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# HOW TO RESOLVE CART ABANDONMENT ISSUES WITH MAGENTO 2?

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Once you successfully get customers to your site, there is nothing more disheartening for an e-tailer, when they abandon the cart in the final stage of the purchase journey.



All e-commerce sites, ranging from giants such as Amazon to new startups, face cart abandonment issues. Recent statistics suggest, 69.23% is the average online shopping cart abandonment rate in the US.

There are several plausible reasons for cart abandonment. Three of the most common reasons are:

- 1. A slow loading website that tests the patience of the customer**
- 2. A complicated or convoluted checkout process**
- 3. Unresponsive websites that forces customers to leave**

## **THE PROBLEM OF SLOW LOADING WEBSITES**

Shoppers throng e-commerce sites during promotions or holiday season, which leads to high traffic. If this high traffic stays on and converts to business, there is nothing like it! But not all e-tailers are lucky. There are times when slow sites infuriate customers, and they abandon cart in the final stage of the purchase journey, which can be devastating.

Slow loading of the website is the number one reason for shopping cart abandonment, often the prime culprit for slow loading of the backend database which serves as the repository for the e-commerce store.

When a customer browses through details of different products, the system executes read queries from the database. For instance, when the customer explores the product name, price, and description, three separate read queries execute simultaneously. The backend database is modified through write queries when the customer finally makes an order. To modify the stock details, inventory database, customer particulars, and more, separate write queries may be executed when the customer initiates a single transaction. Needless to say, the number of queries under execution at any point of time can add up quickly during peak times, leading to server overload and queuing up at the backend to process the queries one-by-one. As the system waits for the queries to fetch the required answer from the database, the website speed becomes slower.

Generally under these circumstances, website admins scale up on the bandwidth. But during high season, thousands of customers simply enter and browse the website, for comparison, without any intent of purchase, proliferating the number of read queries to unmanageable levels, and blocking the read and write queries of genuine customers. Similarly, when the e-commerce site launches an ad campaign, several people may simply click on the link, enter the e-commerce site, browse for a while, and leave.



## THE SOLUTION

Normal scaling of resources has proved to be grossly inadequate to satiate the demand, especially during peak times. Magento's master-slave database architecture with MySQL databases, empowers load sharing.

Magento's load-sharing master-slave architecture basically entails deploying separate databases for write and read queries. The master database handles all write queries or modify the database, whereas slave databases handle read queries from the database.

Magento 2 Enterprise edition offers the option to create three master databases, for the main website and catalogue, for checkout related tables, and for order management system respectively. Unlimited number of slave databases may be created from each master database. For instance, a separate slave database may be created to handle wish list queries, another slave database may be created to handle price enquiries,

and so on. The MySQL administrator configures to replicate data automatically across the master and slave databases.

The obvious advantage of the master-slave architecture is load sharing and ensuring browsing does not have an impact on sales. Shoppers who proceed to the checkout have a separate database to execute faster. Another direct advantage is unmatched scalability. Site admins may add more databases when they expect customer frenzy and during lean periods they can conserve resources by removing databases.

In normal circumstances, taking backups is a separate distinct function. With the master-slave architecture, the backup may be taken from any one slave, leaving the other databases and the website unaffected. The spin-off benefit is to integrate backups into the process.

Magento's master-slave architecture, a backup database is always available. Moreover, taking backup from a single available database is a long-drawn process, during which the database becomes considerably slower, and by extension, the website becomes slower too degrading the customer experience.

Another spin-off benefit is the fillip on offer to data analytics. Just as in the case of backups, analytics may be done on a slave database, without impacting the performance of the master database. Site admins get the best of both worlds, the invaluable power of analytics without slowing down the website to extract the data required for analytics.

## **THE PROBLEM OF NO ORDER CONFIRMATION**

27% of online shoppers (i.e. 1 out of 4) in the US have abandoned an order in the past quarter solely due to a too long or complicated checkout process. A common problem that leads to cart abandonment is when the customer does not get an order confirmation after making the payment and completing the transaction.

Generally, an order success page greets the customer at the end of a completed transaction, and the customer gets an email with details of the

order and the reference number. However, instances when the payment is debited from the customer's card or account, he or she is greeted by a blank page, and gets no email confirmation. The frenzied customer has no recourse but to approach customer care, who may be equally clueless and can only get back at a later stage, after manual follow-up. The inefficiency of the entire system, and customer dissatisfaction can cause a heavy toll on e-commerce companies.

The order confirmation falls through the crack for either of the two reasons:

1. Glitches in the backend, such as account limit reached, address mismatch
2. PayPal tax rounding issues

In many cases, orders processed by the e-commerce store are fulfilled by third-party processes such as SAP and OMX. The e-commerce portal immediately sends the order data to the warehouse, on receiving the payment. In instances when the third-party warehouse server is down, the account limit is reached at the third-party end, or there is an address mismatch with the third party provider, the system cannot communicate, and goes into a waiting mode, until the order eventually gets timed-out within the system. The net result is a blank wall for the customer, with no confirmation, even after completing the transaction and making the payment.

The other most common reason for no order confirmation is PayPal rejecting the transaction, owing to a rounding issue. This happens when three digits in the e-commerce storefront are rounded off to two digits, and a 1c mismatch happens in rare cases. In case of such mismatch, PayPal rejects the order when unsure of the integrity of order.

## SOLUTION

With Magento, all transactions are saved in a secure database, making it easy for customer care to confirm the transaction, and process it. There is also a more effective way of separating the order submission from dispatching the order to the warehouse, to preempt such glitches from



occurring in the first place.

Magento allows creating a cron job scheduler that executes every few minutes, sending all accumulated orders to third party warehouse in batches. The customer gets an instant acknowledgement on confirmation of payment. At the backend, the orders accumulate, and are dispatched to the third-party warehouse in batches, at another time. An Intermediate database table in the system enables tracking the status of order send to the third party.

The solution for PayPal tax rounding issue is to modify the PayPal request data to get order total by adding the line items in the e-commerce database, without resorting to additional calculations.

## THE PROBLEM OF UNRESPONSIVE WEBSITES

\$260 billion worth of lost online orders in the US and EU can be recoverable solely through a better checkout flow & design. At times, the e-commerce website simply becomes unresponsive. The two most common reasons for unresponsive websites are:

### 1. Javascript Issues    2. Design issues

Most e-commerce websites execute multiple javascripts for different processes, such as billing, placing an order, tracking code for third-party websites, or to enhance the user experience. However, the website becomes unresponsive if javascript runs slow or in case a java code fails, there is a domino effect, with all sequential javascript affected. For instance, if there is a roadblock in sending data to an unresponsive third party site by a tracking code, then all the other javascript functions in line are affected. This may cause malfunction of place order button, often executed using a javascript function.

Another common glitch related to website design is when the customer clicks on “Submit Order” multiple times. In such cases, the system rejects all data as duplicates, leaving customer puzzled.

## SOLUTION

Avoid javascript, especially for sending data to third party websites. Instead, use an effective alternative like Google Analytics. When the design is tweaked, all the “submit order” buttons are disabled once clicked by the customer. Many websites display an animation to mask the “disabled submit order” button and indicate the order has already been submitted, and is under processing.

In today’s age of hyper-competition, e-commerce stores leave no stone unturned to increase their sales. Evidence suggests, fine-tuning the checkout process increases e-commerce sales considerably.

Magento offers a stable and customized means to present e-commerce wares, with seamless third-party integrations. With its powerful tools and capabilities, one can streamline the checkout process, and offer a uniform and powerful customer experience across all touch-points.

# 404 ERROR!

SORRY, THE PAGE  
NOT FOUND

RETURN TO THE  
HOME PAGE



## WEBINAR VIDEO

<https://www.youtube.com/watch?v=3zAsjzXnniE&lc=z13mjrcziu35sdt3f23fx1iqnnudgpan4baymard.com/lists/cart-abandonment-rate>

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We enable you to create insights driven customer engagement across all touch points to build a unified marketing approach. Our custom technology solutions have been deployed successfully in companies across the globe, especially in the US, UK, Europe and Australia.

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