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# Optimizing Customer Engagement and Satisfaction on Loyalty through Self-Congruity Theory

Amira Alda Arisani Solekhah and Endy Gunanto Marsasi\*



## AFFILIATION:

Department of Management, Faculty of Business and Economics, Universitas Islam Indonesia, Special Region of Yogyakarta, Indonesia

## \*CORRESPONDENCE:

183111301@uii.ac.id

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## Abstract

**Research aims:** This study explores the factors that shape the intention of Generation Z, aged 20 to 29, in Java to utilize online travel agents. Additionally, it investigates the application of self-congruity theory in understanding consumer behavior. A unique aspect of this research is the inclusion of a novel variable: satisfaction.

**Design/Methodology/Approach:** This research adopts a quantitative approach, utilizing a survey method to gather insights. The data analysis was performed using Structural Equation Modeling (S.E.M.), drawing on responses from 198 participants. The study specifically focuses on Generation Z as its primary subject.

**Research Findings:** This study found that self-congruity influences customer trust and customer engagement, which ultimately contributes to the satisfaction and loyalty of online travel agent users. The satisfaction variable highlights its crucial role in reinforcing the connection between customer engagement and loyalty.

**Theoretical Contribution/Originality:** This study enriches the academic literature by adding the satisfaction variable as a novelty and highlights the critical role of self-concept and trust in building customer loyalty.

**Practitioners/Policy Implications:** To increase loyalty, online travel agent companies must align their brand image with consumers' self-concept, build trust through consistent service, and manage customer engagement wisely.

**Research Limitations/Implications:** This research is limited by fewer samples, the uneven distribution of respondents, and the geographical coverage only on the island of Java.

**Keywords:** Self-Concept; Trust; Customer Engagement; Satisfaction; Loyalty; Self-Congruity Theory

## Introduction

Online travel agent platforms have become a key aspect of the travel industry. Many individuals now rely on these services to conveniently book accommodations, flights, and travel needs. Trust is essential for setting performance expectations and minimizing the perceived risks of using these platforms (Ribeiro et al., 2022). Engaging consumers is crucial for the success of online travel platforms. Service providers face the challenge of sustaining and improving customer involvement while navigating the growing complexity and variety of digital interfaces (Arora et al., 2021). Online travel agents play a significant role in promoting vacation packages. Travel professionals and agency planners need to understand the key

factors that drive customer engagement, boost brand recognition, build loyalty, and enhance their marketing strategies (Abou-Shouk & Soliman, 2021).

Loyalty programs encourage customers to return, fostering a stronger bond between consumers and brands, which helps build deeper trust and connection. Service failures are inevitable, but their impact on overall satisfaction can vary. Some failures may have minimal impact, while others can significantly affect a customer's decision to reuse the service or recommend it to others (Halpern & Mwesiumo, 2021). Customer satisfaction is closely tied to the ease of using online travel agent services compared to the applications provided by the airlines themselves. A survey conducted in 2018 recorded that 86.61% of the total respondents were satisfied and used online travel agent services more often in determining which airline to use (Eka, 2018). This high level of satisfaction stems from several factors, including the capability of online travel agent services to fulfill and frequently surpass the expectations of their consumers consistently.

This study is grounded in a prominent theory that serves as the primary framework for developing the hypothesis under investigation. Specifically, it draws on self-congruity theory, which examines how two distinct visual elements foster a connection between tourists and brands (Šegota, 2024). Self-congruity theory is widely utilized to explore how individuals shape their behaviors and preferences by aligning their self-image with a particular brand. Consumers are more likely to gravitate toward brands that resonate with their personal identity. Self-congruity theory plays a pivotal role in this decision-making process, as people tend to select services that align with their self-perception. For businesses, this underscores the importance of carefully managing their brand image to ensure it reflects the identities of potential consumers. In the service sector, companies must conduct in-depth analyses of both their brand image and the self-image of their target audience to build meaningful connections.

Customer engagement is a critical variable in this study. Customer engagement is crucial on online travel platforms. Consumers can take an active role in planning their trips by utilizing the various features offered on the platform. Interacting with these features has been identified as a critical driver in building brand loyalty and promoting repeat purchases of products or services (Majeed et al., 2022). One effective approach to boosting customer engagement is through well-designed loyalty programs and appealing incentives. Customer engagement includes all interactions and relationships between companies and customers throughout the entire cycle from start to finish. Encouraging brand advocates to create content that resonates with people who have a strong sense of self can help boost engagement and deepen their connection with the brand (Kini et al., 2024). Companies should facilitate open two-way communication with customers through online channels such as email, live chat, or social media or directly through customer service.

Previous research has developed the ideas (Han et al., 2021) that when consumers trust a product or service, it helps them feel satisfied with what's being offered. Tourism trust emerges if the services provided are reasonable and satisfy tourists. Previous research conducted by Teeroovengadum (2022) assumed that the satisfaction felt by consumers

towards the products or services provided could give rise to an attitude of loyalty in consumers towards a brand. Satisfaction with service quality can foster loyalty for customers to use banking services that are considered quality and reliable faithfully. Further research conducted by Tirado et al. (2024) suggests that banks can better support vulnerable customers by implementing CSR strategies that foster trust and strengthen customer engagement.

This study brings a fresh perspective by incorporating satisfaction variables. Satisfaction results from perceived service quality, leading to other consequences, such as customer loyalty (Alnaim et al., 2022). Satisfaction is connected to both the service received and the overall experience, including interactions with customer service, the purchasing process, easy-to-understand information, and ease of use. Companies can channel related departments to solve problems and improve satisfaction to promote the brand (Adak et al., 2022). Companies that understand their customers' needs and expectations and consistently deliver services that go beyond those expectations are more inclined to deliver exceptional customer satisfaction. The researcher added the novelty variable to this study to provide an element of research novelty that can provide the latest knowledge and literature in the academic environment. Researchers use the findings from previous studies as references to see relevance and as a source to provide research renewal to avoid plagiarism and violate academic integrity.

Researchers identified several research gaps from previous researchers. This research addresses a gap that needs further investigation. Research conducted by R. U. Khan et al. (2022) resulted in the finding that satisfaction positively affects customer loyalty. Improving customer satisfaction through effective relationship management services is crucial for cultivating loyalty toward the company. The link between satisfaction and loyalty has been a central theme in many previous studies, highlighting its significance in driving long-term customer commitment (Zhou & Yu, 2022). Although satisfaction positively influences customer loyalty, its impact is not substantial. This research emphasizes the critical role of tourist engagement in fostering and reinforcing loyalty to a destination, particularly through the lens of tourist value, and makes valuable contributions to the field of tourism studies (Habachi et al., 2024). The findings indicate that consumer involvement plays a pivotal role in fostering customer loyalty, demonstrating a clear and significant positive impact.

Additionally, the study sheds light on how gamification services can enhance customer loyalty, especially by delivering immersive gaming experiences. It also identifies key factors that influence customer engagement with gamified service systems, providing insights into improving customer interactions and loyalty in innovative ways. Other results from a study conducted by Meeprom and Suttikun (2024) revealed intriguing findings regarding customer engagement with AI-based services and its impact on customer loyalty. The results indicated that while engagement with AI-based services negatively influenced customer loyalty, engagement with employee-based services had a positive but not statistically significant effect.

This research emerged in response to a growing trend in the restaurant industry during the COVID-19 pandemic, where businesses increasingly adopted AI-based, contactless services over traditional human-based interactions. In the broader context of online travel agents, the concept of customer engagement and satisfaction in driving loyalty remains less than optimal. This gap may stem from the varying levels of influence that customer engagement and satisfaction exert on the perceived quality of services offered. Since each user evaluates services differently, online travel applications face the challenge of meeting diverse customer expectations and preferences to enhance loyalty effectively.

## **Literature Review and Hypotheses Development**

### **Self Congruity Theory**

This study is grounded in Self-congruity theory, which examines how well a person's self-image matches the image of a product (Sirgy, 1985). The theory is widely used to analyze how consumers' self-image aligns with brand images, fostering a connection with the brand. A similar study by Rabbanee et al. (2020) also utilized self-congruity theory, highlighting the significance of the alignment between a consumer's self-image and the brand's image. This alignment significantly influences the satisfaction of social media users when engaging with content, such as commenting, interacting, and sharing preferences. Additionally, Cifci (2022) applied self-congruity theory to examine how individuals understand and identify with their self-concept, including aspects like values, beliefs, and roles (Marsasi et al., 2024). The theory evaluates consumer self-congruity by focusing on three key components: self-concept and the perceived image of products or services. This research underscores the critical role of understanding the connection between self-concept and brand image in predicting its impact on consumer satisfaction.

### **Self-Concept**

Self-congruence describes the harmony between an individual's self-image and their perception of a brand's image. The closer the alignment between a person's self-concept and a brand, the higher the likelihood of them purchasing from that brand (Wu & Wu, 2023). Part of this concept involves how individuals view themselves in social settings and how they believe others perceive them (Albana & Marsasi, 2024). When consumers experience a strong connection between their personal identity and a brand's image, they are more inclined to develop a deep emotional attachment to that brand. Ideal self-congruence pertains to how individuals aspire to see themselves or wish to be, rather than their current self-perception (El Hedhli et al., 2021).

People are often more drawn to brands that align with their aspirational self-image than their present reality. Research on self-congruence highlights two key types: actual self-congruence and ideal self-congruence, both of which are derived from the two dimensions of self-concept—the actual self and the ideal self (Japutra et al., 2023). A brand effectively aligned with the actual or ideal self-concept can foster deeper emotional connections, increase brand loyalty, and drive purchase intentions. Identifying a positive

or negative ideal image of a brand or product can influence their tendency to accept or reject messages from that brand (Belanche et al., 2021). A person who has a positive ideal image of a brand that emphasizes quality and reliability is more likely to accept promotional messages that reinforce that image.

### **Trust**

Trust is a crucial factor in the connection between a company and its customers, representing the belief that the company will fulfill or surpass their expectations. Perceived trust refers to how individuals evaluate the reliability, integrity, and security of a service (Shaliha & Marsasi, 2024). Extensive research has explored the role of trust in various technology platforms, particularly in sustaining user engagement with technologies like chatbots. Findings suggest that consumer trust is essential for the continued use of such innovations (Balakrishnan & Dwivedi, 2021). Trust is established when consumers perceive a platform or company as dependable, secure, and genuinely attentive to their needs. In the luxury goods sector, trust significantly influences purchasing decisions and brand consumption. When customers have confidence in a luxury brand, they are more inclined to stay loyal, continue buying from the brand, and even recommend it to others, even in the face of competitors (Husain et al., 2022).

In this context, brand trust is not just a passive assurance but an active partnership between the consumer and the brand (Dass et al., 2021). This partnership positions the brand as more than a provider of goods or services—it becomes a meaningful collaborator in the consumer's journey, cultivating long-term loyalty and commitment. Furthermore, customers who have confidence in a service provider's quality are generally more accepting of the associated costs (Tiamiyu et al., 2024). Trust is built over time through consistent quality, transparency, payment consequences, and positive interactions, leading to perceptions of reliability and credibility.

### **Customer Engagement**

The concept of customer engagement includes passive interactions, such as visiting a brand's fan page, and active responses, such as likes, comments, and shares (Arora et al., 2021). A post that gets many likes and shares can indicate that the content successfully attracts customer attention and participation. A deep psychological connection is needed between the brand and the consumer to achieve genuine engagement, which goes beyond the transactional relationship (So et al., 2021). Customer engagement also includes participation in behaviors such as sharing information, providing feedback, or even becoming a brand advocate in their environment. Premium brands can influence consumer engagement to work in their favor (Marsasi & Yuanita, 2023).

Customer engagement encompasses a series of actions consumers take in response to brand content, such as reacting, commenting, sharing, and posting related content (Zheng et al., 2022). These actions not only reflect the level of consumer engagement with the brand but also create a widening network of interactions among their communities. Customer engagement behavior in retail involves interactions not only between

customers and brands but also between customers themselves or with company representatives. These direct connections play a crucial role in shaping the overall experience (Roy et al., 2022). The importance of customer involvement or customer participation lies not only in the direct response to the brand but also in forming an active community around the brand.

### **Satisfaction**

Satisfaction reflects the extent to which a company's products or services fulfill or surpass customer expectations. To achieve organizational goals, organizations must pursue satisfaction as the primary foundation for building strong loyalty (Aljumah et al., 2022). Satisfaction also involves creating positive and memorable experiences, which can strengthen long-term relationships between customers and brands. Customer satisfaction reflects how effectively a company's products or services align with or surpass customers' expectations (Ali et al., 2021). Satisfaction encompasses both the functional aspects of a product or service and the emotional elements tied to the overall customer experience. In social commerce, usage satisfaction is connected to the user's experience when interacting with a platform, where usability assessments help shape and adjust their performance expectations (Gemilang & Marsasi, 2023).

Satisfaction is an evaluation made by customers of the products or services they purchase or use based on the extent to which the product or service meets their expectations and needs (Simeon & Hamilton-Ibama, 2022). Customer satisfaction is crucial for businesses, indicating how well a company's products or services align with or surpass customer expectations. In this context, satisfaction with service results from perceived value or quality, emphasizing that satisfaction is directly related to perceived value and the quality of service provided (Li & Lai, 2021). Various factors influence satisfaction, including aspects such as product quality, service quality, and the overall customer experience.

### **Loyalty**

Loyalty is a key factor in business strategies, showing how committed and connected customers are to a brand or company. It helps keep customers coming back, as those who are loyal are more likely to buy again, spread positive word-of-mouth, and recommend the brand to others (Shahzad et al., 2021). Loyalty is typically viewed through two primary dimensions: attitudes and behaviors. These dimensions are integral to building strong consumer-brand relationships. Attitudinal loyalty stems from an individual's internal beliefs and emotional connection to a brand, creating a deeper sense of attachment.

On the other hand, behavioral loyalty is demonstrated through tangible actions, such as repeat purchases, enthusiastic recommendations, and spreading positive word-of-mouth (Anabila et al., 2022). Overall, customer loyalty reflects the degree of commitment and consistent preference that consumers exhibit toward a brand or service provider. This unwavering support not only strengthens the brand's position in the market but also fosters sustainable growth. Creating and maintaining loyalty is very important, but more work is needed in a competitive environment (Al-Hawary & Obiadat, 2021).

Loyalty includes substantial loyalty shown by consumers towards a brand or product, reflected in repeat purchasing behavior, preference for specific brands, and recommendations to others. Loyalty has a more comprehensive definition; it plays a crucial role in a company's ability to retain customers and enhance its performance (Gontur et al., 2022). In a competitive business environment, building and maintaining loyalty is a strategic key to increasing long-term growth and differentiating brands in a crowded market.

### **The Influence of Self Concept on Loyalty**

Research by Bagaskara and Marsasi (2023) examined how self-congruity and trust influence brand loyalty in the context of expedition services, with image congruity theory serving as the guiding framework. The findings revealed that self-congruity has a strong and positive effect on building brand loyalty. Similarly, a study by Nyadzayo et al. (2020) also delved deeper into related aspects of consumer behavior, offering further insights into the dynamics of loyalty. Additionally, their research examined how consumer engagement with luxury fashion brands is shaped by brand involvement and self-concept (B.E.S.C.).

The results showed that shared value creation, social media activity, and personal connections with brands were significantly related to B.E.S.C. and brand loyalty and positive W.O.M. X. Zhang (2022) conducted a study to explore the influence of consumer self-congruity on brand loyalty behavior during stockouts and examined the mediating role of psychological reactance theory. The results demonstrated that consumer self-congruity significantly enhances brand loyalty behavior, with psychological reactance serving as a mediator in the relationship between self-congruity and brand loyalty. The practical implication is that this study provides insight to retailers and brand owners regarding the coping strategies to reduce lost sales when out of stock. Further research was conducted by (Loh et al., 2021) explored how consumers use emotional connections and self-brand relationships to cope with feelings of loneliness, especially when there are few close relationships with others.

Similarly, Zogaj et al. (2021) explored how the alignment between a donor's actual self, ideal self, and functional self affects the relationship between nonprofit organizations and their supporters, with issue involvement playing a moderating role. The study revealed that the alignment between ideal self and functional self positively influenced donor loyalty, whereas actual self-congruence had no significant effect on it. Brands that are appropriate and match a person's self-concept often play a role in building a positive self-image. Customers who feel that using a particular brand enhances their self-image or affirms their values will feel compelled to continue supporting that brand. The following hypotheses were put forward by the authors in this study based on the empirical study above:

***H<sub>1</sub>: Self-concept has a positive impact on loyalty.***

### **The Influence of Self Concept on Customer Engagement**

Research conducted by Grace Phang et al. (2021) explores Social Exchange Theory and Congruence Theory, highlighting how congruence significantly influences customer engagement. Additional research conducted by Chen et al. (2020) seeks to examine the connection between self-concept or self-congruity and customer engagement in tourism destination brand management. The findings suggest that destination brand self-congruity positively impacts customer engagement, as well as the likelihood of revisiting and recommending the destination. Chuah et al. (2020) investigated the link between self-concept or self-congruity and customer engagement, focusing on corporate social responsibility (CSR) initiatives that align closely with a brand. Their findings revealed that the connection between CSR-brand alignment and sustained customer engagement is sequentially mediated by self-cause and brand integration, with environmental concern and green trust acting as moderating factors.

Similarly, Kumar and Kumar (2020) explored how self-congruity influences customer engagement within online brand communities. Their research highlighted that benefits derived from experiences and enhanced self-esteem within these communities significantly boost customer engagement. In addition, Teng et al. (2023) examined the impact of self-congruity on customer engagement within the hospitality industry, providing further insight into the role of self-concept in fostering consumer involvement.

Self-concept increases customer engagement because customers feel more connected to brands that reflect their identity and values. They actively engage in brand activities, discussions and communities because they feel it is a way to express themselves and deepen their connection to something relevant to them. The results showed that when customers see a connection between themselves and a brand, it positively impacts their level of engagement. The following hypotheses were put forward by the authors in this study based on the empirical study above:

*H<sub>2</sub>: Self-concept has a positive impact on customer engagement.*

### **The Influence of Trust on Customer Engagement**

In previous research conducted by Ndhlovu and Maree (2023), an analysis of data gathered from 503 smartphone owners and 491 social media users found that trust plays a key role in boosting customer engagement. A study by Fan et al. (2022) found that trust plays a key role in enhancing customer engagement, showing a positive influence on how customers interact with brands. Further research exploring the connection between trust and customer engagement was also carried out. Research examining the relationship between trust and customer engagement was also conducted by Moorthy et al. (2022), showing that trust positively affects customer engagement.

Further research conducted by Algharabat and Rana (2021) revealed that social commerce significantly enhances social support, fosters trust among community



members, and strengthens social presence. Further research conducted by Lin and Nuangjamnong (2022) demonstrated that customer trust—whether directed toward community members, broadcasts, or products—plays a crucial role in influencing customer engagement. Trust increases customer engagement by creating a sense of security, confidence, and openness. With trust, customers are more comfortable engaging, providing feedback, and building long-term loyalty to the brand. The following hypothesis is put forward by the author in this study based on the empirical study above:

*H<sub>3</sub>: Trust has a positive impact on fostering customer engagement.*

### **The Influence of Trust on Satisfaction**

A study by Lee et al. (2021) found that trust plays a crucial role in enhancing the satisfaction of m-Health service users. In a similar vein, research conducted by Glaveli et al. (2023) revealed that the social and communication skills, including active listening, of fitness instructors are positively associated with customers' trust in service providers. Additionally, the connection between trust and satisfaction has been explored further by (Geebren et al., 2021). The findings indicated that trust significantly and positively influences satisfaction. Further studies conducted by Seo and Lee (2021) seeks to examine the impact of trust on satisfaction within the context of restaurants utilizing robotic services. The findings reveal that trust significantly enhances the perceived usefulness (P.U.) and perceived ease of use (P.E.O.U.) of robotic services, boosting customer satisfaction.

Additional studies carried out by Ramayah et al. (2022) focus on exploring how the healthcare environment impacts patient experiences and reactions in private general practice clinics in Malaysia. The findings highlight that factors such as ambiance, quality of service delivery, interior design, and cleanliness play a significant role in shaping patient trust and satisfaction. Trust increases satisfaction by reducing uncertainty, creating positive expectations, strengthening perceptions of quality, and allowing the brand to correct errors in a way that customers accept. These factors provide a strong foundation for customers to experience satisfaction in short-term and long-term interactions. The following hypothesis is put forward by the author in this study based on the empirical study above:

*H<sub>4</sub>: There is a positive influence on trust on satisfaction.*

### **The Influence of Trust on Loyalty**

Previous studies have examined the relationship between trust and loyalty in various industries. Ghali (2021) explored this link in the context of e-banking, finding that e-trust is essential for building customer loyalty. Similarly, M. A. Khan et al. (2021) studied the telecommunications sector in Pakistan, revealing a strong, positive connection between customer trust and loyalty. In another study, Albaity and Rahman (2021) investigated how

different factors, including trust, influence customer loyalty in Islamic banks, with trust being found to play a significant role in fostering loyalty. Na et al. (2023) conducted a similar investigation in China, focusing on brand trust and brand loyalty in the smartphone market. Their results showed that brand trust positively affects both attitudinal and behavioral loyalty.

Additionally, Al-Hattami et al. (2023) studied loyalty to digital wallet services in the post-COVID-19 era, emphasizing the role of trust alongside service quality, privacy, and security as crucial factors influencing customer loyalty. Trust increases loyalty by creating a sense of security, reinforcing positive experiences, reducing risk, and fostering deeper emotional bonds. Strong trust will make customers feel confident that their relationship with the brand is long-term and valuable, encouraging them to remain loyal. The following hypothesis is put forward by the author in this study based on the empirical study above:

*H<sub>5</sub>: Trust positively contributes to building and enhancing loyalty.*

### **The Influence of Customer Engagement on Loyalty**

Earlier research by Ahmad et al. (2022) explored the relationship between customer engagement and loyalty in the rapidly expanding online shopping sector. Their findings showed that customer engagement has a positive effect on loyalty. In a similar vein, Arora et al. (2021) examined how Social Customer Relationship Management (S.C.R.M.) influences customer engagement and its subsequent impact on loyalty, retention, and satisfaction in today's global digital environment. Their results highlighted a positive link between customer engagement and loyalty. Further research by Gao and Huang (2021) investigated the role of high-quality omnichannel integration in shaping loyalty, with customer engagement and acceptance of relationship programs acting as mediators. Their study found that superior omnichannel integration boosts both customer engagement and program acceptance, which in turn fosters loyalty.

Leckie et al. (2021) took a different approach, focusing on how factors like desired self-identity, green perceived value, and altruistic value affect brand loyalty towards eco-friendly brands such as electric and hybrid vehicles, with customer engagement serving as a mediator. Their results emphasized the critical role of consumer engagement in strengthening brand loyalty. Lastly, Rasool et al. (2021) examined the effects of customer engagement on loyalty in the banking sector, shedding light on its significance in driving customer loyalty in that industry. The findings revealed that customer engagement positively influences loyalty. By fostering repeated positive experiences, customer engagement strengthens customer loyalty over time, strengthening emotional bonds, providing additional value, and building a supportive community. Meaningful and consistent engagement gives customers a compelling reason to stay loyal to the brand. The following hypothesis is put forward by the author in this study based on the empirical study above:

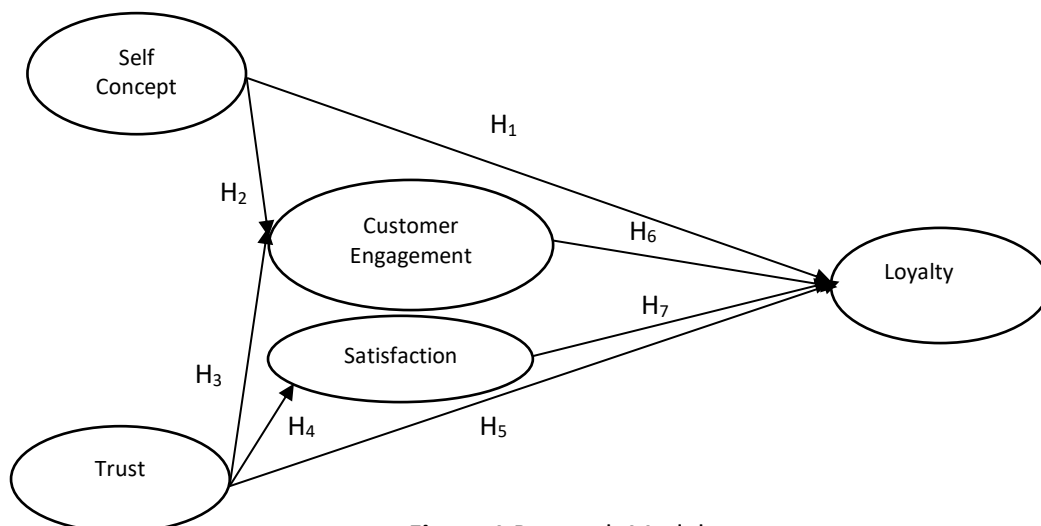
*H<sub>6</sub>: Customer engagement has a beneficial impact on fostering loyalty.*

### The Influence of Satisfaction on Loyalty

Previous research conducted by Wattoo and Iqbal (2022) sought to explore the connection between satisfaction and loyalty in the context of online shopping within developing nations, including Pakistan. The results highlighted that satisfaction plays a positive and significant role in shaping loyalty. Additionally, the link between satisfaction and loyalty was further investigated by Yum and Yoo (2023) aiming to explore the connection between service quality, satisfaction, and loyalty in mobile social media. The findings showed that factors such as usefulness, convenience, design, and security/privacy significantly and positively impact satisfaction. Another related study was conducted by N. Zhang (2022), this study was conducted to explore how satisfaction influences loyalty in the context of food companies in China during the COVID-19 pandemic.

The findings revealed that satisfaction positively affects loyalty. A similar study was also carried out by Kim et al. (2021), which aimed to examine satisfaction's impact on loyalty in the context of robot barista services in South Korea during the COVID-19 pandemic. The study's findings indicated that satisfaction positively influences both brand love and brand loyalty. Another research study was carried out by Alzoubi et al. (2022), which aimed to explore marketing strategies for introducing Beacons (BLE) technology and how this technology can transform potential customers into customers who feel satisfied and loyal. The study found that the use of BLE technology is strongly linked to higher satisfaction, which in turn boosts loyalty. Satisfaction increases loyalty by creating consistent positive experiences, reducing risk, building positive emotions, and strengthening feelings of appreciation. Repeated satisfaction instills a deep sense of trust and emotional connection and fosters long-term customer loyalty towards the brand. Based on the findings from the empirical study, the author proposes the following hypothesis in this research:

**H<sub>7</sub>:** *There is a positive effect on satisfaction on loyalty.*



**Figure 1** Research Model

## Research Methods

Researchers use a quantitative approach to test the relationship of the hypotheses that have been proposed related to the measurement of variables that influence the intention to use online travel agents. This study uses a quantitative approach. The quantitative approach collects data in sufficient quantities. This research tests a hypothesis based on theory, with the data tested showing accepted or rejected results (Creswell & Creswell, 2022).

This study uses the Structural Equation Modeling (S.E.M.) technique as its analysis method. S.E.M. is a statistical technique used to analyze between indicators to identify errors directly. The S.E.M. method allows direct analysis of the variables used (Hair et al., 2019). The subjects in this study were users of the online travel applications Traveloka, Tiket.com, Agoda, and Airbnb aged 20 to 29 years, or Generation Z, who live in several areas of Java. This study analyzes factors of customer engagement and satisfaction influencing self-concept, trust, and loyalty. Objects refer to something that will be analyzed and studied by researchers. In this study, the objects are the online travel applications Traveloka, Tiket.com, Agoda, and Airbnb. This study was conducted in several cities on the island of Java by narrowing down the area according to the category to be studied. Java has six provincial areas: East Java, West Java, Central Java, and D.K.I. Jakarta, Banten, and D.I.Yogyakarta. This region was chosen because it has the highest rate of domestic tourist travel by province of origin in Indonesia, especially among Generation Z.

**Table 1** Questionnaire Items and Sources for Variables

Variable	Questionnaire	Source
Self-Concept	I like this OTA/Online Travel Service application because it is appropriate for today's travel needs.	(Liu [Sunny] et al., 2023)
	I am happy to use this OTA/Online Travel Service application because it can fulfill my desires.	(Kotamena et al., 2024)
Trust	The online payment offered by this OTA/Online Travel Service application is from my perspective.	(Strandberg, 2023)
	I am sure that this OTA/Online Travel Service application does not disseminate personal data.	(Ashiq & Hussain, 2024)
	I rely on this OTA/Online Travel Service application because it can be accessed 24 hours.	(Akgunduz et al., 2023)
Customer Engagement	I trust this OTA/Online Travel Service application because it provides honest information.	
	I put my trust when transacting with this OTA/Online Travel Service application.	(Saoula et al., 2023)
	I am comfortable using discount vouchers from this OTA/Online Travel Service application.	(Laparojkit & Suttipun, 2022)
	I am enthusiastic about participating in discussions in the community forum this OTA/Online Travel Service application provides.	(Talha et al., n.d.)
	I am interested in using this OTA/Online Travel Service application because its display makes it easy.	
	I am unwilling to provide a personal review after using this OTA/Online Travel Service application.	(Puriwat & Tripopsakul, 2021)

**Table 1** Questionnaire Items and Sources for Variables (cont')

Variable	Questionnaire	Source
Satisfaction	I receive the latest information about the best hotels from this OTA/Online Travel Service application.	
	I am not interested in exchanging opinions with colleagues regarding the facilities provided by this OTA/Online Travel Service application.	(Gao & Huang, 2021)
	I follow the latest developments in services offered by this OTA/Online Travel Service application.	
	I am enthusiastic when this OTA/Online Travel Service application holds a flash sale on twin dates.	(Wu & Wu, 2023)
	I hesitate to choose this OTA/Online Travel Service application because the information provided needs to match the advertisement.	(Agarwal & Dhingra, 2023)
	I am interested in using this OTA/Online Travel Service application because it has many positive user testimonials.	
Loyalty	I am satisfied using this OTA/Online Travel Service application because it provides a refund feature.	(Law et al., 2022)
	I have made the right decision to choose this OTA/online travel service application because it provides a non-cash payment method.	
	The points collection program on this OTA/Online Travel Service application can meet the needs of subsequent purchases.	(Sevilmiş et al., 2024)
	I decided to use this OTA/Online Travel Service application in an emergency.	
	I intend to subscribe to this OTA/Online Travel Service application for an extended period.	(Gazi et al., 2024)
	I do not consider this OTA/Online Travel Service application my first choice.	
	I will use this OTA/Online Travel Service application when the choices of transportation ticket and hotel services offered are constantly updated.	(Raddats et al., 2024)
	I am committed to permanently joining this OTA/Online Travel Service application to get the primary services offered.	
	I prefer this OTA/Online Travel Service application over other service applications because it is well-served.	(Cardoso et al., 2022)
	I will return to using this OTA/Online Travel Service application shortly.	(González-Viralta et al., 2023)

## Results and Discussion

### Research Respondent Profile

The processed data is primary data involving 198 respondents. Overall, 220 respondents were successfully collected to be used as the main research data; however, 22

respondents did not pass the initial screening stage, and the questionnaire filling was insufficient.

**Table 2** Respondent Profile

Demographics	Category	Number of Respondents	Percentage
Gender	Male	150	75.9 %
	Female	48	24.1 %
Age	20 – 23 Years	47	23.7 %
	24 – 26 Years	73	36.7 %
	27 – 29 Years	78	39.7 %
Last Education	Junior High School or equivalent	4	1.9 %
	Senior High School or equivalent	69	35 %
	Diploma or equivalent	31	15.6 %
	S1 or equivalent	91	45.8 %
	Masters or equivalent	2	1.2 %
	S3 or equivalent	1	0.4 %
Occupation	State-Owned Company Employee	17	8.6 %
	Private Employee	112	56.6 %
	Student	29	14.9 %
	Retiree	1	0.1 %
	Military/Police/Civil Servants	3	1.5 %
	Self-Employed	36	18.3 %
Domicile	Surabaya	18	9.2 %
	Bandung	17	8.7 %
	Semarang	14	6.8 %
	Jakarta	36	18.4 %
	Tangerang	13	6.4 %
	Sleman	100	50.6 %
	Total	<b>198</b>	<b>100 %</b>

Based on Table 2, most respondents were male (75.9%) compared to female (24.1%). The age of respondents was dominated by the 27-29 age group (39.7%) and 24-26 years (36.7%), with the focus of the study on Generation Z. Regarding education, most respondents had a bachelor's degree or equivalent (45.8%). Based on occupation, the majority of respondents were private employees (56.6%), self-employed (18.3%) and students (14.9%), which are also significant groups. Geographically, the largest domicile of respondents was in Sleman (50.6%), an area famous for its tourist destinations and highly used online travel applications.

### Validity and Reliability Test

**Table 3** Validity and Reliability Test

Variable	Item	Pearson Correlation	Sig.	Keterangan	Cronbach's Alpha	Keterangan
Self Concept	SC2	.815**	<.001	Valid	0.842	Reliable
	SC4	.861**	<.001	Valid		
	SC5	.845**	<.001	Valid		
Trust	TR1	.836**	<.001	Valid	0.910	Reliable
	TR3	.848**	<.001	Valid		
	TR4	.883**	<.001	Valid		
	TR5	.843**	<.001	Valid		
	TR7	.824**	<.001	Valid		
Customer Engagement	CE1	.861**	<.001	Valid	0.921	Reliable
	CE2	.877**	<.001	Valid		
	CE3	.738**	<.001	Valid		
	CE4	.903**	<.001	Valid		
	CE5	.689**	<.001	Valid		
	CE6	.875**	<.001	Valid		
Satisfaction	SAT1	.722**	<.001	Valid	0.893	Reliable
	SAT2	.876**	<.001	Valid		
	SAT3	.840**	<.001	Valid		
	SAT4	.850**	<.001	Valid		
	SAT5	.857**	<.001	Valid		
	SAT6	.746**	<.001	Valid		
Loyalty	LOY1	.851**	<.001	Valid	0.925	Reliable
	LOY2	.704**	<.001	Valid		
	LOY3	.846**	<.001	Valid		
	LOY4	.856**	<.001	Valid		
	LOY5	.859**	<.001	Valid		
	LOY7	.883**	<.001	Valid		

Validity testing is carried out to see the level of accuracy of the measurements carried out in the study. Validity begins with understanding the object to be measured so that measurements can be carried out correctly and accurately. The questionnaire is considered valid if the Pearson correlation is greater than or equal to 0.5, and the significance level is below 5%. Additionally, for the questionnaire items to be deemed valid, the Pearson correlation significance value must be less than 0.05 ( $\alpha = 5$ ) (Hair et al., 2019).

Reliability testing is the next step after conducting a validity test. Reliability is the level of consistency of scores achieved against the measured variables. This effort aims to determine whether the responses from respondents are not diverse and whether the measurement results can be valid. A measuring instrument that knows whether or not it is appropriate in a reliability test is called Cronbach Alpha ( $\alpha$ ). Cronbach Alpha ( $\alpha$ ) has a measurement range of 0 to 1. Variables should have a minimum value of 0.7 to be considered appropriate for inclusion (Hair et al., 2019)<sup>79</sup>. A reliability test is considered reliable if Cronbach's  $\alpha$  is greater than or equal to 0.7, and unreliable if it is less than 0.7.

## Structural Model Testing

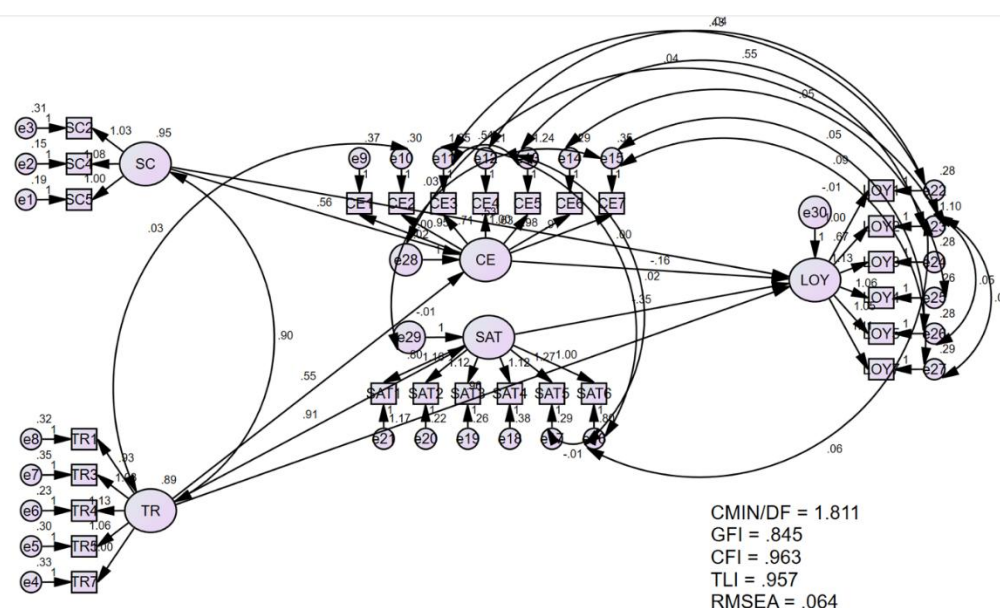


Figure 2 Structural Model Test

Figure 2 confirms the alignment between the empirical data and the structural model by referring to the Goodness of Fit (GoF) criteria. According to Table 4, the GoF value suggests that the model meets the anticipated standards. The evaluation results are presented in Figure 2, which illustrates the structural model's performance after adjustments based on modification indices. Modification indices are used in this study to help identify inappropriate model specifications and the relationship between two variables that should be connected. Researchers use modification indices to direct modifications to areas of the model that need the most change so that modifications become more efficient and relevant.

Table 4 Structural Model Goodness of Fit Test

No	GoF	Criteria	Value	Conclusion
1	CMIN/DF	CMIN/DF < 3.0	1.811	Good Fit
2	GFI	GFI 0.8 – 0.9	0.845	Marginal Fit
3	CFI	CFI 0.8 – 0.9	0.963	Good Fit
4	TLI	TLI 0.8 – 0.9	0.957	Good Fit
5	RMSEA	RMSEA < 0.08	0.064	Good Fit

Table 4 shows a good fit of all indicators. The CMIN/DF value of 2.248 is below the 3.0 threshold, suggesting that the model fits well. The GFI value of 0.845 falls within the range of 0.8 to 0.9, indicating a marginal fit. Both the CFI (0.940) and TLI (0.933) exceed the minimum threshold of 0.90, indicating a strong fit with the data. Additionally, the RMSEA of 0.080 is at the upper limit for a good fit, confirming that all models are suitable.



## Hypothesis Test

**Table 5** Hypothesis Testing Results

Hypothesis	Path	Std. Estimation	C.R	P	Std. Reg Weight	Conclusion
H <sub>1</sub>	Self Concept → Loyalty	0.420	2.063	0.039	0.448	<i>Supported (+)</i>
H <sub>2</sub>	Self Concept → Customer Engagement	0.557	2.444	0.015	0.527	<i>Supported (+)</i>
H <sub>3</sub>	Trust → Customer Engagement	0.565	2.175	0.030	0.468	<i>Supported (+)</i>
H <sub>4</sub>	Trust → Satisfaction	0.769	8.133	***	1.006	<i>Supported (+)</i>
H <sub>5</sub>	Trust → Loyalty	0.898	2.728	0.006	0.839	<i>Supported (+)</i>
H <sub>6</sub>	Customer Engagement → Loyalty	0.035	0.158	0.874	0.040	<i>Not Supported (-)</i>
H <sub>7</sub>	Satisfaction → Loyalty	-0.439	-1.053	0.292	-0.313	<i>Not Supported (-)</i>

Table 5 presents the hypothesis testing results, showing that five hypotheses are supported while two are not. The standardized estimate values highlight the strength of the relationships between the variables and hypotheses. The regression weights indicate that the five hypotheses have a positive and significant connection. Specifically, H<sub>1</sub> suggests that Self Concept is positively and significantly related to Loyalty, with a standardized estimate of 0.420 and regression weights of 0.448 (p-value = 0.039). H<sub>2</sub> indicates that Self Concept positively influences Customer Engagement with a standardized estimate of 0.557 and regression weights of 0.527 (p-value = 0.015). H<sub>3</sub> reveals that Trust has a positive and significant relationship with Customer Engagement, with a standardized estimate of 0.565 and regression weights of 0.468 (p-value = 0.030).

H<sub>4</sub> shows that Trust positively affects Satisfaction, with a standardized estimate of 0.769 and regression weights of 1.006 (p-value = 0.000). H<sub>5</sub> demonstrates that Trust significantly influences Loyalty, with a standardized estimate of 0.898 and regression weights of 0.839 (p-value = 0.006). On the other hand, H<sub>6</sub> indicates that Customer Engagement has a negative and insignificant relationship with Loyalty, with a standardized estimate of 0.035 and regression weights of 0.040 (p-value = 0.874). H<sub>7</sub> reveals that Satisfaction has a negative and insignificant relationship with Loyalty, with a standardized estimate of -0.439 and regression weights of -0.313 (p-value = 0.292). In conclusion, five hypotheses—H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>, H<sub>4</sub>, and H<sub>5</sub>—show a positive and significant relationship, while H<sub>6</sub> and H<sub>7</sub> show a negative and insignificant relationship.

## Discussion

The study reveals that self-concept significantly contributes to fostering loyalty. Additionally, the results emphasize that self-congruity plays a key role in shaping brand loyalty. Another study by Nyadzayo et al. (2020) explored how consumer engagement with luxury fashion brands is influenced by brand involvement concerning self-concept.

Consumers who feel their identity aligns with the brand image tend to be more emotionally involved, ultimately increasing their loyalty. This study shows that self-concept plays an essential role in shaping loyalty, where brands that can build emotional relationships with consumers will gain long-term benefits in terms of loyalty. Consumers who feel that their experiences on the Traveloka, Tiket.com, Agoda, and Airbnb applications reflect who they are will feel more satisfied and continue to engage with the brand. Online travel service companies that can adjust the personality of consumers and brands well to their target consumers can strengthen loyalty between consumers and brands. Based on the findings of the hypothesis, the more a brand resonates with consumers, the stronger their loyalty to it grows.

The study's findings revealed that self-concept significantly positively impacts customer engagement. This aligns with research conducted by (Grace Phang et al., 2021) The study, which highlighted that a positive self-concept significantly impacts customer engagement, particularly among consumers of online travel agencies. Consumers feel that their identity is reflected in a brand and will be more motivated to continue interacting with it through positive reviews or active participation in promotional campaigns. Chen et al. (2020) added that the alignment between self-congruity and brand experience could motivate consumers to engage more deeply by providing reviews, sharing recommendations, and participating in discussions related to the brand. Consumers feel personally connected to the applications they use; they will be more involved in various online activities such as sharing experiences, following social media accounts, providing feedback, and even providing recommendations to people around them. Online travel service companies that successfully match their brand personality with that of their target audience can strengthen the connection between the brand and its customers. The findings of the hypothesis indicate that the stronger the brand alignment with the consumer, the better and stronger their relationship.

The study revealed that trust plays a key role in boosting customer engagement, a finding backed by research conducted by Ndhlovu and Maree (2023) The research shows that trust plays a key role in boosting customer engagement, particularly among consumers of online travel agencies. Consumers who trust a brand feel safer when interacting and are more likely to actively contribute to building the brand. Research by Lin and Nuangjamnong (2022) indicates that when consumers have trust in a brand, they are more inclined to actively participate on various digital platforms, such as social media and review sites. Trust in an application or brand increases participation in giving feedback, joining promotional campaigns, and discussing the brand. Online travel service providers that effectively maintain and enhance consumer trust are able to foster a stronger connection between consumers and their brands. Based on the findings, it can be concluded that the more trust consumers have in a brand, the deeper and more lasting their relationship with it becomes.

The study's results showed that trust is crucial in boosting satisfaction. This supports previous research by Seo and Lee (2021), which highlighted that when consumers have a strong trust in a brand, it enhances their positive experiences, leading to higher satisfaction. Customers who view a brand as reliable are more likely to feel satisfied with

their interactions, trusting that the company will consistently meet their expectations. Research conducted by Lee et al. (2021) indicates that trust has a strong positive impact on satisfaction, particularly among consumers of online travel agencies. This trust can be realized through transparent services, easy booking systems, and protection of consumers' data. Online travel service providers that build and nurture consumer trust are able to create a deeper bond between customers and their brands. The results show that when consumers trust a brand more, the relationship between them becomes stronger and more meaningful.

The study found that trust strongly influences loyalty in a positive way. Previous studies also support this, emphasizing the crucial role of trust in building customer loyalty. For instance, Ghali (2021) showed that trust significantly affects loyalty, especially in the online travel agent industry context. They noted that when consumers trust an online travel service provider to consistently meet their expectations, it motivates them to keep using the service and recommend it to others. M. A. Khan et al. (2021) further emphasized that when consumers have confidence in a brand or service, they are more likely to remain loyal and make repeat purchases, as trust fosters a sense of security. Consumers who feel confident in the services provided tend to have higher loyalty because they believe the brand will continue providing consistent value. Online travel service companies that can maintain and strengthen consumer trust can strengthen ongoing purchase intentions and consumer loyalty to the brand. The hypothesis results suggest that as consumer trust in a brand increases, so does their loyalty to the brand.

The study's findings suggest that customer engagement does not have a significant impact on loyalty. If customer engagement is balanced with user convenience with the online travel application used, then loyalty in the future will be recovered. Consumers feel too bombarded with unimportant or frequent interactions, which can cause boredom and reduce their loyalty to the brand or service. This finding aligns with research conducted by Sajjad and Zaman (2020), which shows that although customer engagement is often considered a positive factor, excessive or irrelevant involvement can hurt loyalty. Kulikovskaja et al., (2023) support this finding by showing that poor customer engagement, such as interactions that are too intense or do not match consumer expectations, can significantly reduce loyalty. This is especially true in online travel agents, where consumers often interact with various platforms and information that may be irrelevant or disruptive to their experience, such as too many advertisements and pop art advertisements that are very annoying for consumers when using online travel applications. Consumers feel that their involvement with a brand or service does not bring the expected added value; they tend to reduce their commitment to the brand and look for more suitable alternatives. Consumers who feel that their involvement in online travel applications interferes with exploration activities on the application, then customer engagement tend not to be able to influence loyalty. According to the results of the hypothesis, as customer engagement increases, the level of consumer loyalty tends to decrease.

The study's results show that satisfaction does not have a significant impact on loyalty. If satisfaction is not matched by consistent quality in the online travel application, future

loyalty may diminish. These findings align with previous research (Ahrholdt et al., 2019) which explains that although satisfaction is often considered a factor that increases loyalty, there are situations where high satisfaction can decrease loyalty. This can happen when consumers feel satisfied but do not have a solid emotional bond with the brand or product. Satisfaction alone is not enough to build strong loyalty. They state that satisfaction can be temporary in some cases and only results in long-term commitment if consumers feel other, more profitable options exist. Even if consumers are satisfied with a service, they may still switch to competitors that offer better promotions or additional value. Research by Trini and Salim (2018) also supports the finding that satisfaction is only sometimes directly proportional to loyalty, especially in highly competitive industries such as online travel agents. Consumers who feel satisfied with online travel applications only last for a short time; satisfaction does not affect loyalty. According to the results of the hypothesis, as consumer satisfaction increases, their level of loyalty tends to decrease.

## **Conclusion**

This study focuses on optimizing customer engagement and satisfaction to enhance loyalty through self-congruity among online travel agent consumers. The author concludes the study's results regarding the relationship between the hypotheses. The study's results highlight several key findings regarding the impact of self-concept, trust, and customer engagement on both loyalty and satisfaction in the context of online travel agents. This emphasizes the importance of understanding and managing self-concept, trust, and customer engagement in online travel agent marketing strategies to optimize loyalty and satisfaction. Brands that align with consumer self-concept, build trust, and ensure relevant engagement will have long-term advantages in maintaining loyalty and increasing satisfaction.

Further testing is needed on the dynamics of customer engagement that can negatively impact loyalty. In this context, further research can explore the limits of excessive customer engagement and how online travel agents can manage interactions wisely to ensure engagement remains relevant and not excessive. Researchers can also examine the long-term impact of customer engagement on loyalty using a longitudinal approach.

Researchers can integrate this research model with new theories developing in digital marketing. This could include sentiment analysis of customer interactions on social media or using big data to predict consumer loyalty behavior more accurately. This research can help online travel agents formulate more effective, data-driven marketing strategies to build stronger customer relationships.

The advice given by the author for online travel agent service providers includes strengthening user interaction features so that users can interact with other users, similar to the Shopee and Gojek applications. In these applications, users can have conversations in the review column related to travel experiences. More fun features, such as animated GIFs or exciting photos, can be added to encourage users to be more active in sharing experiences and providing valuable feedback. The company should reward users who

frequently use the application, similar to the Gojek application, which offers loyal customers a "sultan" reward. The company can create a more loyal and active community by increasing user engagement. Attractive loyalty programs, such as exchangeable points, and more transparent privacy policies and data security systems should be implemented. A clear explanation of personal data security measures will make users feel more comfortable and safe when using the application. Examples include features like face ID or PIN to open the application.

The company should increase the speed of customer service response to strengthen trust. Additionally, simplifying the refund process and providing various payment options, such as more diverse e-money, are crucial. The company should improve the application interface to make it easier to use, especially when searching for hotel and transportation information, as this contributes to user satisfaction. Companies are advised to provide special appreciation to loyal customers, such as exclusive discounts or offers unavailable to other users. Reducing excessive advertising in the application will also increase user convenience. By following these steps, companies can strengthen their brand, increase user satisfaction, and maintain loyalty amidst the competitive online travel industry.

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