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#### Introduction

Magento Commerce is one of the world's flexible digital commerce platforms written in PHP and has over 250,000 active sites. It empowers over 200,000 retailers to date and operates on an open source technology wherein developers can modify the source code to fit the need of the business. It equips the architects with a more powerful toolset to create advanced solutions that speeds up merchant growth. There are various versions of Magento commerce and now Magento 2.0 is on the way which is an extension of the Magento 1.x platform. After several years, Magento has shown incredible progress in the e-commerce domain by incorporating key features and offering enhanced e-commerce services in its version of 2.x. One in four retailer uses Magento software. It is estimated

that there will be a 200% increase in the number of shoppers served by Magento by 2020. The leading position in the market and its unique ecosystem put Magento 2.x as the natural best next step for Magento 1.x users. Magento commerce announced they will be ending the support for Magento 1.x in June 2020 unless there is an extension of the licenses involved. However, it is evident that Magento 1.x is soon going to turn obsolete, and big retail giants will no longer prefer it in the long run. With the e-commerce industry, having retail giants like Amazon, Walmart, and other mid-tier players continuously evolving, innovating and progressing forward, businesses will realize better profit and value by adopting Magento 2.



### **Magento 2 Offers Future-Readiness**

M2 is finally here and the reasons for upgrading are numerous and worthy! Magento Commerce has rebuilt M2 from scratch to be quicker, simpler and more efficient than the predecessors.

Magento 2 has brought in major improvements on a technological level in terms of performance and modularity. It offers several new features, opportunities, and enhancements which provide amazing customer experiences. Thus, leading your store to increase business opportunities and sales.



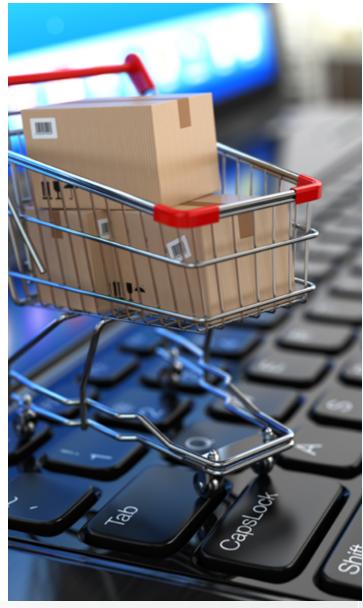
### What is New in Magento 2 - Reasons Why You Should Upgrade

Usage of New Technologies: Magento 2 makes use of the latest technologies such as; LAMP stack - Linux, Apache/Nginx MySQL, HTML, CSS, PHP with newest versions of each, which are PHP 7.0.2 and above, HTML5, CSS 3.3 as well as other techniques like Database Clustering, Performance Monitoring, Full Page Caching. The latest versions of PHP include security improvements that affect the store's speed.

Offering the Best of Both the World's:

Magento 2 has introduced Magento Progressive Web Application (PWA) studio which provides customers with a seamless shopping experience by letting them harness the power of PWA technology. PWA's are the next big thing in digital commerce. By combining the best attributes of native apps and responsive websites, PWA's have the ability to turn a mobile web user to a mobile app user. When users visit a PWA powered website on a web browser, they can download it and add it to their home screen. This way they can access the "app like website" similar to a native app without having to access the web browser. They are compatible with almost all the widely used mobile browsers and platforms and do not need any sort of installation from the app store. A responsive website can serve its purpose only in the presence of an internet connection, but PWA's can go beyond that and serve you even without one. Also, another added benefit is that the web crawler indexes PWA's first as compared to sites that do not have a mobile friendly version. Because of this, it performs well in terms of Search engine optimization rankings.

Faster Loading Time: Magento 2's loading time is much faster than the standard time, which is generally 2-3 seconds. Thanks to full-page caching Magento has offered in both its editions i.e. the enterprise and community editions, different pages such as home page, category page, and product pages load in less than 1.5 seconds, even without making use of front end caching. According to experts, websites shouldn't take more than 3 seconds for loading as it might lead to a loss in a significant chunk of traffic.

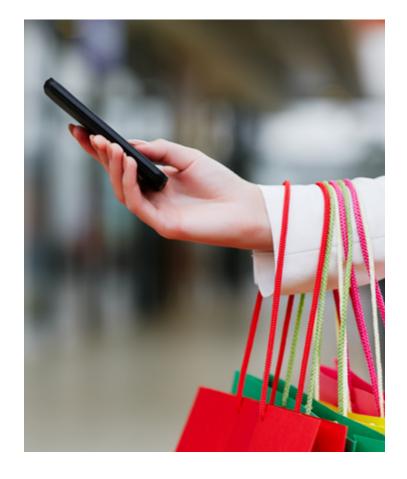


**Simplified Customization:** The previous Magento versions needed technical knowledge for carrying out modifications and manipulations in layouts, the new one will simplify this task even for the beginners. The Visual Design Editor will provide design management. Merchants will be able to modify blocks and containers without having to put in much effort. Admins will be able to customize the admin panel with ease which in turn will equip them with the ability to access business information quickly. The new admin interface is a lot more user-friendly and reduces time to manage an online store. The admin interface of Magento 2 now includes a new feature called drag-and-drop layout editing, which means you don't require great coding knowledge to change an online store's appearance.

**Better Testing Capabilities:** Testing is a necessity, especially when working with a complex system having a lot of customized features, extensions and modules. Screening for bugs in the initial stages of development is important in order to minimize risks in the long run. Luckily, the testing process is easier in Magento 2. It makes use of automation testing for finding bugs in the application. Automated checks are a great way of finding out if the application is still functioning properly after making changes to it. When an application gets plugged in with new functionality or when a bug gets fixed, it causes a change in the functionality of the working software, i.e. it introduces regression bug. We can identify any new bugs introduced as a result of the changes, by running a set of automated regression checks.

**Better Checkout Process:** Magento 2 offers a streamlined checkout. The checkout process has become easier and faster for customers.

Magento 1 has a lengthy six (6)-step checkout process, whereas Magento 2 offers a simple 2 step checkout process and an Instant Purchase feature. With this feature, merchants can now offer customers a faster checkout experience by making use of previously-stored payment credentials and shipping information to skip checkout steps altogether, taking them to a confirmation purchase page. Sites with simpler check-out processes (like an instant purchase) have resulted in increased sales. Registering after the checkout process is also an option, and the process is simple to implement.



Key integrations: Magento 2 comes with a lot of popular extensions so stores have better functionality out of the box. This includes payment gateways like PayPal and Braintree. These are payment platforms most of Magento users choose to integrate anyway, so Magento 2 makes the whole integration process a lot easier. There are integrations with Worldpay and CyberSource as well to increase payment security.

Magento 2 Special Promotions: For an e-commerce business to prosper, it is important to implement effective marketing strategies which lay a strong influence on the customers. Having said this, promotions are one of the most prominent marketing strategies which help in generating good traffic and sales for an E-Commerce site. Through Magento 2 Special Promotions, the admin of the site can allow 16 special promotion rules. These promotion rules or actions are relevant to both cheapest and expensive items in the form of fixed or percentage discounts. As customers are more inclined to the online site which offer discounts, thus, this module will help increase customer traffic for a site. Apart from that, It will also help promote the business amongst the customers thereby increasing the sales conversions for the site.

**Email marketing automation:** One of the brand new features of Magento is the Dotmailer Email Marketing Automation. It permits merchants to create campaigns within a few minutes. One can create automated campaigns through SMS, Push, email and other channels and manage transactional emails for their Magento stores. Dotmailer's toolset is simple and easy to use. In case one needs help, they offer 24 x 5 to solve customers' queries.

For B2B E-commerce: Magento 2 comes with Advanced Account Management Tools which are beneficial for both webstore managers and their customers. A customer self-service tool gives B2B customers the capacity to request and supervise their own company accounts. At the same time, webstore merchants have access to comprehensive features to better classify and organize customer related information. This includes the ability to import and export customer lists, and the capacity to designate sales representatives to selected accounts.

Magento 2 helps in reducing the time involved with a webstore's purchasing methods. It lets B2B customers create orders by entering one or more stock keeping units (SKUs) at a time. Once done, Magento will automatically validate the



SKU and notify customers whether that inventory is available or not. Customers will also have the option to upload CSV(Comma-separated values) files to complete their ordering processes. On the other hand, merchants can create unlimited requisition lists for the products that are frequently purchased from their store. Thus it encourages speedier purchases.

Enhanced Dashboard: Magento 1's user interface would confuse the business users, but Magento 2 offers a clean, user-friendly experience where even the most non-technical users can find tools and add new product listings with ease. It helps in finding information easily, navigates to all parts of the admin panel and manages your store more efficiently. Magento 2 has a wideranging dashboard which gives an overview of lifetime sales, last orders, average orders, revenue tax, financial data, most viewed products, new customers, shipping, and quantity. It helps one to see their current state of their business in a blink of an eye.

**Ajax add-to-cart Feature:** Each time a user adds a product to the cart in Magento 1, the system reloads the entire web page. This can lead to a longer waiting time and can cause customers to abandon their carts.

Thanks to Ajax add-to-cart feature, the new system doesn't have to reload the entire page when a user adds a product to cart, which thereby reduces waiting time and enhances user experience.

This is an issue one shouldn't disregard especially when products of smaller value are being traded or when the customers usually add more products to their carts.

**SEO & Security:** There are rich fragments on the catalogue pages that improve search result in Search engine result pages. The strengthened hashing algorithms (SHA-256) for passwords has made the passwords stronger to various cyber-attacks.



### Why Magento 1.x Platform is Passé

Security patches will not be a part for these versions once support ends

Increase in vulnerability to cyberattacks as the code grows older



Competitive edge at risk: Businesses will not be able to sustain themselves in the market place in the long run as Magento 1 doesn't have innovative features and advanced functionality. All of the innovation needed for businesses to stay competitive and sustainable is happening on M2.

Because running unsupported software is very risky, particularly when the software that isn't supported is such an important part of your operation, it is always better to move to an upgraded version equipped with advanced features and functionality, in order to minimize risks and have a competitive edge. The time period for migration can vary depending on your eCommerce site, but a safe bet is to permit a minimum of 3 months. It is important to note that, this time period is totally dependent on the level of customization you have done on the M1 site. Hence, for better support solutions, it will be a better idea to move to Magento 2.

### What to Expect with a Magento 2 Migration

Migrating from Magento 1 to Magento 2 involves the following:



Changing the structures of databases and themes.



Having to work with a new API.

In order to avoid data loss and downtime, the migration process should be expertly managed.

### **Few Considerations for the Migration**

Before you start: It is essential to upgrade your site at the same time as the migration. It is an ideal moment to make serious changes and modifications in order to get your eCommerce site ready for the next level of digital growth. Find out if your site requires a re-design plan with more hardware, more advanced topology, by taking help from experts in user experience and technology domains.

- Review extensions and data on your current site: Review and examine what you should keep or remove from the new Magento 2 website. Many clients identify that they need far fewer customizations on Magento 2 than they had on Magento 1. Also, take time to remove obsolete and redundant data from your Magento 1.x database to simplify your migration process.
- 2. It is a good practice to have a full backup of your Magento 1 store and the required database, files, and folders in case any issue arises during the migration process. Use the replicated Magento 1.x database as the source data for your migration.
- 3. Dry run: Before you start migration on the production environment, follow the best practice of going through all the testing environment. It is always better to stop all administrative activity on both Magento 1.x and Magento 2 during your migration test runs (and during the actual data migration).

- 4. Begin your migration with a Data Migration Tool. This tool will transfer data related to customers, catalogues, orders, shipment, and core configuration. However, it is important to know what it does not migrate. Your custom data, admin rights, media files, and certain other custom technical aspects don't get transferred on the tool.
- 5. Migrate Magento 1 theme to Magento 2 and commit User Interface level changes.
- 6. Make changes and modifications to the migrated data as and when required.
- 7. After migrating data, you will then have to gradually collect the data updates that are a part of the Magento 1 store (such as new orders and reviews) and then transfer these updates to the Magento 2 store.
- 8. Now that your Magento 2 site is up-to-date and is functioning normally, you go live.

#### **Other Considerations**

Migrating from Magento 1 to Magento 2 involves the following:

- An ideal delivery partner plays an important role to achieve success.
- ▶ While migrating to Magento 2, you should identify and analyse whether the extensions that were a part of M1, would be of any use in M2 or not and if it's a possibility to replace them with out of the box Magento 2 features or not.
- Also, the cost is another factor to take into consideration.

### **Migration Components**

Magento 2 migration process involves four elements: data, extensions and custom code, themes, and customizations



#### Data

There exists a Magento 2 Data Migration Tool to help you move all of your data with respect to products, customers, store configurations, promotions and more to Magento 2.



#### Extensions and Custom Code

The development community has been working hard to help you use Magento 1 extensions in Magento 2. It has come up with the Magento Marketplace, where you can download or buy the latest versions of your favourite extensions.

With the help of the Code Migration Toolkit, you can port your extensions and custom code to Magento 2, thereby reducing your efforts.



#### Themes and Customizations

Magento 2 uses advanced approaches and technologies that provide merchants with an unmatched ability to design innovative shopping experiences and scale to new heights. To take advantage of these advances, developers will have to make modifications to their themes and customizations. Documentation is available online for developing Magento 2 themes, layouts, and customizations.

### Success Stories – E-commerce Companies Riding High on Magento

An e-commerce brand wanted to give its business a big uplift with an online store.

When a Magento 1.x Community Edition store did not give the brand the desired results, the brand reconsidered and decided to migrate to Magento 2 enterprise edition. It became the first Magento 2 enabled website to have launched in the US.

The theme of the website was responsive, and the brand's seamless shopping experience that consolidated online and offline stores started generating results in a short time. Total online revenue increased by about 104% in the initial 6 weeks of going live, of which 60% was from mobile devices.

#### Conclusion

The Magento community is progressing forward with the new version of Magento. It is of no use for the extension makers, developers, and merchants

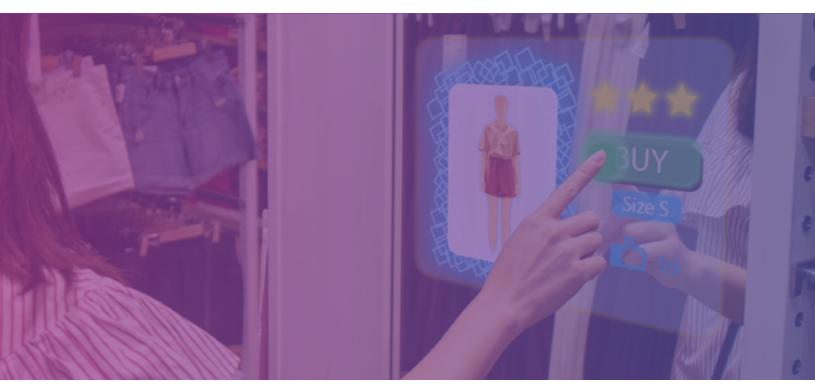
to still invest in Magento 1 as it is set to fade eventually. As the community is moving forward with Magento 2, every day spent on the original version would reduce in its worth.

The new platform is mature and has key technological benefits that result in less implementation time, better performance, enhanced productivity, and easier administration.

All the online stores using Magento 1 would benefit from the new functionality, features and performance improvements when they migrate to Magento 2 Community or Enterprise edition.

As there are many major differences between both the platforms, the migration would need a serious commitment throughout its lifecycle i.e. from the planning stage to theimplementation stage. A professional upgrade service is a perfect choice for store owners who want to ensure that the process is hassle-free and efficacious.





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