6 Ways to Retain Shoppers from ‘Add to Cart’ to Order Completion

Checkout Optimization + Reducing Abandonments
Why Shoppers Abandon Checkouts

What’s Inside
This report dives deeper into six ways that sites can improve the checkout user experience to ensure orders aren’t needlessly lost through poor checkout design.

1. Form Field Optimization
2. Pre-Filled Form Fields
3. Security Concerns
4. Privacy Concerns
5. Account Creation
6. Third-Party Payment

Reasons for abandonment during checkout

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The site wanted me to create an account</td>
<td>37%</td>
</tr>
<tr>
<td>Checkout process was too long/complicated</td>
<td>28%</td>
</tr>
<tr>
<td>I couldn’t see/calculate order total up-front</td>
<td>23%</td>
</tr>
<tr>
<td>Lack of trust with credit card information</td>
<td>19%</td>
</tr>
<tr>
<td>There weren’t enough payment methods</td>
<td>8%</td>
</tr>
<tr>
<td>The credit card was declined</td>
<td>4%</td>
</tr>
</tbody>
</table>

$260 Billion is recoverable through checkout optimizations

Baynard has documented, over the course of 7 years worth of checkout user testing and benchmarking, that the average large-sized e-commerce site can increase its conversion rate by 35.26% solely through a better checkout design.

If we look at the combined e-commerce sales of $738 billion in the US and Europe, the potential for a 35.26% increase in the conversion rate translates to $260 billion worth of lost orders, which are recoverable solely through a better checkout flow and design. However, the research also shows that this type of increase won’t come easy, as the average checkout flow of large-sized e-commerce sites have 39 usability issues in their checkout flow on their current live production site.

69% of the online users who add a product to their cart never complete the purchase.¹

19% of all users in the past quarter have abandoned one or more orders because they didn’t trust the site with their credit card information, or 8% because there weren’t enough payment methods.

While Baymard’s testing reveals most of these users abandon checkout because they were just “window browsing” and never had the intent of purchasing, or abandon because of too-high shipping costs, the testing also shows some particularly interesting causes for checkout abandonments that are solvable solely by optimizing the checkout design and flow.

¹ The cart abandonment rate is an average rate across 37 different abandonment studies: https://baymard.com/lists/cart-abandonment-rate
Baymard's large-scale, 1-1 checkout usability testing, as well as large-scale eye-tracking studies, have consistently shown that users fixate on the form fields during the checkout flow.

Indeed, the amount of empty fields users are shown directly correlates with their experience of a site's checkout.

In short, the more form fields users are shown, the more likely their checkout experience will suffer, and the more likely they'll be to abandon without completing the checkout.

This type of form field reduction can be achieved by things like defaulting the billing address to be the same as the shipping address (hiding the billing address fields), collapsing secondary fields like “Address line 2” and “Company Name” behind text links, auto-detecting a user’s city and region based on the postal code, and asking for “Full Name” instead of “First,” “Middle,” and “Last Name.”

The good news is that the number of form fields required for completing a checkout can be reduced to as little as 6–8 fields, as shown here in a mockup of a shipping and a payment checkout step.

The average checkout has 15 form fields—twice as many as necessary²

---

² Baymard's benchmark of the top-50 US e-commerce sites; https://baymard.com/blog/checkout-flow-average-form-fields
Shoppers find pages full of empty form fields intimidating, as there’s a high degree of perceived friction where shoppers worry about how much time it will take to type all their information and the potential for typos and errors.

Baymard’s large-scale testing revealed that 26% of e-commerce sites ask for the same information multiple times in the checkout flow—common offenders mean that shoppers have to re-type the following:

- **PHONE**: Their phone number in a shipping step despite already having typed it during (non-checkout) account creation
- **NAME**: Their name in the ‘cardholder name’ field despite already typing it earlier in the checkout flow for the shipping address
- **ZIP CODE**: Their ZIP code at the shipping address step, despite having typed it in the cart step when using a ‘shipping calculator’
- **EMAIL**: Their email address for the shipping email that was typed outside the checkout when signing up for the site’s newsletter

Pre-fill any information if it will be retyped by the majority of shoppers

By pre-filling forms with shoppers’ previously typed information, they can quickly scan those fields to make sure the information is correct before moving on. In the example below, note how Wayfair has pre-filled the user’s email address in the first two images, and country in the third, all from information the shopper had previously entered.

Of course, a few shoppers will need to change the pre-filled information (e.g., if the contact phone is different from the shipping phone) but the point is that, for the majority of shoppers, the pre-filled information will be the same. In testing, users are highly appreciative of the site being "smart" enough to pre-fill their info, while a minority group of users still have the flexibility of using a different set of information.
Shoppers trust seals from consumer-facing brands more

The security seal used matters as consumer-facing brands (e.g., Norton and Google) are generally better in establishing trust compared to less widely known brands (e.g., GeoTrust and Comodo). The testing reveals that users tend to trust large, consumer-facing brands more than less well-known brands, even if those badges are actual SSL seals that indicate a technical level of security. The security seal used matters as consumer-facing brands (e.g., Norton and Google) are generally better in establishing trust compared to less widely known brands (e.g., GeoTrust and Comodo). The testing reveals that users tend to trust large, consumer-facing brands more than less well-known brands, even if those badges are actual SSL seals that indicate a technical level of security.

Actual security ≠ Perceived security

Most shoppers don’t have a good sense of the underlying technical workings of encrypted form pages. What shoppers rely on instead is their perception of how secure a form is; in other words, shoppers tend to “trust their gut.” In testing, it’s consistently observed that shoppers’ security perception is formed based on a visual evaluation of the credit card interface. Credit card interfaces without any unique visual styling or security badges (mockup A) are perceived as less secure than those with visual encapsulation of the form fields (mockup B). Simply adding background colors, encapsulating the form fields, and adding trust seals or security certificates is in testing observed to reduce shoppers’ anxiety over providing their credit card information.

Which badge gives you the best sense of trust when paying online?

36% 22% 19% 13% 10% 7% 1% 1% 1%

A B

19% of users didn’t trust the site with their credit card information.

19% of users have abandoned at least one checkout in the previous quarter because they didn’t trust the site with their credit card information. Large-scale, 1-1 testing with users supports this finding and investigated it further. The test data reveal that many users are anxious about providing payment data during checkout, but also reveal that this anxiety can be alleviated by making the credit card form fields more visually robust.

#3 Shoppers’ Perceptions of Site Security

1 Baymard Institute survey of 1,799 online US shoppers, matched to US internet demographics.

4 To determine which security seals perform the best with users, Baymard surveyed 2,020 US adults.
#4 Shoppers’ Privacy Concerns

Research Question:
When purchasing online, how reluctant would you be handing out the following information?

<table>
<thead>
<tr>
<th>Information</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security Number</td>
<td>92%</td>
</tr>
<tr>
<td>Passport Number</td>
<td>90%</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>35%</td>
</tr>
<tr>
<td>Phone Number</td>
<td>15%</td>
</tr>
<tr>
<td>Gender</td>
<td>11%</td>
</tr>
</tbody>
</table>

Not all information we ask of our shoppers is equally important to them. While card data is sensitive, our testing reveals several other types of information a sub-group of shoppers are highly reluctant to hand out, as shown in the graph.5

The very high abandonment rate when required to hand out the social security and passport numbers is obvious and only included for control. What is striking is how many shoppers who’d strongly consider abandoning their order if required to hand out date of birth (35%), phone (15%), and gender (11%). However, our benchmarking reveals that e-commerce suffers greatly from these privacy issues, as 46% of sites currently require their shoppers to provide a phone number, and 8% require gender or date of birth, without explaining why the information is required or what it’s used for.6

Make it optional—or explain why it’s required

Despite shoppers’ reluctance to hand over seemingly unnecessary personal information, our testing also verifies that sites can alleviate the vast majority of shoppers’ privacy concerns by simply explaining why the information is required.

Baymard’s large-scale shopper testing reveals that most users are mollified when a simple, one-line explanation of why the information is required, and what it will be used for, is provided. Letting shoppers know that, for example, a phone number is required “for shipping-related questions” eases their anxiety.

The same is true for gender and birthdate. In fact, a surprising number of shoppers would strongly consider buying a product elsewhere if they were required to provide their birthdate or their gender—35% and 11%, respectively. Given the risk of abandonments, gender and birthdate should only be asked for when absolutely required (e.g., to verify age for age-restricted products) or shoppers should be allowed to choose not to provide a response.

---

5 Baymard Institute survey of 2,020 online shoppers, matched to US internet demographics.
6 Baymard’s checkout UX benchmarking, https://baymard.com/checkout-usability/benchmark/top-100
Business vs shopper concerns

It is understandable why sites want to have shoppers sign up for accounts: they will have the ability to reach out more often to shoppers to offer them promotions and sales, and shoppers may be inclined to buy more frequently at a site at which they’ve already registered.

However, such legitimate business interests come at the expense of scarifying away a very significant amount of new shoppers, and forfeiting a significant amount of sales, here and now (up to 10-30% of sales).

Shoppers perceive a high level of friction when they are forced to create yet another e-commerce account to check out. Unlike many UX issues, the solution to this one is clear: shoppers shouldn’t be required to create an account simply to place an order at a new site.

Generally, our large-scale testing reveals that even on large-sized e-commerce sites, there’s often a 10-30% increase in conversion rate when going from forced account creation to optional.

Testing also revealed that a guest checkout flow isn’t just for shoppers who don’t have an account at a site: sometimes even registered shoppers needed to check out as a guest. For example, if shoppers can’t remember their username or password (which on average happens to 19% of account shoppers), and just want to check out as a guest rather than go through the process of resetting account login credentials.

Users dislike of being forced to create an account to check out was second only to “extra costs” as a reason for abandoning checkouts in Baymard’s survey of US internet users. In fact, 37% of respondents said they had left a checkout during the previous quarter because the site required them to create an account.

37% of users didn’t want to create an account

Shoppers have many different reasons for not wanting to create accounts. During testing, some of the most frequent include that:

• Shoppers simply don’t want yet another account at yet another e-commerce site

• Shoppers expect the checkout to be significantly slower when they create an account

• Shoppers expect they will receive “spam” (i.e., newsletters, promotional emails, etc.)
#6 Shopper’s Desire for 3rd-Party Payment Options

When Baymard first started testing checkout usability in large-scale back in 2009, many shoppers were unfamiliar with 3rd-party payment options. Back then, 3rd-party payment options were an optional convenience factor for a small minority of somewhat tech-savvy shoppers.

In our latest checkout study, however, shoppers’ expectations have shifted; with a clear sub-group of shoppers now relying strongly on 3rd-party payment methods. In fact, 8% of all shoppers have abandoned one or more orders in the past quarter, solely due to a lack of their desired 3rd-party payment option—and 83% of the top 60 grossing US and international e-commerce sites now offer at least one 3rd-party payment option.⁸

### International shoppers prefer 3rd-party payment methods

Testing revealed that among the domestic shoppers who strongly prefer a 3rd-party payment method, it’s mostly due to a combination of improved checkout convenience (less typing), and data security (not fully trusting the merchant site with their card data).

However, when testing with international users, that is any shopper ordering on websites from another country than their own, these international users strongly prefer 3rd-party payment methods mainly because they want a trusted 3rd party to act as a fallback in case of order issues or undelivered orders—expecting the 3rd-party payment provider to help them out.

In addition, even for the shoppers who don’t prefer the 3rd-party payment option it can sometimes prove useful. During testing, several of the shoppers that experienced credit card validation errors (which is up to 4% of all users)⁹ used the 3rd-party payment options as a secondary fallback option. This fallback option proved particularly effective for the group of shoppers who had prior experience with 3rd-party options.

The following two user quotes from testing illustrate international shoppers general sentiment well:

“"I didn’t get the items, and then I just got my money back. I have earlier purchased with my VISA card where I didn’t get the items, and there you have to physically go to the bank and that’s kinda messy. Both times I got my money back. But that is what they can do [3rd party, ed.], they take some fee for it, I don’t know how it works. They safeguard the money for some time.”

“I think it’s easier. Also, if something happens where they claim it’s shipped, but I don’t receive it—what do you then do? I’m not a lawyer. So what do you do in that situation?”

---

⁸ Baymard’s checkout UX benchmarking, https://baymard.com/checkout-usability/benchmark/top-100
⁹ Baymard Institute survey of 1,799 online shoppers, matched to US internet demographics, https://baymard.com/lists/cart-abandonment-rate
Baymard’s checkout user experience research has consistently documented that checkout can be improved significantly by adopting the following practices:

#1
Reduce the number of form fields shoppers have to fill out—the average site has 15 fields, but most sites can reduce this to just 6-8 form fields.

#2
Help shoppers move through forms more efficiently by pre-filling any information that users have already typed, in particular ‘email’, ‘cardholder name’, and ‘postal code’ typed earlier in the checkout flow.

#3
Ease shoppers’ concerns over the security of their payment information by visually encapsulating the credit card form fields and use trust marks shoppers recognize.

#4
Ease shoppers’ concerns over the privacy of their data by not asking for personal information such as gender or birthdate, making the input optional, or explain why the data such as their phone number is required.

#5
Allow shoppers to check out as guests, and refrain from forcing them to create accounts to check out.

#6
Provide shoppers with at least one 3rd-party payment option, especially when catering to international users.
About the research

28,000+ hours of e-commerce UX research

This research report on checkout user experience optimization is conducted by the Baymard Institute and commissioned by Amazon Pay.

To date, Baymard Institute has conducted 28,000+ hours of large-scale UX research—uncovering what designs cause usability issues, how to create ‘State of the Art’ e-commerce experiences, and how leading e-commerce sites perform.

The findings presented here are based on parts of the research results from Baymard Institute’s 7 years’ worth of large-scale testing of e-commerce checkout flows, and employ a mix of the following test methodologies:

• 2 rounds of 1:1 moderated qualitative usability testing (in lab) with a total of 272 test participants/site sessions following the “Think Aloud” protocol—real users testing live e-commerce checkouts.

• 1 large-scale eye-tracking checkout study with 32 participants.

• 2 rounds of checkout benchmarking with 6,000+ weighted checkout UX performance parameters.

• 5 quantitative studies with a total of 7,023 participants.

About Baymard Institute

Baymard is an independent web research institute with a main focus on e-commerce usability and optimization. Since being founded in 2009, Baymard has conducted large-scale e-commerce usability testing, published 15,000+ structured best practice examples from top online retailers, and consulted for 71% of all Fortune 500 B2C e-commerce sites.

For questions about the research and methodology, visit www.baymard.com, or email info@baymard.com.
Faster checkout

Amazon Pay simplifies checkout so hundreds of millions of customers around the globe can check in and check out using information already stored in their Amazon accounts.

“With Amazon Pay, customers can make purchases without entering their payment or address information. It only takes a couple of steps to check out, and you don’t need to fumble around for a credit card.”

Ben Branson
Founder, Seedlip

Increased conversion

Amazon Pay is a trusted, familiar solution that can minimize the number of input fields at checkout and boost sales.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Industry/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>76%</td>
<td>Mattress Retailer (US)</td>
</tr>
<tr>
<td>19%</td>
<td>Gaming (US)</td>
</tr>
<tr>
<td>20%</td>
<td>Broadband Wireless (UK)</td>
</tr>
</tbody>
</table>