Tackling Cart Abandonment in the Automotive Industry with Machine Learning

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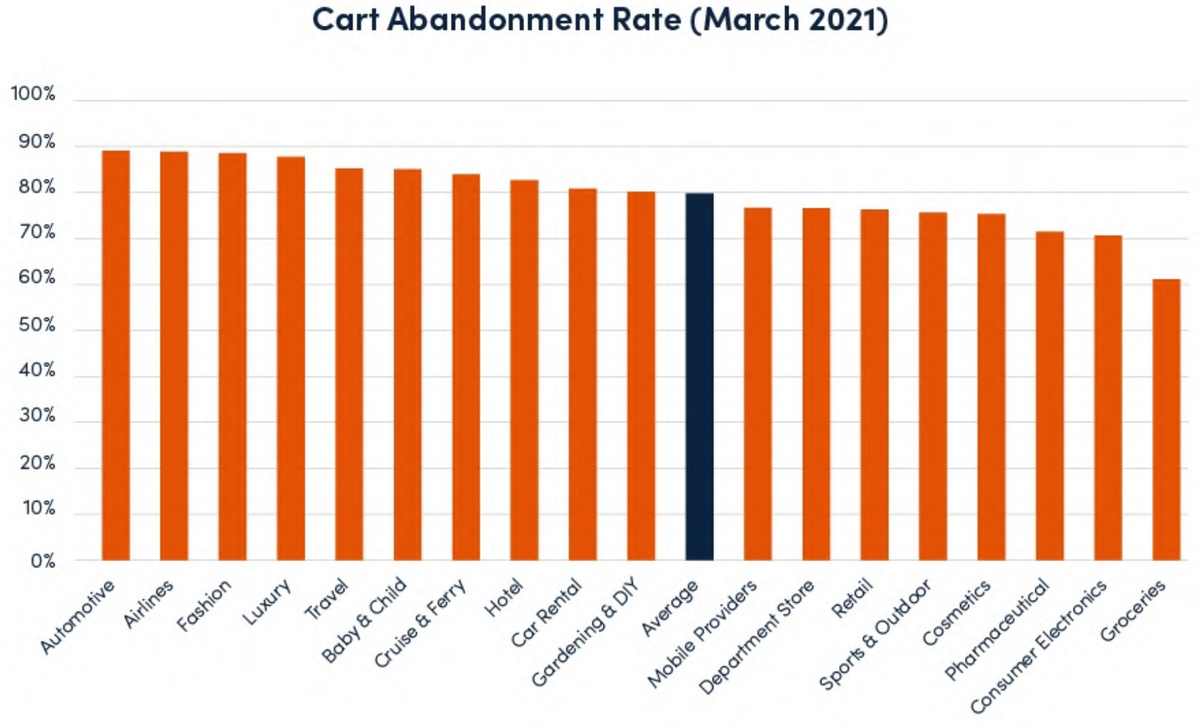
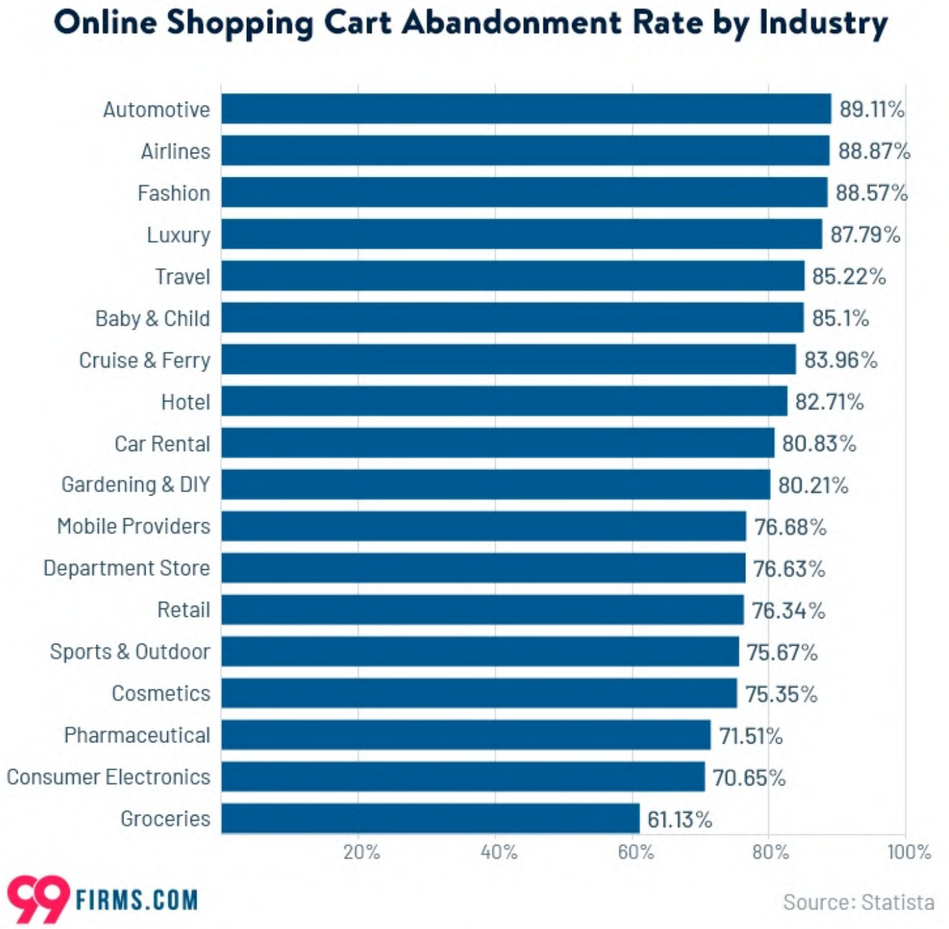
Overcoming Cart Abandonment: Key to Boosting E-Commerce Success in Automotive Industry

The automotive industry has undergone a significant transformation with the rise of e-commerce. However, one of the challenges that online retailers in this industry face is "cart abandonment." This phenomenon refers to the act of users adding items to their online shopping carts but leaving the website without completing the purchase. Understanding the reasons behind cart abandonment and developing strategies to minimize it is crucial for the success of e-commerce in the automotive industry.

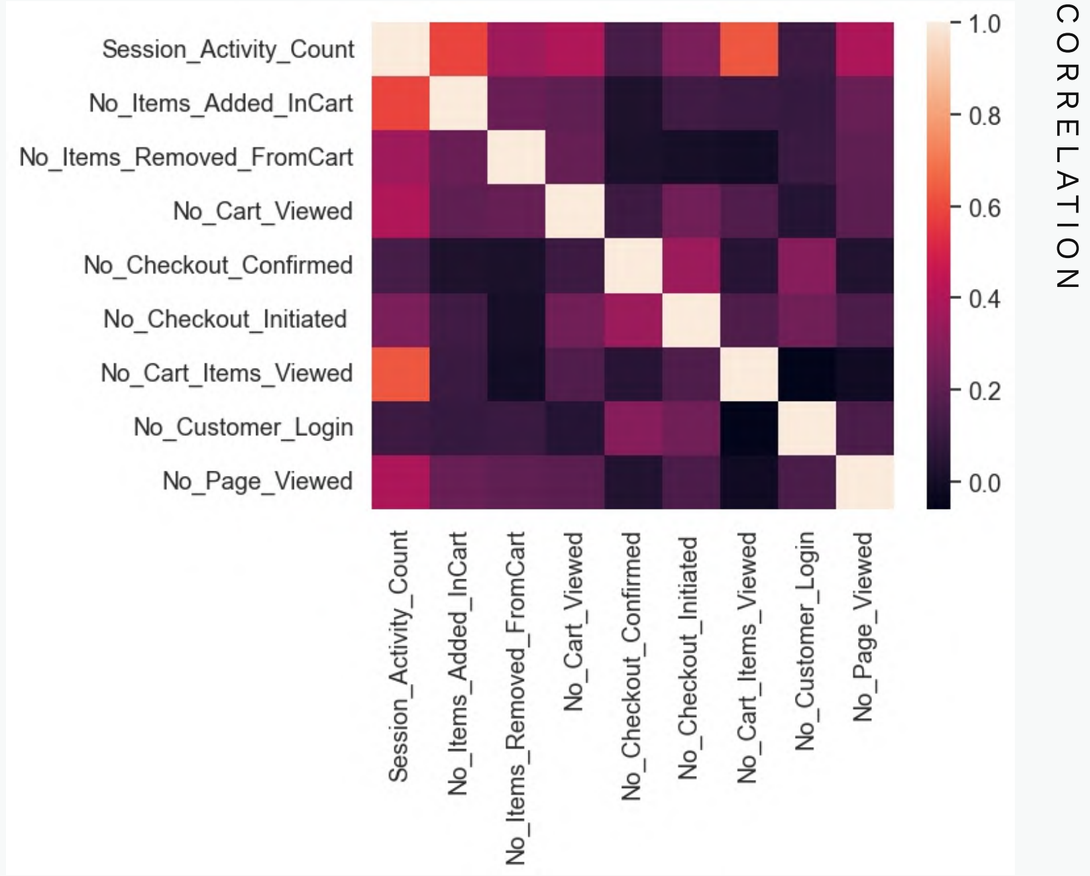




The data from various sources in 2021 and 2023 shows that the automotive industry has the highest cart abandonment rate among all industries. In other words, online shoppers browsing for automotive products are more likely to add items to their carts but leave without making a purchase compared to other industries.

To combat cart abandonment in the automotive industry, we can use machine learning to analyze user behavior and offer personalized incentives to encourage them to complete their purchase. This can increase conversion rates and boost customer loyalty.

1. Session ID
2. Is Product Details Viewed by Customer?
3. Session Activity Count
4. Number of Items Added in Cart
5. Number of Items Removed from Cart
6. Number of Cart Viewed
7. Number of Checkout Confirmed
8. Number of Checkout Initiated
9. Number of Cart Items Viewed
10. Number of Customer Login
11. Number of Page Viewed
12. Customer Segment Type
13. Cart Abandoned: Target.



USING ADVANCED DECISION TREE ALGORITHMS WITH MACHINE LEARNING, DATA WAS TESTED AND ACHIEVED AN ACCURACY OF 0.988 AND A KAPPA OF 0.976122, WHICH ARE HIGHLY SIGNIFICANT VALUES. THESE RESULTS CAN HELP DRIVE SALES AND INCREASE CUSTOMER RETENTION IN THE AUTOMOTIVE INDUSTRY.

Number of Checkout Confirmed	%73
Number of Customer Login	%5,6
Session Activity Count	%5
Number of Checkout Initiated	%4,4
Number of Page Viewed	%2,7
Number of Items Added in Cart	%2,5
Number of Cart Items Viewed	%1,8
Number of Cart Viewed	%1,7
No Items Removed from Cart	%1
Product Details Viewed	%0,9

Thanks

By continuously monitoring customer behavior, we can leverage advanced machine learning and decision tree techniques to identify which actions lead to sales and which actions lead to cart abandonment. This data can then be used to our advantage to improve our e-commerce strategy and increase conversions in the automotive industry.

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