar. Based on the Slovin calculation with an error rate of 0.10, the sample size is 100 respondents. In the research context, using the Slovin formula with a margin of error of 0.1 is often employed to determine a sample size representative of a larger population (Elvira et al., 2022; Qi et al., 2023). Data were collected using a 5-point Likert scale questionnaire to measure respondents' perceptions of digital transformation, trust, and customer loyalty.

Data Collection Techniques

The data collection technique in this study uses a closed questionnaire distributed to customers of PT Pos Indonesia branch Pematangsiantar. The instrument was constructed using a 5-point Likert scale to measure respondents' perceptions of digital transformation, trust, and customer loyalty. The Likert scale is used with a range of 1 = Strongly Disagree to 5 = Strongly Agree. The questionnaire has been tested for validity and reliability before distribution.

Data was collected in-person and online, adjusted to the respondents' conditions and distribution effectiveness. This approach was chosen because it is efficient and allows respondents to answer independently and anonymously.

Analysis Method

Data were analyzed using Structural Equation Modeling (SEM) with Smartpls 3 software. This model was chosen because it can simultaneously analyze the complex relationships between variables and mediation variables (Matthews, 2018; Sarstedt & Cheah, 2019; Wong, 2013). SEM can also simultaneously evaluate the validity and reliability of instruments and produce more accurate and robust analyses. Hair et al. 2017.

Operational Variable

The Research variables include digital transformation as the independent variable, which encompasses indicators such as improved service efficiency, personalization of customer experiences, technology adoption, reliability of digital systems, ease of service features, data security, digital customer data management, and technological flexibility in meeting customer needs. These indicators refer to the study (Karwatzki et al., 2017), which emphasizes the importance of personalization and data security in the digital environment, as well as to the Research (Oppold & Herschel, 2020), which highlights the role of transparent and automated systems in data-driven decision-making.

The customer trust variable as a mediating variable includes indicators such as trust in service reliability, the belief that the company maintains data privacy and security, consistency in fulfilling service promises, and satisfaction with operational transparency. These indicators are in line with the findings of Segijn et al. (2021), who developed a transparency and control framework as a basis for building digital trust, and the study by Portes et al. (2020) on the dimensions of digital transparency that affect the quality of customer relationships.

The customer loyalty variable as a dependent variable is measured through the intention to continue using the service, providing recommendations, satisfaction levels, and the perceived value of the customer relationship with the company. These indicators are also supported by customer loyalty approaches in e-commerce and digital services studies, as discussed in (Kamalaldin et al., 2020) and (Yessi Claudia et al., 2023). Variables were selected based on their relevance to the digital transformational challenges faced by PT POS Indonesia. By

understanding the interactions of these variables, researchers are expected to provide evidence-based strategy recommendations to support the development of digital services at PT POS Indonesia.

RESULTS AND DISCUSSION
Result
Respondent Characteristics
Data was collected and analyzed using Smart PLS 3 software. The characteristics of the respondents in this study indicate that 75% are female and 25% are male. Based on age, 32% of the respondents are aged 26–30 years, 24% are aged 21–25 years, 15% are aged 16–20 years, 18% are aged 31–35 years, and 11% are aged over 35 years. The demographic diversity of the respondents, both in terms of gender and age groups, significantly contributes to the richness of the data collected. This diversity allows the Research to capture a broader perception of digital transformation, trust, and customer loyalty, considering that preferences for digital services can vary based on age and gender factors (WU & Dahlan, 2023). For example, younger customers tend to be more open to technological innovations, while older customers may trust digital systems differently

Each question item was tested for validity and reliability, where the validity test results showed a correlation value (R calculated) higher than the R table value of 0.196. Thus, all items were declared valid. The reliability test shows a Cronbach's alpha value of more than 0.70, indicating that all variables in this study have good internal consistency and can be relied upon for further analysis (Hair Jr et al., 2014, 2021), where the validity test results are explained in Table 1.

Table 1. Validity Testing

	Customer Loyalty	Customer Trust	Digital Transformation
L1	0.783		
L2	0.741		
L3	0.820		
L4	0.791		
L5	0.829		
TD1			0.803
TD2			0.761
TD3			0.713
TD4			0.794
TD5			0.740
TD6			0.721
TD7			0.808
TD8			0.750
TRS1		0.748	
TRS2		0.849	
TRS3		0.796	
TRS4		0.795	

Source: Data processing results, 2025

The data in Table 1 shows that the construction of customer loyalty, trust, and digital transformation variables have good validity and reliability. All indicators in each contract have loading factor values above the threshold of 0.7. The loading factor for customer loyalty data is (0.741-0.829), the loading factor for customer trust is (0.748-0.849), and the loading factor for Digital Transformation is (0.713-0.808). These values meet the criteria for convergent validity, indicating that the indicators within the construct consistently measure the same concept (Hair et al., 2017). With an estimated Composite Reliability (CR) value of >0.7 and Average Variance Extracted (AVE) >0.5, this contract is considered valid and reliable, and the construct meets the reliability and convergent validity criteria recommended in SEM-PLS analysis (Sarstedt & Cheah, 2019). These findings are consistent with previous research showing that CR values >0.7 and AVE >0.5 indicate reliable and valid constructs in digital service research and customer behavior (Hair et al., 2021; Henseler et al., 2016).

Cronbach's Alpha analysis is used to measure internal consistency in each construct. If the value is above 0.7, it indicates good reliability, as shown in Table 2.

Table 2. Construct Reliability and Validity

	Cronbach's	rho_A	Composite	Average Variance Extracted

	Alpha		Reliability	(AVE)
Customer Loyalty	0.852	0.854	0.895	0.630
Customer Trust	0.810	0.819	0.875	0.636
Digital Transformation	0.897	0.900	0.917	0.581

Source: Data processing results, 2025

The analysis results in Table 2 show that all constructs have good reliability and validity. Customer loyalty has a Cronbach's Alpha of 0.852, Composite Reliability of 0.895, and AVE of 0.630. Customer Trust is reliable with a Cronbach Alpha of 0.810, Composite Reliability of 0.875, and AVE of 0.636. Digital Transformation has a Cronbach's Alpha of 0.897, Composite Reliability of 0.917, and AVE of 0.581. The Cronbach's Alpha value exceeding 0.7 indicates good internal reliability and consistency among indicators within each construct (Hair et al., 2021). Composite Reliability, also above 0.7,

indicates that these constructs have strong measurement stability and accuracy. AVE greater than 0.5 indicates that the construct can explain more than 50% of the variance of its indicators, which is the minimum requirement for convergent validity (Fornell & Larcker, 1981). Thus, overall, the constructs in this study are reliable and valid to support subsequent structural model analysis (Henseler et al., 2016; Sarstedt & Cheah, 2019). Overall, the constructs in this study are reliable and valid to support further analysis. The PLS model is shown in the following Figure 1:
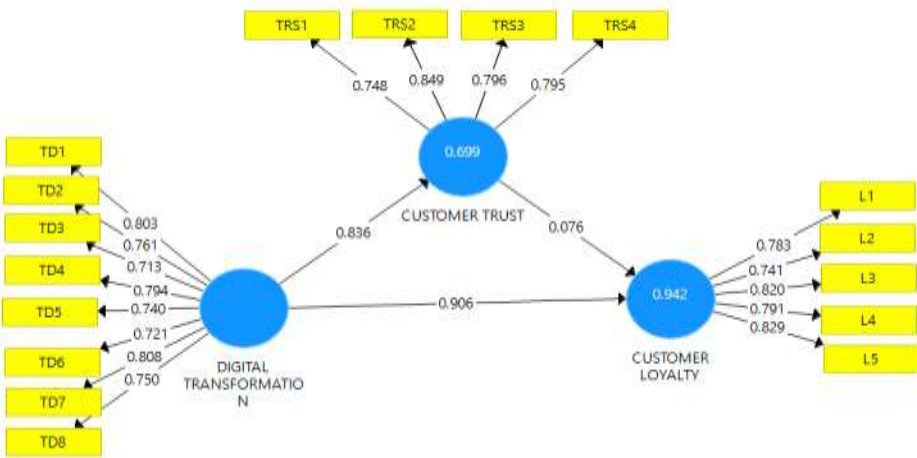

Figure 1. PLS Modeling
Source: Primary Data Processing, 2025

The results of the Mean, STDEV, T-Value, and P-Values in Figure 1 and Table 3 explain how the relationship between the variables is being studied.

Table 3. Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Customer Trust -> Customer Loyalty	0.076	0.068	0.057	1.339	0.181
Digital Transformation -> Customer Loyalty	0.906	0.913	0.045	20.055	0.000
Digital Transformation -> Customer Trust	0.836	0.838	0.028	30.152	0.000

Source: Data processing results, 2025

Partial hypothesis testing is explained in Table 3, which states that Customer Trust for Customer Loyalty has an Original Sample value of

0.076 with a T Statistic of 1.339 and a P-value of 0.181. P Value > 0.05 indicates that this relationship is not significant. Customer trust does

not affect Customer Loyalty. Digital Transformation for Customer Loyalty shows a strong and significant relationship with an Original Sample value of 0.906, T Statistic of 20.055, and P Value of 0.000. P-value < 0.05 indicates that digital transformation has a significant positive relationship with customer loyalty. Digital Transformation on Customer Trust also significantly and greatly affects the Original Sample of 0.836, T-Statistic 30.152, and P-value of 0.000. P-value < 0.05 indicates that Digital Transformation has a significant positive impact on customer trust. These results affirm that digital transformation drives customer loyalty directly without relying on trust as an intermediary variable. This is consistent with previous findings,

which State's's's that increased digital interaction, personalization, and transparency of digital services can directly strengthen customer loyalty (Kamath et al., 2019; Yessi Claudia Sianipar et al., 2023).

On the contrary, the insignificance of the influence of trust on loyalty supports the argument that in the digital context, trust alone is not always sufficient to form customer loyalty, especially if the functional aspects of digital services are already very adequate (Meurisch & Mühlhäuser, 2022). These findings are relevant to the empirical approach in PLS-SEM, where significant relationships are observed through T values > 1.96 and P < 0.05 for a 95% confidence level (Hair et al., 2017).

Table 4. Path Coefficients

	Customer Loyalty	Customer Trust	Digital Transformation
Customer Loyalty			
Customer Trust	0.076		
Digital Transformation	0.906	0.836	

Source: Data processing results, 2025

The results of the relationships between variables in the research model are explained as follows. Customer trust has no significant relationship with customer loyalty, with a coefficient value 0.076. This relationship is very weak and insignificant. Digital transformation has a significant positive relationship with customer loyalty, with a coefficient of 0.906. This

relationship is so strong that it indicates that digital transformation significantly enhances customer loyalty. Digital transformation has a significant positive relationship with a coefficient value of 0.836. This strong relationship indicates that digital transformation dramatically contributes to increasing customer trust.

Table 5. Total Indirect Effects

Mean, STDEV, T-Values, P-Values					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Customer Trust -> Customer Loyalty		0.000	0.000		
Digital Transformation -> Customer Loyalty	0.063	0.057	0.048	1.326	**0.186**
Digital Transformation -> Customer Trust			0.000		

Source: Data processing results, 2025

The research results indicate that customer trust does not significantly mediate the relationship between digital transformation and customer loyalty. This is evident from the indirect effect value of 0.063 with a T-statistic value of 1.326 and a P-value of 0.186, above the significance threshold of 0.05. This means that although digital transformation has a direct positive and significant impact on customer loyalty (β = 0.906; p < 0.001) and also on customer trust (β = 0.836; p < 0.001), customer trust is not

strong enough to bridge the impact of digital transformation on loyalty (β = 0.076; p = 0.181).
Discussion
The Relationship Between Customer Trust and Customer Loyalty

The research results show that digital transformation significantly impacts customer loyalty at the PT Pos Indonesia branch in Pematangsiantar. This is evident from the coefficient value of 0.906 with a significance level (P-Value 0.000), which confirms that the

application of digital technology can enhance customer loyalty. These findings indicate that, although theoretically important, trust does not become a dominant factor in shaping customer loyalty in the digital context of PT Pos Indonesia. This is in line with the Trust-Based Relationship theory, which states that trust indeed underpins long-term relationships, but it does not always directly impact loyalty if customers have become more focused on the functional value of the service (Albarq, 2023; Portes et al., 2020). The study (Meurisch & Mühlhäuser, 2022) also shows that in digital services, customers continue to use the services despite being skeptical about data management because efficiency and convenience factors have a greater impact on loyalty than trust.

Similarly, (Dewi et al., 2024) found that trust does not significantly mediate the relationship between digital marketing and loyalty, especially when the perceived value of service benefits is higher for customers. Conversely, several previous studies, such as (Dewantari et al., 2024) and (Rachman & Oktavianti, 2021), found that trust significantly influences loyalty. However, the context is more dominant in the banking and e-commerce sectors, which require a higher level of trust due to the greater transaction risks involved. Thus, in the context of PT Pos Indonesia's digital services, customer loyalty is more influenced by direct experience with technology usage rather than solely by perceptions of trust.

The Relationship Between Digital Transformation and Customer Loyalty

Digital transformation also significantly affects customer trust, with a coefficient of 0.836 (P-value 0.000). This result indicates that customers build trust in PT Pos Indonesia's services when digital technology can provide convenience, security, and transparency. These findings are supported by the Technology Acceptance Model (TAM) and Trust-Based Relationship Theory, which explain that customers' perceptions of the usefulness and reliability of technology drive the formation of trust (Portes et al., 2020; Pristiyono et al., 2022). Previous research also supports these findings. In the banking sector, digitalization emphasizes data protection and information clarity, which has increased customer trust (Henseler et al., 2016; Shankar & Jebarajakirthy, 2019). A similar phenomenon occurs in the automotive sector (Miguel et al., 2022), the container industry (WU & Dahlan, 2023), and SMEs (Matarazzo et al., 2021), where the use of digital technology builds

a positive perception among customers towards the service system. Thus, digital transformation is a tool for efficiency and a strategic instrument for building customer trust in digital services, including in the postal service sector.

The Relationship between Digital Transformation and Customer Trust

On the other hand, customer trust does not have a significant effect on loyalty, with a coefficient value On the other hand, customer trust does not significantly affect loyalty, with a coefficient value of 0.076 and a P value of 0.181. These findings indicate that in the context of digitized postal services, customer trust has not yet become the main factor directly shaping loyalty. Although the Commitment-Trust theory by Morgan & Hunt (Rahma & Prayoga, 2022) emphasizes the importance of trust in building long-term relationships between customers and companies, this result shows that trust has not fully played a role when customers prioritize the functional benefits of digital services, such as speed, convenience, and efficiency (Meurisch & Mühlhäuser, 2022).

Previous studies by (Sumelvia Dewi et al., 2024) also found that trust does not significantly mediate the relationship between digital marketing and customer loyalty, particularly in the MSME sector, which is more sensitive to convenience and economic value. On the other hand, other studies, such as those conducted by (Dewantari et al., 2024) and (Rachman & Oktavianti, 2021), show a positive and significant relationship between trust and loyalty. However, the context of their research is in the banking and digital payment system sectors, where the level of trust plays a more critical role in customer decision-making. Thus, in the context of digital transformation in the postal service sector, trust is a supporting factor rather than the main determinant of loyalty. Strengthening trust remains important, but it must be accompanied by technological innovations that can provide fast, safe, and transparent service experiences.

The Relationship Between Digital Transformation and Customer Loyalty with Customer Trust as a Mediating Variable

The research results indicate that customer trust does not significantly mediate the relationship between digital transformation and customer loyalty. This is reflected in the indirect effect value of 0.063 with a T-statistic of 1.326 and a P-value of 0.186, which exceeds the significance threshold of 0.05. These findings do not support the assumptions in Trust-Based Relationship

Theory and the Service-Dominant Logic (SDL) framework, which view trust as an important element in creating long-term relationships between customers and service providers (Albarq, 2023; WU & Dahlan, 2023). On the contrary, a study by (Meurisch and Mühlhäuser, 2022) found that in the context of digital services, customer loyalty is often more influenced by ease of use, efficiency, and speed of service rather than by trust factors. Another study by (Sumelvia Dewi et al., 2024) also shows that trust does not always function as a significant mediator in the relationship between digital innovation and loyalty, particularly in the MSME sector, where customers prioritize practical and time-efficient service experiences. In the context of the digitalization of PT Pos Indonesia's services, these results suggest that increasing customer loyalty is more effectively achieved through the optimization of technology that directly enhances user experience rather than solely relying on the formation of trust as a mediating pathway.

CONCLUSION

This research shows that digital transformation significantly increases customer loyalty at the Pematangsiantar branch of PT Pos Indonesia. This transformation can create a more efficient, personalized, and reliable service experience, strengthening the long-term relationship between the company and its customers. Digital transformation has also been proven to increase customer trust significantly. However, that trust does not significantly impact loyalty, nor does it serve as an effective mediating variable in the relationship between digital transformation and customer loyalty. These results affirm that customer loyalty in the context of digital services is more influenced by the direct benefits of technology implementation rather than trust factors. Therefore, loyalty enhancement strategies should focus on developing adaptive, accessible, and transparent service technologies.

This finding expands the understanding of the role of digital transformation in shaping customer behavior in the service sector, particularly in developing countries. These results serve as a basis for PT Pos Indonesia to prioritize technology investments to maintain and enhance customer loyalty. Future research can deepen the analysis by considering demographic characteristics, technology usage behavior, and digital literacy levels to obtain a more comprehensive picture of customer loyalty formation in the digital era.

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