



UNIT-2

Software Options and Solutions

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Evaluate e-commerce software options.
- ✓ Build an online store with product pages, supporting features, a shopping cart, and an effective checkout process

Unit 2

Software Options and Solutions

Looking at the Options

Software and Services Required for E-Commerce Businesses

An e-commerce business typically requires two types of software. The first element is a **content management system**, which will host all the back-end features for your business (such as inventory management and web page content). The second element is an **e-commerce server** package, which will host all the customer-facing (front-end) features for your business, such as online catalogs and credit card processing. These two systems may be separate software packages that can be connected together, or they may be part of an integrated software suite.

You will also need a **web host** that will broadcast your site to the Internet. Most e-commerce businesses choose a hosting company to do this for them. When evaluating hosting companies, be sure to find out:

- How many pages are included with a site package
- What the site size limit is
- What the bandwidth is
- How many users are supported
- If there is a guaranteed uptime percentage
- What content management systems and e-commerce server packages they support, or if certain features (such as shopping cart services) are built in
- What level of customization is supported (for example, can users make changes to web pages or does the hosting company make all site changes)
- All fees and taxes

Be sure to test some sites that are currently hosted by the company that you are looking at to evaluate their speed and functionality.

Options for Your Business

Let's take a look at the most common options for e-commerce server software.

Out of the Box

Your first option is to choose an online service that provides all the tools you will need via an online interface, as well as templates to get started. Shopify, Yahoo! Small Business, Volusion, and Amazon all provide this type of service. This option is best if you have a small budget and a simple business.

Building Your Online Store

Your Internet Address

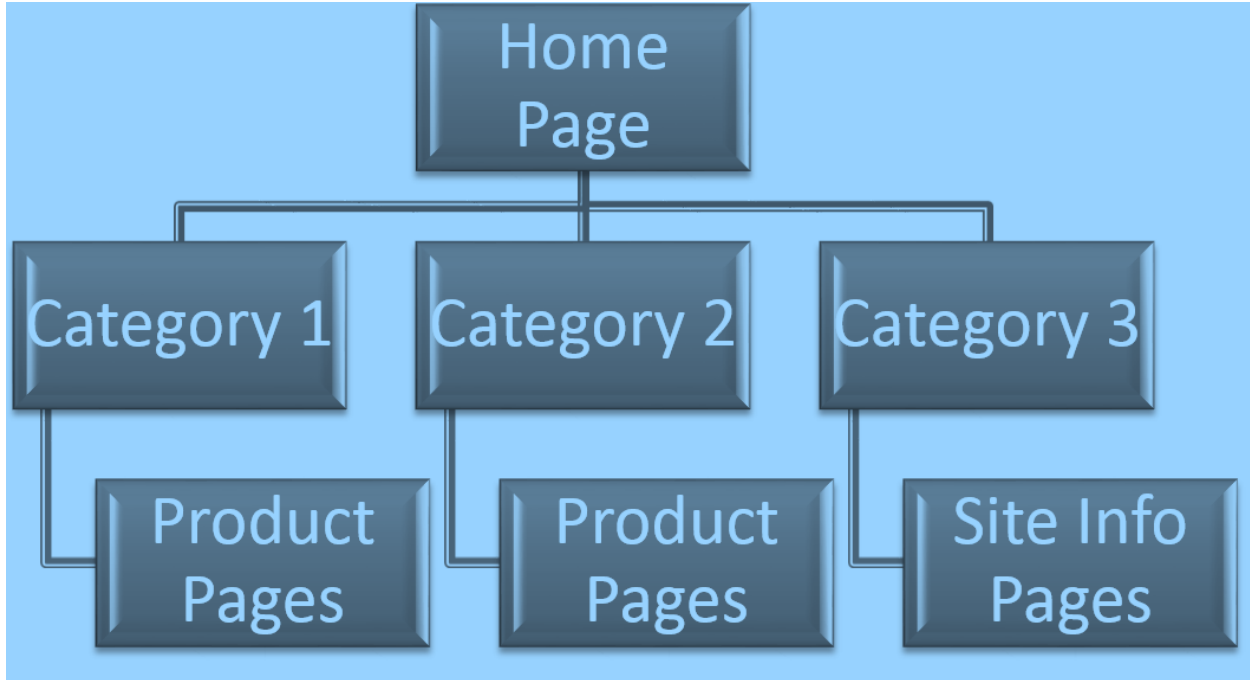
The setup of your e-commerce store will depend on your company and what products and/or services you offer. However, there are some basic elements that all stores contain and that should be optimized. First, let's look at what customers will see first: your domain name and your top-level page.

Domain Name

Your domain name will be your business' Internet address, so make sure that it is easy to remember and type. Consider using an alternative top-level domain like .biz or .info if the .com version is taken. As of this writing, top-level domain names are becoming more diverse and experts are predicting that they will take on more importance in the coming years.

Overall Site Organization

Typically, a website will have a three-tier setup that makes it easy to navigate through the site and find information. Product pages are typically organized by category (and sometimes further by sub-category), with an additional category for site information pages. Links to these information pages are usually displayed in the footer of every site page for easy access.



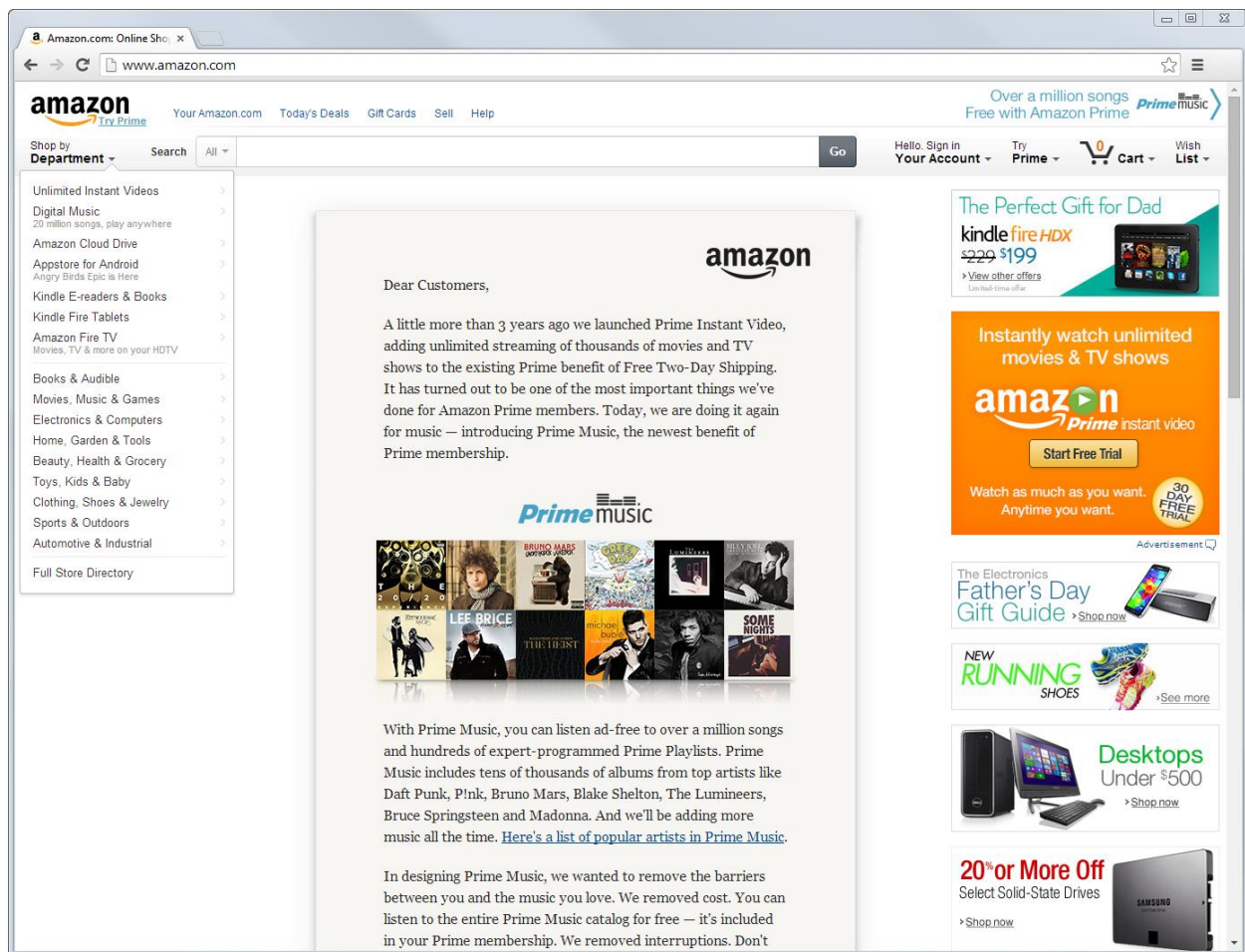
Here is a sample site hierarchy for a site selling body care products.



Top-Level Page

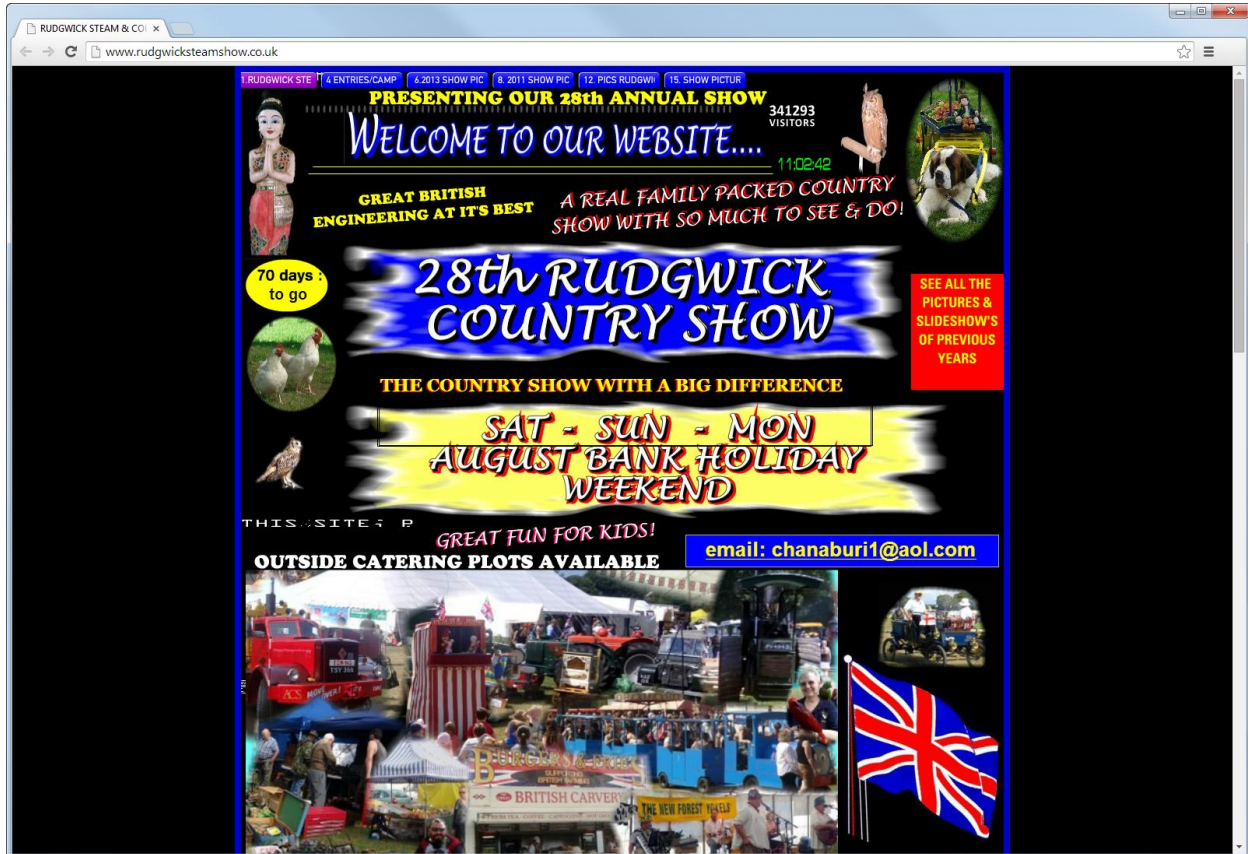
The top-level page of your website is also known as the **home page**. This is the page that loads when customers type in your Internet address or click its link from a search engine. It needs to engage the reader within five to seven seconds, or they will probably go elsewhere to find what they are looking for. Ensure that the design is clean and that it clearly states the business and key product names. Use short, snappy sentences that tell the reader why they should stay and how they can benefit from the products and services offered. Chunk information using headings and blocks to help customers scan through the information. As well, offer the same navigation structure (menus, search box, etc.) that users will see throughout the rest of the site.

Consider Amazon’s top-level page:



An easy-to-use directory is featured on the left, with a search box and quick links clearly visible at the top. A sales pitch currently occupies the center of the page, which will be replaced with recently viewed and related items once the user has searched for products. Finally, current promotions are featured on the right-hand side.

Compare its clean design with this outdated website advertising a country show:



It's missing all the key elements: a clean, inviting design; clear link structure; and instructions for the reader. In fact, you have to scroll to the bottom of the page to find out how to navigate the site. Finding out how to purchase tickets is almost impossible. There are also several typographical and grammatical errors right on the front page.

Call To Action

Give your visitors a clear indication of what you want them to do right from the home page. This is known as the **call to action**, or **most-wanted response (MWR)**.

A call to action usually includes a phrase like:

- Click Here!
- Call Now!
- Buy Today!
- Special Limited-Time Offer!
- Get a Free Quote Now!
- See It In Action!
- Find Out More!
- Donate Today!

- Download Now!

Your call to action might be to have a customer:

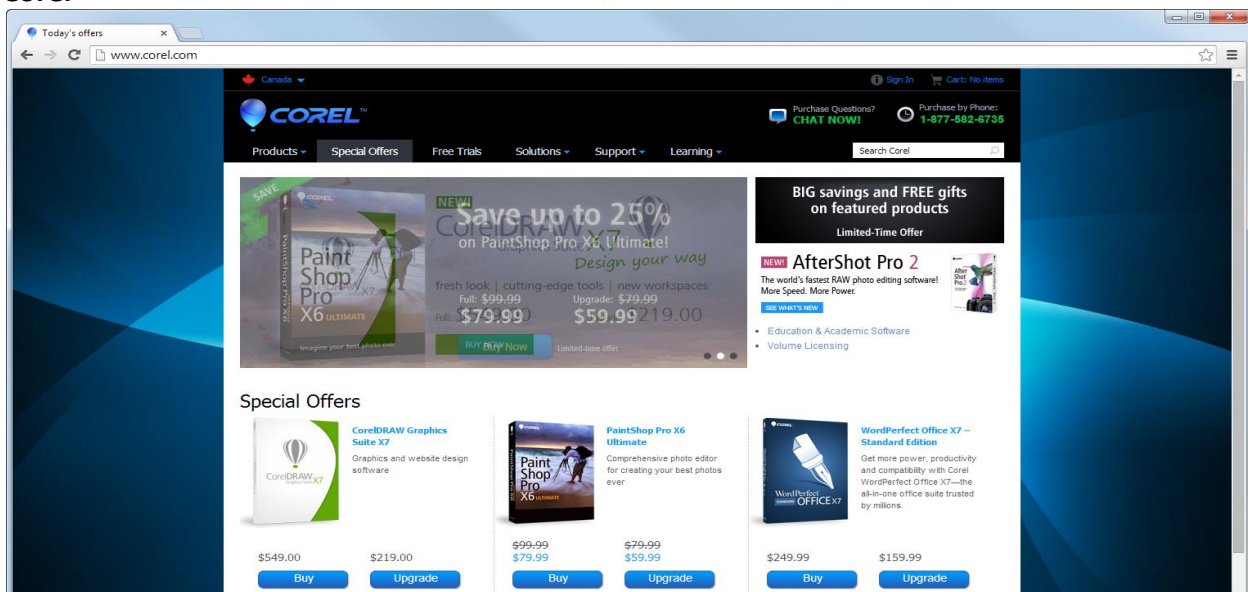
- Buy a product
- Sign up for a newsletter
- Watch a video
- Click an advertisement that you get revenue for

Here are a few examples of websites with powerful call to action statements on their home page.

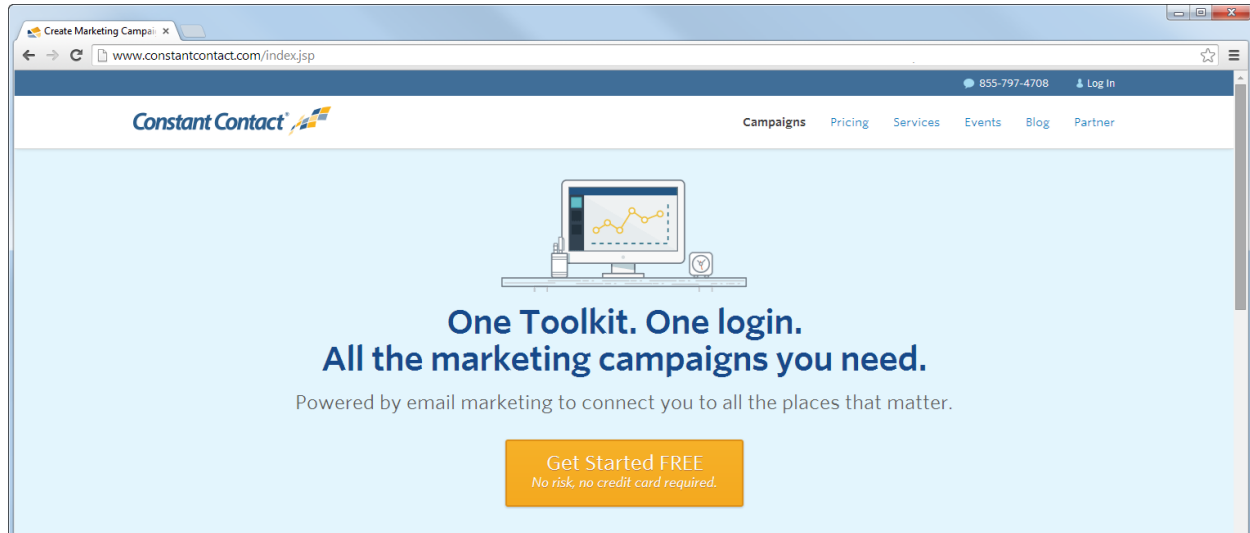
Bob Bly



Corel



Constant Contact



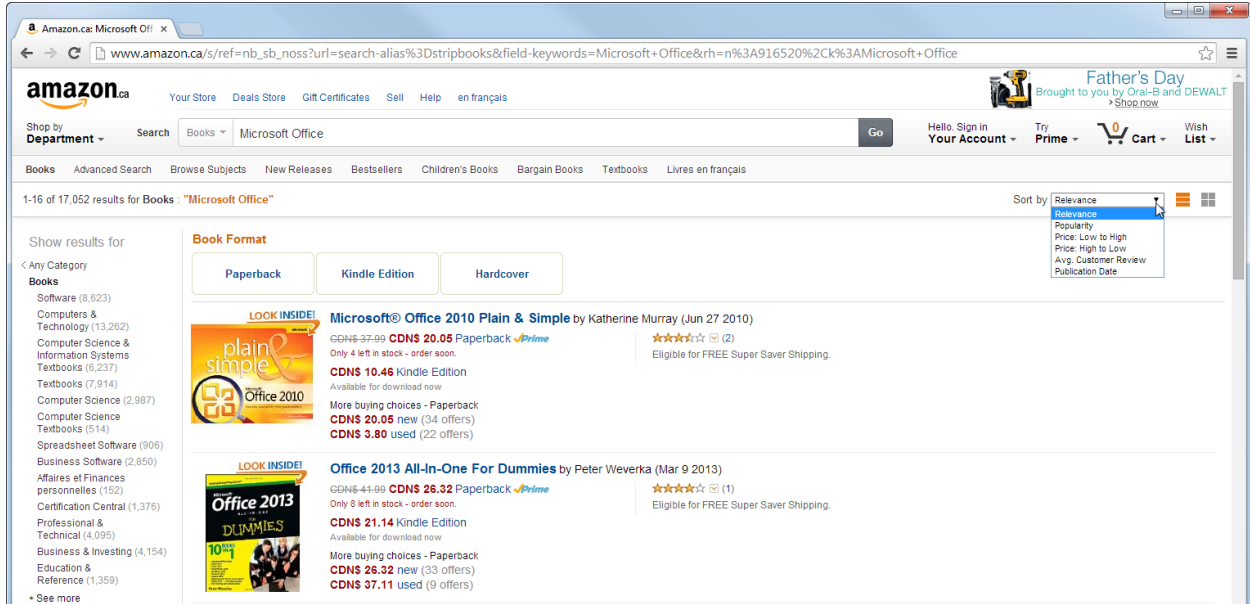
Navigating Through Your Site

To ensure that customers can find what they are looking for, it's important to offer several ways to navigate. Use tools that customers are familiar with and place them in familiar locations. Remember, if they can't find what they are looking for on your site, they will go elsewhere. In general, keep Ian Daniel's three F's in mind when designing your site: fast, functional, and familiar.

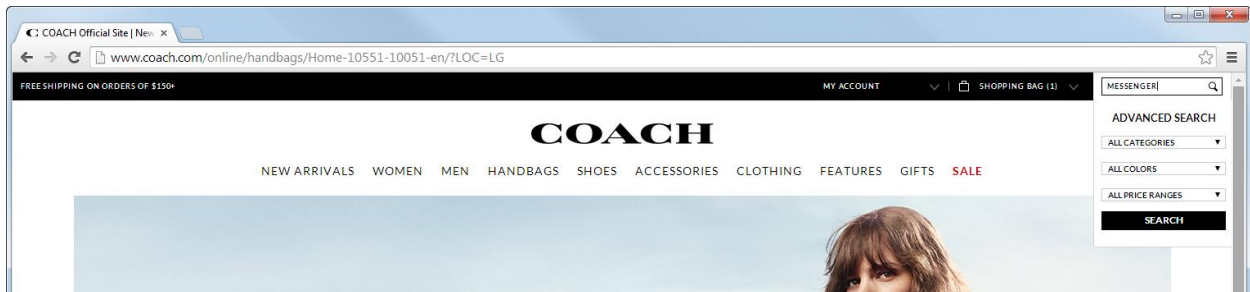
Search Box

A permanent, easy to use, comprehensive search function that delivers relevant, accurate results is essential. Websites usually locate the search box in a top corner of the page, so that it is on the same place throughout the website.

We also recommend providing advanced search options (like sorting and filtering). Typically these options are seen on the results page:

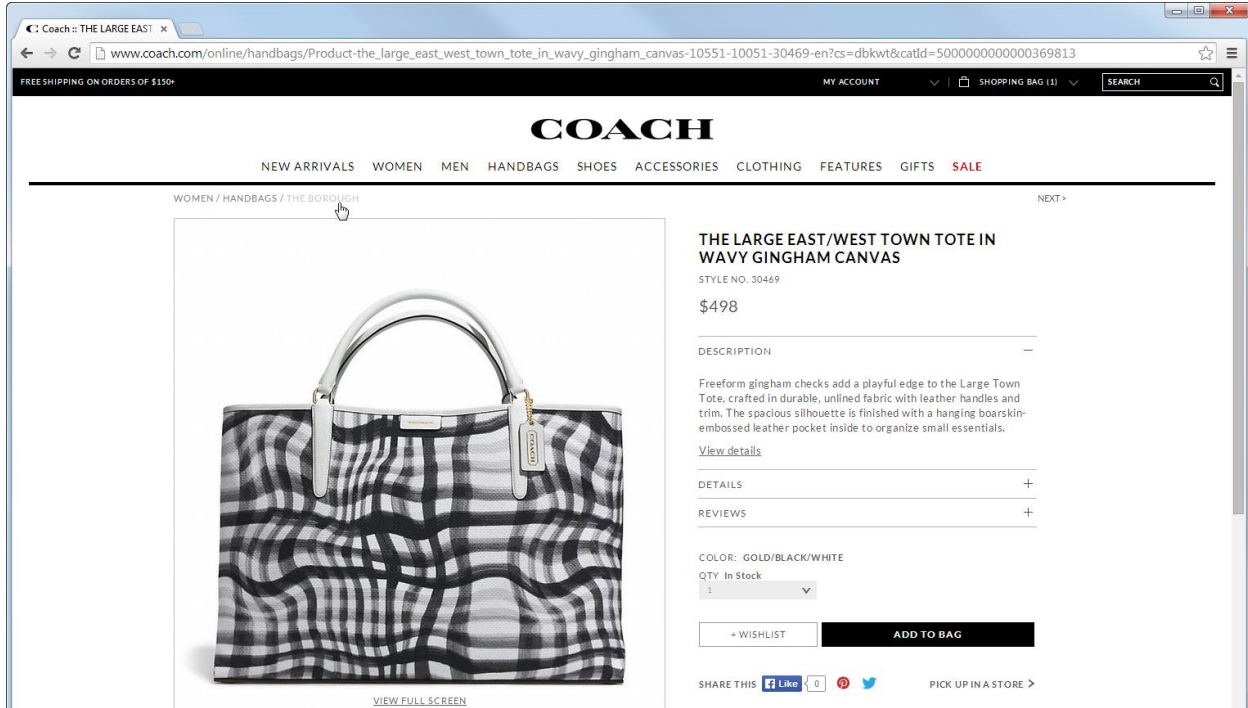


However, advanced options can also be offered as an add-on in the search box itself:

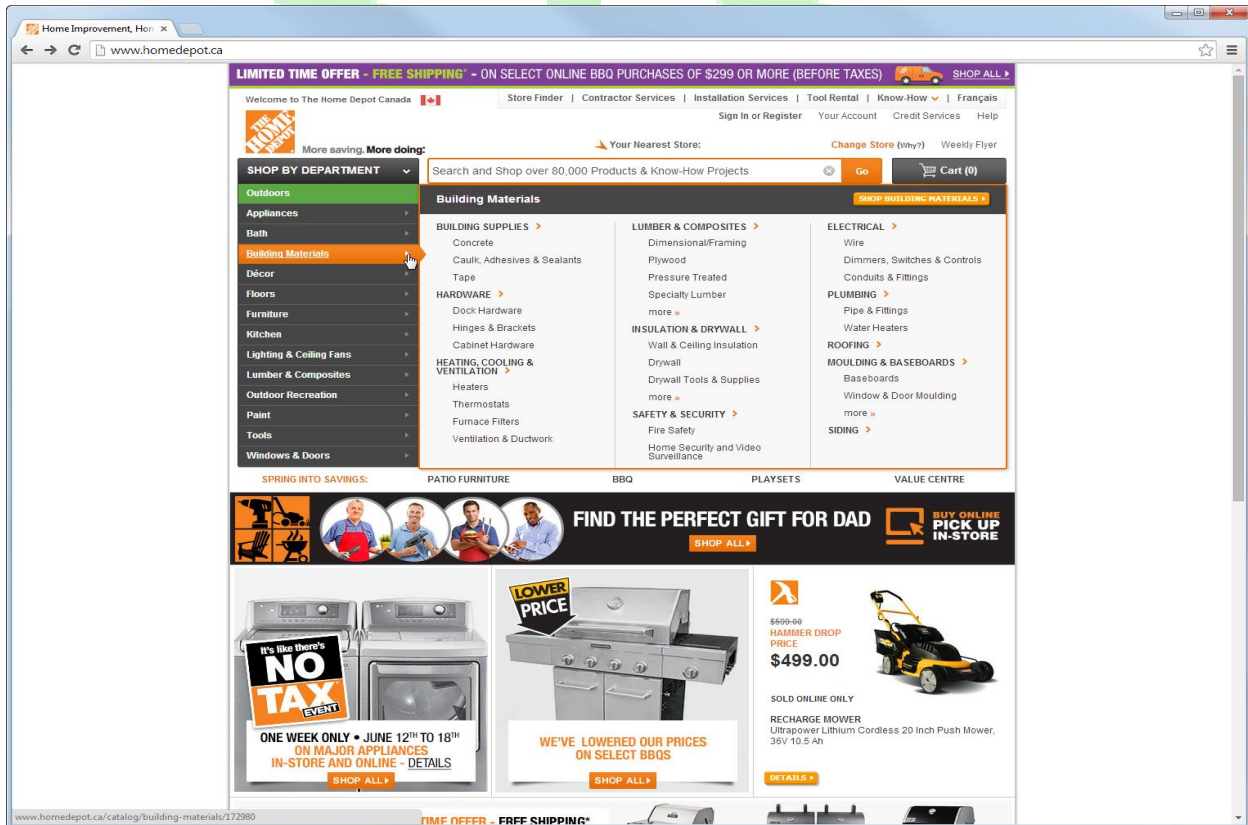


Menus and Categories

Menus organized by category are also an essential feature of navigation. In this example, a breadcrumb link shows the user exactly what type of bag they are looking at (“The Borough” collection of Women’s Handbags) and offers quick links at the top to completely change categories.



Depending on your business, you may want to offer the option to drill into specific sub-categories and sub-sub-categories right from the menu.



Test Your Knowledge

What experiences do you have with website search tools. Have you ever left a site and gone elsewhere because you couldn't find what you needed? What can you take away from this?

Building Effective Product Pages

Essential Page Elements

Each product should be displayed on its own page with the same layout. Here are some things that you might want to include:

- Product name using optimized keywords for search engine indexing
- Product description in bullet points, focusing on what it offers the customer
- Good-quality image or video that includes alternative text (consider having zoom-in functionality or links to larger images)
- List of available options, such as color or size
- Add to Cart/Add to Basket link with options to customize products in the order (quantity, color, size, model, etc.)
- Related information, such as shipping or warranty details
- Customer reviews or third-party reviews and ratings
- Social media and sharing links

Make the information easy to navigate using headings, tabs, and menus. Provide as much information on the page as you can without overwhelming the customer. One way to do this is to link to more detailed information, like manufacturer's specification pages or FAQ pages.

Sample Pages Amazon.com

The screenshot shows the Amazon product page for 'Teach Yourself VISUALLY Office 2013'. The page includes a search bar with 'microsoft office' entered, a navigation menu, and a main product area. The product title is 'Teach Yourself VISUALLY Office 2013 [Paperback]' by Elaine Marme. The price is \$17.84, with a list price of \$29.99. The page also features a 'Buy New' section with a quantity selector and an 'Add to Cart' button. A 'FREE TWO-DAY SHIPPING FOR COLLEGE STUDENTS' banner is visible. The book description section is titled 'Book Description' and provides details about the book's content and format.

Teach Yourself VISUALLY Office 2013 [Paperback]
by Elaine Marme
★★★★★ (55 customer reviews)
List Price: ~~\$29.99~~
Price: **\$17.84** & **FREE Shipping** on orders over \$35. [Details](#)
You Save: \$12.15 (41%)

In Stock.
Ships from and sold by Amazon.com. Gift-wrap available.
Want it Monday, June 16? Order within **28 hrs 46 mins** and choose **One-Day Shipping** at checkout. [Details](#)
45 new from \$16.11 **23 used** from \$16.29

FREE TWO-DAY SHIPPING FOR COLLEGE STUDENTS
[Learn more](#)

Formats	Amazon Price	New from	Used from
Kindle Edition	\$16.38	--	--
Paperback	\$17.84	\$16.11	\$16.29

Book Description
Publication Date: **March 18, 2013** | ISBN-10: **1118517687** | ISBN-13: **978-1118517680** | Edition: **1**

Learn the new Microsoft Office suite the easy, visual way

Microsoft Office 2013 is a power-packed suite of office productivity tools including Word, Excel, PowerPoint, Outlook, Access, and Publisher. This easy-to-use visual guide covers the basics of all six programs, with step-by-step instructions and full-color screen shots showing what you should see at each step. You'll also learn about using Office Internet and graphics tools, while the additional examples and advice scattered through the book give you tips on maximizing the Office suite. If you learn best when you can see how things are done, this book is for you.

- Shows you how to use Microsoft Office 2013 with easy-to-follow, step-by-step instructions illustrated with full-color screen shots
- Covers Word, Excel, PowerPoint, Outlook, Access, and Publisher
- Includes additional information on using Office Internet and graphics tools
- Designed to help visual learners read less and learn more

Test Your Knowledge

What do you like about this page? What don't you like about this page?

Chevrolet

2014 Chevy Silverado 1500 | 2013 Model | Overview | Photos & Videos | Models & Specs | Accessories | Compare | Build & Price | Search Inventory

CHEVROLET CARS / PERFORMANCE / CROSSOVERS & SUVs / TRUCKS & VANS Shopping Tools Locate A Store Owners Culture Español

CHEVY SILVERADO. 2014 NORTH AMERICAN TRUCK OF THE YEAR.

L7Z Crew Cab Standard Box (4X4) as shown: \$45,480*

Colors Wheels Trims Bodystyle

MSRP from **\$25,575*** Search Inventory Enter Zip Request a Quote

Max. Towing **12,000** lbs. towing* Learn About Capabilities

EPA Est. Avail. MPG **16/23** @ est. city/hwy* Learn about Efficiencies

Max. HP **355** @ 3L V8 HP* Learn about Performance

Powertrain Warranty **5/100k** years/miles* Learn About Warranty

SEE HOW THE 2014 SILVERADO EXCEEDS THE HIGHEST OF STANDARDS.

ECOTEC3 ENGINES

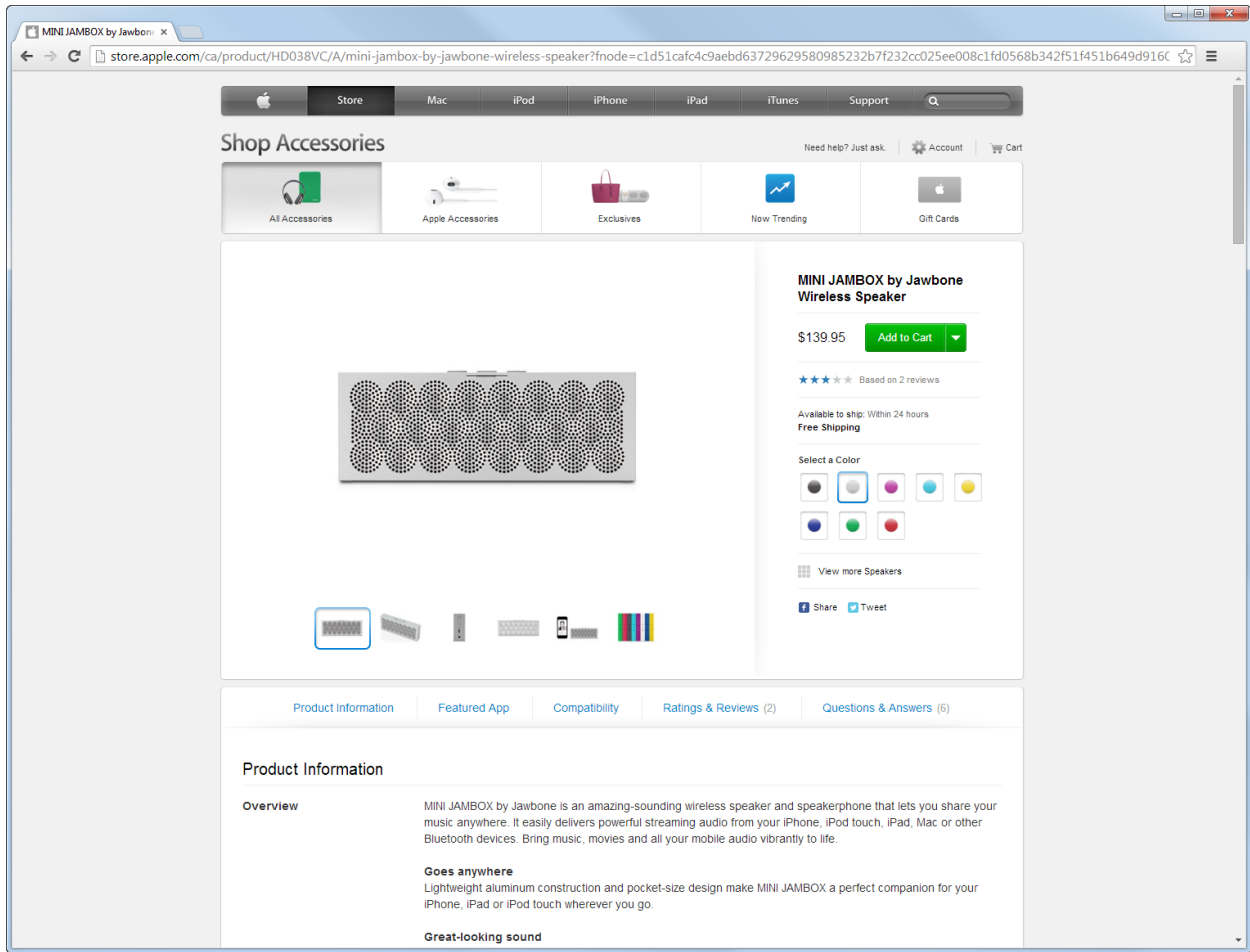
Our available 5.3L EcoTec3 V8 provides 355 horsepower while offering up to 23 hwy mpg,* the most fuel-efficient gas V8 pickup engine ever. The standard 4.3L EcoTec3 V6 offers 305 lb-ft of torque, the most of any standard V6 in its class. Our available 6.2L EcoTec3 V8 offers 420 horsepower and 460 lb-ft of torque.

CHAT NOW

Test Your Knowledge

What do you like about this page? What don't you like about this page?

Apple

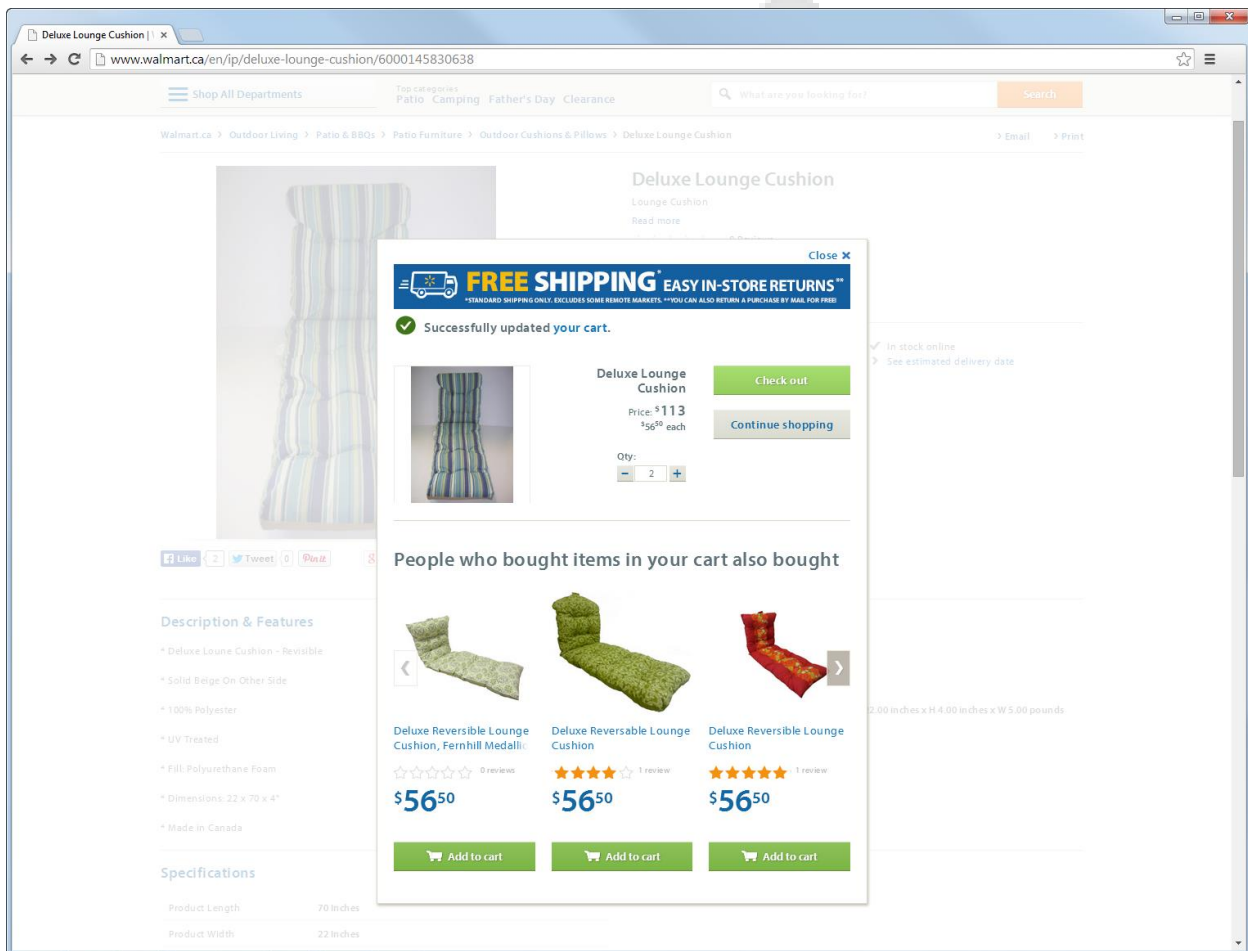


What do you like about this page? What don't you like about this page?

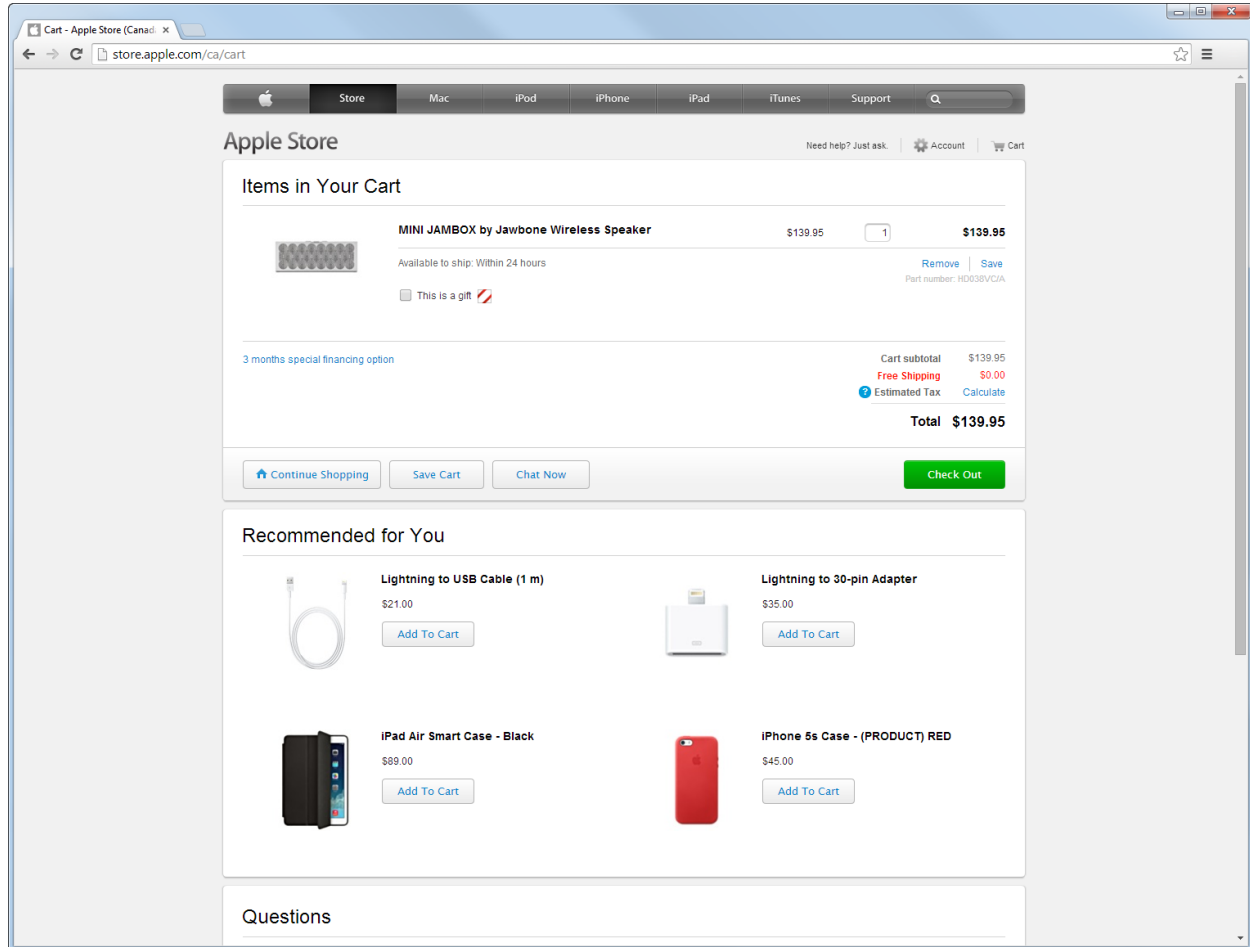
Shopping Cart Features

Once customers add a product to their shopping cart, they should see a new page or a pop-up box confirming the addition. This page or window should also provide an opportunity to change the product (quantity, color, size, etc.), a link to continue shopping (or a close button), and a checkout link. You may also want to showcase related products or services (like guarantees and free shipping).

Here is an example of a pop-up shopping cart from Wal-Mart.



Here is Apple's shopping cart page.



As a final note, know what terminology your customers prefer. Some areas of the world use the term “shopping cart” while others use “shopping basket.” Test different methods and see which phrases get the best response.

Optimizing the Checkout Process

The Checkout Process

Once customers have finished shopping and click the “Check Out” button in the shopping cart, the checkout process begins. It typically includes the following steps:

- Ask customer whether they want to log in or check out as a guest
- Confirm contents of shopping cart, including quantity, size, color, etc.
- Set options like gift wrapping and shipping speed
- Enter customer and shipping information
- Enter payment information
- Review order details

- Place order by clicking a button labeled “Place Order,” “Complete Checkout,” or something similar

Unfortunately, about 80% of shopping cart orders never reach this stage. This is called **shopping cart abandonment**. There can be many reasons for this, including:

- Using the shopping cart as a wishlist
- Saving items to compare prices and features to other websites
- Not confident in the site’s security
- Errors during the checkout process
- Checkout process is hard to complete or overly complicated

Not all of these factors are within your control, but it is important to optimize those that are.

Optimizing Your Checkout Process

Here are some tips for designing an easy-to-use checkout process.

Show customers what to do.

Guide customers through the checkout process using icons and links. Give them specific instructions at each stage and make it easy to return to a previous stage.

Apple’s checkout, for example, uses numbers and positioning on the page to identify each stage of the process. An Edit link allows customers to easily go back to any stage.

The screenshot shows the Apple Store checkout process. The current step is "Shipping Address", which is highlighted with a blue circle and a checkmark. The page is titled "Secure Checkout - Apple" and shows the Apple Store logo and navigation links. The product being purchased is "MINI JAMBOX by Jawbone Wireless Speaker" for \$139.95. The shipping address form includes fields for First Name, Last Name, Area Code, Primary Phone, Company Name (optional), Street Address, Apt. Suite, Bldg. (Optional), Town/City, Province, and Postal Code. There is also a checkbox for "This is a business address" and a "Shipping Notifications" section with a checkbox and a field for a mobile phone number. A "Continue" button is visible at the bottom right of the form. The cart subtotal is \$139.95 and free shipping is \$0.00.

If errors occur, clearly show what is wrong and give customers a chance to fix it. Highlighting errors in red, providing pop-up boxes, and shading required fields can help customers complete the process.

2 Shipping Address

Shipping Address

Please enter your phone number area code.

Area Code 555-5555

Company Name (optional)

21 Main Street

Apt, Suite, Bldg. (Optional)

Toronto ON A4A 4A4

Canada This is a business address ?

Shipping Notifications ?

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

Area Code Mobile Phone (optional)

Apple Shipping Policy | [Learn more](#)

- Signature is required for delivery.
- We do not ship to P.O. boxes
- Delivery estimates below include item preparation and shipping time

Notice that this checkout process takes place on a single page, with different sections of the page expanded and collapsed at the appropriate time. This makes it much easier for customers to complete the checkout process, as well as view and edit their shopping cart if necessary.

Keep it simple.

Only gather the information that is absolutely necessary. (For example, do you really need to gather the customer's middle name?) Typically you will need to obtain:

- Customer's first and last name
- E-mail address
- Daytime and evening telephone number
- Mailing address
- Billing address
- Payment information

Make sure you are gathering the right information. For example, we recently visited a Canadian shopping site that required U.S. customers to enter their province as well as their state, and would not allow the transaction to be completed unless both fields were filled in with a valid abbreviation.

If possible, hide fields that are not required. For example, if you are not currently running any promotions, hide that field. Otherwise, customers may leave your site to find a coupon code and never come back.

Finally, consider whether validation tools like CAPTCHA are absolutely necessary. Many of these methods can easily be broken, are not required for a small site, and simply frustrate customers.

CAPTCHA is an acronym for “Completely Automated Public Turing test to tell Computers and Humans Apart.” It is designed to prevent bots from spamming websites and is frequently used during account setup and financial transactions on the Internet. It asks a human to re-type an obscured message like this to confirm that it is a human and not a computer:



Unfortunately, the messages can be quite hard to read and can be quite frustrating for human users, particularly people with disabilities or the elderly. CAPTCHA can easily be broken by bots, defeating its purpose. We recommend using alternative spam and bot blockers whenever possible.

Offer account options.

Offer customers the option of creating an account or simply checking out with an e-mail address as a guest. You can also disguise the account process by asking customers to create a password that will be associated with their e-mail address so that they can manage their order.

Give customers as much information as possible.

Provide information through links and icons so that customers aren’t distracted during the process, but also have access to information if they need it. On Apple’s checkout page, for example, customers can hover over the question mark icons for additional information about the related option.

2 Shipping Address

Shipping Address

Bob Smith

555 555-5555

Company Name (optional)

21 Main Street

Apt, Suite, Bldg. (Optional)

Toronto ON A4A 4A4

Canada This is a business address

Shipping Notifications

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

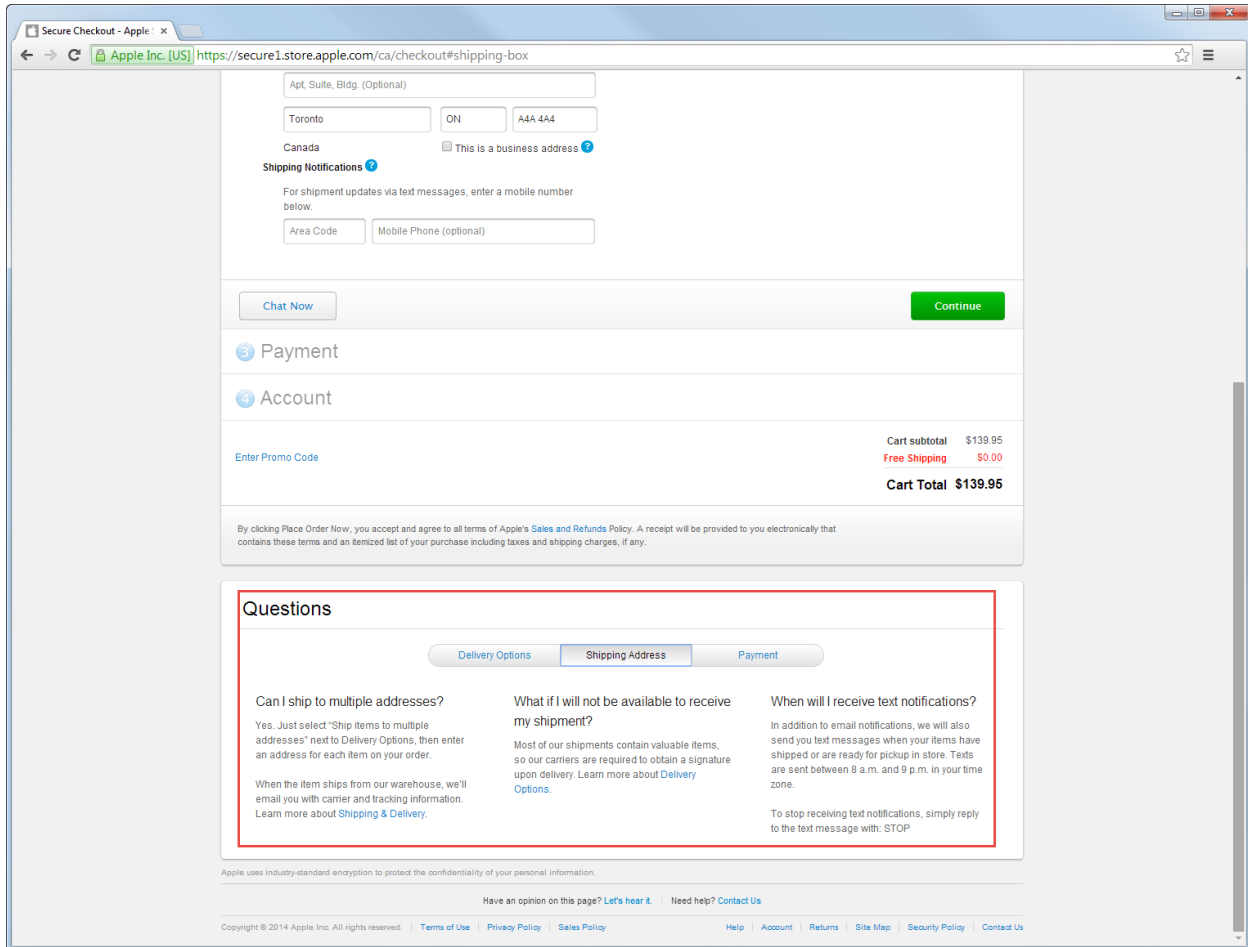
Area Code Mobile Phone (optional)

Apple Shipping Policy | [Learn more](#)

- Signature is required for delivery.
- We do not ship to P.O. boxes
- Delivery estimates below include item preparation and shipping time

This helps us choose the best shipping method for you. Business shipments are normally delivered on weekdays by 5:00 p.m. local time. Residential shipments are normally delivered Monday - Saturday by 8:00 p.m. local time.

The bottom of this particular checkout page provides a tabbed FAQ section that keeps customers on the checkout page. There are additional, off-page links in each FAQ section for more detailed information that open the target page in a new browser tab or window.



Order Confirmation Page

Once a customer successfully completes the checkout process, they will typically click a button on the last page or step that says, “Place Order,” “Complete Checkout,” or something similar. Make sure that the text of this button is very clear so that customers understand that they are completing the transaction.

Once the order has been processed (meaning your server has received credit card information and the order details), a confirmation page should be displayed that contains the following information:

- “Thank you for purchasing” statement
- Order number
- Review of what the order contains and the price
- Estimated shipping dates and tracking information

- What the next steps are (e.g. if future e-mails will be sent when the order is processed and/or shipped) and what customers should do if these steps are not followed
- Links to important site pages (FAQ, customer service, etc.)
- Links to related products
- Link to feedback surveys
- Company information (logo, tagline, etc.)
- Contact information (e-mail addresses and telephone numbers) for customer service, technical support, and any other relevant department(s)

This information should also automatically be sent as an e-mail to the customer immediately. Know what is required in the areas that you operate. Many countries have rules detailing when confirmation must be sent and when products must be shipped.

Additional Site Elements

Introduction

In addition to the pages that will sell products to your customers, there are several other types of pages that you should include on your website. These pages should be easy to access, usually through a footer area at the bottom of the website.

Here is an example from U.S. personal care company Bath and Body Works.

<p>LET US HELP YOU</p> <ul style="list-style-type: none"> Shipping & Returns Order Tracking My Account Gift Cards Corporate Gifts Customer Care Contact Us Site Map 	<p>GET TO KNOW US</p> <ul style="list-style-type: none"> Our Story Fragrances A-Z Careers Store Events 	<p>GET CONNECTED</p> <ul style="list-style-type: none"> Facebook Twitter Pinterest YouTube Blog 	<p>JOIN THE FUN!</p> <p>Get email offers & the latest news from Bath & Body Works!</p> <p>Enter Email <input type="text"/></p> <p>Confirm Email <input type="text"/> SUBMIT</p> <p>STORE LOCATOR</p> <p>Enter Zip <input type="text"/> SUBMIT</p>
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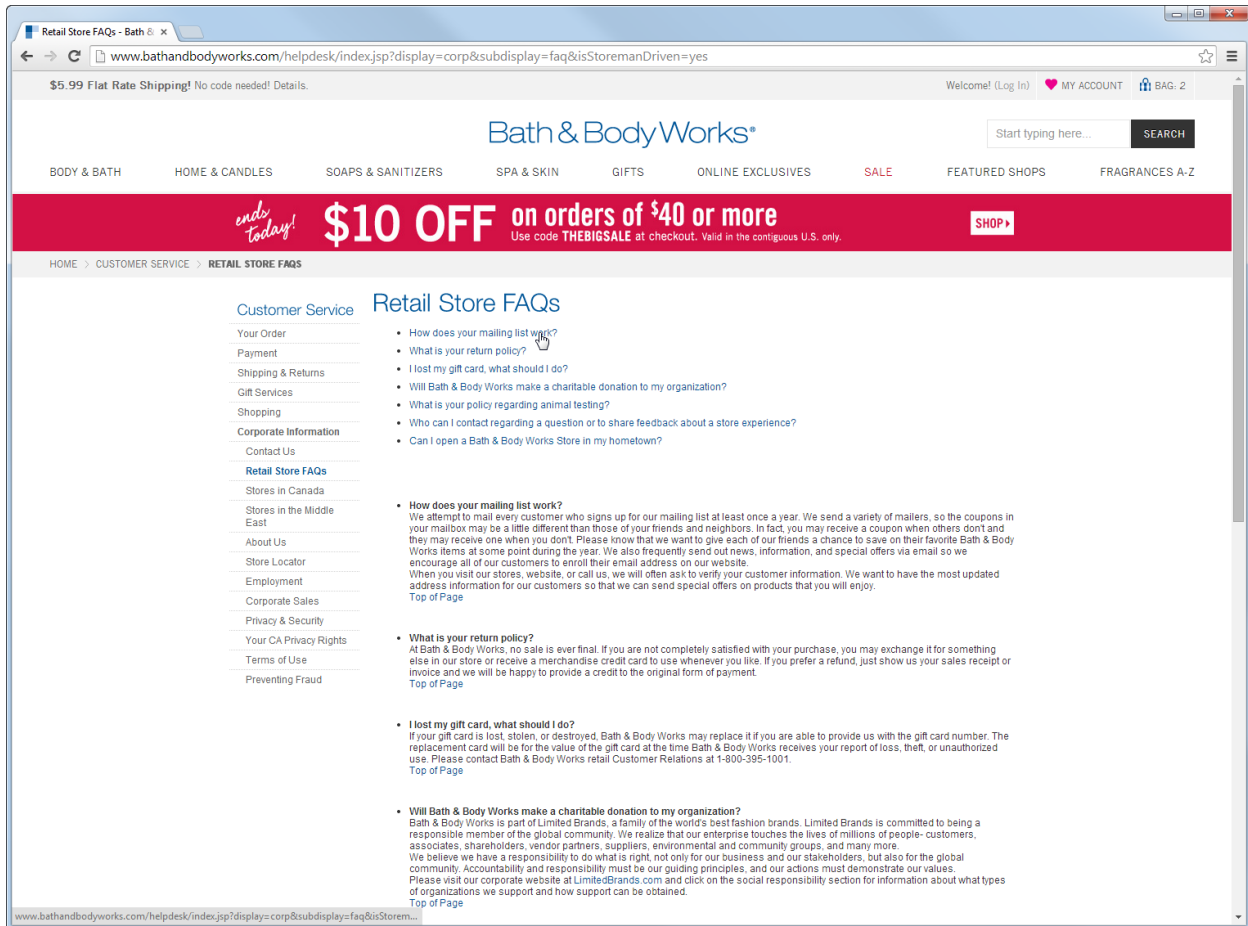
Contact Page

Always have a page with your company’s physical mailing address; relevant e-mail addresses (such as generic addresses for customer support, account inquiries, and sales); telephone numbers (including a toll-free line); and fax numbers. You should also have a contact form that customers can fill out and submit right from the website.

Some sites also choose to have a live chat option so that customers can talk to a customer service representative right from the website. If you choose this option, make sure to choose a secure service and to have it monitored 24/7.

Frequently Asked Questions

Compile a list of frequently asked questions and your responses to them, such as return policies and guarantees. Most sites have a list of questions at the top of the FAQ page that are linked to the specific answer on the page.



Testimonials

Having a page with testimonials from real customers can boost customers' trust and confidence in you. This can be displayed as a single generic testimonials page, or as reviews on each product page.

Privacy and Information Gathering Policies

Always have your information policies easily accessible to customers. (In many parts of the world, this is required by law.) Tell customers what data you are gathering, how it will be used, and if it will be shared. As well, if they provide an e-mail address, mailing address, or telephone number to you, you cannot send them information unless they specifically request it.

(See Session Fourteen for more information on privacy and data gathering.)

Shipping Options

Some customers want to know what shipping options to various regions are available before they start shopping. You may also want to include information on gift wrapping and gift shipping.

Order Information

Provide links where previous customers (who may or may not have an account) can view and manage previous orders. Keeping a secure database of past orders (so that customers can see what they purchased from you previously) is also a good idea.

Member Information

If you have a loyalty program, provide a page that outlines its benefits as well as access to a members-only area and a sign-up form.

Social Media Integration

Last but not least, give customers an easy way to visit your social media sites and to share your site with their friends through their own social media accounts. Many e-commerce businesses are starting to build social media into the checkout process, so that customers can tell their friends about their purchases right from your site.

Test Your Knowledge

What other types of pages would you want to include in a permanent footer area?

The Finishing Touches

Testing, Launching, and Updating

Pre-Launch Testing

Usability Testing

Once you have your site set up, test it on a variety of platforms and devices. Send it to trusted friends and mentors, too. Ask them questions like:

- How many clicks does it take you to find our page about...?
- How long did a particular page take to load for you?
- How effective is our search tool?
- How long did it take you to purchase a product, from finding it to checkout?
- Were you able to find support information?
- What parts of the website worked well?
- What parts of the website did not work well?

Test Your Knowledge

What other items would you add to this checklist?

As well, have someone who is a great speller and has a good eye for detail review your site for spelling errors, design errors, broken links, etc.

Optimization Tools

You can also use automated tools to check the integrity of your website. This is particularly effective for making sure that all pages are linked properly and that the structure of the site is sound. Some commonly used tools include:

- Optimizers built into web design and e-commerce suites
- W3C Validator (<http://validator.w3.org/>)
- Google PageSpeed (<https://developers.google.com/speed/pagespeed/>)

Once you have implemented the feedback from all the various tests, it's time to make the site live.

Launching the Site

If possible, we recommend launching a test version of the site before the full release. If no one has the site address, it should stay hidden from customers (since it usually takes several days for search engines to index it). This will give you a chance to do some real-world testing and make any final adjustments before the site is in the public eye.

As well, timing can be everything. Consider the best time of year as well as the best date and time to launch your store. For example, if you're selling university textbooks, launching your site in the middle of the semester might not be the optimum time.

Post-Launch Testing

Monitor your site closely post-launch. Watch analytics (which we will discuss in Session Ten), listen to what customers are saying, and adjust the site accordingly. Do not launch the site and then get on a plane where you will be inaccessible for many hours. (It seems self-explanatory, but we've seen it happen!)

Continue to test your site after it has launched. Links can get broken, pages can stop displaying correctly, and new devices sometimes don't work as we expect them to. Stay on top of possible problems and fix issues before they become a major impediment to your success.

Split and Multivariate Testing

The best e-commerce businesses continually make adjustments to their site, test the results, and make design changes based on the feedback received. Something as simple as the text on a button or the placement of a link can have a huge impact on your conversion rate.

There are two main types of testing. The first is **split testing**, where you create two or three versions of a page, send customers randomly to each page, and track the results (in terms of clicks, length of time spent on page, etc.). The winning page then gets tested again with different elements.

Although this type of testing is usually easy to set up and monitor, it can be time-consuming. **Multivariate testing** can help automate the testing process and test multiple elements of the same page at the same time. This is usually done through specialized software.

Test Your Knowledge

Review this list of usability test questions and add to it as appropriate:

- How many clicks does it take you to find our privacy information page?
- How long did the Contact Us page take to load for you?
- How effective is our search tool?
- How long did it take you to purchase a product/service, from finding it to checkout?
- Were you able to find support information?
- What parts of the website worked well?
- What parts of the website did not work well?
- Did you find any spelling or grammatical errors?
- Did you find any broken links?
