



# E-Commerce Cart Abandonment

Insights and Storytelling through Analysis

# The Business Problem

Our e-commerce platform is facing a high cart abandonment rate. Customers are spending time, browsing multiple pages, even building sizable carts — yet many of them drop off before completing checkout.

This doesn't just mean lost sales — it means lost trust and missed revenue opportunities, especially from high-value customers who show strong purchase intent.



# Understanding *Customer* Behaviour

## Browsing & Engagement Patterns

Most customers visit between **7–13 pages** and spend 8–10 minutes on the site.

Customers who abandon their carts actually **spend more time** and **explore more pages** than those who complete purchases.

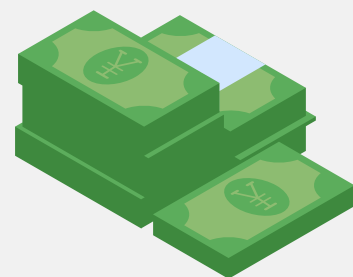


# Interpretation

Abandonment isn't about lack of interest. It's often about friction, confusion, or hesitation in the buying journey.



# Cart Value *Trends*



Valuable Purchases	Low Abandonment	High Risk
Completed purchases are linked with higher average cart value (~₹125).	Abandoned carts often have smaller cart values (~₹100).	But critically, some of the highest cart values (>₹200) are also being abandoned.

# Interpretation

We're losing some of our most valuable customers at the final step. This is the biggest revenue leak.



# Customer Segments

## Loyal Customers

These are serious buyers who build high-value carts and spend significant time exploring products. However, their higher abandonment tendency signals the need for strong retention efforts like targeted discounts, loyalty rewards, or smoother checkout.

## Potential Customers

This group shows genuine interest with medium cart values and fair browsing time. With timely offers, reminders, or personalized recommendations, they can be converted into loyal buyers.

## Window Shoppers

These users spend minimal time on the platform and keep small cart values. They are likely casual browsers with low purchase intent.

# Interpretation

High-value, **Loyal Customer** (high-intent customers) are the priority segment for recovery campaigns, as winning them back drives the greatest revenue impact





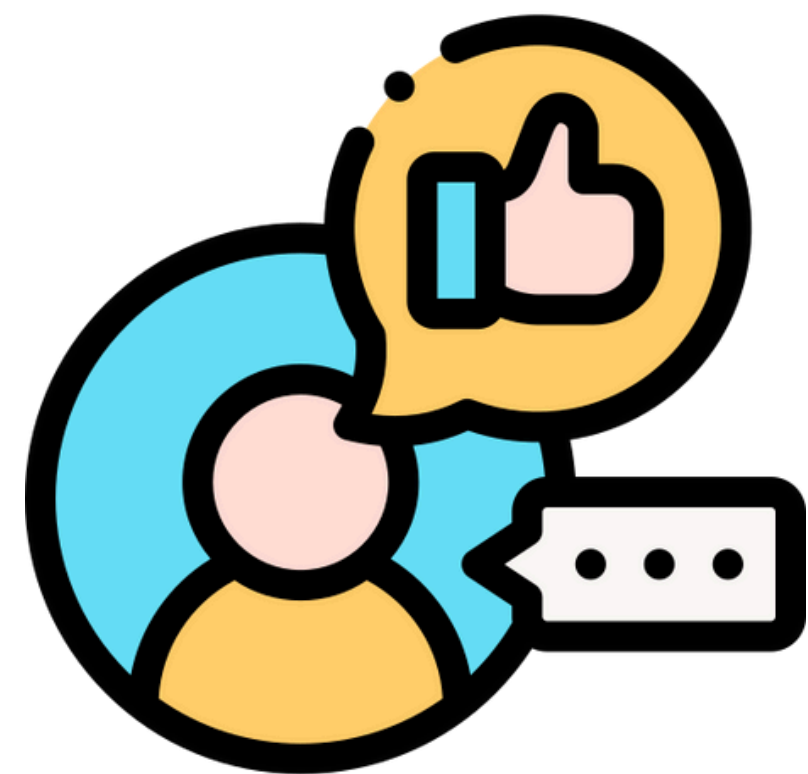
# The Journey of Our Analysis

## Story of Cart Abandonment



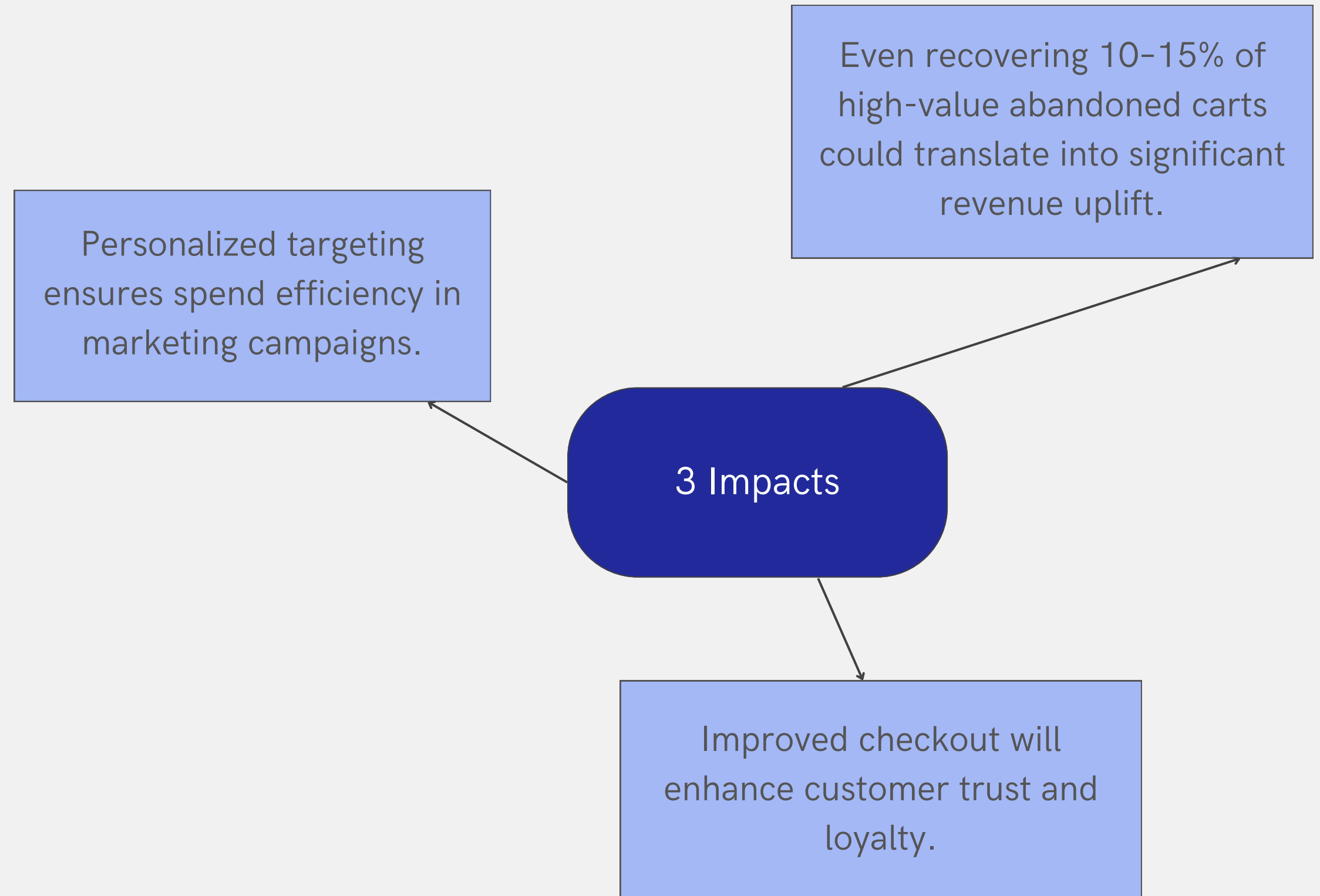
Our journey began by comparing completed purchases and abandoned carts, where we uncovered that buyers typically spend more (₹125), while abandoned carts were often lower in value (₹100). Yet, surprisingly, we also found that some of the highest-value carts (>₹200) were being left behind, signaling a major revenue leakage. To dig deeper, we ran a clustering analysis, which revealed three distinct customer groups — casual window shoppers, potential buyers who could be nudged, and loyal high-value customers at risk. Finally, by building a predictive model, we learned that while the model is excellent at recognizing buyers, it also gives us the ability to flag at-risk customers in real time, enabling timely recovery campaigns. Together, these insights told a complete story: from identifying the problem, to understanding customer behavior, and finally to building actionable solutions.

# Business Recommendations



✓	Step 1	Checkout Optimization
		<ul style="list-style-type: none"><li>• Simplify checkout (guest checkout, fewer clicks, multiple payment options).</li><li>• Add trust signals (secure payments, clear return policies).</li></ul>
✓	Step 2	High-Value Cart Recovery (Loyal Customers)
		<ul style="list-style-type: none"><li>• Send cart reminder emails or SMS nudges.</li><li>• Offer time-limited coupons or free shipping for large carts.</li></ul>
✓	Step 3	Behavior-Based Interventions
		<ul style="list-style-type: none"><li>• Use exit-intent popups for users spending too long on site without checking out.</li><li>• Personalize product suggestions to reduce "decision fatigue."</li></ul>
✓	Step 4	Targeted Marketing
		<ul style="list-style-type: none"><li>• Window shoppers: welcome offers, first-purchase discounts.</li><li>• Potential Customers: upselling &amp; free shipping thresholds.</li><li>• Loyal Customers: strong retargeting campaigns.</li></ul>

# The Business Impact





# Storyline for Stakeholders

Our data shows that abandonment is not due to lack of interest — in fact, the most engaged and high-value users are abandoning most often. This signals an urgent need to fix friction in checkout and deploy smart recovery strategies. By focusing on Loyal Customers and leveraging predictive modeling, we can unlock hidden revenue and strengthen customer experience.

# Thank You!

**Do you have  
any questions?**

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