The Influence of Digital Touchpoint Usage Experience on Customer Loyalty and the Mediating Role of Digital Engagement: A Study on an Internet Service Provider Company

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ABSTRACT. In the current study, the influence of digital touchpoint usage experience on customer loyalty, along with the mediating role of digital engagement, was investigated. This study utilized a quantitative research method involving 385 customers of an Indonesian Internet service provider who fulfilled the selection criteria. Data collection was done using a 7-point Likert questionnaire, and the data was analyzed with the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach. The study found that digital touchpoint experience usage positively impacted digital engagement and customer loyalty, respectively. Meanwhile, digital engagement had a significant positive effect on customer loyalty and mediated the influence of digital touchpoint experience usage on customer loyalty. These results highlight the importance of constantly improving digital touchpoints, which, in turn, will enhance digital engagement and customer loyalty.

1. Introduction

The Internet service provider (ISP) industry in Indonesia has grown rapidly as a result of rising internet usage and digital customer interaction [1,2)]. Indeed, Indonesia has emerged as one of the world's fastest-growing telecommunication markets [3,4]. According to a 2024 internet penetration survey by *Asosisasi Penyelenggara Jasa Internet Indonesia* (APJII), there were 221.5 million internet users in Indonesia, a 1.4% rise over the previous year [5]. The large number of internet users has also driven the number of ISP companies in Indonesia, where the number of ISP companies has almost doubled within 15 years [1,2]. Despite the large number of ISP companies, the Indonesian ISP market is classified as a tight oligopoly since there are only a few companies dominating the market [6,7].

PT Telekomunikasi Indonesia Tbk, or also known as Telkom, is the market leader in the ISP sector in Indonesia [8]. Telkom is a state-owned enterprise (SOE) that provides fixed broadband services using fiber optic technology under the IndiHome brand. In addition to fast internet access, Indihome offers landline telephone and interactive television. With active customers of over 8 million people at the end of 2023, Indihome services have reached almost all regions of Indonesia, specifically, 496 provincial capitals, regencies, and cities. To keep up with the rapid changes in the digital era, Telkom continues to innovate and adopt the most up-to-date technology to promote its business performance [9,10]. One of the approaches is by developing several digital touchpoints, including myIndiHome mobile application. The application covers essential features of Indihome, including Over-the-Top (OTT) streaming service activation, service registration, disruption reporting, and loyalty point tracking. Six years after its launch in 2016, there were 1.5 million active users of myIndiHome [11].

In the context of digital business, digital touchpoints can influence the overall customer experience since digital touchpoints serve as the point of interaction between the customers and company [9,12]. The presence of digital touchpoints can positively affect the customer experience ecosystem, which will enhance customer brand engagement and customer loyalty [13,14]. Through regression and factor analyses of an online survey in biotechnology start-ups, [14] found that digital touchpoints affect customer brand engagement. Several empirical studies also indicate that, in general, loyalty is influenced by digital engagement [15–17]. Interestingly, there is also a report suggesting the mediating role of digital engagement on digital touchpoint usage experience toward customer loyalty [18]. In the banking industry, online customer experience significantly impacts customer engagement, which in turn enhances loyalty. Overall, previous studies show the intricate relationship between digital touchpoint usage experience, customer loyalty, and digital engagement. Given the important nature of digital touchpoints in digital businesses, as reported by [9,19–21], this study was aimed to determine the influence of digital touchpoint usage experience on customer loyalty, along with the role of digital engagement in the relationship between the two variables. This research is expected to reveal the nature of the relationship between all the variables, providing the foundation for continuously improving the user interface, content, and features of digital touchpoints.

The relationship between customer loyalty and the experience of customer in using digital touchpoints in this study is investigated under the Service Dominant Logic (SDL) theory. SDL is a theoretical framework in marketing that proposes a shift in perspective from traditional Goods Dominant Logic (GDL) to an emphasis on services [8]. This theory emphasizes the creation of shared value between customers and providers through the service exchange. SDL is characterized by a shift in attention from goods to services, from tangible resources (operands) to intangible resources (operants), from "what is exchanged to the exchange process," and from

"being to doing" [9]. SDL aims to customize offerings according to customer desires, because customers are always considered co-producers, and SDL seeks to strengthen customer participation in customization to better meet their needs [8]. SDL argues that customers are not only passive recipients of value but also active participants in value creation [22,23]. This idea is particularly relevant in today's digitally enabled services because digital touchpoint applications are "forward-leaning" media where users actively take part and interact with the application.

2. Literature review

2.1. Digital Touchpoint, Customer Loyalty, and Digital Engagement

Massive digitalization in the current Industrial Era 4.0 has led the majority of businesses in the world to adapt by building various digital platforms and services, including digital touchpoints [24,25]. Digital touchpoints are defined as online and mobile interactions where customers can communicate two-way or engage with a company [26]. Internet-based interactions between companies and customers to deliver products and services have grown significantly, driven by the development of the Internet and mobile applications. Furthermore, [21] stated that digital touchpoints can be represented as digital platforms where customers interact routinely and online for each level of the customer journey. The customer's experience in mobile and online interactions or two-way communication with a company brand is known as the digital touchpoint usage experience.

A few studies indicate an association between digital touchpoint usage experience and customer loyalty [18,20,27]. Customer loyalty is a positive attitude from a customer toward a company's goods or services and commitment to continue using the company's products or services [28,29]. Loyal customers are beneficial to the business since they can help spread the word about the services or goods or they have used to their families or acquaintances. Loyal customers tend to consistently buy the company's goods or services and are hesitant to buy goods or services from other businesses, thereby contributing to the company's sustainability [28,29]. According to [31], selecting the appropriate digital touchpoint aids in satisfying clients' functional and emotional needs, which influences favorable affective reactions and eventually fosters client loyalty. This is also consistent with a separate study reporting that customer loyalty is significantly impacted by the experience of using digital touchpoints [20].

The emergence of digital touchpoints increases engagement between consumers and service providers, facilitating more effective communication and interaction [31]. Digital engagement is a two-way digital interaction that occurs between customers and companies as a result of the communication technology advancement, where customers can easily access a company's services and goods (32,33). A study has been conducted in biotechnology start-ups to determine how well digital touchpoints affected consumer brand engagement [14]. The primary

conclusions demonstrated that consumer brand engagement was affected by digital touchpoints. Thus, digital engagement is investigated as a variable in this research.

Previous studies suggested that digital engagement could increase customer loyalty. One study found that consumer loyalty was significantly impacted by customer engagement through a variety of interaction channels [16]. Accordingly, another research discovered that customer engagement significantly impacted brand loyalty when they examined the impact of consumer interaction through digital touchpoints on brand loyalty via customer satisfaction and brand trust [17].

2.2.   The mediating role of digital engagement

The mediating role of digital engagement on the influence of digital touchpoint usage experience on customer loyalty has been indicated through a study conducted by [18]. Customer experience has always been the main source of long-term competitive advantage for businesses or companies. The exposure of businesses or companies to digital engagement, one of which is through online shopping channels, opens up the potential for interesting antecedents to be explored. Based on the report by [18], online customer experience has a significant impact on consumer engagement, which in turn boosts customer loyalty. This finding requires further research by examining the mediating role of digital engagement on the influence of digital touchpoint usage experience on customer loyalty in the context of ISPs.

2.3.   Service-dominant logic (SDL)

SDL is a theoretical framework in marketing that proposes a shift in perspective from the traditional Goods-Dominant Logic (GDL) to a focus on services. SDL views customers as partners who can collaborate with the company and partners in the supply chain to establish value and promote the philosophy of "marketing with." Customers are also considered as operant resources, namely resources that are able to act with other resources. Since customers and producers play similar roles, value is always reciprocally and jointly created in interactions between providers and beneficiaries through the application of competencies and the integration of resources (34). According to SDL, collaboration and knowledge to collaborate are the primary drivers for companies to become stronger in the market competition. In other words, this theory focuses on the co-creation of value between customers and providers through the exchange of services.

This study utilizes SDL in the context of digital touchpoints due to several considerations. First, SDL provides a framework for viewing complicated, interactive systems that integrate resources more comprehensively [34]. Second, SDL offers a more generalizable framework than GDL and covers broader issues surrounding service marketing, contributing to greater understanding of the dynamic activities in the emerging service-based economy [35]. As such, companies can re-examine the contributions from customers to the value creation process, which is neglected in GDL. Lastly, SDL stems from a different logic in the service domain by enhancing

the value creation process, broadening the range of available resources and encouraging cooperation across and within service systems. Therefore, the application of SDL is useful for exploring the digital touchpoint phenomenon.

SDL is applied as a theoretical model underlying the conceptual approach and hypothesis of this study, which examines the influence of digital touchpoint usage experience on customer loyalty, with the involvement of digital engagement on Indihome broadband internet customers. Based on the SDL theory and findings from previous research, the hypotheses formulated in this study are (Figure 1):

H1: Digital touchpoint usage experience has a positive and significant effect on customer loyalty.
H2: Digital touchpoint usage experience has a positive and significant effect on digital engagement.
H3: Digital engagement has a positive and significant effect on customer loyalty.
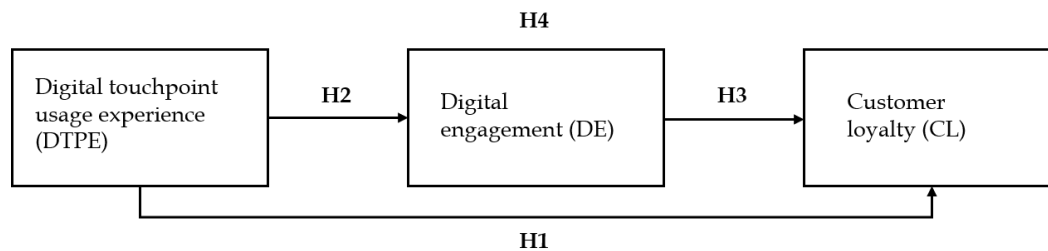H4: Digital engagement mediates digital touchpoint usage experience on customer satisfaction.

Figure 1. Conceptual framework of the research

3. Research methodology

This research employed a quantitative approach to evaluate the relationship between the research variables, i.e., digital touchpoint usage experience (DTPE), digital engagement (DE), and customer loyalty (CL) (Figure 1). A 7-point Likert scale questionnaire, consisting of demographics, DTPE, DE, and CL sections, was used to collect data. The Likert scale allowed the research participants to convey their level of agreement from "strongly disagree" to "strongly agree." The questionnaire was initially evaluated for validity and reliability using the data collected from 30 participants. Three-hundreds eighty-five respondents across Indonesia who met the predetermined criteria were recruited using a purposive sampling technique. The predetermined criteria were as follows: (i) had to be an active customer, (ii) had subscribed to IndiHome for a minimum of 6 months, and (iii) had subscribed through MyIndiHome. The research was conducted in March 2024 until it was completed.

The data was analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach in SmartPLS 4.0 software. This approach is well-suited for examining correlations between variables that contain complicated constructs, such as the framework tested

in this study [18,36]. PLS-SEM was performed in several steps, i.e., assessment of instrument (outer model), assessment of structural model (inner model), and hypothesis testing. The outer model evaluation was conducted by assessing the validity and reliability of the instrument. The structural model was assessed based on the estimation of endogenous constructions. Lastly, hypothesis was tested by examining the path coefficient and p-values, where significance was set at p-value < 0.05. In this research, DTPE was the independent variable, while DE and CL were the dependent variables.

4. Results and Discussion

4.1. Demographic of Respondents

Table 1. Demographic of Respondents

Characteristics	Percentage
Gender	
Male	73%
Female	27%
Age	
≤ 30 years old	20.5%
31 – 40 years old	16.9%
41 – 50 years old	2.9%
≥ 51 years old	59.7%
Occupation	
Private employee	89.1%
Civil servant	1.3%
Entrepreneur	1.5%
Housewife	0.8%
Student	0.8%
Retiree	3.9%
Others	2.6%
Education Level	
Master graduate	9.4%
Bachelor graduate	64.9%
Diploma graduate	11.4%
High school graduate	14.3%

The respondents' demographics are presented in Table 1. The demographic data shows that the majority of IndiHome service users are dominated by men, accounting for 73%. This result differs from the result reported by the APJII in 2024, which showed that internet users in Indonesia consisted of 50.7% men and 49.1% women [5]. This difference in percentage between genders suggests the uniqueness of Indihome broadband internet customers.

The majority of the respondents are over 50 years old. This aligns with the results of APJII, which reported that the largest percentage of internet users were in the same age range [5]. This study also found that most Indihome broadband internet users work as private employees (89.2%), with 92% (an additional 2.8% from entrepreneurs and civil servants) of the respondents being active workers with a steady income.

In terms of education level, there is a striking difference between the study results and previous studies [38]. Most of the respondents are Bachelor's graduates (65%), followed by high school graduates (14%). On the other hand, [38] reported that the largest number of broadband internet users had high school education (56.38%), followed by Bachelor's graduates (28.1%). The contradictory results may occur because the subscription price of Indihome is more suitable for workers who have a steady income. At the same time, it is possible that respondents in [37] study were broadband internet users who used services provided by their parents. This difference also indicates that internet usage penetration is not only for people with Bachelor's degree, but also has good penetration for people with high school education.

4.2 Instrument Assessment

a. Instrument Validity Assessment (Outer Model)

The validity assessment was performed using outer loading, AVE (average variant extracted), Fornell–Larcker criterion, and HTMT (heterotrait–monotrait) ratio.

The outer loading values were determined to evaluate convergent validity. If the outer loading value is more than 0.7, the indicator has good validity [14]. As shown in Table 2, all indicators used in this research have outer loading values of more than 0.7, which suggests that all indicators have good convergent validity.

Table 2. Outer Loadings of Research Variables

Variable	Indicator	Outer Loading	Validity
Digital Touchpoint Usage Experience (DTPE)	DTPE1	0.892	Valid
	DTPE2	0.889	Valid
	DTPE3	0.867	Valid
	DTPE4	0.864	Valid
	DTPE5	0.885	Valid
	DTPE6	0.874	Valid
	DTPE7	0.876	Valid
	DTPE8	0.888	Valid
	DTPE9	0.873	Valid
	DT1PE0	0.848	Valid
	DTPE11	0.867	Valid

Digital Engagement (DE)	DE1	0.870	Valid
	DE2	0.858	Valid
	DE3	0.869	Valid
	DE4	0.864	Valid
	DE5	0.858	Valid
	DE6	0.854	Valid
	DE7	0.828	Valid
	DE8	0.853	Valid
	DE9	0.832	Valid
Customer Loyalty (CL)	CL1	0.875	Valid
	CL2	0.871	Valid
	CL3	0.879	Valid
	CL4	0.855	Valid
	CL5	0.876	Valid
	CL6	0.874	Valid
	CL7	0.866	Valid
	CL8	0.892	Valid
	CL9	0.865	Valid
	CL10	0.836	Valid
	CL11	0.849	Valid
	CL12	0.861	Valid
	CL13	0.862	Valid
	CL14	0.870	Valid
	CL15	0.867	Valid
	CL16	0.855	Valid
	CL17	0.832	Valid
	CL18	0.831	Valid
	CL19	0.843	Valid

Meanwhile, AVE, Fornell–Larcker criterion, and HTMT were calculated to assess discriminant validity, ensuring that the latent or construct variables in the model are different. All the variables have AVE values above 0.5, indicating that all variables have good discriminant validity (Table 3) [14]. By comparing the square root of each AVE in the diagonal with the correlation coefficients for each construct in the pertinent columns and rows, the discriminant validity was assessed using the Fornell–Larcker criterion [36]. Table 4 depicts that each construct's connection with the others is greater than its AVE square root. This result shows that the discriminant validity is not supported based on the criterion. It has been reported that approximately 10.80% of research is not well-suited to employ Fornell–Larcker [38]. Thus, to further evaluate the discriminant validity, HTMT was used [11]. Following the HTMT

assessment, the HTMT values for the variables are above the threshold of 0.85 (Table 5). Thus, the results suggest a potential problem for the discriminant validity. This can occur due to the statement items deemed to be overlapping by the respondents [39]. However, since the AVE values show good discriminant validity, the research instrument can still be used.

Table 3. Average variant extracted (AVE) results

Variable	Average Variance Extracted (AVE)	Validity
Digital Touchpoint Usage Experience	0.765	Valid
Digital Engagement	0.729	Valid
Customer Loyalty	0.741	Valid

Table 4. Fornell–Larcker Criterion Results

Variable	Customer Loyalty	Digital Engagement	Digital Touchpoint Usage Experience
Customer Loyalty	0.861		
Digital Engagement	0.888	0.854	
Digital Touchpoint Usage Experience	0.861	0.933	0.875

Table 5. Heterotrait–Monotrait Ratio (HTMT) Results

Variable	Customer Loyalty	Digital Engagement	Digital Touchpoint Usage Experience
Customer Loyalty			
Digital Engagement	0.918		
Digital Touchpoint Usage Experience	0.882	0.970	

b. *Instrument Reliability Assessment*

The reliability assessment was conducted using composite reliability and Cronbach's alpha. Reliability is the degree to which a research instrument measures a construct consistently and steadily, without bias or random errors, even when employed in various contexts and at different periods. A variable meets the reliability if it has composite reliability and Cronbach's alpha of more than 0.7 [11]. As shown in Tables 6 and 7, all the variables have composite reliability and Cronbach's alpha values of more than 0.7, highlighting their excellent reliability.

Table 6. Composite Reliability Results

Variable	Composite Reliability	Reliability
Customer Loyalty	0.982	Reliable
Digital Engagement	0.960	Reliable
Digital Touchpoint Usage Experience	0.973	Reliable

Table 7. Cronbach's Alpha Results

Variable	Cronbach's Alpha	Reliability
Customer Loyalty	0.981	Reliable
Digital Engagement	0.954	Reliable
Digital Touchpoint Usage Experience	0.969	Reliable

4.3   Structural Model Assessment (Inner Model)

The structural model was assessed using Goodness-of-Fit (GoF), through R^2, F^2, Q^2, and model fit indices criteria [36]. Table 7 shows that the R^2 values for CL and DE are 0.796 and 0.871, respectively. The data suggests that 87.1% of DE variable is influenced by DTP, while 79.6% of CL variable can be affected by DTPE and DE variables.

Table 8. R^2 Values Results

Variable	R^2
Customer Loyalty	0.796
Digital Engagement	0.871

To examine the magnitude between variables, F^2 was calculated. F^2 value of 0.040 from DTPE indicates its small influence toward CL, while its F^2 value of 6.765 indicates its large influence on DE. Meanwhile, F^2 value of 0.270 from DE suggests its medium influence on CL.

Table 9. F^2 Values Results

Variable	Customer Loyalty	Digital Engagement	Digital Touchpoint Usage Experience
Customer Loyalty			
Digital Engagement	0.270		
Digital Touchpoint Usage Experience	0.040	6.765	

Next, the Q^2 predicts the relevance value. Q^2 values of more than 0 suggest that the model has predictive relevance, while values less than 0 indicate that the model has less predictive relevance. As shown in Table 10, all variables have Q_2 values of more than 0, highlighting the high predictive relevance of the model.

Table 10. Q² Values Results

Variable	SSO	SSE	Q² (=1-SSE/SSO)
Customer Loyalty	7315.000	3025.861	0.586
Digital Engagement	3465.000	1277.463	0.631
Digital Touchpoint Usage Experience	4235.000	4235.000	

Similarly, the model fit indices show the model's fitness and decent levels of validity and reliability since the standardized root mean square residual (SRMR) is less than 0.08 and the normed fit index (NFI) is more than 0.90 [11]. These results further corroborate the GoF of the current model.

Table 11. Model Fit Indices

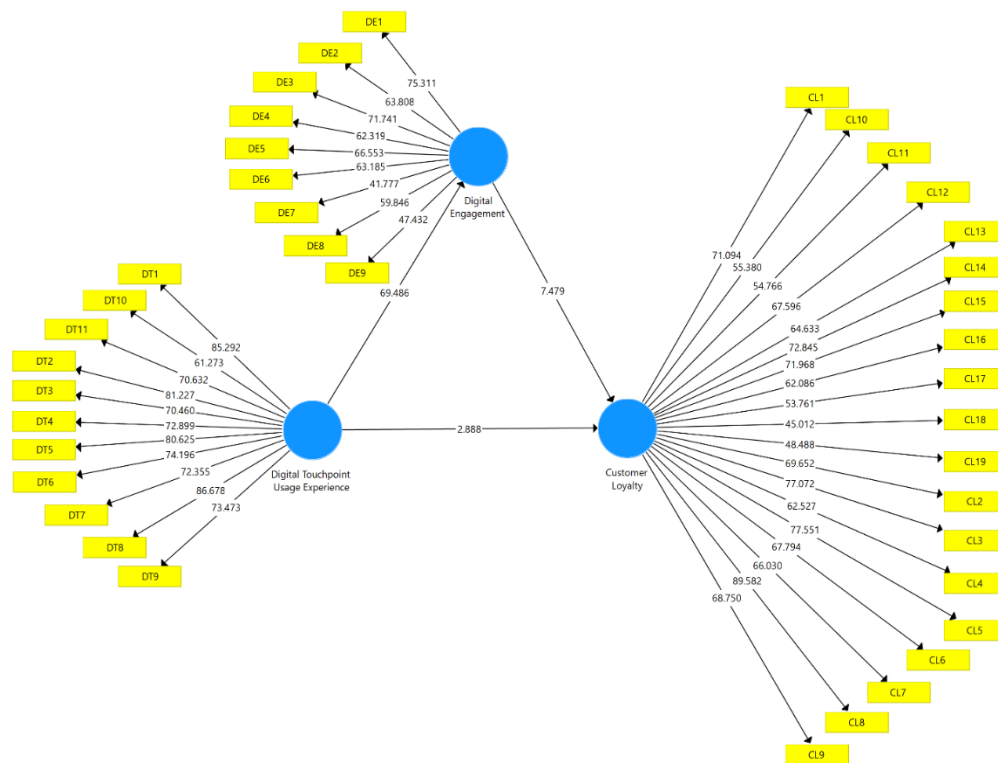| Parameter	Estimated Model
SRMR	0.030
d_ULS	0.721
d_G	1.216
Chi-Square	2359.319
NFI	0.876

4.4 Hypothesis Testing

Figure 2. PLS-SEM measurement results

The estimated parameters' significance offers valuable insight into how the research variables relate to one another (Figure 2). DTPE has a significant positive effect on CL, as reflected in its positive value of the original sample estimate (path coefficient = 0.251) and p-value of 0.003 (Table 12). This result suggests the importance of DTPE on CL, where a pleasant experience when using digital touchpoints will lead to increased loyalty. Other studies have reported a similar relationship between these two variables [11,20]. [30] further explained that selecting the right digital touchpoint enables customers to fulfill their emotional and functional needs. The fulfillment will affect positive affective responses, which, in turn, fosters customer loyalty. [12] further highlights the importance of digital touchpoints in gaining CL. Her research identified that the DTPE applications built by companies were utilized to disseminate the latest news, provide contact information, install products, guide customers, and simplify product use. The usefulness, ease of use, and information given through the applications facilitate customer loyalty [12].

Table 12. Hypothesis Testing Results

Hypothesis	Construct	Original Sample (O)	T Statistics (|O/STDEV|)	P-Value
H1	Digital Touchpoint Usage Experience -> Customer Loyalty	0.251	3.019	0.003*
H2	Digital Touchpoint Usage Experience -> Digital Engagement	0.933	69.764	0.000*
H3	Digital Engagement -> Customer Loyalty	0.653	7.858	0.000*
H4	Digital Touchpoint Usage Experience -> Digital Engagement -> Customer Loyalty	0.610	8.219	0.000*

*statistically significant at p-value < 0.05

DTPE also has a positive and significant impact on DE (path coefficient = 0.933; p-value = 0.000; Table 12). This result indicates the important role of DTPE not only for CL but also for DE. A competent digital touchpoint, featuring a user-friendly, interactive, and responsive interface, complemented by customized features creates a positive digital touchpoint usage experience. This experience facilitates digital engagement by involving cognitive, emotional, and behavioral aspects [40]. MyIndihome, which is a mobile application, can function better than a website in improving digital engagement since mobile applications can provide a richer, more portable, and deeper experience [41]. The positive and significant effect of DTPE on DE has also been reported [11,41]. [14] reported that digital touchpoints influence customer brand engagement in

biotechnology start-ups. By paying attention to the features in the application, customers gain good application usage experience, which positively affects DE [11].

Our result confirms the significant positive relationship between DE and CL, as observed from the path coefficient value of 0.653 and *p*-value = 0.000 (Table 12). This finding aligns with previous research stating that customer engagement can boost loyalty by establishing powerful psychological ties with the brand and favorable brand interactions [34,44]. New media and digital platforms enable businesses to interact with clients more efficiently, fostering long-term relationships [44]. Further, [11] emphasize the importance of a company applying various features, such as virtual assistants, AI-based chatbots, gamification, and to improve engagement in digital touchpoints, which then improves customer loyalty.

In addition to having a direct effect on CL, DTPE has an indirect effect on CL, where the effect is mediated by DE. This relationship is corroborated by the hypothesis testing, showing a path coefficient value of 0.610 and *p*-value = 0.000 (Table 12). This result suggests the significant role of DE in mediating the relationship between DTPE and CL. This means that if there is an increased digital engagement, the effect of DTPE on CL is amplified. The utilization of digital touchpoints by a company allows the creation of high-quality digital engagement, which improves customers' social, emotional, and cognitive engagements. The increase in these engagements eventually fosters loyalty, as reported by [40].

In line with previous research, DTPE currently plays a crucial role in an era where technology is rapidly developing. Thus, our findings highlight the importance of developing digital touchpoints in the telecommunications industry, especially for internet service providers. To improve DTPE, a company needs to embed interactive content, a feature-rich interface, timely customer service, and improved personalized features in digital touchpoints. These approaches can enhance digital experience and engagement. Additionally, utilizing customer feedback as the basis for application updates ensures the application's relevance to the customer's needs, thereby enhancing user experience and fostering loyalty [11].

In this research, SDL offers a comprehensive framework for understanding and analyzing the complex relationship between the research variables. This theoretical perspective shifts the focus from goods-dominant logic, which emphasizes tangible products and transactions, to a more nuanced view that appreciates value co-created through interactions between companies and customers [34,35]. By applying SDL, companies can better understand how digital touchpoints serve not only as transaction channels but also as an integral part of the shared value creation process. This approach encourages companies to view every digital interaction as an opportunity to engage customers more deeply, understand their needs and preferences, enhance loyalty, and tailor experiences on a personal level.

Integrating digital touchpoints through the lens of SDL facilitates a more dynamic and interactive customer experience. SDL positions digital touchpoints as platforms for learning and adaptation. Customers actively contribute to the value creation process by providing feedback, exchanging experiences, and collaborating with the company [34,45]. This active engagement fosters a stronger emotional connection with the brand, thereby increasing customer loyalty. Therefore, digital touchpoints become more than just interaction touchpoints; they are essential tools for building and maintaining long-term customer relationships based on shared value-creation rather than transactional exchange.

In addition, the use of SDL in analyzing digital touchpoints highlights the strategic role of technology in customizing and personalizing the customer experience. Digital platforms enable companies to collect and analyze data on customer behavior, preferences, and feedback in real-time, offering insights that can be used to continuously refine and improve the customer experience [46]. This data-driven approach enables companies to anticipate customer needs, provide personalized solutions, and create highly relevant and engaging interactions. Consequently, customers are more likely to feel valued and understood, increasing loyalty and advocacy.

5. Conclusion

Our results reveal the intricate relationship between digital touchpoint experience usage, digital engagement, and customer loyalty under the SDL framework. Digital touchpoint experience usage positively influences digital engagement and customer loyalty so that positive experiences in using digital touchpoints will increase digital engagement and customer loyalty. The importance of digital touchpoints in this digital era should push companies to improve digital touchpoint's features, content, and interface by utilizing feedback from customers, in accordance with the principle of value co-creation in SDL. Additionally, digital engagement has a significant positive effect on customer loyalty and mediates the relationship between digital touchpoint experience usage and customer loyalty. This dual role shows how digital engagement can foster customer loyalty. The existence of good digital engagement through digital touchpoints will create a connection between customers with the service and the brand itself, which ultimately creates a strong relationship and customer loyalty.

6. Limitation and Future Research

Although the current study was carefully designed, it still has a few limitations. First, the research instrument is a self-administered questionnaire, which is considered efficient and cost-effective. Nonetheless, it has inherent disadvantages, such as the potential for non-response bias and difficulty ensuring understanding. Consequently, the results need to be interpreted cautiously. Second, the approach used in the current study is a quantitative research method, an approach known for its specificity and detailed and clear in terms of quantifying result.

Unfortunately, it cannot obtain information related to the cause-and-effect relationship of the research findings. Lastly, a larger sample of respondents is required to provide a thorough understanding on the phenomenon observed. To identify the cause-and-effect relationship of the research findings, obtain a more in-depth understanding, and increase generalization, further research using qualitative method and larger samples are required. This will shed a clearer light on the relationship between digital touchpoint experience usage, digital engagement, and customer loyalty.

Conflicts of Interest: The authors declare that there are no conflicts of interest regarding the publication of this paper.

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