eCommerce
Platform
Evaluation
About this Whitepaper

What?
This white paper is for brands and merchants who are evaluating their eCommerce platforms. It details an approach to eCommerce platform evaluation that takes into account both the technical build of the platform and the merchant’s situation. We’ll explain the importance of the criteria we’ve chosen and what eCommerce features will directly impact your business and online strategy. By evaluating the potential of immediate and long-term effects, this white paper will help you make a more informed decision when choosing your platform.

Why?
With dozens of eCommerce platforms available, finding the best system for your business is a difficult choice. Looking at the system itself and understanding the impact its features will have on your digital presence and your selling capabilities will help make your decision clearer.

Who Wrote This?
Bear Group is a web development firm based in Seattle, Washington. Since 2007, we have worked with marketing leaders to bring their digital strategies forward and help their businesses thrive.

How Can Bear Group Help?
As a web development firm, one of our primary offerings is our ability to support and guide marketers in their technology choices. We have a core competency in building and supporting unique, brand-specific storefronts for clients, and have done so for over a decade. For marketers searching for a new eCommerce platform, considering whether or not their eCommerce platform is holding back their online strategy, or seeking to become better educated on eCommerce technology, we hope this white paper will be a helpful resource.
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Is There a Best eCommerce Platform?

For over a decade, our development team has met with businesses of all sizes to help them build custom eCommerce stores. We’ve worked with clients that required complex checkout processes, unique user navigations, and full integration into their back-office systems.

Here’s what we’ve found: there is no single eCommerce platform that is right for all merchants.

While one eCommerce platform may be the right choice for some, it could be the wrong choice for even a competitor within their same industry. When approaching an eCommerce platform, your eventual decision should begin with identifying the kind of merchant you are so you can find a fit with the right platform.

In this white paper, we’ll walk you through the process that we guide our clients through, identifying a range of the best available eCommerce platforms and breaking down their features to help you find the right platform for building your online store.
Understanding Where You Fit

For each type of merchant, there’s an ideal eCommerce platform. Although there’s a huge range of merchants online, we’ve found that most sell their offerings in four different ways.

🔍 Using a custom branded storefront.

This tends to be a choice for medium and large businesses because of the cost, time, and resources that designing, building, securing, and maintaining a custom eCommerce platform will require.

For merchants that sell unique offerings and need a custom checkout, or are trying to create a branded user experience, a custom eCommerce platform will allow you to customize your website to look and feel exactly the way you want.

It allows you to integrate with any other systems—ERP, accounting software—and establish a process that fits your company. It’s great for retailers $1M+ in online sales or with unique business situations that don’t fit into a “standard” store, and view their store as an agile and ongoing part of their business.

🛒 Using a hosted (SaaS) storefront.

Hosted stores are a much cheaper, faster option than custom eCommerce platforms. Rather than spending weeks developing a unique website, you could open shop this afternoon. A hosted store means you don’t need to really develop (code) your store or maintain it (upgrades are automatic). Instead you have a simple administrative interface through which to manage your website.

The trade-off is that you lose full control of your data, the check out process, the website’s look and feel, and the ability to customize third-party integrations. For a growing company, this means that you will inevitably hit a customization ceiling. For smaller stores that have less than $1M in sales or standard product lines (ie clothing), these are often a better entry point than building a branded store.
Dropping in payment buttons.

For stores with few products it’s possible to just add product detail pages to your site and use a service like Amazon Payments, PayPal, or Stripe to drop buttons or payment forms into your web page. This can be done via a product page that is managed in your CMS.

Selling through a large online retailer.

Merchants who choose this option may use programs like Amazon Stores, Walmart, or eBay. You lose all control of the look and feel of the store, and they share in revenue for all sales over their platform. They can also provide a high volume of customers and simplicity for merchants.

In the flowchart below, you’ll find a decision matrix that our project managers use when trying to match merchants to their ideal platforms. You can use the chart below to narrow down the eCommerce platforms you compare throughout the rest of the white paper.
Deciding On An eCommerce Platform

Revenue
What is the current or expected annual revenue from your eCommerce business? (Based on 3 year forecast if possible)

Micro Business: 
W<$200k (Don’t build, use a platform)

SaaS Options
Amazon Seller Central, Shopify

Small Business:
Less than $1M Online

Complexity
How complex is your business, simple standard SKU’s? Need ability to work at the code level to modify the store?

Simple
SaaS Options
Shopify, Big Commerce

Self-Hosted Options
Woo Commerce, Open Cart, Magento CE

Medium Business:
$2M-25M Online

Custom
How custom does your website need to be? Unique front-end, custom checkout, custom integrations (ERP?) for post-order processing?

Simple, Standard Front-end API / plugin’s Only
SaaS Options
Magento Commerce Cloud, Shopify+, Enterprise

Complex
Self-Hosted Options
Magento Commerce Cloud (Professional / B2B), Magento Enterprise

Large Business:
More than $25M Online

Custom Branded Store, Integrations, Code Access Required

PaaS / Self-Hosted
Magento, Enterprise, Oracle, Commerce, Hybris, Sitecore

Type

There are eCommerce platforms available for the needs of small, medium, and large businesses. But, as you can see from the flowchart above, there isn’t a single eCommerce platform that could accurately support the resources and goals of all three merchants.

For example, platforms like Shopify and BigCommerce are an ideal option for smaller businesses because they can be built quickly without a development team. Complete platforms, like Demandware and Sitecore, would be a difficult entry point for smaller businesses because of the initial development work that managing them would require.
A smaller business would also be incapable of taking full advantage of the customization offerings of a larger platform, and would find themselves presented with a number of options that they have no use for.

For enterprise-level businesses, a platform with customization capability is a requirement for a few different reasons.

1. **Owning your own code.** Owning your own code means that in the instance you need to migrate your website to an entirely new platform, you won’t lose everything. This also means that you maintain ownership over product content, as well as user data.

2. **Scalability.** You want to invest in a website that is capable of growing alongside your business so that you don’t find yourself migrating to a larger platform within a few years.

### Market Share

Popularity should be a consideration when choosing your website platform for a number of reasons. A wider adoption means a larger development community. This means it can be easier for you to find development assistance instead of depending on a single developer. It also indicates the likelihood of having ongoing support for your platform.

When you put in a platform, you’re going to be adopting the company behind it, the solution providers (often called SI’s) who customize and support it, and the technology providers who provide integrations, hosting, and extensions to that platform. With your eCommerce platform comes a full ecosystem of people and tech that will be part of it.

Each platform, including open source platforms (see Appendix) like Magento, are still dependent on receiving ongoing updates from their internal core teams. Once those updates stop being released the platform becomes a legacy system and will start breaking down. The commerce platforms available for merchants are very fragmented, there is no single leader with even 10% of the market share.
Verticals

While your offerings, business, and workflow are unique, the structure of certain eCommerce platforms may benefit the online selling experience of certain industries more (for example, Demandware is well known in clothing retailer circles). Although we don’t recommend adopting a platform simply because it’s what your competitors are on, it can be informative.

Annual Licensing Costs

Annual licensing costs can range in expense from less than $300 a year (Shopify) to upwards of hundreds of thousands (Demandware, Hybris, AEM). Some platforms are completely free (OpenCart, Magento Community).

From the outset, annual licensing costs can seem prohibitive. However, licensing is not a factor that you should overlook. Although it may look expensive from the outside, paying for licensing covers a lot of additional costs and will save you both time and money in the long run.

Licensing costs can cover hosting, web operations, and support from the team that built the platform and knows it best. Managing each of those services on your own, individually, can be difficult and ultimately end up costing you the same as a license would have. Generally, websites that are built on licensed editions of the platform are the most secure and run the fastest. For eCommerce websites especially, where PCI compliance and security are constant concerns, paying for a license will offload those tasks to a reliable team.

If your business is large enough to be able to cover licensing costs, it’s highly likely that you should pay for the license.

Development Required

Some larger eCommerce systems aren’t ready right out of the box like other smaller, hosted platforms. They will require web design, development, integrations with any other additional third-party tools, and whatever other customization your branded storefront needs.
With a platform like Shopify, you have access to a readily available administrative interface that you can use to manage your website’s basic layout, design, and product pages. These are meant for administrators and merchants with less technical experience.

On the other hand, more complex platforms like Magento work well out of the box, but perform at their best when they’re configured to a merchant’s unique needs and themed to their brand.

**Code Base**

Open source projects are significantly easier to extend, integrate, and adapt. For example, an open source eCommerce platform lets you write custom extensions for your specific order management process and in-house tools.

SaaS platforms on fully hosted environments can also be extended, but through packaged plugins or purely through the API. The issue with a pure API integration is speed - a custom extension, with direct database access, will always be faster than an API.

**MarTech Integration Ability**

No website exists in a vacuum, and this is especially true with eCommerce systems. Enterprise-level eCommerce platforms will require third-party solutions to bring your store online. At minimum, this means a payment gateway, shipping rating service, and tax service—not to mention the CRM integrations, analytics packages, conversion optimization tools, ratings, returns processing, shipping/fulfillment vendors, accounting tools, and ERP systems that your team relies on.

It’s a long list.

You’ll want the ability to connect into these systems, and that’s often at the center of your commerce decision. Smaller merchants can get by using pre-built systems with available connectors. However, rapid growth or any unique business scenarios will throw simplicity out the window.
Admin Simplicity

How quickly will your team be able to pick up this tool? With some platforms it’s quite easy, but with others it depends on how you’ve built your website. Having a robust, powerful eCommerce platform becomes pointless if you and your team can’t operate it.

Developer Community Size

An active, large development community is a good sign for your platform. When your eCommerce platform needs development work, an expert developer won’t be hard to find. It also indicates a longer lifespan, improving technology, and better security for your platform.

The larger the development community, the more developers actively work on your eCommerce platform’s codebase. This means that your platform is constantly being updated to reflect the most recent technology and security requirements. Without those updates, your system starts to age rapidly, affecting UX, security, and necessitating an expensive migration rather than a periodic upgrade.

Location

Location is another important consideration when choosing your eCommerce platform. If you are trying to sell to an international customer base, you should consider the content abilities of your eCommerce platform and its ability to display translated, personalized, and localized content. Additionally, some payment gateways and eCommerce platforms will not process payments from specific countries.
When You Need a New Platform

When You’re Dealing With a Legacy System

Many people think that an eCommerce website is a complete and enclosed software, but that’s not true. While you do own your webstore, there are extensions, data layers, and millions of lines of code that you don’t own, but that are responsible for keeping your eCommerce website functioning and up-to-date.

So who’s responsible for the components of your website that you don’t own?

This is where the size of the development community plays a significant role in your eCommerce platform, because developers are essential for both creating those updates and applying them to your website. (Updates to your eCommerce platform should be released constantly, but they need to be updated manually—a quick but complex task that will require development expertise.)

If your website has no developer community, or it’s shrinking, and updates are being released more and more infrequently—or stop altogether—your eCommerce website is no longer being supported. It’s now a legacy system.

Over time a legacy system will start breaking down, posing security vulnerabilities, constant administrative issues for your team to struggle with, and (most importantly) issues with the UX experience. Once that happens, you’ll have to replatform your website.

It’s likely that if you’ve been on the same website for the last five years, and you haven’t migrated your website to a new platform, you’re on a legacy system.
When You’ve Outgrown Your Current Platform

With a hosted platform (SaaS), you will eventually hit a customization ceiling.

This could manifest in a few different ways, like a limited UX or an inability to integrate your eCommerce platform with your operational tools (accounting software, ERP system).

Although a smaller, hosted platform may have initially been the best choice for your strategy, you will eventually need an eCommerce website that scales with your growing business. At that point, you’ll need to migrate to a larger, enterprise-level eCommerce platform such as Magento that’s capable of greater customization.
How You Build On a New eCommerce Platform Without Losing Your Current Website

Fortunately, putting a new platform in place doesn’t mean losing all of your content. Where your content is being migrated will determine how it can be migrated, and how long that will take. Here are a few ways you can migrate your website between eCommerce platforms.

Migrating Between Different Versions of the Same eCommerce Platform

When new versions of an eCommerce platform are released, the platform provider eventually stops supporting older versions. For merchants on a SaaS platform, these changes may be automatically applied to their store. For merchants on enterprise-level platforms, however, this means that a migration every few years is necessary. eCommerce platforms typically provide a method for data migration so customers, order history, products, and configuration can be moved to a new platform. Moving to the newer version of your same commerce platform is the fastest way to migrate.

Migrating Between Different Platforms

You’ll need to use a programmatic migration to transform your database to a format that fits with your new system, as it’s unlikely your old data will be organized the same way it was. Arranging your content and putting it in order will be a required step. In some cases, there are third party services to assist with migrating between specific platforms.

Manual Migrations

In some scenarios, you may not be able to systematically migrate your data because you can’t access it or you don’t own it.
In that case, the best course of action is to migrate as much of your website’s content as you can, manually. This means going through every page and moving it by hand—cut and paste. Having a content manager manually move your content means that they can simultaneously review it as it goes up, checking to ensure images are in the right place and content is correctly formatted.

And there are many times when just starting fresh in a new system is the best way to go. This is practical when customer order details are integrated with an accounting system, or ERP system, and you aren’t reliant on the order data in your eCommerce platform as the only record.

Starting fresh is almost always the easiest option from a development perspective, and gives you the most flexibility when choosing a new eCommerce platform.
What Kind of Customization is an eCommerce Platform Capable Of?

Each of the eCommerce platforms we compare differ from each other in cost, build, and code base, but they all provide you, as a merchant, with a substantial starting point that can be used to build your online store.

With the eCommerce technology available today, you don’t have to build your website from scratch in order to design a custom website.

Here are a few examples of how an eCommerce platform can be customized to handle more complex transactions.

Another reason merchants may choose to custom-build their own website, rather than using an eCommerce platform, is because they need a unique user experience, check out, or product page layout. The right eCommerce platform can support this level of customization, allowing merchants to create both a custom front-end for their users and a back-end for their team to manage their website.

Especially in the last decade, eCommerce website technology has evolved. Open source platforms—like Magento—offer administrators the opportunity to manage their website from a familiar interface, but also have the ability to directly access the platform’s code and customize their website for a unique UX.
Stretching the Platform: Creating a Product Customizer

Diamondback’s Andean triathlon bike is characterized by an innovative design that can be highly customized to suit each rider.

In order to support this level of personalization, we used Diamondback’s Magento platform to build the Andean Bike Customizer tool. Magento holds hundreds of underlying simple SKU’s for every component of the bike, listing available parts, pricing, quantity, and images. After the user makes their choices, it then receives the final Bill of Materials (BOM), and processes eCommerce orders through to the Diamondback ERP system.
Optimizing eCommerce
With the Right Tools

In 2017, Statista reported eCommerce transactions worldwide amounted to an estimated 2.29 trillion U.S. dollars. Based on current trajectories, that amount is expected to double by 2021. Now is the time to take advantage of this unprecedented opportunity to grow your business with eCommerce.

An online website is no longer just an additional support resource for brick and mortar stores—it’s a vital component of your business. Now more than ever, neglecting your webstore can mean falling behind online and negatively impacting your success. The internet is dynamic, constantly changing, and keeping up—or pulling ahead—of competition requires up-to-date technology driving new tactics.

And, most importantly, working with the right tools.
About Bear Group

Bear Group specializes in working together with marketing leaders to build custom websites. Each member of our development staff is senior in their field, and some of our eCommerce clientele have included industry leaders such as Amazon Services, Diamondback Bicycles, and Oiselle.

Founded in 2007, Bear Group has spent the last decade partnering with a long list of industry experts. We’re fortunate to use our expertise to back the ambitious, digital strategies of industry leaders.

We are a team. Each member of Bear Group is passionately involved in their field. We take pride in what we do and greatly enjoy bringing life to the digital strategies of our clients and easing pain points with quality code.

We always look forward to engaging with new clients. Please feel free to connect with us anytime for a free consultation at: https://www.beargroup.com/contact

Best of luck in your upcoming web development project!

The Bear Group
Appendix

In the chart below we compare 10 different eCommerce platforms, chosen for the excellence of their build as well as their popularity. These platforms are for the first two categories of merchants: those selling through a custom branded storefront, and those selling through a hosted SaaS (software as a service) platform.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Type</th>
<th>Market Share</th>
<th>Verticals</th>
<th>Annual Licensing Cost*</th>
<th>License</th>
<th>Technical Skill Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magento</td>
<td>Enterprise</td>
<td>9%</td>
<td>Shopping, Business, Vehicles</td>
<td>None - $$$$$</td>
<td>Open-Source</td>
<td>Moderate to Expert</td>
</tr>
<tr>
<td>Woo Commerce</td>
<td>Enterprise and SMB</td>
<td>.8%</td>
<td>Business, Shopping, Technology</td>
<td>None - $$</td>
<td>Open-Source</td>
<td>Novice to Expert</td>
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<tr>
<td>Sitecore</td>
<td>Enterprise</td>
<td>1%</td>
<td>Business, Health, Education</td>
<td>$$$$</td>
<td>Proprietary</td>
<td>Moderate to Expert</td>
</tr>
<tr>
<td>Big Commerce</td>
<td>Enterprise and SMB</td>
<td>1%</td>
<td>Shopping, Business, Vehicles</td>
<td>$-$-$-$</td>
<td>Proprietary</td>
<td>Novice to Expert</td>
</tr>
<tr>
<td>Shopify</td>
<td>SMB</td>
<td>7%</td>
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<td>$-$-$-$</td>
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<tr>
<td>OpenCart</td>
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<td>Shopify Plus</td>
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<td>$$$$$</td>
<td>Proprietary</td>
<td>Novice to Moderate</td>
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<tr>
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<td>&lt;0.1%</td>
<td>Shopping, Business, Vehicles</td>
<td>$$$$$</td>
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<td>Moderate</td>
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<td>Shopping, Business, Vehicles</td>
<td>$$$$</td>
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<td>Moderate</td>
</tr>
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<td>&lt;0.1%</td>
<td>Shopping, Business, Adverts</td>
<td>$$$$$</td>
<td>Proprietary</td>
<td>Novice to Moderate</td>
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<tr>
<td>Platform</td>
<td>Code Base</td>
<td>MarTech Integration Capability</td>
<td>Security Team</td>
<td>Admin Simplicity</td>
<td>Development Community Size</td>
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<td>Magento</td>
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<td>Custom Dev</td>
<td>Dedicated Team</td>
<td>Depends on Customization</td>
<td>Huge</td>
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<tr>
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<td>Huge</td>
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<td>Provides Documentation</td>
<td>Easy</td>
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<td>OpenCart</td>
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<td>Oracle Commerce</td>
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