

6 Checkout Optimization Lessons

based on years of testing at the Baymard Institute

Years of Checkout Research

Large-scale checkout usability study of 15 of the largest e-commerce sites

Benchmark study of 100 major US e-commerce sites' checkout process

Large-scale eye-tracking study of checkout processes

Audited and consulted on checkout optimization for several Fortune 500 companies

Checkout Optimization 2015

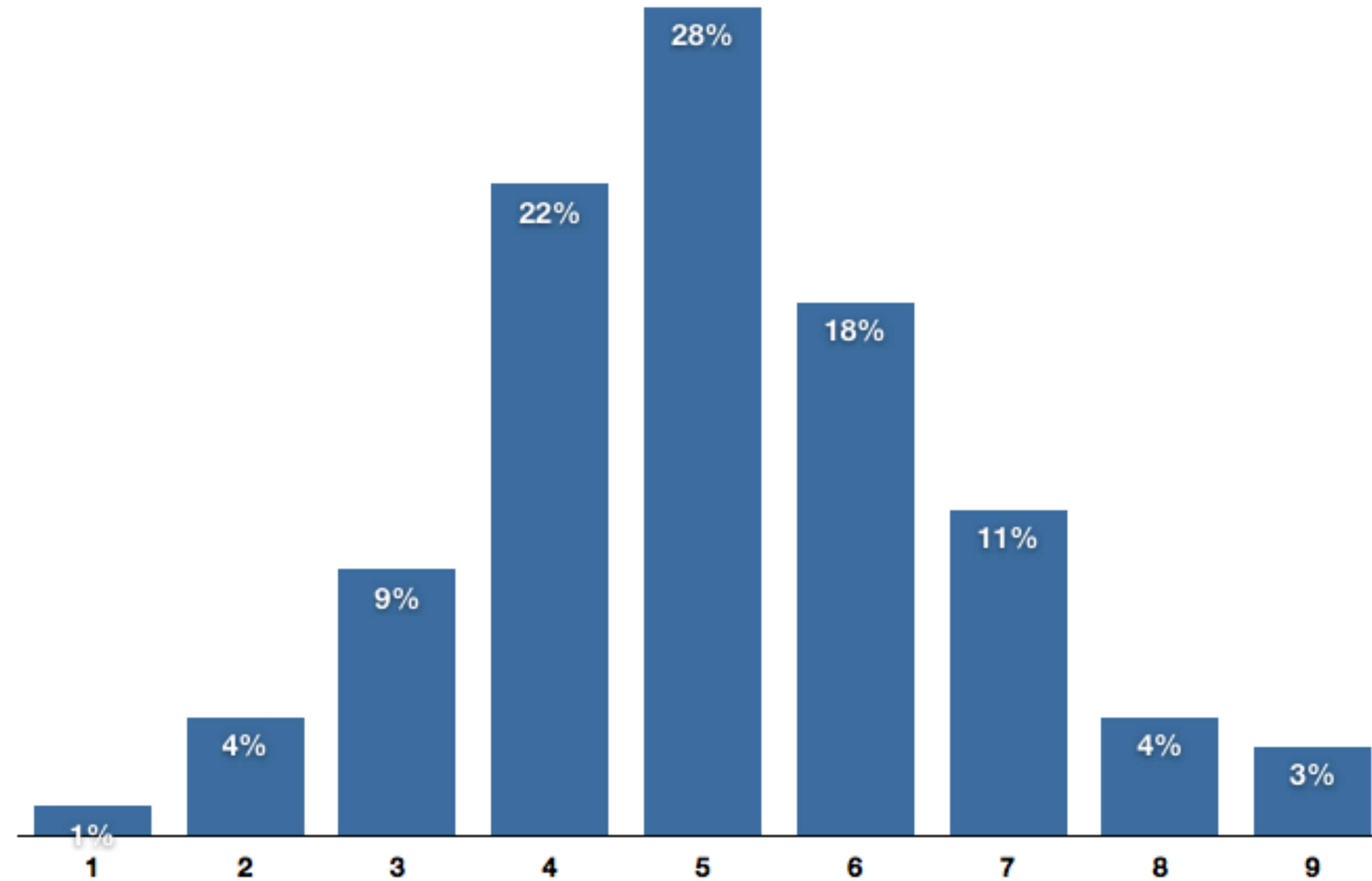
68.07% cart abandonment rate – and still rising

(2006 - 2015 average of 29 independent studies)

Good checkout usability requires going beyond basics with 10-30
smaller design improvements

Today we'll look at 6 checkout optimization lessons

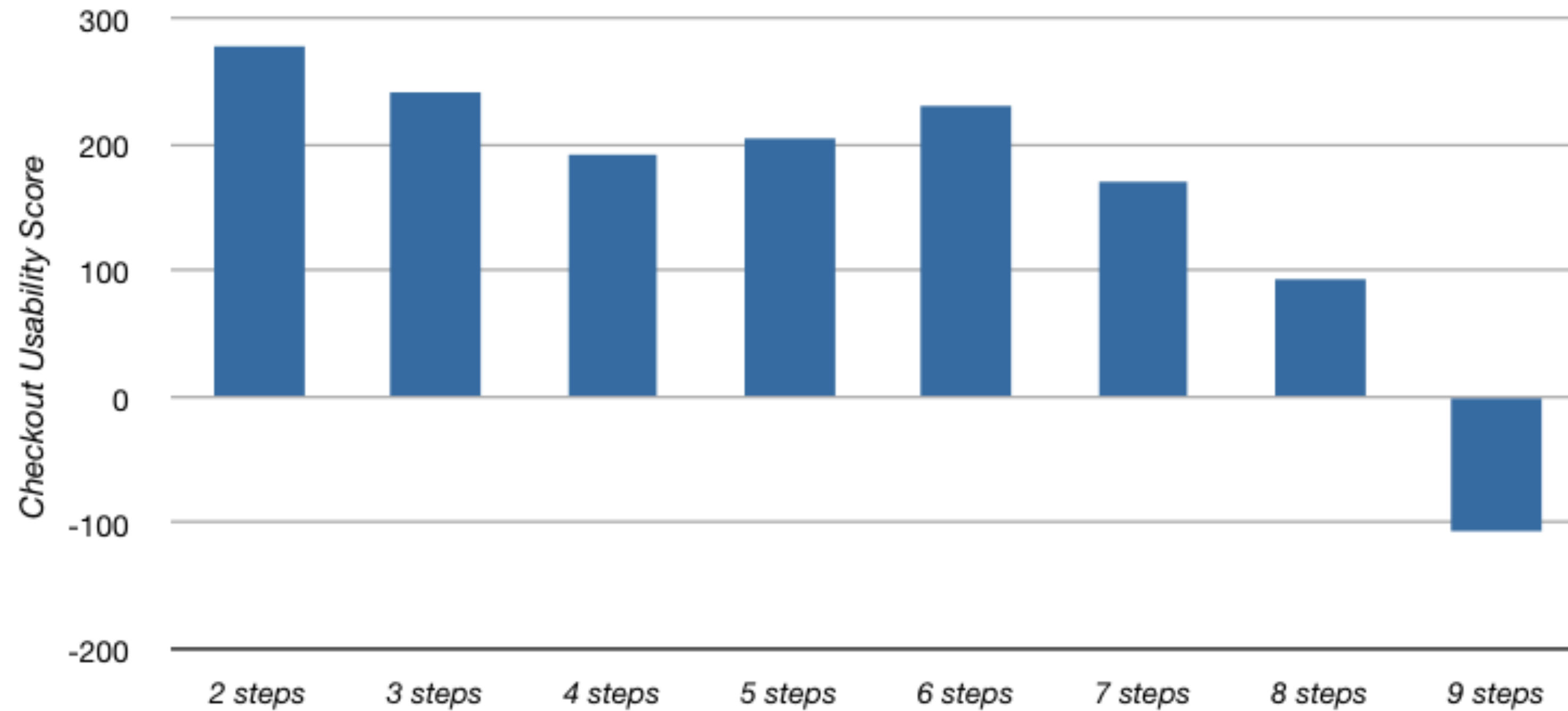
Average Number of Checkout Steps



Number of checkout steps for the top 100 US e-commerce site

(avg. 5.08 steps from 'cart' to 'order review')

It's Not About the Number of Checkout Steps



It's *not* about the number of checkout steps, but what you ask users to do at each step (and how you ask them)

Secure Checkout

Edit Shopping Bag

Shipping Information

Billing Address

Payment Options (Step 3 of 4)

Your Payment Method

☒ Credit Card

VISA

MasterCard

Discover

UnionPay

JCB

Amex

Card Number

Exp. Date

Month

Year

Ex: XXXX XXXX XXXX XXXX

☐ PayPal

Promo Codes, Gift Cards and Merchandise Credit

Enter code or number

REDEEM

Promo codes are case sensitive.

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L.L.Bean Visa Coupons

Coupon Number

Enter number

REDEEM

Ex.: XXXXXXXXXXXXXXXXXX

[Return to Billing Address](#)

CONTINUE TO REVIEW ORDER

Order Summary

Shipping

Balance

CONFIRM

This order Card for applicable prices shown

✕

Research: How Do Visitors Interact with Form Fields and Buttons?

Users show a disproportionate amount of attention towards empty form fields

Users will feel they are overpaying when seeing a coupon code field

1. SHIPPING

Shipping address

John Newman
2125 Chestnut St
San Francisco, CA 94123-2708
United States
4153159567
[Edit](#)

Shipping method

Standard Shipping. Estimated arrival date: Mar 21
[Edit](#)

No gift box added.
[Edit](#)

2. BILLING

Billing address

John Newman
2125 Chestnut St
San Francisco, CA 94123-2708
United States
4153159567
john-n@baymard.com
[Edit](#)

New REI membership

Buy a lifetime membership for a one-time fee of \$20. REI member benefits include an annual refund of up to 10% back, exclusive member deals and more.

☐ Add a \$20 membership

Current REI members

Add your number to this order to receive your member benefits.

Member number

Payment method

Coupon code

Gift card

Credit card



Card number*

Expiration date*

Security code* [?](#)

[Continue](#)

Don't worry, your card won't be charged yet.

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3. REVIEW AND SUBMIT ORDER

Order summary

[Edit cart](#)



Brooks Beast 12 Road-Running Shoes - Men's
Quantity: 1
\$140.00

Subtotal	\$140.00
Standard shipping	FREE
Tax (?)	\$12.25
Total due	\$152.25

THE REI DIFFERENCE | **100%** SATISFACTION GUARANTEED

Lesson 1: Understand Form Field Attention

To avoid 'coupon hunting' hide coupon code field behind a link

Only utilized at 26% of all sites

Consider renaming it 'reward code' or even 'gift certificate'



Research: Seemingly Unnecessary Info Requirements

“Look, why do they need my phone number? What do they need that for? They don’t need it!”

Every single subject we've tested at one point complained about a site asking for too much personal information

A required phone cause privacy concerns as users 'know' that they can be (and typically are) contacted by email

* Company: If you do not have a Company name, please
* Email:
☐ Please send me email notifications regarding Symantec products

2. Billing Information
United States or Canadian addresses only.

* Address:

* City:

* State/Province:


* Zip/Postal Code:

* Country:

* Telephone: Format: ###-###-####

3. Shipping Information
☒ Use the above billing information for your shipping information.

4. Payment Information



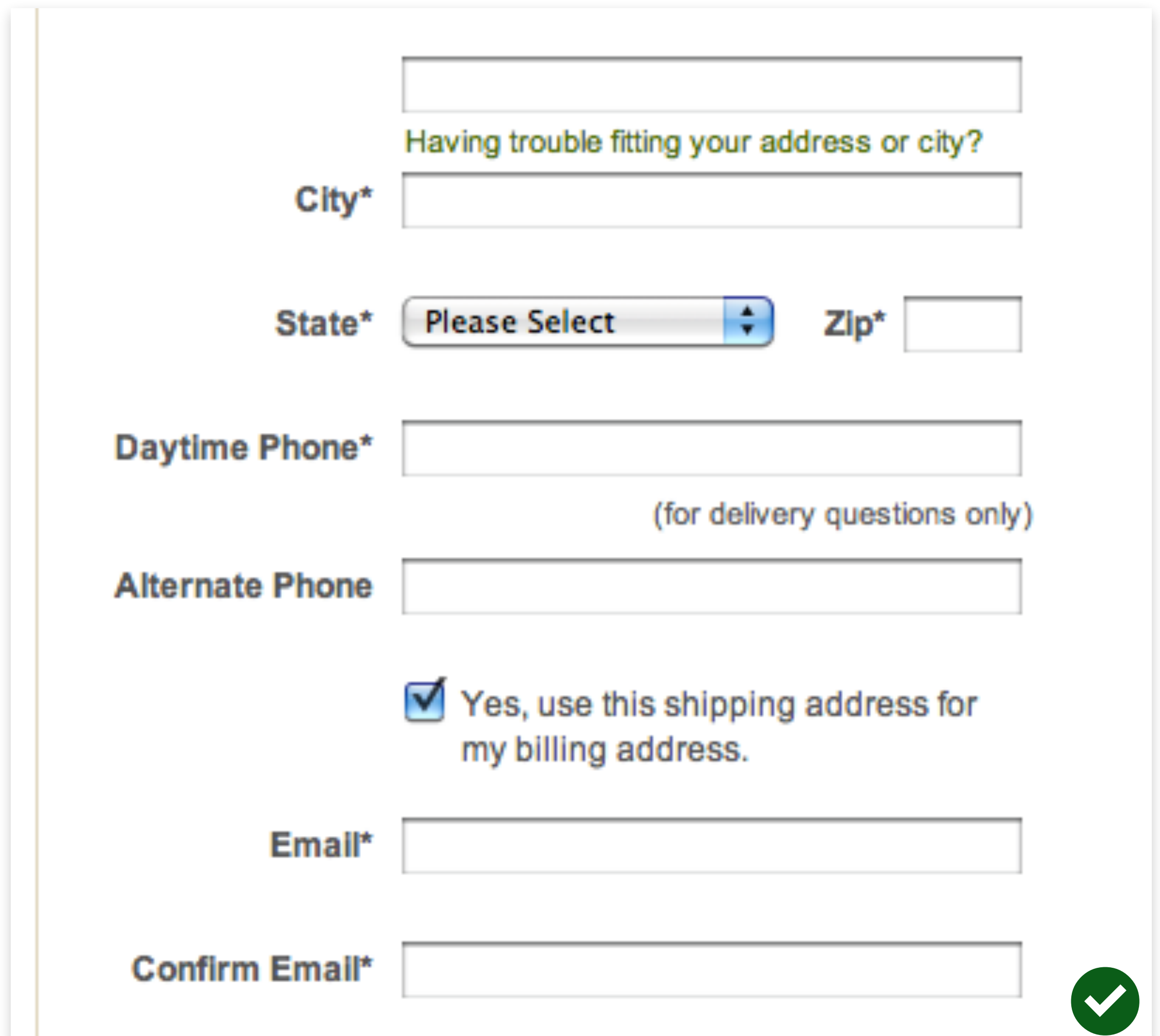
Lesson 2: Explain Seemingly Unnecessary Requests for Personal Info

The subjects were very forgiving if the site explained *why* phone was required

Either make phone optional *or* explain it

61% of all sites require phone without explaining what it will be used for

Also applies to other personal info such as gender, date of birth, social security number, etc.



The screenshot shows a checkout form with the following fields and elements:

- A text input field at the top.
- A link: [Having trouble fitting your address or city?](#)
- City*** with a text input field.
- State*** with a dropdown menu showing "Please Select" and a blue arrow icon.
- Zip*** with a text input field.
- Daytime Phone*** with a text input field.
- A note: *(for delivery questions only)*
- Alternate Phone** with a text input field.
- A checked checkbox with the text: **Yes, use this shipping address for my billing address.**
- Email*** with a text input field.
- Confirm Email*** with a text input field.
- A green circular button with a white checkmark icon in the bottom right corner.

Williams-Sonoma

Research: Redundant Information Requests

Shipping Address

John Newman
415 848-4445
2125 Chestnut St
San Francisco CA 94123-2708
United States

Shipment Notifications


1. → john.newman@baymard.com
Signature may be required for delivery

Edit Shipping

Shipping Method

Standard Shipping — Free

Edit Shipping Method



iPad with Wi-Fi 16GB – Black (3rd generation)

Delivers Aug 22 by Standard Shipping

Part number: MD333LL/A

Recycle fee

\$499.00

1

\$499.00

Edit Cart

\$6.00

Payment & Account

Payment & Billing Details

Debit/Credit Card

Apple Gift Card

Financing

2. → Same as shipping information

Billing Contact

John

Newman

415

848-4445

Area Code

Alternate Phone (optional)

Email Address

VISA

MasterCard

AMERICAN EXPRESS

DISCOVER

Debit/Credit Card Number

Security Code

Expires

Month

Year

Pay with two debit/credit cards

?

✕

50% of all sites ask for the same info multiple times during checkout

baymard.com

Lesson 3: Don't Ask for the Same Info Twice and Pre-Fill Fields

Rarely happens on the same page

Obviously avoid asking for redundant info – but what about things that are often, but not always, the same? Like billing vs shipping address

Reduce friction by *pre-filling* things such as name (in particular cardholder name), e-mail, zip code, or an address typed earlier (e.g. during account creation)

For most B2C sites billing address can default to the shipping address

The screenshot shows a checkout process with three main sections: 'Ship To', 'Payment', and 'Review'. The 'Ship To' section displays the address: John Newman, 2125 Chestnut st., San Francisco, CA, 94123, United States, with a 'Change' link. The 'Payment' section is highlighted with a green checkmark and asks 'How would you like to pay?'. Below it, there's a section for 'Add New Payment Method' stating 'We accept American Express, MasterCard, Visa and Discover Card.' It includes input fields for 'First Name' (pre-filled with 'John') and 'Last Name' (pre-filled with 'Newman'), and a 'Card Number' field. The 'Review' section asks to 'Confirm order details and shipment method.' A sidebar on the right shows 'Order Summary', 'Estimate', 'Shipping', and 'Total:'. A green checkmark icon is visible in the bottom right corner.

The screenshot shows a checkout page with two main sections: 'Shipping and Payment Information' and 'Your Cart (\$114.40)'. The 'Shipping and Payment Information' section is highlighted with a green checkmark and contains a 'Shipping Address' form. The form has fields for 'First Name *', 'Last Name *', 'Company', 'Street Address *', 'City *' (pre-filled with 'San Francisco'), and 'Zip/Postal Code *' (pre-filled with '94123'). A note states 'Please note that we cannot ship to a PO Box'. The 'Your Cart' section shows 'Credit Card' payment options (PayPal, Google) and a message: 'Don't worry, you will not be charged yet. You will chance to review your order on the next page.' It includes fields for 'Name on card *', 'Card Number *', 'Expires *' (pre-filled with '01' and '2012'), and 'Security Code *'. A green checkmark icon is visible in the bottom right corner.

The screenshot shows a checkbox labeled 'Use this address for my Billing information.' with a green checkmark icon next to it. A green checkmark icon is also visible in the bottom right corner.

2 Shipping Address

Shipping Address

Christian

Holst

2125 Che

This is not a valid entry. Please check that the information is correct.

941

41531591

Street Address

Apt, Suite, Bldg. (optional)

ZIP Code

Enter ZIP for City and State

United States

☐ This is a business address ?

Shipping Notifications ?

Shipment notification emails are sent to the Billing Contact.
Another recipient email address may be added below.

Email Address (optional)

For shipment updates via text messages, enter a mobile number below.

Area Code

Mobile Phone (optional)

Chat Now

3 Payment

Apple Shipping Policy | [Learn](#)

- Signature may be required
- We do not ship to P.O. boxes
- Delivery estimates below in
- We do not ship directly to A

Research: Use of Inline Labels

Field labels inside the field is *visually* very simple, however...

... the form fields get very difficult to *interact* with, and ...

... each field loose its *context* the second the user starts typing (unless the label changes position)

Especially problematic on errors

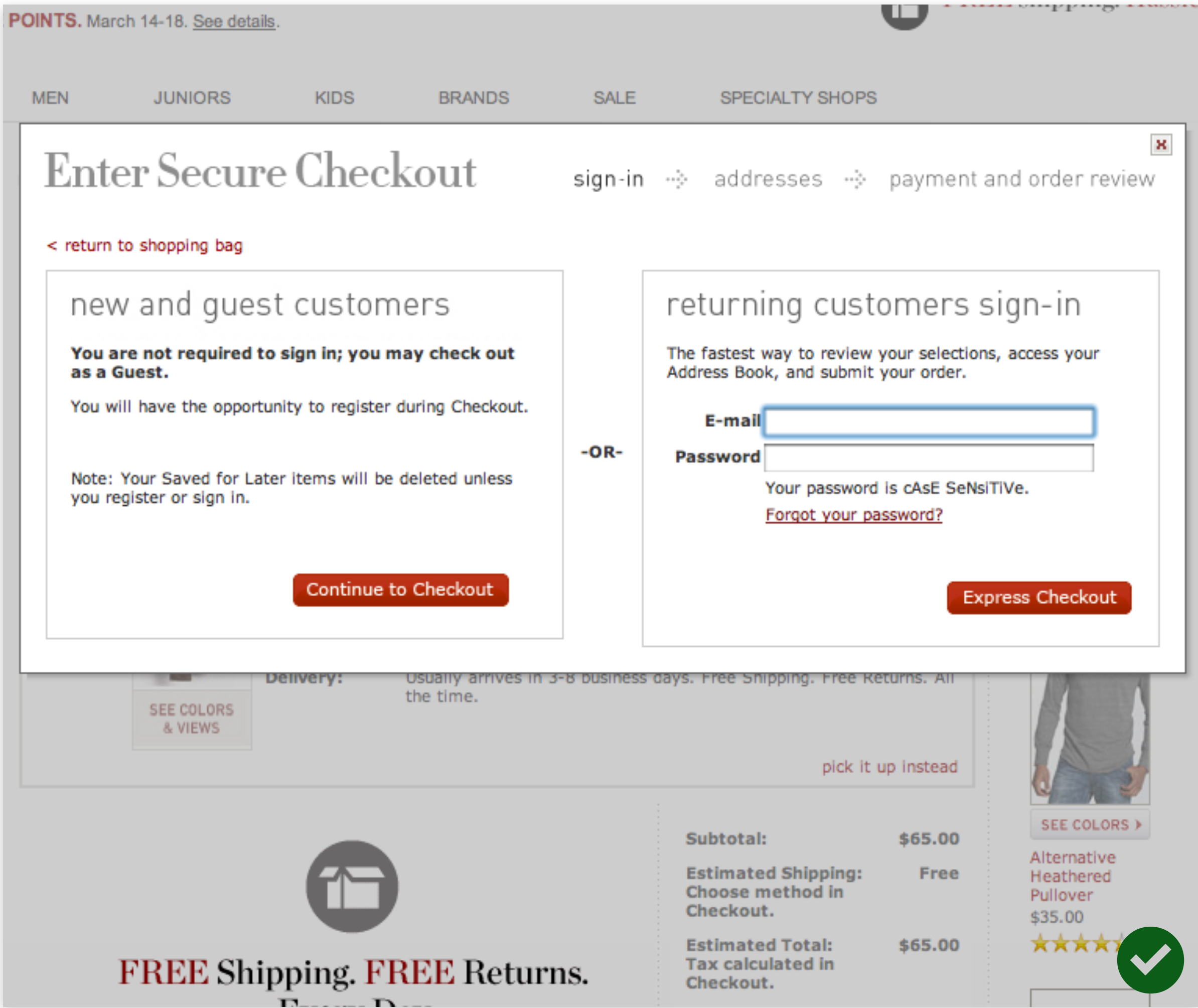
Make Checkout as Frictionless as Possible



60% overlook the 'Guest Checkout' option
will be perceived as 'forced' account creation

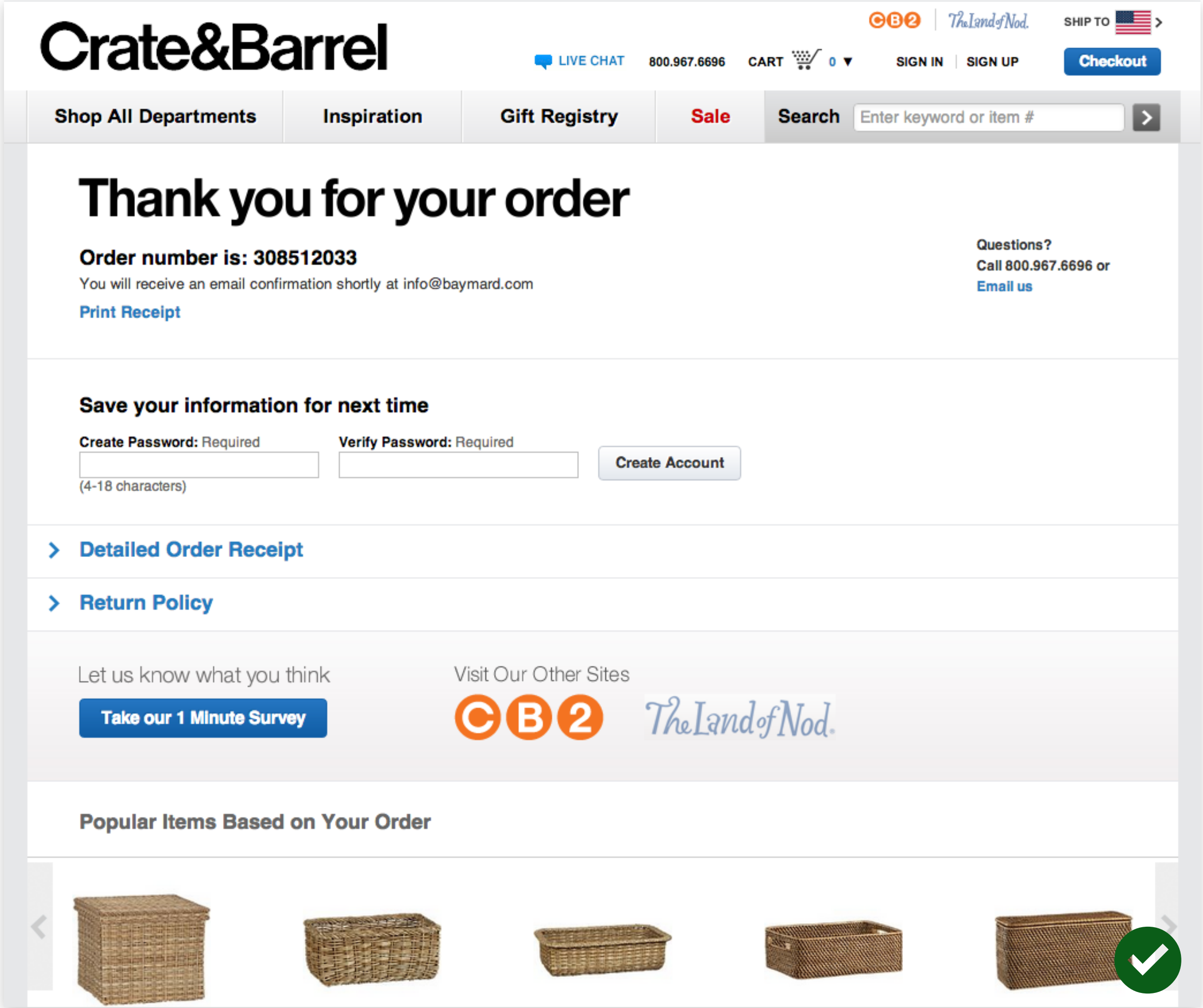
Learn more baymard.com/blog/mobile-checkout

Lesson 4: Consider the Placement of 'Guest Checkout'



‘Guest’ is top-left, following a western reading pattern

Learn more baymard.com/blog/mobile-checkout



Postponed account creation (perceived as just 2 fields)

Test subjects talked about different *areas* of the checkout page as particularly 'secure' or 'insecure'

Users have little technical knowledge of HTTPS, but go with their gut feeling

baymard.com

Research: Visual Reinforcement & Perceived Level of Security

Visual clues such as borders, a background color, and security icons add to the user's *perceived* level of security

89% of sites don't encapsulate their credit card fields

Learn more: baymard.com/blog/visually-reinforce-sensitive-fields

Office DEPOT.

1. Login

2. Ship

3. Pay

4. Review & Place Order

Checkout: Pay (Step 3 of 4)

Continue Shopping

Payment Information

* Required Information

☒ Same as Shipping

* First Name:

John

Middle Initial:

* Last Name:

Newman

Company Name

* Address

2125 Chestnut St.

* City

San Francisco

* State

CA - California

* Zip Code

94123

Country

USA

* Phone Number:

415-845-444

 ext.

Fax: - -

* Email Address:

john.newman@baymard.com

* Re-Type Email:

john.newman@baymard.com

Subtotal:

\$4.79

Delivery Fee:

\$9.95

Taxes: [Tax Exempt?](#)

\$0.41

Total:

\$15.15

Canadian users register at: [www.officedepot.ca](#)

Credit card orders require a billing address that appears exactly as on your credit card statement (even if different than your account billing address). Please enter the address above. Billing information is required for all orders, including Gift/Reward Card purchases.

Payment Information

* Required Information

Credit Card

Credit Card Type:

(Select your card type)

Credit Card Number:

Please enter your credit card # without spaces or dashes (i.e. 000000000000)

Expiration Date:

--

 /

--

 (mm/yyyy)

CID

[Need Help?](#)

Need Help?

Email Assistance

FAQs

Chat not available

Shop with Confidence

Privacy

Every transaction is secured using SSL encryption. [View our Privacy Statement](#)

Get it Faster


Pick your order up at [Your Local Store](#)


Not what you thought?

Please review our [Return Policy](#)

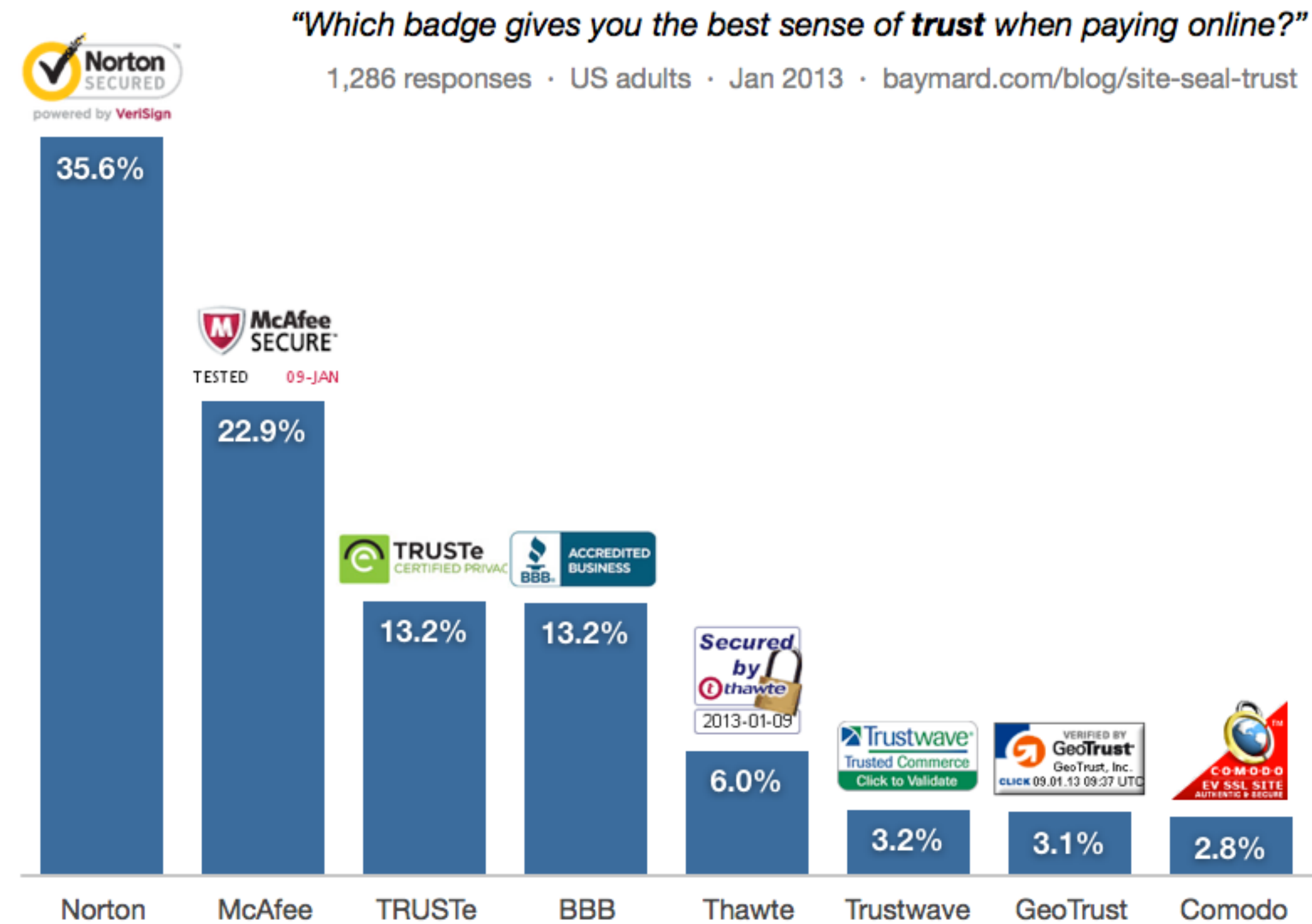
VeriSign Secure

Your information is protected by VeriSign encryption





Research: Badges and Perceived Level of Security



A

Checkout

step 1/2

* Your name

The software license will be made out in this name.

* E-mail address

We'll send the receipt to this e-mail address.

Company name (optional)

If you want your company name on the invoice, just add it here.

Secure credit card payment

This is a secure 128-bit SSL encrypted payment.

* Credit card number

The 16 digits on the front of your credit card.

VISA

MasterCard

AMEX

DISCOVER

* Expiration date

The date your credit card expires. Find this on the front of your credit card.

01 / 11

* Security code (or "CVC" or "CVV")

The last 3 digits displayed on the back of your credit card.

8627 123

What happens now?

This is step 1 of 2. On the next page you can review your cart and product information. We will not bill you until you confirm the order on the next page.

Next step »

B

Checkout

step 1/2

* Your name

The software license will be made out in this name.

* E-mail address

We'll send the receipt to this e-mail address.

Company name (optional)

If you want your company name on the invoice, just add it here.

Secure credit card payment

This is a secure 128-bit SSL encrypted payment.

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VISA

MasterCard

AMEX

DISCOVER

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01 / 11

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8627 123


What happens now?

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Next step »

Research: Validation Errors and the Recovery Experience

! Important Message
There was a problem with your address submission. Please fix all the areas below and try again.

Add Credit/Debit Card
Credit or Debit Card Number:

Cardholder's Name:
Expiration Date: 02 2016
Add Billing Information
Full Name:
Address Line1:
Address Line2:
City:
State / Province / Region:
ZIP:
Country:
Phone Number:

Please enter a valid zip code for your region.

Would you like to create a Blue Nile Account and store this information? ☐ Yes ☒ No

*First Name	<input type="text" value="John"/>	*Address	<input type="text" value="2125 Chestnut st"/>
*Last Name	<input type="text" value="Newman"/>		<input type="text"/>
Company	<input type="text"/>	*City	<input type="text" value="San Francisco"/>
*Phone	<input type="text" value="4158484445"/> <input type="text"/> Intl. number?	*State	<input type="text" value="CA -- California"/>
	Phone Number Ext.	*Zip Code	<input type="text" value="9412w"/>
*Email	<input type="text" value="john.newman@baymard.com"/>		
	*Country	<input type="text" value="United States"/>	

Register Yourself

You have entered an invalid e-mail address. Please try again.

Input errors are bound to happen – the user's 'recovery experience' is vital to conversion

(100% abandonment on unresolved errors)

Lesson 6: Display the Triggered Error Rule

1) Persist all typed data – retyping is infuriating and can lead to repeat errors

2) Highlight field and have the error description nearby (never *only* at the top of the page)

3) The error message should print the actual validation rule invoked – don't simply write 'invalid phone number'; instead write '+ character not allowed' or '10 digits required'

4) Consider using non-blocking warnings instead of validators (currently only 36% have address warnings)

5) 1-4% of all transactions are declined: guide the user through the process, offer alternatives, and phone support.

subscription to your existing account.


Email

Verify Email

Password

Verify Password

Password should not be same as Email Address.




State:

Zip Code:

Phone:

This entry can only contain numbers. Please try again.

[Why is this required?](#)




please verify.

are you missing an apartment/suite number? this may affect the delivery of your order.

John Newman
Chestnut St
San Francisco, CA 94123

[edit address](#)

continue



The 6 Checkout Optimization Lessons

Hide coupon code field behind a link, to avoid needless attention

Explain what the phone number will be used for

Pre-fill all prior typed info (e.g. cardholder name) to reduce typing

'Guest Checkout' should be in the top left area (or chosen by default) +
have optional password fields late in the checkout

Encapsulate your credit card fields to add visual reinforcement

Display the actual error rule triggered and consider non-blocking warnings
instead of validators, etc

Checkout Optimization 2015

68.07% cart abandonment rate – and still rising

(2006 - 2015 average of [29](#) independent studies)

Good checkout usability requires going beyond basics with numerous smaller design improvements

“Research-Driven Design”

Baymard Institute