

# Analysis of E-commerce Customer Behavior and Time Spending

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## Introduction:

In the digital realm of E-commerce, understanding customer behavior is paramount for strategic decision-making. This report delves into the intricacies of online retail by analyzing a comprehensive dataset encompassing key metrics such as Email, Address, Avatar, Time on App, Time on Website, Length of Membership, and Yearly Amount Spent. Through this analysis, we aim to uncover valuable insights into customer engagement and spending patterns, providing actionable intelligence for businesses navigating the competitive landscape of online retail. This is work throughout excel and we used pivot table to analyze the result

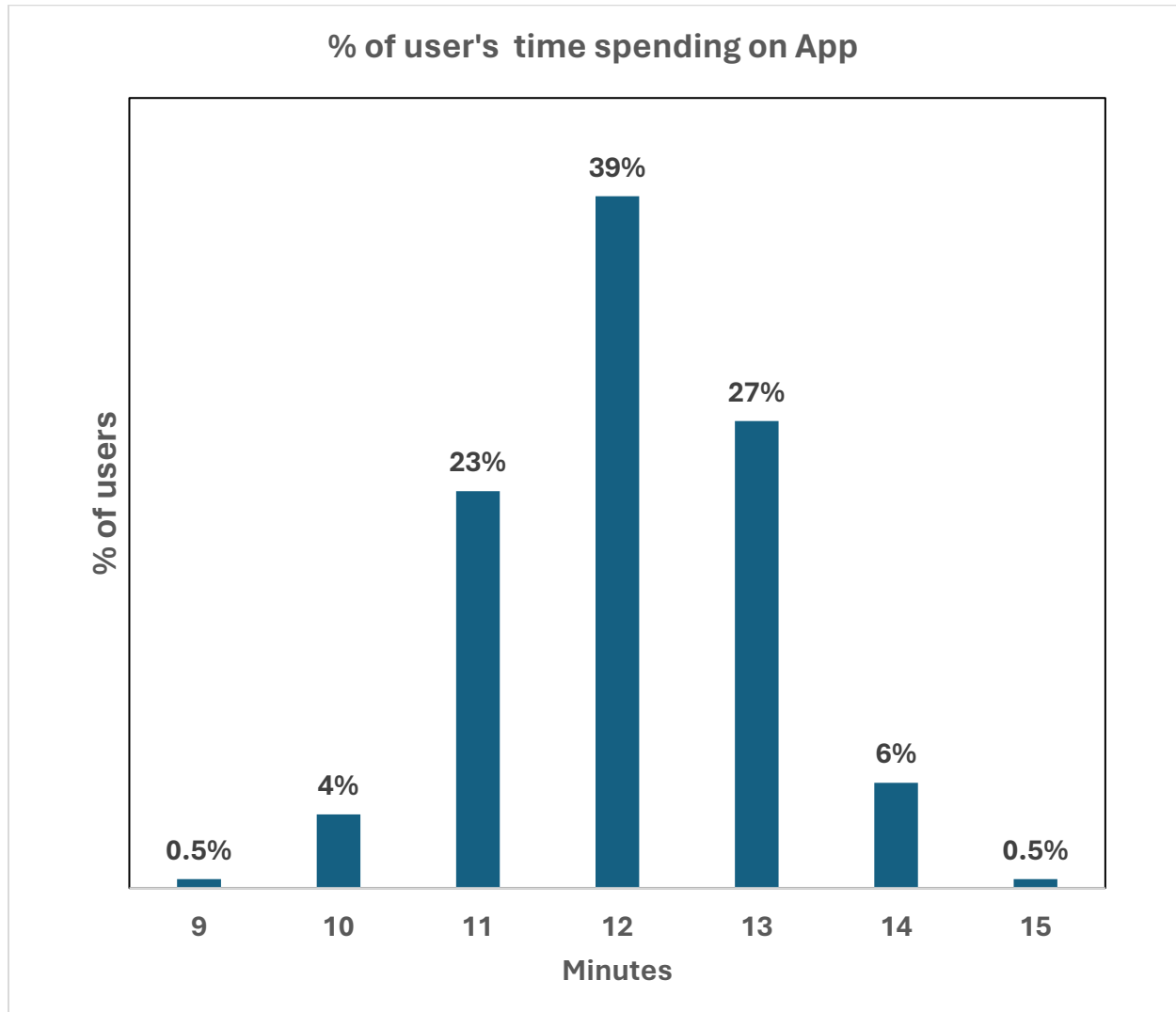
## Dataset methodology:

We find this dataset scraped from our search on Kaggle web.

The dataset provides a comprehensive view of customer interactions and expenditures on an ecommerce platform. It includes the following fields:

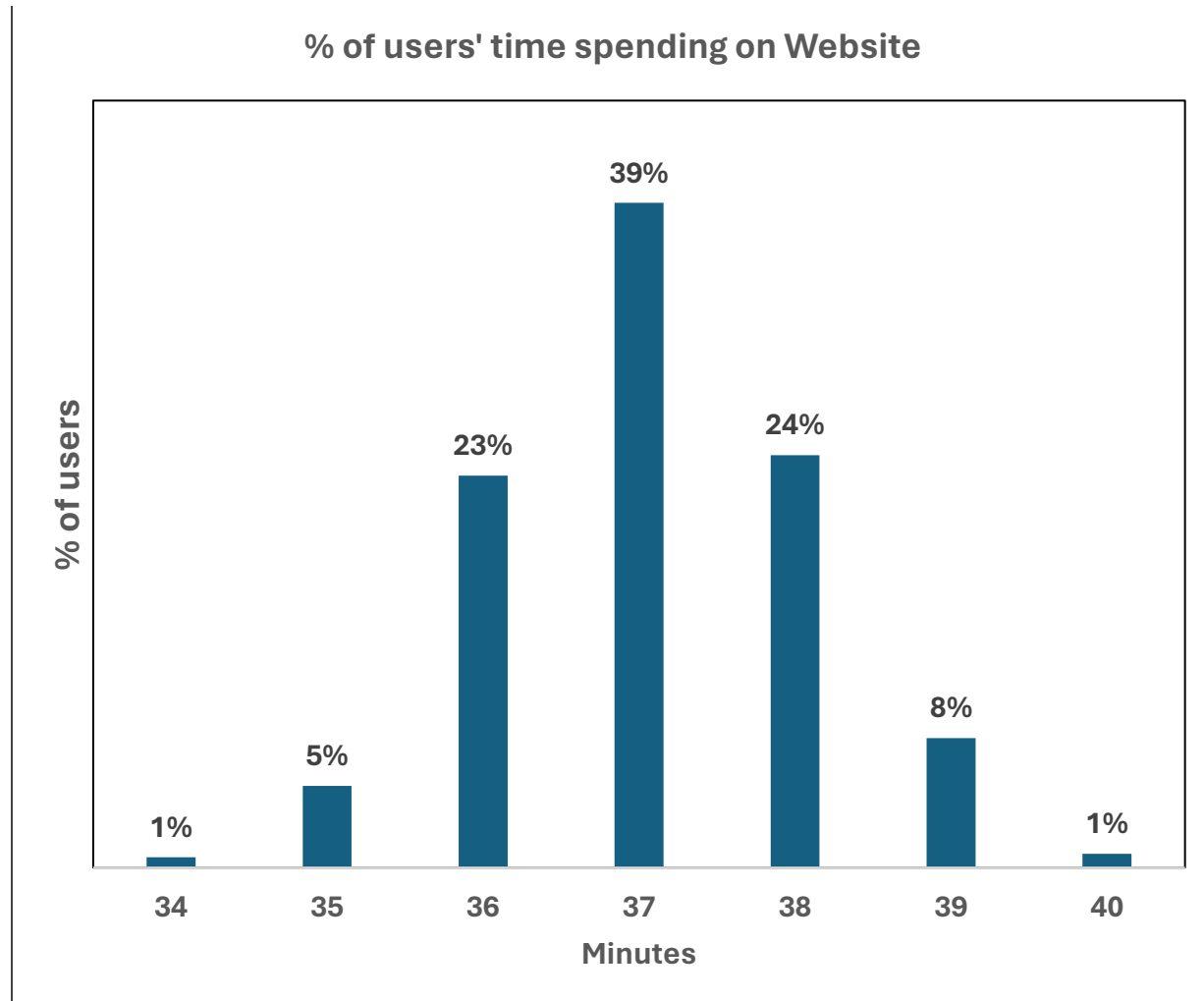
Fields or column	Description
Email	The email address of the customer, serving as a unique identifier.
Adress	The physical address of the customer, useful for geographical analysis.
Avatar	The profile image chosen by the customer, which could correlate with engagement levels.
Time on APP	The total time a customer spends on the ecommerce application.
Time on website	The total time a customer spends on the ecommerce website.
Length of membership	How long the customer has been registered with the platform.
Yearly amount spent	The total amount of money the customer spends annually on the platform.

## Data analysis



❖ **Figure1 Time spending on E-commerce application by customer's**

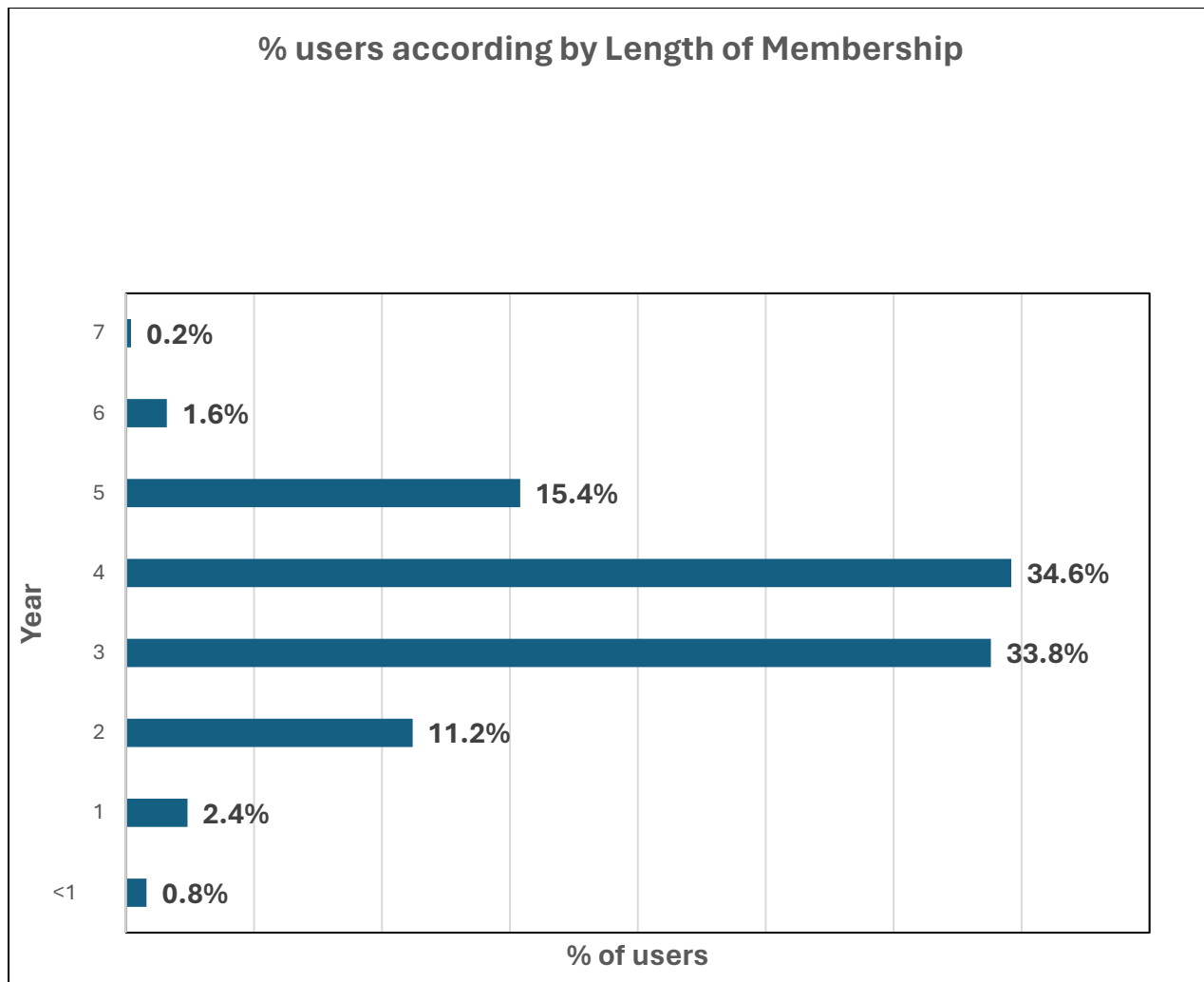
Figure 1 represents the distribution of time spent by users on App to make an order. This graph shows that the user spent time from 9 to 15 minutes. Most users spend either 11, 12, or 13 minutes on the app, with the highest percentage at 12 minutes (39%). However, following this peak, the trend shifts, with usage percentages beginning to decline. From 12 to 15 minutes, the percentage gradually decreases, indicating a reduction in user engagement beyond the 12-minute mark.



❖ **Figure2 Time spending on E-commerce website by customer's**

Figure 2 shows the distribution of time spent by users on Website between 34 and 40 minutes to make an order. Most users spend between 36 to 38 minutes on the website, with the peak at 37 minutes where 39% of users spend their time. It starts with only 1% of users at 34 minutes, then goes up to 39% at 37 minutes, which is the highest. After that, it starts to go down again. By 40 minutes, only 1% of users are still on the website. So, it seems like most people spend less time on the website after about 37 minutes.

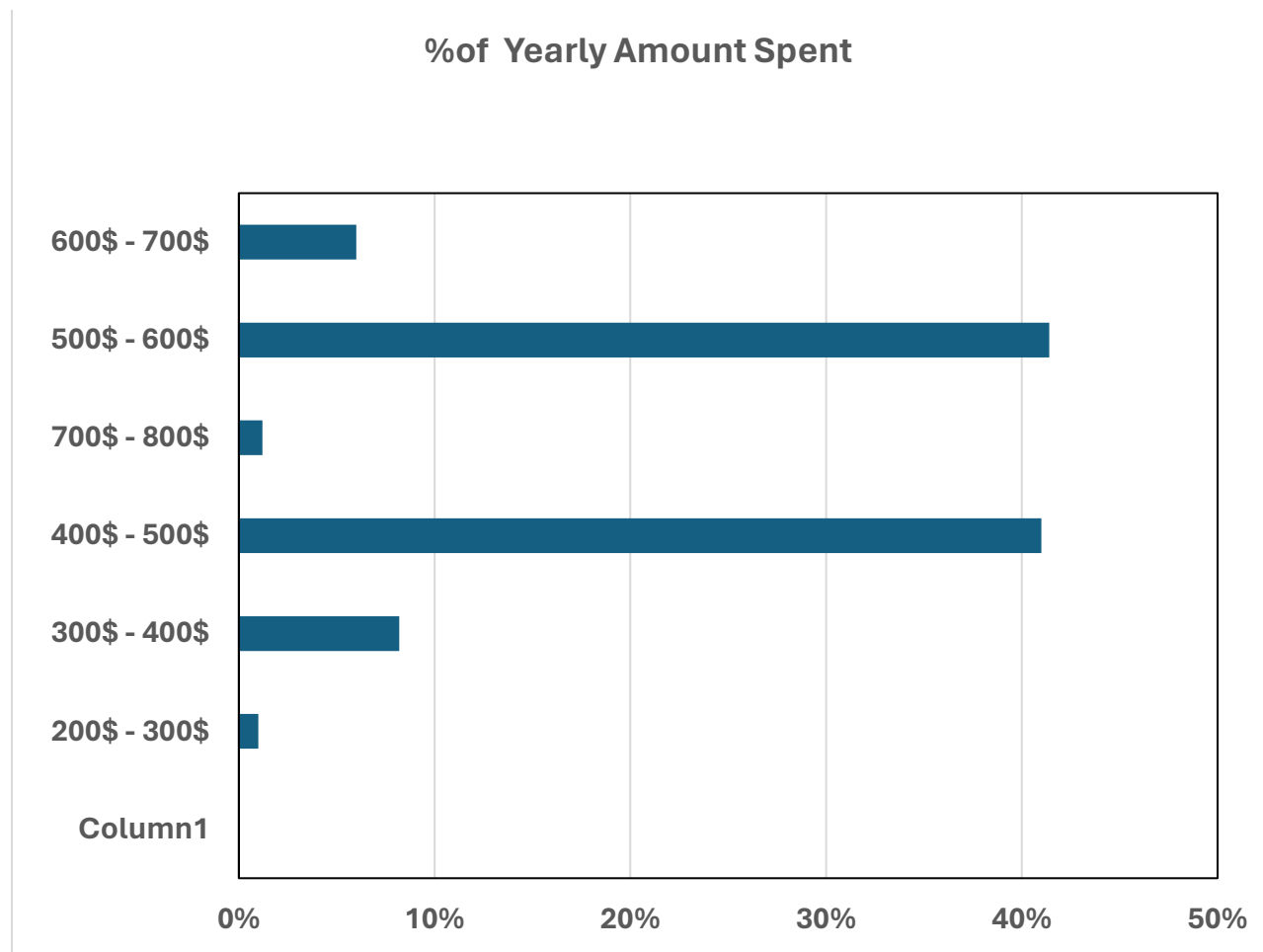
Time spent on the website might be higher because people can find more information and explore more features there. They may feel more comfortable with saving time browsing the app and find it easier to navigate. Additionally, customers might be looking for specific details that are easier to find on the app. These reasons contribute to why users tend to spend more time on the website compared to the application.



❖ **Figure3 Membership registration on the platform**

From figure 3, it seems that the majority of members have been with the membership for either 3 or 4 years, with 33.8% and 34.6% of members, respectively. There is a significant drop in membership after the fourth year, with a smaller percentage of members continuing for 5, 6 and 7.

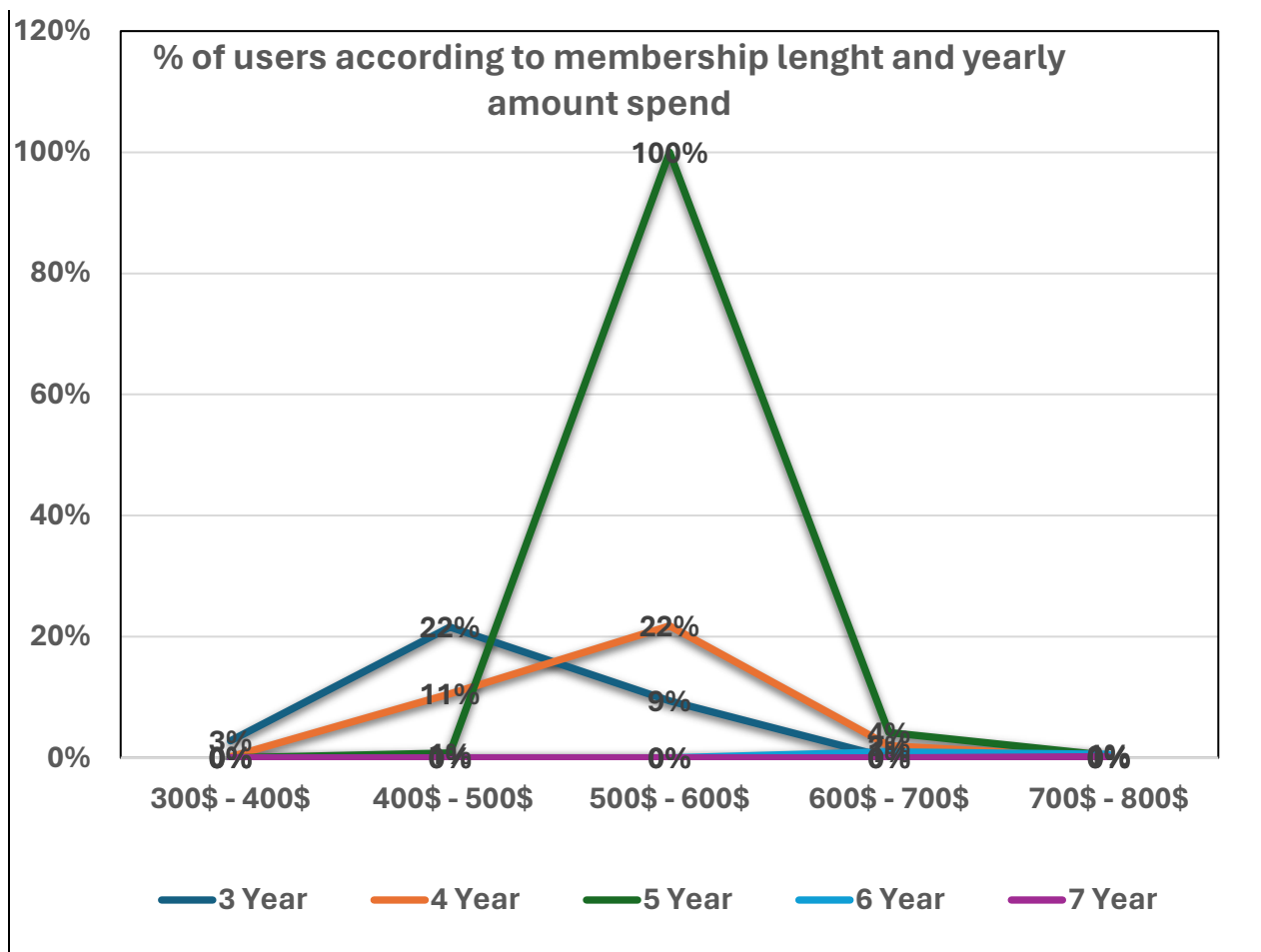
The data shows that the company has done well keeping customers, especially in the third and fourth years. But there's a chance to get even more customers and keep growing.



❖ *Figure4 Money spending annually on the platform*

Figure 4 shows how much customers spend each year. Most customers, 82%, spend between \$400 and \$600. About 8% spend between \$300 and \$400, while only 1% spend less than \$300 or more than \$700. This means most customers prefer to spend in the middle range.

Understanding these spending habits can help the business offer products and prices that match what customers want. It can also help attract new customers or encourage current ones to spend more. This way, the business can keep customers happy and make more money.



❖ *Figure5 Relation between length of membership and yearly amount spending*

Figure 5 represents different durations of membership, ranging from less than one year to seven years and different ranges of spending money between \$200 and 800\$.

This data allows you to understand how spending patterns vary across different lengths of membership. In addition, the data shows that customers who have been members for longer tend to spend more money each year. For example, those with memberships of 3 to 5 years are more likely to spend between \$300 and \$700 annually compared to newer members.

This suggests that the longer someone stays a member, the more they're willing to spend. Understanding this relationship can help the business keep customers happy and encourage them to stay members for longer. It can also help the business make more money by targeting promotions or rewards towards longer-term members.

## Conclusion and recommendation:

- Conclusion

The data shows that the company has done well keeping customers, especially in the third and fourth years.

There's a chance to get even more customers and keep growing. Understanding why some customers leave after four years could help keep them longer and make the business better.

- Recommendation

To ensure long-term customer satisfaction and loyalty, businesses should continuously adapt their products and services to align with evolving customer needs and preferences. Staying competitive in the market requires regular monitoring of competitors and incorporating improvements to match or exceed their offerings. Prioritizing exceptional customer experiences is paramount, addressing any issues promptly to maintain customer satisfaction. Embracing a culture of continuous improvement, fueled by feedback from customers and employees, allows businesses to identify areas for enhancement and implement changes for better outcomes. Moreover, developing and implementing targeted customer retention strategies, such as loyalty programs or personalized communications, can further prolong customer lifetime value. By adhering to these recommendations, businesses can effectively address factors contributing to customer attrition and foster enduring customer relationships.