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ABSTRACT

This study analyzes the effectiveness of membership loyalty programs in increasing customer retention using Net Promoter Score (NPS) with the support of information systems. Loyalty programs are one of the effective strategies in maintaining long-term relationships with customers. However, its success relies heavily on the right measurement of customer satisfaction, one of which is through NPS. NPS provides clear insights into customer loyalty levels by distinguishing between "promoters" and "detractors". Information systems play an important role in supporting the collection and analysis of customer data in real-time, enabling companies to create more personalized and relevant offers. Through the Systematic Literature Review (SLR) approach, this study reviewed various literature related to the implementation of loyalty programs, NPS measurement, and the role of information systems in improving customer retention. The results show that a combination of relevant loyalty programs, effective NPS measurement, and supportive information systems can create a better customer experience, increase satisfaction, and strengthen customer loyalty. This research also provides recommendations for companies in optimizing the use of information technology and periodic evaluation of loyalty programs to achieve maximum results in customer retention.



Loyalty Programs, Net Promoter Score (NPS), Customer Retention, Information Systems, Loyalty Measurement.

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INTRODUCTION

In an increasingly competitive business era, companies need to adopt effective strategies to retain customers and strengthen long-term relationships with them (Supriyanto, Rahmawati, & Setiawan, 2023). One of the widely used approaches to achieve this goal is through the implementation of loyalty programs or loyalty memberships (Alzoubi, Alshurideh, Kurdi, & Inairat, 2021). This program is designed to encourage consumers to continue interacting with certain brands by providing benefits or incentives to customers who frequently make transactions or subscribe to services (Asmarasari et al., 2020). Loyalty programs are proven to increase customer retention, which is a key factor in maintaining the stability of a company's revenue.

However, even though many companies implement loyalty programs, the effectiveness of them is often difficult to measure (Keiningham et al., 2021). A well-designed loyalty program should not only attract new customers but also maintain the loyalty of existing customers (Hindarwati et al., 2023). One widely used way to measure customer satisfaction and loyalty levels is to use the Net Promoter Score (NPS), a method that allows companies to

evaluate the extent to which customers are willing to recommend their products or services to others (Irawan & Lestari, 2024).

NPS is an important indicator because it can provide a clear picture of customer loyalty levels. NPS groups customers into three categories: promoters, passives, and detractors, based on how much they would recommend a product or service to others (Munir, 2023). By using NPS, companies can identify areas that need improvement and take strategic steps to improve the customer experience, which in turn can improve customer retention (Rafli et al., 2024).

In addition to NPS, support from information systems is also very important in increasing the effectiveness of loyalty programs. A good information system allows companies to collect and analyze customer data in real-time so that companies can provide more personalized and relevant services (Prestasyawati et al., 2021). The data generated from this information system can help companies design more targeted marketing strategies as well as improve interactions with customers based on their behavioral analysis.

Integration between loyalty programs supported by effective information systems can create stronger relationships between companies and customers (Zikri & Andarini, 2024). For example, by using a system that can track customer activity, companies can offer promotions or rewards that are more aligned with those customers' preferences and habits. This not only increases customer satisfaction but also has the potential to increase customer retention, which is the main goal of any loyalty program.

Although many companies have adopted loyalty programs, challenges in managing and measuring them remain. Without the right support from an information system capable of providing in-depth analysis, the results of these programs are often not optimal (Fitriani et al., 2022). Therefore, it is critical to re-evaluate how loyalty programs, NPS, and information systems can work synergistically to achieve higher customer retention goals.

Various previous studies have examined the implementation of loyalty programs and the use of Net Promoter Score (NPS) in increasing customer retention. Most studies show that an effective loyalty program can contribute to increased customer satisfaction and encourage customers to continuously interact with brands. Research by Supriyadi et al. (2022) revealed that customers engaged in loyalty programs tend to make repeat purchases more often, which in turn increases the company's revenue. Additionally, NPS has been identified as an effective measuring tool in assessing customer loyalty, with research by Wardana et al. (2023) showing a positive association between a high NPS score and increased customer retention. However, many studies have been limited to measuring the impact of loyalty programs without considering the role of information systems that can support the successful implementation of such programs.

This research aims to provide updates by integrating the use of information systems as a supporting factor in the effectiveness of loyalty programs and NPS measurement. While previous research has addressed the relationship between loyalty and customer retention programs, as well as the importance of NPS, this study differs by combining all three elements comprehensively. This research will analyze and synthesize findings from various sources to provide a more holistic picture of how information systems can support the effectiveness of loyalty and NPS programs in improving customer retention. The main objective of this study is to identify the key factors that influence the success of loyalty programs, as well as provide

deeper insights into the role of information technology in improving customer satisfaction and loyalty across various industry sectors.

Through this study, it is hoped that a clearer picture can be found of how the effectiveness of loyalty programs can be measured using NPS and how the role of information systems can support the success of the program. A holistic approach will provide new insights into managing customer relationships and retention strategies, which are essential in maintaining competitiveness in an increasingly dynamic market.

METHOD

This study uses the Systematic Literature Review (SLR) method to analyze and evaluate studies relevant to the topic of the effectiveness of loyalty programs in increasing customer retention through Net Promoter Score (NPS) measurement and information system support. SLR was chosen because this approach allows researchers to systematically identify, evaluate, and synthesize existing literature, resulting in more objective and comprehensive conclusions. This process begins with the selection of relevant articles through a literature search in various academic databases such as Google Scholar, Scopus, and JSTOR. The selected articles must meet the inclusion criteria, namely being in *Indonesian* or English, published in the last 10 years, and related to loyalty programs, NPS, and the role of information systems in increasing customer retention.

The next process is the screening and mapping of relevant literature by checking the suitability of the topics and methodologies used in each study. The selected articles will then be analyzed to understand the different approaches used in implementing loyalty programs and NPS measurement, as well as how information systems play a role in supporting their effectiveness. This research will also focus on identifying findings that link the implementation of loyalty programs to customer retention rates, as well as exploring the impact of using NPS in measuring customer loyalty across various industry sectors.

After the literature analysis process, the researcher will synthesize the existing findings to provide a clearer picture of the relationship between the three elements: loyalty programs, NPS, and information systems. This synthesis aims to identify patterns that have emerged in previous research, as well as reveal the factors that affect the effectiveness of loyalty programs in increasing customer retention. As such, this research will provide more comprehensive insight into how these three elements can work together to create more effective strategies for retaining customers and strengthening long-term relationships. The stages of the SLR method in this study are explained in Figure 1 below:

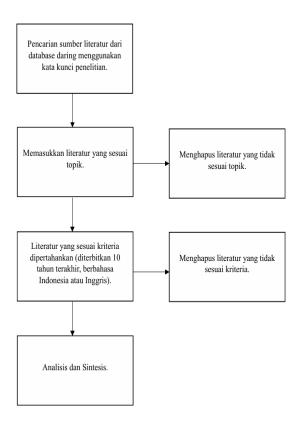


Figure 1. Implementation of the SLR Method

RESULT AND DISCUSSION

Based on the literature analysis conducted, it was found that loyalty programs in general have a positive impact on customer retention, especially if the program is tailored to customer preferences and needs. A study from Monika & Oktafani (2021) shows that customers who engage in loyalty programs are more likely to make repeat purchases and maintain long-term relationships with brands. Successful loyalty programs often offer the right incentives, such as special discounts, exclusive access, or rewards based on the frequency of purchases. This has been proven to increase customer satisfaction and reduce the chances of them switching to competitors.

In terms of Net Promoter Score (NPS) measurement, research from Ismail & Dewantoro (2023) shows that NPS can be used as an effective indicator to assess customer loyalty levels. Some of the articles reviewed noted that companies with high NPS tend to have better customer retention rates and lower churn rates. NPS allows companies to identify customers who are truly satisfied (promoters) and those who may be at risk of leaving the brand (detractors), so that companies can take appropriate actions to improve the customer experience (Munthe et al., 2025). It can be concluded that companies that actively monitor and evaluate NPS on a regular basis tend to have better retention strategies.

Information systems play a critical role in supporting the success of loyalty programs and NPS measurement. The results of the literature analysis revealed that companies that use information technology to collect and analyze customer data can provide a more personalized and relevant experience to customers. By using information systems, companies can track customer purchase patterns, preferences, and interactions in real-time, allowing them to adjust

offers or promotions to be more targeted (Rhamdani, 2021). This not only increases the effectiveness of loyalty programs, but also strengthens relationships with customers.

Additionally, it was found that integration between loyalty programs, NPS, and information systems can result in stronger synergies in improving customer retention. A study from Syukur & Mukti (2023) shows that by using the right information system, companies can more easily monitor the effectiveness of loyalty programs, assess the impact of changes made based on feedback from NPS, and design more targeted marketing strategies. These findings demonstrate the importance of combining these three elements to create a better customer experience and increase customer loyalty in the long run. The list of literature that is the source of reference for this study is described in Table 1.

Table 1. Research Literature Sources

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No	Research Title Author Name & Year	Research Results				
1	Loyalty Programs on Muftian, D. R., Customer Satisfaction and Diyanto, T., & Loyalty Tokopedia Case Dewobroto, W. S.	Tokopedia's digital loyalty programs such as Toko Points, Toko Loyalty, e-coupons, e-newsletters, and flash sales affect customer satisfaction and loyalty. Customer satisfaction mediates the influence of loyalty programs on customer loyalty.				
2	Mediated Customer Nadjhary, A. S.,	Membership programs have a significant effect on customer satisfaction and loyalty. Customer satisfaction mediates the influence of a membership program on customer loyalty.				
3		Service quality has a significant effect on NPS, with the dimensions of responsiveness and empathy as the main factors that affect customer loyalty.				
4	Programs on Customer Oktafani, F. Loyalty at Chatime Bandung (2021)	The membership program has a significant effect on Chatime Bandung's customer loyalty, although it is not able to explain overall customer loyalty. The need to increase value equity to increase loyalty.				
5	Loyalty at Starbucks Coffee Using the Net Promoter Score	Starbucks customer loyalty is influenced by service, facilities, and product quality. Some outlets get very loyal scores, while others are not loyal due to inadequate facilities.				
6	Consumer Loyalty to P., Mulyana, A., & Edutech in Indonesia Using Sondari, M. C. the Net Promoter Score (2025) Method (Case Study of Ruangguru and Zenius)	This study measures the level of loyalty of Generation Z to the Ruangguru and Zenius edutech platforms using the NPS method. The results show that Zenius has a higher level of loyalty than Ruangguru, both from exclusive users and users of both platforms. Zenius' NPS score is 48 (exclusive users) and 32 (users of both platforms), while Ruangguru's is 25 and -7, respectively.				

No	Research Title	Author Name Year	&	Research Results
7	Relationship Management o	n M., Ferichani, N	М., с N. :	This research shows that processes, human resources, data, and information technology affect consumer loyalty at Cold n'Brew. The analysis method used is partial least square with the Smart PLS 3.0 program.
8	Programs, Rewards Point and Email Marketing t	ts A. A., Barkah, o S. A., Herawa v: T., & Auliana,	C. i	This research resulted in three program proposals, namely membership with member cards, rewards points, and email marketing to increase customer loyalty at Semanis Kamu Cafe. This program is expected to increase the percentage of active buyers from 40% to 50%.
9	Analysis of custome satisfaction and loyalty of brownie cake products usin Python-based Net Promote Score calculation	of Rochmawati, g & Agung, A. A.	R.,	This study shows that the level of customer satisfaction and loyalty to brownie cake products is very good with an NPS of 60%. The data is processed using Python and the results are presented in the form of diagrams and tables.
10	benchmark for custome	er (2021) of	1	This study shows a high NPS level (92.41% and 90%) at BPJS Kesehatan Tondano Branch Office. These results are the basis for the development of innovations in participant services, especially in the simplification and implementation of information technology.
11	Classification of e-learnin system user loyalty using No Promoter Score and machin learning	et Safitri, S. e Amriza, R. N.	T., I S., I D.	This study compared Decision Trees, Naïve Bayes, and K-Nearest Neighbor (KNN) algorithms to classify the loyalty level of e-learning users using the Net Promoter Score (NPS) approach. The results showed that the Decision Trees algorithm had the best accuracy rate of 95%, followed by Naïve Bayes (90%) and KNN (85%).
12	Quality on Customer Loyalt	y & Mukti, Y. ee (2023) d	Y. (The research resulted in proposals to improve the quality of service at JNE Tasikmalaya to increase customer loyalty. An NPS value of -15 indicates low loyalty. Improvement priorities include improving employee SOPs, employee appreciation, customer delivery data, and adding employees and fleets.
13	_	et W., Angriani, 1	H.,	Based on a survey of 45 respondents, the NPS score obtained was 55.09%, indicating a fairly good level of recommendation based on the usability aspect of the Smart Catering website.
14	-	re Suyatno, A., re Rahmawati, E.	&	Research shows that Service Quality and NPS have a positive and significant effect on customer loyalty. Service quality also indirectly affects loyalty through NPS.
15	The Influence of Membershi and Partnership Programs o Customer Loyalty: A Stud	n Andarini,	S.	The membership and partnership program has a positive and significant influence on customer loyalty at Midtown Hotels Indonesia Surabaya branch, increasing customer retention and satisfaction rates.

No	Research Title	Author Name & Year	Research Results
	n Midtown Hotels Indone urabaya Branch	esia	

The Effect of Loyalty Programs on Customer Retention

Loyalty programs are one of the main strategies used by companies to increase customer retention. A study from Pudjianingrum et al. (2022) found that a well-designed loyalty program can extend long-term relationships with customers, leading to increased retention. Customers who feel valued and benefit from loyalty programs tend to be more loyal and continue to choose products or services that the company offers. Loyalty programs are often designed to reward customers based on their purchasing behavior, such as points that can be redeemed for rewards or special discounts for members. By providing relevant and engaging incentives, customers feel valued, which strengthens their emotional attachment to the brand, reduces the likelihood of switching to competitors, and improves overall customer satisfaction (Zikri & Andarini, 2024).

However, it's important to remember that the effectiveness of loyalty programs doesn't just depend on the incentives provided, but also on how companies interact and understand the needs of their customers. Loyalty programs that are not tailored to customer needs or preferences actually risk reducing their effectiveness (Monika & Oktafani, 2021). Therefore, companies need to ensure that the loyalty program implemented is truly relevant and provides benefits that can be felt directly by customers.

The Role of Net Promoter Score (NPS) in Measuring Customer Loyalty

Net Promoter Score (NPS) has become one of the main indicators in measuring customer loyalty (Wijaya et al., 2024). NPS measures how likely a customer is to recommend a product or service to others, which provides a clear picture of how satisfied a customer is with a company. Research from Supriyadi et al. (2022) shows that companies with high NPS tend to have better retention rates and fewer customers who leave the brand (churn). Customers who are in the "promoter" category are those who give a score of 9 or 10 on the question "How likely are you to recommend our product?", while those who give a low score (0-6) go into the "detractor" category, which indicates they are more likely to move on to a competitor.

Additionally, NPS allows companies to get invaluable feedback on areas that need improvement. For example, customers who fall into the "detractor" category provide clear insights into their less than satisfactory experience. With this information, companies can take steps to improve their products, services, or overall customer experience. Regular use of NPS provides companies with the data they need to continuously adapt and improve loyalty programs to be more effective in improving customer retention (Munthe et al., 2025).

The Role of Information Systems in Supporting NPS Loyalty and Measurement Programs

Information systems play an important role in supporting the success of loyalty programs and NPS measurement (Irawan & Lestari, 2024). In an increasingly digitally connected world,

companies must be able to leverage technology to collect, manage, and analyze customer data in real-time. A good information system allows companies to track customer interactions, purchasing behavior, and customer satisfaction levels more effectively. With information obtained through information systems, companies can adjust loyalty programs to offer more relevant and targeted incentives (Wardana et al., 2023). For example, information systems can help companies to identify customers who are almost no longer transacting (churn risk) and provide special offers to retain them.

In addition, the integration between information systems and NPS allows companies to monitor customer feedback directly and connect it with other data, such as purchasing patterns or interaction habits with brands (Rhamdani, 2021). This provides deeper insight into the relationship between customer satisfaction and retention, as well as how loyalty programs can be improved or improved. Information systems also simplify the process of processing NPS data, allowing companies to create more accurate and faster reports, which in turn helps with more effective decision-making (Munir, 2023).

Synergy between Loyalty Programs, NPS, and Information Systems in Increasing Customer Retention

One of the key findings of this study is that synergy between loyalty programs, NPS, and information systems can strengthen companies' ability to improve customer retention (Pudjianingrum et al., 2022; Hindarwati et al., 2023). While each of these elements can work in isolation, the combination of all three results in a more holistic and effective strategy. Loyalty programs provide incentives to attract and retain customers, NPS provides tools to measure customer loyalty and satisfaction, while information systems allow companies to monitor and analyze in-depth data regarding customers.

In its implementation, the information system plays the role of a link between loyalty programs and NPS measurement. By using existing customer data in the information system, companies can find out which customers are more likely to become "promoters" or "detractors" based on their NPS scores, as well as adjust the offers or promotions provided (Syukur & Mukti, 2023). For example, customers who have a high NPS score may be rewarded more in loyalty programs, while customers at risk of switching to competitors (detractors) may be targeted with special offers or attention to improve their experience and prevent churn.

CONCLUSION

Based on the results of the literature analysis conducted, it can be concluded that a well-designed loyalty program can significantly increase customer retention, especially when accompanied by effective Net Promoter Score (NPS) measurement and supported by a robust information system. Loyalty programs that provide the right and relevant incentives are able to increase customer satisfaction, while NPS serves as a useful tool for measuring loyalty levels and identifying areas for improvement. Additionally, information systems play a crucial role in collecting and analyzing customer data, which allows companies to design more effective and personalized strategies. The synergy between the three elements, namely loyalty programs, NPS, and information systems, forms a more comprehensive and sustainable strategy to retain customers. By making the most of customer data, companies can identify customers who are at risk of leaving the brand as well as pay special attention to them, which in turn can strengthen

long-term relationships and reduce churn. To increase the effectiveness of loyalty programs and NPS measurement, it is recommended that companies prioritize the use of information technology in managing customer data. Companies should invest in information systems that enable real-time data collection and facilitate NPS analysis to make more informed decisions. In addition, companies need to periodically evaluate loyalty programs and NPS measurement to ensure that these two elements remain relevant and effective in meeting customer needs and expectations.

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