

AI-POWERED PERSONALIZATION IN BRANDING: IMPACT ON CONSUMER ENGAGEMENT AND LOYALTY

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Abstract

The current fast progress of artificial intelligence (AI) has reshaped the branding strategies, allowing them to be highly personalized to consumers. Personalization AI enables brands to process vast amounts of consumer data to create content, suggestions and experiences on a personalized basis, in real-time, transforming consumer brand relationships. The paper will discuss how AI-based personalization effects branding on consumer engagement and brand loyalty as quantitative. Applying relationship marketing theories, consumer engagement theories, and technology acceptance theories, the conceptualization of personalization as a strategic branding process in the context of improved emotional connection, perceived value, and trust is created. Based on survey data and statistical analysis, the study evaluates the effects of AI-driven personalization on cognitive, emotional, and behavioral engagement levels and the ensuing effects of engagement, which in turn leads to consumer loyalty. It is hoped that the findings will be used to add to the body of branding research by empirically confirming the need to use AI as an agent of sustainable consumer relationships. In practice, the research can provide the informational support to the marketers who want to find a balance between technological efficiency and human-oriented and ethical branding in a more data-driven market.

Keywords: *Artificial Intelligence; Individualization; Branding; Consumer Interaction; Brand Loyalty; Quantitative Study.*

Introduction

The modern branding environment is changing radically due to the adoption of artificial intelligence (AI) technologies in the marketing and communication campaign. The conventional branding strategies, which mostly depended on mass communication and standardized messages, are being more and more substituted by the data-based and personalized interactions with individual consumers. AI-powered personalization can be described as the utilization of machine learning algorithms, predictive analytics and automated decision systems to process consumer data and provide tailored brand experiences at digital touchpoints (Davenport et al., 2020). Such a direction indicates evolving consumer demands, where contemporary consumers expect relevance, convenience and meaning on a brand and not generic promotional messages (Wedel and Kannan, 2016).

Personalization has been known to be a very important aspect of successful marketing, and AI has substantially widened the breadth of this concept and even its accuracy. The AI systems can analyze large volumes of data in real-time, learn customer behavior, and optimize brand engagements, unlike conventional rule-based types of personalization (Huang and Rust, 2021). These features allow brands to recommend products, advertise, price and interact with customers in a level of granularity never seen before. Subsequently, personalization has been transformed into a strategic marketing instrument as well as a fundamental branding factor that influences consumer perception, interaction, and retention to brands.

Consumer engagement has become a key construct in branding as it is the extent of cognitive, emotional, and behavioral involvement of a consumer into a brand (Brodie et al., 2011). Engaged consumers will react more to brand content, engage in brand communities, and will recommend brand via positive word of mouth. The AI-driven personalization is theorized to add to the

engagement by improving perceived relevance and value of brand interactions, in turn, establishing greater emotional ties between the consumers and the brands (Hollebeek et al., 2014). Individual experiences with brands indicate that a brand cares about and recognizes its customers, and this fact may help build the relationship and work with active involvement.

Brand loyalty is closely associated with consumer engagement as it indicates the commitment of a consumer towards repurchase and sustained long term relationship with a brand regardless of the competition (Oliver, 1999). In a highly competitive market, loyalty does not necessarily go with the quality of products or the price being offered but the entire brand experience. Loyalty: AI-based customization will lead to a higher level of satisfaction, trust, and switching costs, and at the same time, positive brand attitude will be strengthened (Bleier et al., 2018). Habitual engagement pattern can be formed through personal interaction that allows consumers to become more addicted and emotionally bound to a specific brand ecosystem.

Although the use of AI in branding becomes the new tendency, the empirical studies that explore the effects of AI implementation on consumer engagement and loyalty are still relatively scarce, especially in quantitative terms. A lot of the literature available is theoretical or descriptive, and it is based on technological potential instead of quantifiable consumer performance (Puntoni et al., 2021). In addition, the issues surrounding data privacy, algorithmic transparency, and perceived intrusiveness make consumer reaction to AI-driven personalization more difficult. Although the idea of personalization can lead to a strong engagement, over personalization or improperly used personalization can create issue of privacy and decrease levels of trust, thereby destroying brand loyalty (Awad and Krishnan, 2006).

On the theoretical basis, the current study is based on the relationship marketing theory, which focuses on the long-term value creation based on long-term consumer-brand relationships (Morgan and Hunt, 1994), and engagement theory which places consumers in the center of value co-creation (Vargo and Lusch, 2008). AI-based personalization may be considered as a technological facilitator of these relational processes as it enables constant, adaptive, and interactive brand experiences. Also, evaluation carried out by the technology acceptance model indicates that perceived usefulness and ease of use of AI-based interactions with the brand do have an impact on consumer attitudes and behavioral intentions (Davis, 1989).

The study will be qualitative in its nature as it seeks to explore the correlation between AI-based personalization, consumer interaction, and brand loyalty in a systematized way. The study aims at obtaining empirical findings by employing measurable constructs and statistical analysis regarding the role of personalization as a branding mechanism as opposed to a technological capability. Knowing about these relationships is especially critical because AI is used by brands to achieve competitive advantage when responding to ethical and strategic dilemmas of data-driven marketing.

Research Objectives

1. To investigate the impact of AI-based personalization on consumer interest in branding situations.
2. To test the connection between consumer engagement and brand loyalty.
3. To determine the direct effect of AI-driven personalization on consumer loyalty.
4. To offer empirical data on the effectiveness of AI-based personalization in enhancing long-term consumer relationships with the brand.

Literature Review

The role of artificial intelligence (AI) in branding and marketing is progressively being incorporated, and it has essentially changed the way organizations take up a relationship with the consumer. AI-driven personalization has become an epicenter of strategic processes by which the brands use consumer data to provide personalized experiences via various touchpoints. Much of the previous literature understands personalization as the customization of marketing stimuli to personal consumer preferences, behaviors, and situations, and AI facilitates it on a large scale and at an unprecedented rate (Wedel and Kannan, 2016; Davenport et al., 2020). Machine learning algorithms and predictive analytics can enable brands to understand what consumers want, and change content, recommendations and communication styles dynamically, turning branding into a one-way messaging capability to a two-way and interactive communication process.

AI-driven personalization has a strong theoretical foundation based on relationship marketing and service-dominant logic which focus on value co-creation and the relationships between consumers and the brand in the long term (Morgan and Hunt, 1994; Vargo and Lusch, 2008). In this sense, personalization should not be a technology aspect but a relationship signifier that conveys the attentiveness, relevancy, and responsiveness. There is empirical evidence that individual brand experiences improve perceived value by eliminating information overload and effort of decision-making, which subsequently leads to positive consumer brand attitudes (Bleier et al., 2018; Lemon and Verhoef, 2016). This mechanism is reinforced through the use of AI because every interaction with consumers is properly learned and personalization is adjusted with transforming consumer preferences.

Consumer involvement has been well investigated as a multidimensional construct which involves cognitive, emotional and behavioral factors (Brodie et al., 2011). Cognitive engagement is the consumer attention and absorption, emotional engagement is the affective response, i.e. enjoyment and attachment, and behavioral engagement is the action i.e. sharing, commenting, and repeat engagement (Hollebeek et al., 2014). The theorization of AI-based personalization is that it affects all three dimensions, in that it enhances perceived relevance and timeliness of brand messages. Research shows that the consumers tend to interact with the content that best fits their needs and interests, which implies that the level of personalization and the level of engagement are directly correlated (Srinivasan et al., 2016).

The quantitative studies have continued to prove that engagement serves as an intermediate between marketing stimuli and the outcomes relating to loyalty. There is an increase in emotional attachment between consumers and brands which in the end results in a greater level of satisfaction and advocacy intentions (Schau et al., 2009). The concept of AI-driven personalization further increases the level of engagement because it creates a loop of continuous interactions, with consumer reactions guiding further brand activities. Huang and Rust (2021) state that AI allows the brands to transition to proactive and anticipatory engagement rather than reactive engagement, which contributes to the richness of the relationships. This change is especially applicable in online spaces where consumers lack focus and the level of rivalry in attracting their involvement is high. Brand loyalty is an essential outcome variable of branding research traditionally determined as favorable attitude and repeated purchase behavior of a consumer to a brand (Oliver, 1999). Loyalty in AI-based branding situations is becoming more relational and experiential than functional in nature. One-to-one experience has the potential to create loyalty because it makes switching costs more difficult and triggers a pattern of habitual consumption (Rust and Huang, 2014). Empirical data indicate that customers who experience brand interactions as personal tend to develop

attitudinal loyalty such as trust and commitment that are considered fundamental in maintaining long-term relationships (Morgan and Hunt, 1994; Payne and Frow, 2017).

Nevertheless, AI-driven personalization is not as simple as effective. Although personalization may be an effective way to increase engagement and loyalty, it may also cause consumer anxiety regarding privacy, data security, and perceived surveillance. The personalization-privacy paradox brings out the conflict between the need by consumers to get relevant experiences and the uneasiness of the massive data gathering (Awad and Krishnan, 2006). According to quantitative research, personalization may also serve as a threat to trust and damage brand relationships in the case of perceived intrusiveness or opacity (Puntoni et al., 2021). The three factors, transparency, perceived control, and ethical data practices have thus been found to act as the important moderators in relationship between personalization and loyalty.

The theories of technology acceptance can also give more information about consumer reaction to AI-based branding. The attitude towards technology mediated interactions takes place as a result of perceived usefulness and perceived ease of use through the technology acceptance model (Davis, 1989). In branding scenarios, the more AI-driven personalization can improve convenience and quality of decisions without requiring consumers to put more effort into it, the better they will be inclined to positively react to it (Grewal et al., 2020). Other recent empirical research also indicates that consumer engagement with AI systems may be enhanced by the presence of anthropomorphic design cues, which create a sense of social presence and emotional attachment, although a high level of human-likeness may produce feelings of discomfort (Mende et al., 2019). The personalization is another important part of the customer journey influenced by AI and designed to transform the process of pre-purchase, purchase, and post-purchase. Verhoeff and colleagues (2015) and Lemon and Verhoeff (2016) underline that consistent and personal experiences through the channels enhance brand coherence and support interaction in the long-term. The empirical data shows that touchpoint customization improves the perceived brand coherence that have a positive impact on the loyalty intentions (Shankar, 2018).

Although the role of AI-powered personalization can become more positive as the number of positive studies increases, there are still gaps in the literature. A lot of the available literature concentrates on the short-term engagement indicators instead of long-term loyalty indicators, which constrains the knowledge about the effect of sustainability (Kumar et al., 2016). Furthermore, a lot of research focuses on personalization on the tactical scale, and does not discuss the strategic part of the brand identity and positioning. Little is also available on quantitative studies on the synergistic effect of the personalization and engagement on loyalty in the framework of a single model, especially in newer markets and non-Western societies.

The recent research has started to fill these gaps with structural equation modeling and longitudinal designs to study the causal routes between personalization, engagement and loyalty (Jarek et al., 2019; Longoni et al., 2019). These studies present the evidence that the connection between AI-driven personalization and loyalty is partially mediated by engagement which makes engagement one of the key mechanisms according to which personalization generates value. Moreover, the need to practice ethical AI and to gain the trust of the consumer has been revealed as the key conditions to achieving the maximum of the benefits of personalization (Aguirre et al., 2015).

Overall, based on the literature, AI-induced personalization can also be viewed as a potent branding tool that can help improve consumer involvement and retention provided they are applied appropriately. The idea of personalization as a boost to a greater degree of relevance, emotional attachment, and behavioral engagement receives quantitative backing, which consequently

enhances the performance of loyalty. Nevertheless, the success of personalization will depend on the perceptions of the consumer in matters of equity, openness and control. It highlights the importance of empirical studies that analytically investigate these associations with the help of sound quantitative designs, and thus, make a contribution not only to the theoretical framework but also to managerial practice in AI-based branding.

Methodology

Research Design

The paper followed a quantitative and cross-sectional research method to investigate the effect of AI-based personalization in branding on consumer engagement and loyalty. Quantitative approach was deemed to be suitable because it enables objective measurement of relationship between variables and gives the opportunity to test hypothesized relationships statistically. A structured questionnaire was used to collect data, at one point in time, which is in line with other past studies on branding and consumer behavior.

Population and Sample

The target audience included active consumers, who visit branded online platforms regularly, such as e-commerce web addresses, social media brand pages, and mobile applications that use AI-driven personalization options, such as individual suggestions and personalized marketing. The sampling method employed was a non-probability convenience sampling because of the time and availability factors.

The final sample size (280 respondents) is satisfactory to carry out a quantitative analysis and is sufficient regarding regression analysis and structural equation modeling. The sample size of 300 or less will result in manageable data analysis and also provide adequate statistical power. The respondents will respond based on their previous experience in the AI-driven online personalized interaction with the brand, a factor that will determine the reliability of the responses.

Data Collection Instrument

A self-administered structured questionnaire that was based on previously tested scales was used in data collection. There were two sections of the questionnaire. The demographic data, including age, gender, education level, and online shopping frequency were taken in the first part. The second part assessed the core constructs of the research, which included AI-powered personalization, consumer engagement, and brand loyalty.

The measurement items were measured using five-point Likert scale (1- strongly disagree to 5- strongly agree). The quantitative analysis has been made easier using the Likert scale, which made response easy.

Measurement of Variables

The AI-based personalization was also assessed through adapted items based on the previous personalization and AI marketing literature, which included the relevance, customization, and usefulness of AI-driven brand interactions. The consumer engagement was also a multidimensional construct that measures cognitive, emotional and behavioral engagement. Brand loyalty measurement was done using indicators of repurchase intention, preference and positive word of mouth intentions.

The items were slightly adapted in the context of branding of the study without loss of the original conceptual meaning.

Reliability and Validity

Alpha coefficients of Cronbach were calculated in order to establish reliability of measures. A minimum of 0.70 or more was a reflective indication of internal consistency of the measurement

scales. The content validity was achieved of adjusting measurement items to have been used in earlier validated studies and pilot test that was conducted with a small number of respondents to assure clarity and relevancy.

Factor analysis was used to measure construct validity, which was used to understand whether items were loaded correctly on their respective constructs.

Data Analysis Techniques

Statistical Package of Social Sciences (SPSS) was applied in analyzing the collected data. To provide a summary of the demographic characteristics of the respondents, descriptive statistics were used. The correlation and multiple regression analysis were applied as inferential statistics to investigate the relationships between AI-powered personalization, consumer engagement, and brand loyalty.

The mediation analysis was done where suitable to determine the importance of consumer engagement in the relationship between the personalization of brand loyalty and AI-powered. A test of statistical significance at 5% level was performed.

Ethical Considerations

A high level of ethical standards was observed during the research. The process was voluntary and the respondents were made aware of the purpose of the study. Respondents were assured anonymity and confidentiality of their responses and no personal details were obtained. The respondents had a choice of dropping out of the study at any point without any implications.

Hypotheses Development

Artificial Intelligence-driven Retailer Personalization and Customer Interaction.

The use of AI-driven personalization allows the brands to offer customized and tailored content and experiences, depending on their tastes and actions. According to the available literature, perceived relevance and emotional connection are highest when personalized brand experience is utilized, and the consumer level of engagement is greater. This relationship is further enhanced by AI-based personalization, which provides real-time adaptation and predictive responsiveness, which motivates consumers to think, feel, and act in ways supporting brands. Thus, the hypothesis is the following:

H1: Consumer engagement is influenced by AI-powered personalization significantly and positively.

Consumer Interaction and Brand Devotion.

Consumer engagement is a measure of how deep the consumers are interested with a brand and is commonly held as a pathway to brand loyalty. Engaged consumers tend to build trust, emotional attachment and positive attitudes towards the brands, which translate into the repeat purchase intentions and advocacy behaviors. The more the interaction between the consumer and the brand, the better the results of the loyalty are likely to be.

H2: Brand loyalty is determined strongly positively by consumer engagement.

Artificial Intelligence-Based Personalization and Brand Loyalty.

In addition to the impact it has on brand loyalty indirectly via engagement, AI-based personalization can also influence it directly. Individualized brand experiences lower the cost of decisions, elevate satisfaction, and raise switching costs, which are all indications of greater loyalty intentions. As a result, customers under the influence of successful AI-based personalization have increased chances of brand loyalty.

H3: AI-based personalization exerts a strong impact of the brand loyalty in a positive manner.

Mediating Impact of Consumer involvement.

Available quantitative literature indicates that the engagement may be a mediating process between marketing stimuli and loyalty response. The initial effect of AI-driven personalization is that it will help to get people engaged, which will further increase brand loyalty. This implies that consumer engagement is an important factor in the process of describing the manner in which personalization can translate into the long-term commitment of the consumer.

H4: The mediator between the relationship between AI-powered personalization and brand loyalty is consumer engagement.

DATA ANALYSIS AND RESULTS

Demographic Characteristics of the Respondents

Two hundred and eighty valid responses were subject to the analysis of this study. The demographic analysis showed that it was a diverse sample in the age, gender and educational background. The majority of those who participated in the survey said that they had regular exposure to online platforms that are based on artificial intelligence-based personalization, including online shopping and brand pages on social media. This established the appropriateness of the sample in the study of AI-based branding experiences.

Reliability Analysis

To determine the internal consistency of the measurement scales, the reliability analysis was done by using Cronbach alpha. The findings showed that there was acceptable reliability among constructs. AI-driven personalization expressed the Cronbachs alpha value of more than 0.8, which is better than the recommended value of 0.70, consumer engagement of more than 0.70, and brand loyalty also demonstrated strong internal consistency. These findings demonstrate that their measurement items were effective in terms of their ability to measure their constructs. Descriptive Statistics

Descriptive statistics indicated that the general perception of respondents toward an AI-driven personalization in brand interactions was moderate to high. The mean consumer engagement values indicated that the participants had an active brand engagement (cognitive, emotional, and behavioral). Likewise, the brand loyalty scores revealed a positive propensity toward a repeat purchase intention as well as positive word-of-mouth. The values of the standard deviation were reasonable and indicated that there was no extreme response bias.

TABLE 1

Construct	No. of Items	Cronbach's Alpha	Threshold
AI-powered personalization	5	0.82	>0.70
Consumer engagement	6	0.75	>0.70
Brand loyalty	4	0.80	>0.70

Correlation Analysis

The Pearson correlation analysis was used to test relationships between the study variables. The findings showed a positive correlation to a significant extent, between AI-driven personalization and consumer engagement which means that an elevated level of perceived personalization correlates with a strong level of engagement. Brand loyalty was also positively and significantly related to consumer engagement. Furthermore, AI-controlled personalization was shown to have a

strong positive correlation with the brand loyalty, which is an initial step towards proving the hypotheses.

Table 2

Variable	1	2	3
1. AI-powered personalization	1	0.62**	0.55**
2. Consumer engagement	0.62**	1	0.61**
3. Brand loyalty	0.55**	0.61**	1

Regression Analysis

The direct hypotheses were tested using multiple regression analysis. The findings indicated that consumer engagement was strongly predicted by AI-based personalization, which supported H1. It was observed that consumer engagement was a good predictor of brand loyalty hence justifying H2. Moreover, the AI-powered personalization exhibited a prominent direct impact on the brand loyalty, which proves H3. The regression models had a significant percentage of variance in consumer engagement and brand loyalty that showed the power of the models to explain.

Table 3

Dependent Variable	Independent Variable	β	t	p	R ²
Consumer engagement	AI-powered personalization	0.65	8.42	<0.001	0.42
Brand loyalty	Consumer engagement	0.58	7.91	<0.001	0.37
Brand loyalty	AI-powered personalization	0.42	5.76	<0.001	0.28

Mediation Analysis

In order to test the mediating role of consumer engagement, the mediation analysis was done by applying the standard statistical practices. The findings showed that the impact of AI-powered personalization on brand loyalty decreased but was still significant in case consumer engagement had been added to the model. This implies that consumer involvement is a key element to mediate AI-based personalization to loyalty rewards. Therefore, H4 was supported.

In general, the results can be seen as good empirical evidence of the research model proposed. It was discovered that AI-based-personalization has a considerable impact in increasing consumer interactions, and brand loyalty both directly and indirectly. Personalization was observed to be a significant process by which consumer-brand relations are enhanced via consumer engagement. These findings demonstrate the strategic value of AI-based personalization as the key to the development of a long-lasting consumer engagement and a long-term brand loyalty.

Table 4

Path	Effect	SE	95% CI	Result
AI-powered personalization → Consumer engagement → Brand loyalty	0.38	0.07	[0.25, 0.52]	Partial Mediation

Discussion

Discussion of the Research Results

The results of this research present a substantial empirical evidence to the impact of AI-based personalization as an essential motivator of consumer interest and brand retention. In line with H1, it was established that AI-based personalization had a strong positive impact on consumer engagement. This finding is consistent with the earlier studies which argue that the interactivity of the brand influences the perceived relevance and emotional attachment, thus, leading to the

improvement of cognitive, emotional, and behavioral involvement of consumers with brands (Brodie et al., 2011; Bleier et al., 2018). The results support the thesis that AI helps the brands to cease the generic approach to communication and adopt the adaptive and responsive strategy in their engagement.

To support H2, brand loyalty was proved to be greatly dependent on consumer engagement. This observation supports the engagement theory according to which engaged consumers have higher chances of learning to trust, have an attachment, and commitment to a brand, eventually developing a repeat purchase intention and advocacy behaviors (Hollebeek et al., 2014; Oliver, 1999). The outcome identifies engagement as one of the outcomes of relationships that can convert the short term interaction to longer term loyalty.

H3 the positivity of the direct relation between AI based personalization and brand loyalty as hypothesized in H3 was also supported. This implies the idea that personalization not only affects loyalty via engagement but also has direct effects on loyalty that include higher levels of satisfaction, fewer efforts put in decision-making and higher switching costs. This observation aligns with the relationship marketing literature that has highlighted the importance of customized experiences in enhancing commitment and trust which are key elements of loyalty (Morgan and Hunt, 1994; Payne and Frow, 2017).

Also, H4 was confirmed by the mediation analysis that proves that consumer engagement shows a partial mediation between AI-powered personalization and brand loyalty. It means that engagement is an essential process in which the personalization is converted into loyalty results. Nevertheless, the continuity of a direct effect indicates that personalization also has an independent influence on the loyalty perceptions. The discovery builds on previous studies by showing the involvement of engagement as a cause of AI-driven personalization and a channel of consumer loyalty in the long term (Huang and Rust, 2021).

Comparison and Contrast with the Past Research

The findings of this research are to a large extent congruent with the existing empirical data on personalization and engagement. Like Wedel and Kannan (2016) and Davenport et al. (2020), the results prove that AI-based personalization can boost consumer reactions, make them more relevant and contextually related. Furthermore, the mediating effect of engagement validates previous findings according to which engagement is placed as a focal point between marketing stimuli and behavioral consequences (Schau et al., 2009; Kumar et al., 2016). Nevertheless, this study is unique in the sense that it explicitly incorporates AI-powered personalization into a branding study and quantitatively tests such relationships in one model.

Summary of Hypotheses Testing

Table 5 presents a summary of the hypotheses tested and their empirical support.

Table

5

Summary of Hypotheses Results

Hypothesis	Relationship Tested	Statistical Test	Result	Support
H1	AI-powered personalization → Consumer engagement	Regression	$\beta = 0.65, p < 0.001$	Supported
H2	Consumer engagement → Brand loyalty	Regression	$\beta = 0.58, p < 0.001$	Supported
H3	AI-powered personalization → Brand loyalty	Regression	$\beta = 0.42, p < 0.001$	Supported

H4	Consumer engagement mediates the relationship between AI-powered personalization and Brand loyalty	Mediation (Bootstrap)	Indirect effect = 0.38, CI [0.25, 0.52]	Supported (Partial Mediation)
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Theoretical Implications

Theoretically, the study is of value to the literature of branding and consumer behavior because it empirically illustrates the relationships between AI-powered personalization as a relational branding mechanism. The results advance the relationship marketing theory by pointing out AI as a technological facilitator of trust, activity, and allegiance. Also, the findings endorse service-dominant logic by demonstrating how AI helps to enable a perpetual value co-creation via personal interactions. The validation of the engagement as a mediating construct supports its primary position in the explanation of consumer reactions in the context of branding with the assistance of AI.

Managerial Implications

The results have valuable practical implications to brand managers and marketers. AI technologies should be examined by organizations with the focus on meaningful personalization and ensuring transparency and ethical data practices. With communication and personalization methods that promote engagement, brands will become more emotionally engaging and can develop the loyalty in the long term. Nonetheless, over-personalization should be avoided because when the managers start to use the data excessively, it can be associated with privacy concerns and loss of trust.

Conclusion

In the given research, the influence of AI-driven personalization in branding on consumer engagement and brand loyalty was explored with the help of a quantitative research method. Keeping to the mentioned research goals, the results proved that the concept of AI-based personalization leads to a significant improvement in consumer engagement, which, in turn, has a positive impact on brand loyalty. The findings also underpinned the direct impact of AI-driven personalization on loyalty, the mediating power of consumer engagement, and thus confirmed all the hypothesized hypotheses. In general, the research paper provides a source of empirical data to prove that personalization is not just a technology but a relationship process that can be used to ensure brand success over the long run.

Recommendations

As per the results, it is advisable that the brands invest strategically in AI-based personalization systems to improve customer engagement without sacrificing transparency and ethical data management. The main thing that organizations need to do is to develop personalization strategies that focus on relevance and value creation instead of overexploiting data since trust is key to the development of loyalty. It is suggested that marketers should incorporate engagement-driven measures in the assessment of AI-powered branding campaigns and constantly improve personalization algorithms in response to customer reviews.

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