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How to connect content and e-commerce

A guide across three main approaches
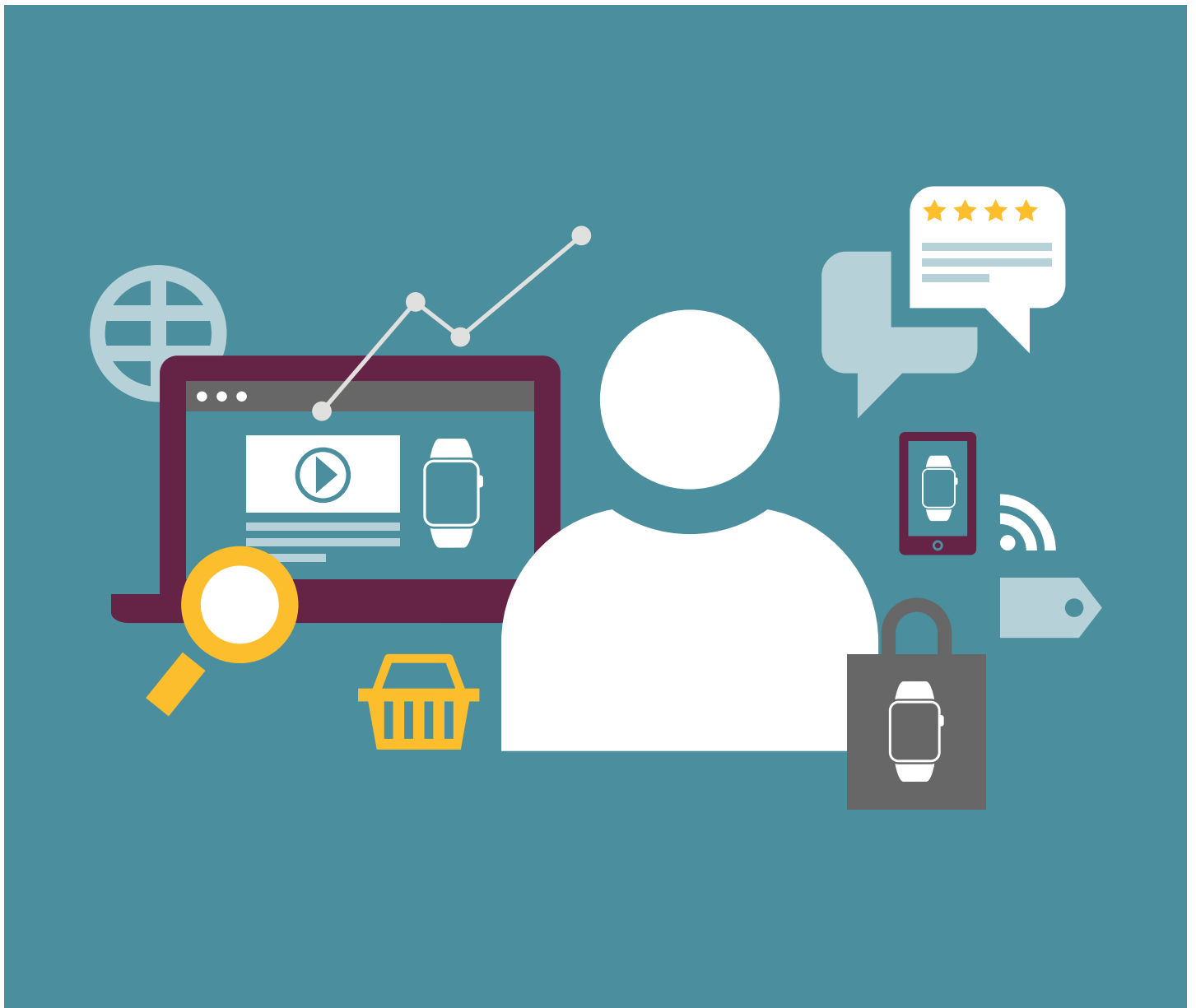
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Choosing your approach to e-commerce

Companies make or break, depending on how fast and how well they embrace e-commerce and selling online. Consumers are more connected than ever. On average, the millions of US adults online have 4.3 connected devices and 70% use smartphones[1]. Web and mobile experiences shape purchasing behavior. Online sales in Europe reached €232.60 bn ($253.86 bn) in 2016 (+15.6% from 2015) and this is expected to rise by 14.2% in 2017[2].

Decision-makers responsible for developing and managing digital business for their brands and companies know that they must deliver engaging customer experiences from desktop to mobile and to physical stores. Content is key and 95% of companies selling online have taken steps to combine their content and commerce strategies[3].

There are different approaches you can take when getting into e-commerce: you can start with an e-commerce system, or you can start with a CMS, or you can take a hybrid or headless approach. This paper looks at the merits as well as drawbacks of the different approaches you can take, and gives you pointers on how to choose the system(s) that best fit your enterprise needs.

"About 95% of companies selling online are in the process of unifying their content and commerce strategies."
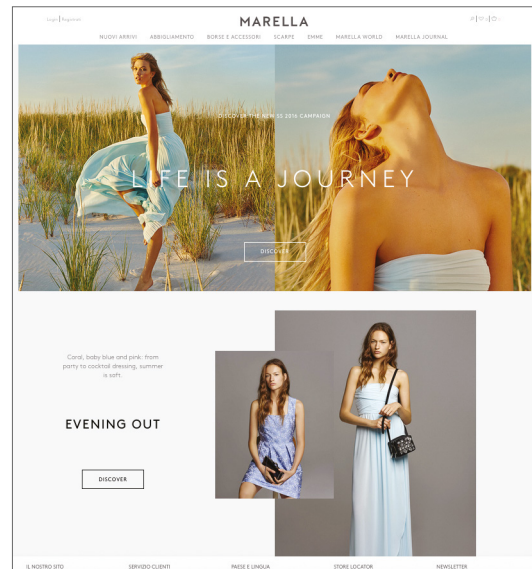
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MARELLA

A brief story on how Italian fashion brand Marella reshaped its entire multi-language e-commerce sites with Magnolia

The first step was a thorough assessment of the business needs, the complexity of the operational context, as well as the most relevant registered pain points. Next, a multi-brand, multi-country and multi-language solution was designed that could manage Marella's entire luxury and fashion editorial content. Implementation partner Openmind chose to lead with Magnolia as the CMS in front, integrating with the existing e-commerce platform.

Such a solution gave Marella huge benefits. For a start, it leaves little room for mistakes during the content uploading phase, thanks to Magnolia's ease of use and support of mobile. Magnolia also took the complexity out of Marella's content management, allowing the business to handle the whole process more efficiently and to get new fashion content published quickly, a vital requirement in today's competitive market.
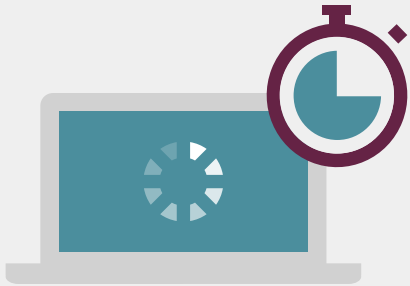
Magnolia's multi-layered flexibility allowed Marella to devote less time and resources to managing the large quantity of content that a rich, consistent, seamless omnichannel customer experience requires.

The challenges you face

1. Connecting painlessly with payment systems

Make sure your e-commerce system is in sync. Your customers are ready to pay, so don't lose them with the error message, "credit card payment failed". Your payment system must be able to handle high traffic and offer fast, smooth and seamless checkout.

40%

of people will leave a site that takes more than three seconds to load[4].

00:01

A one-second delay in page load can lead to a 7% loss in conversions[4].
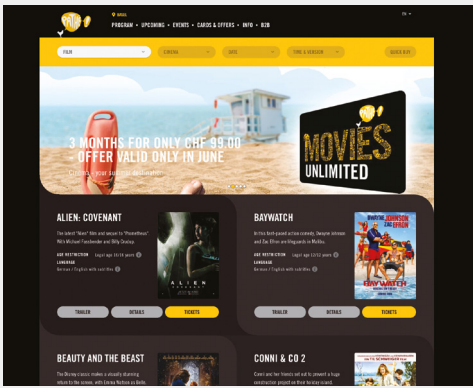
2. Flexible integration with marketing tools

You have a CRM system for segmenting customers and recording details; social media tools to tag, message and engage customers in campaigns and flash sales; analytics to understand, test and track customer behavior. All these need to be well integrated in your marketing strategy so that you don't have to fight against data silos. Your e-commerce site should be robust to meet your enterprise-scale requirements and scalable to evolve with changing technology.

3. Omnichannel brand experiences

Your e-commerce website is geared for multiple channels and languages, but is it truly omnichannel, i.e. orchestrated into a consistent brand experience connecting all touchpoints for customers? About 50% of e-commerce transactions are cross-device[5], so whether consumers first search on a tablet, then visit your brick-and-mortar store, and go back to

their desktops to purchase and pay, they expect a seamless journey without thinking about how complex those connections might be.

Mobiles are becoming the battleground that determines the quality of digital experiences. Retail apps are consumers' most popular tool for browsing, buying and reviews, while the preference for apps vs. mobile sites is fairly even in the travel sector[6].

Pathé used Magnolia to optimize the digital cinema experience for its customers. Cinema-goers can not only buy tickets via Pathé's mobile-optimized website, but also share film suggestions with friends and arrange cinema visits - made possible through integrations with popular calendar and
messaging platforms such as Doodle and Whatsapp. Pathé's new website has become its main sales channel, offering customers an improved experience even before they visit the cinema.

4. Delivering personalized content

No matter how large your company is or what you are selling, even simple personalization can power up the effectiveness of your e-commerce and marketing programs.

- Personalization can deliver five to eight times the return on investment (ROI) on marketing spend and lift sales 10% and more[7].

- Gartner predicts that by 2018, organizations that have fully invested in all types of personalization will outsell those that have not by 20%[8].

Personalize using data from the systems you have. Magnolia enables you to connect visitor data from your analytics tool or CRM for more targeted conversions. Personalize entire pages or page elements, and manage personalized promotions effectively. See Magnolia's guide on how to create personalized web experiences in an easy and scalable way.

5. Quick product/service updates and timely campaigns

You need a fast and easy way to create rich content. A CMS that is easy to learn and to use allows you to manage digital assets like graphics, photos, sound clips and videos

efficiently, and to tap on and integrate external data sources. It becomes straightforward to orchestrate social media posts and marketing campaigns to deliver the right triggers at the right time to the right audiences.

6. Security and reliability

If customers don't trust your brand or your payment system, they won't buy. Your e-commerce site must be safe, secure and reliable, and stand up to unauthorized cyber attacks and hacking. Compatibility with the latest SSL and PCI security standards, regular updates, guaranteed uptime and round-the-clock support are vital.

Merging content and commerce

To create great digital experiences, you need engaging content. That's why a CMS is an essential part of your e-commerce ecosystem. When online shops hit the market in the early days of the Internet, most of them functioned as product catalogs. Their focus was on processes such as shopping cart, checkout, payment and delivery. E-commerce translated into online versions of stores and shelves, but neglected the experience of selling and shopping.

With the rise of mobile phones and tablets, the game changed, opening up numerous possibilities of communicating, interacting, buying and selling. E-commerce merchants realized that they had to inject relevant content into their online shops, that they had to create engaging digital experiences, that they could win over more customers with personalization. A CMS makes content creation easy, with more options for creating campaign landing pages, product pages and digital journeys on multiple channels.

So companies have to integrate content and commerce. Two of the biggest technology and organizational challenges that they face here are: 1) working with their legacy content management system, and 2) integrating the content management system and commerce software[9]. Let's take a closer look at how to achieve this and the factors to consider.

"Big brands realize they need so much more than a picture to sell products. They're all about selling a lifestyle, and that means bigger, better content is needed to engage customers." —Hubspot[10]

Why companies often look to fit a CMS around a commerce system

Most companies are reluctant to dump an existing commerce system that they are using. This applies to small businesses who can't afford to replace ther commerce system, but also to large enterprises who can't risk the big investment to give their commerce back-end a facelift. Commerce systems often have complex integrations with other systems: CRM, ERP, PIM, point-of-sales, payment, logistics, etc. It's thus easier to add a CMS than to start from scratch.

When brands and retailers were asked to prioritize their initiatives, 16% prioritized a commerce system project, while 41-59% prioritized investments to improve the customer experience including content development, responsive design and personalization. Hence, companies are three times more likely to invest in improving the content experience than in switching commerce systems[11].

Three main approaches

Digital business practitioners talk about "owning the glass": the system that "owns the glass" is the one in front that serves the content and that handles the traffic load and speed of delivery.

Which system should you lead with: e-commerce system or CMS? Each has their strengths. In general, e-commerce systems are better at transactional flows like shopping carts and delivery tracking. Tasks like editing content and managing campaigns are easier in a CMS.

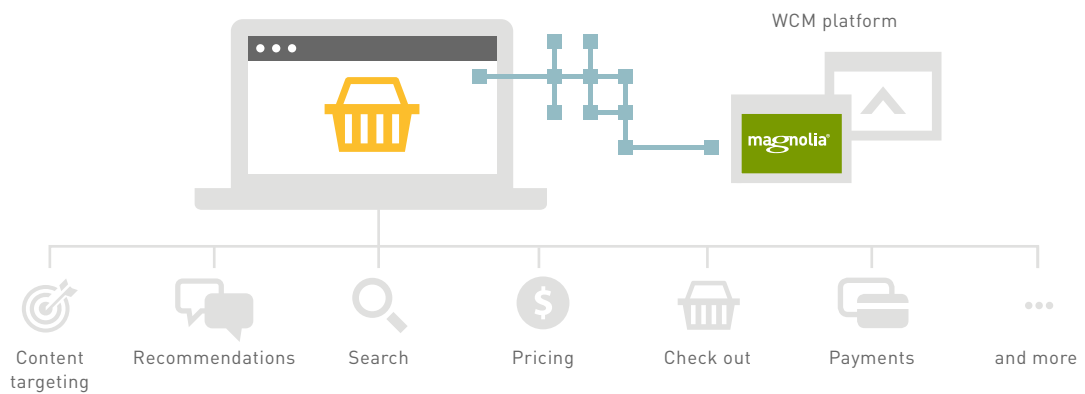Pricing models are different. Most e-commerce systems charge for a license and also by usage: you pay per request for transactions through the channel. The more you sell, the more you pay. CMS charges tend to be fixed: you pay per license server.

There is no one-size-fits-all solution and each integration is unique. Analyze your business needs to find the approach that fits best. Let's look at the three approaches in more detail.

Commerce at the front, content at the back

If you go for a commerce-first approach, you put the commerce system at the heart of your strategy and tap on its transactional capabilities from product catalog and search, to pricing, payment and shipping. The CMS is at the back-end and supports the commerce system with content elements.

In this approach, the commerce system delivers the experience and the CMS has a straightforward role as a content repository and helps generate content creation processes. Companies who go for this approach might find it difficult to justify investing in a high-end CMS, as they would be under-using its delivery capabilities. As such, those who go for this approach usually look to use their CMS in a headless scenario.

On the commerce site, you integrate content elements to complement the products or services. This means that the site is structured as a typical shopping journey, with selective parts enhanced with content, e.g. themed landing pages for certain product categories or special promotion pages.

Many commerce systems also offer basic, built-in content management features. However, for complex enterprise requirements, such as optimizing for multiple channels, having a publishing workflow, incorporating personalized content and analytics, you are better equipped with a full-fledged CMS.

Pros and cons of the commerce-first approach
Pros: This requires little effort to set up - the CMS delivers single content elements to the

commerce system, which then delivers the assembled page to the consumer. It is an easy way to inject some content into online shops, using the CMS in a headless approach.
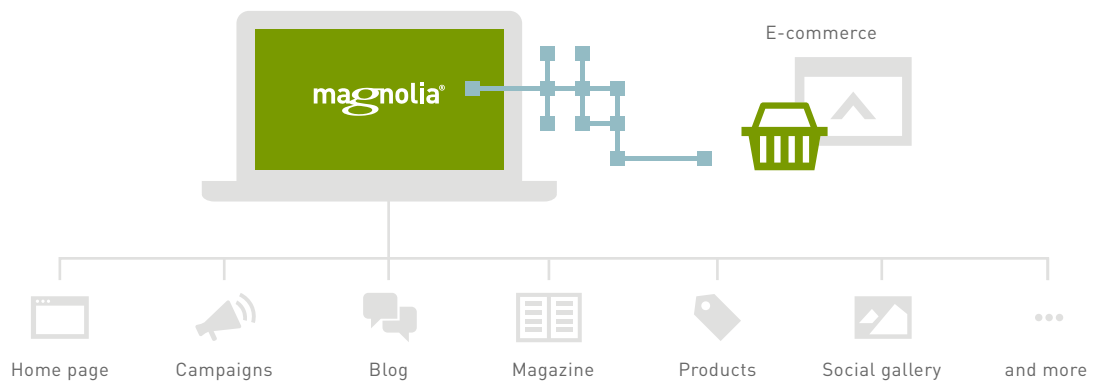
Cons: Content editors have to switch back and forth between two admin tools. Personalization has to work across both systems, i.e. the user context has to extend across the CMS and the commerce system. It is difficult to re-use content for responsive design that caters to different devices - desktop, tablet, mobile.

Go for commerce-first if:
This approach works if you are focused exclusively on selling or if you already have an established online presence and simply wish to enhance the customer experience with rich media content. Examples include department stores and major retailers that live by the classic "search, browse, view, cart, checkout" model. They offer a wide range of diverse products, which require detailed search and buying guides, and use the product catalog, merchandising and promotion functions of a commerce system to drive conversions and revenues.

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Content at the front, commerce at the back

If you lead with content, you are driven by marketing and publishing strategies that call for a CMS to provide designed templates, structured modules for managing news, events and campaigns, and easy-to-use editing tools.

| Home page | Campaigns | Blog | Magazine | Products | Social gallery | and more |

In this approach, the CMS delivers the experience - including page generation, navigation and personalization - using content from both the CMS and commerce repositories. The commerce system acts as a service layer. It serves the CMS with ordering, payment and processing functions.

Your site is free to focus on branding, imaging and storytelling. You are more concerned with how visitors consume and process the content, and the ability to buy and sell is an added service.

Pros and cons of the content-first approach

Pros: This puts customer experience first and you can create those experiences in the CMS. Marketing and commerce teams can work with their respective tools with little need to switch between the two. While this approach tends to be a bit more complex and time-consuming, it is well worth the effort as it is likely to be the most flexible and extendable in the long run. To reduce the complexity while increasing flexibility, some CMS vendors and commerce systems have developed ready-built integrations and connectors.

Cons: Elements of commerce personalization, e.g. shopping history, behavior and general profile, need to be combined with content personalization. The search function, and the search rules set up, must work properly across both the content and product worlds. Product, pricing and inventory details need to be featured on the site in real-time.

Go for content-first if:
This approach works if you have clearly defined products, if you have highly individualized purchase journeys, or if you have strong brands that emphasize the customer experience and can draw from a large pool of editorial content and digital assets. Examples include fashion brands, online media channels or travel and tourism (hotels and airlines).

The hybrid approach

In this approach, the CMS and commerce systems share the task of delivering the experience, each system meeting the relevant request as it comes. Integration focuses mainly on the front-end, such as using single sign-on so that customers only authenticate once, or sharing CSS and HTML templates to create a consistent experience across the site. This approach usually calls for basic back-end integration, such as synchronizing customer data and user profiles between the two systems.

Marketing site   Store

FRONT-END INTEGRATIONS

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Home page   Campaigns   Blog   Content   Recommendations   Search
                                    targeting

Magazine   Products   Social gallery   Pricing   Check out   Payments

Pros and cons of the hybrid approach

Pros: This attempts to bring the best of both worlds together: the commerce system deals with the checkout and payment, while the CMS handles the experience.

Cons: One difficulty is making the CMS and commerce systems appear as one consistent experience to consumers. For a seamless transition between browsing and buying, the consumer's session needs to be shared between the two systems. Losing the previous data and having to type in your shopping choices and address details at the point of payment is a no-go. Another difficulty is how to synchronize the managing and publishing of assets. As content and commerce become more tightly intertwined, content will depend on product and pricing data and vice versa. The dependencies between the two systems need to be clear and streamlined in the publication workflow. Finally, it is difficult to integrate the targeting, personalization and search capabilities of both systems.

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Several retailers have used Magnolia successfully in hybrid approaches.

REWE

REWE's online shop rewe.de won first prize in the multi-channel category of the Internet world Shop Awards 2016. The supermarket chain is open 24/7 with its online shop and indulges customers with shopping on all channels. Customers can order either via the site or the REWE app and have the items sent conveniently and directly to their home. They can also choose from a wide range of recipes and add the ingredients to their virtual shopping baskets. To create this digital shopping experience, REWE used a hybrid approach with e-commerce platform commercetools, together with the CMS from Magnolia.

ROSSMANN

The drugstore chain Rossmann went on an e-commerce offensive by launching a completely responsive online drugstore that enables mobile shopping across all devices. The new shop platform enhances the customer experience by combining product presentation and content in the form of advice and magazine articles. Implementation partner Aperto used Magnolia in a hybrid approach.

Other retailers have used Magnolia's integration strengths to easily connect with other systems in order to access all the data needed to build multichannel digital experiences.

coop
Alleanza 3.0

Coop Alleanza is the leading grocery distribution chain in Italy. Using Magnolia, it launched a digital communication strategy that offers customers interactive in-store digital experiences.

"The solution that we implemented had to guarantee fast and easy content creation and management for in-store multi-touch devices in order to provide customers with e-coupons, special offers, rewards and an interface to update their personal data. Magnolia's flexibility, adaptability and openness to integration allowed us to easily implement a specific customization of the platform, saving time and finishing the project within the challenging deadline that we had."

— **Michele Miraglia, Manager, Square Reply**

MIGROS

With Magnolia, Switzerland's largest retailer saves over 50% on annual IT infrastructure costs. The new solution also makes it faster and easier for Migros customers to find goods and services.

Migros used Magnolia to develop a dedicated interface for managing thousands of campaign and product teasers accross the site. This made it easier for editors to mantain an overview of what was available, allowing time-sensitive marketing content to be found and used faster and more effectively.

Types of integration

All three approaches outlined above are key in merging content and commerce, and depending on your needs, one or the other might fit better in certain scenarios. If your main concern is creating consistent omnichannel experiences across mobile web, app, tablet, desktop or kiosk applications, the content-first and hybrid approaches are more likely to achieve this.

Regardless of which system is in the lead, you need to think about how to integrate and the quality of the integration. Choose a CMS that can cover the common pitfalls and that allows you to merge content and commerce systems to create a unified experience not just for your customers, but also for your commerce and marketing teams working with these tools. Let's now go into the types of integrations.

Pseudo or no integration

Companies often use both commerce and CMS systems in parallel without any actual data exchange. This is what Forrester calls the "two-site syndrome", where the "discover" and "explore" parts of the customer journey are disjointed from the "buy"[12]. They produce similar-looking templates to give customers the impression of a seamless transition from one system to the other. Or they use i-frames to keep the overall design while jumping to an external page.

This approach is easy to implement and it might work for some scenarios. The downside is that editors have to deal with redundancy and work with two separate tools. Sharing assets might become a pain. Customers won't have a good user experience, especially when they see different URLs and have to login at two different pages or if pages are not optimized for mobile devices. In the long term, pseudo integrations are stop-gap solutions that lead to additional costs and limited functionality.

Import integration

In this approach, data is exported/imported between the two systems, commerce and CMS. Editors can work with one tool, but they have to deal with data redundancy and potential synchronization issues, e.g. at what time point was the import done, what amount of data was exchanged.

Real integration

A true integration uses machine-to-machine communication, e.g. through standardized application programming interfaces (APIs), to combine the systems. For instance, if login data is exchanged, customers only have to sign in once and have access to both systems. As another example: if unformatted data is exchanged, content from the CMS can be transferred to the commerce system and the required formatting takes place there using the lead system's template logic. This is the principle that enables integration in headless scenarios.
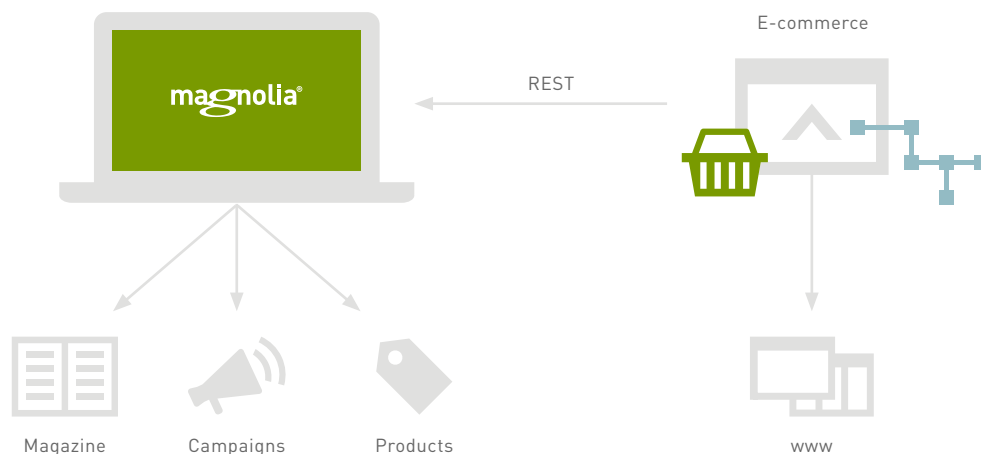
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Headless for the enterprise

A pure headless CMS is one without the delivery tier, where the content managed in the CMS is rendered on another system. It separates content from presentation and removes the limits of pre-defined structures. You can serve structured content to existing end-points quickly and support delivery formats from mobile or web-based apps to TV. You can deliver content to any format you want via a content API.

Leading global brands use Magnolia in headless and hybrid scenarios. Magnolia enables them to combine the speed and agility provided by headless with robust enterprise CMS features that a pure headless CMS usually does not offer, such as workflow, personalization and multi-site capabilities.

REST APIs: The key to going headless
Magnolia's use of open APIs and data standards create rich integration and customization opportunities that make it easy to share and manage content across multiple sources. Flexible REST APIs support headless scenarios and enable you to use semi-structured content.

Magnolia's representational state transfer (REST) Web service allows you to manipulate content through a Web API. Developers can call any Magnolia command via REST and expose their own REST endpoints via Magnolia. You can create, read, update and delete any pages, components or elements stored in a named workspace. You can also execute commands to activate, export and import content. REST is useful for connecting other systems, e.g. use REST to push product data from a third-party system into Magnolia and let editors enrich it in a Magnolia app.

Content capability checklist: The final four

Companies focus heavily on content in order to differentiate from the competition. In doing so, they have to increasingly support more content types, from product and informational content, to ads, videos, social media and user-generated content[13]. Enterprises have consistently told Magnolia that their top pain point when pushing e-commerce initiatives was how to manage content easily. Here's a quick checklist of what your CMS should be capable of doing.

1. Easy to use
Is it fast and easy to create content? Creating pages and managing content should be as simple as using a smartphone app. Can you update retail offers quickly and publish with minimal developer help? Can you produce core content across country sites and in different languages? Your CMS should have built-in tools that are easy to learn, but flexible enough to let your team be creative.

2. Personalize effectively
Does it have personalization features that let you deliver the right content to the right audience in a practical and scalable way? Your CMS should allow you to manage your personalized campaigns, seasonal promotions and special offers more efficiently. Does it connect easily with your analytics, CRM and marketing automation tools so that you can do more?

3. Manage content from any source and publish to any format
Are you able to pull in content from different sources, e.g. social media, brand personalities or travel packages? Can you publish to any front-end format and go headless? Magnolia's content apps allow you to manage structured data productively and they can be tailored exactly to your needs. Build a content hub to cover any structured content creation task that you have, such as managing event pages or your store's catalog.

4. Caching and fast display
When you're launching a high-traffic marketing campaign, you want to be sure that your sites are fast and won't go down at peak times. Is your CMS reliable and stable enough to meet your demanding enterprise requirements? And does it offer the scalability you need for future challenges?

Partners

Magnolia has established technology partnerships to enable your business to get the most from your systems. Magnolia also provides pre-built integrations for popular solutions such as Amazon Web Services, commercetools, Google Analytics, IBM Marketing Cloud and WebSphere Commerce, Salesforce and SugarCRM.

Canto CELUM commercetools IBM intershop KonaKart
Enterprise Java eCommerce

movingimage Magento salesforce commerce cloud SAP SUGARCRM

Build the bricks

There is no out-of-the-box solution for succeeding in e-commerce. Each integration is different, so look for the best approach. Analyze your business needs, which would cover factors such as resource and structural maturity, and budget. Go back to basics and choose systems that excel at their core functionality. Pick tools that give you the flexibility and scalability to evolve your e-commerce deployments and integrations over time. You won't be alone on this journey. Other enterprises have faced similar questions and challenges before. Your vendors, implementation and technology partners can help you assemble the best-fit bricks and patterns to speed up and power up your e-commerce integrations.

Links to resources

Find and download pre-built connectors to the most popular third-party tools at Magnolia Marketplace:
https://marketplace.magnolia-cms.com

Check out e-commerce integration solutions provided out of the box by Magnolia in our technical documentation:
https://documentation.magnolia-cms.com/display/DOCS/Integration#Integration-E-Commerce

To learn more, visit:
https://www.magnolia-cms.com

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References

1
Forrester (2016). Digital Experience Technology and Delivery
Priorities.

2
 Centre for Retail Research (2017). Online Retailing: Britain, Europe,
US and Canada 2017. http://www.retailresearch.org/onlineretailing.
php

3
Forrester (2016). Businesses Embrace Content + Commerce to
Drive Customer Engagement. A custom technology adoption profile
commissioned by commercetools.

4
Kissmetrics. How loading time affects your bottom line.
https://blog.kissmetrics.com/loading-time/

5
Criteo (2016). eCommerce Industry Outlook.
http://www.criteo.com/media/3552/criteo-ecommerce-industry-out-
look-2016.pdf

6
Google (2016). Apps and mobile sites: Consumption across finance,
retail and travel. https://www.thinkwithgoogle.com/intl/en-gb/
research-studies/apps-and-mobile-sites-consumption-across-fi-
nance-retail-and-travel.html

7
McKinsey. Dahlström, P. (2013). The demands of on-demand
marketing. http://www.mckinseyonmarketingandsales.com/the-de-
mands-of-on-demand-marketing

8
Gartner (2015). Walk a fine line with personal mobile offers.
http://www.gartner.com/smarterwithgartner/walk-a-fine-line-with-
personal-mobile-offers/

9
Forrester (2016). Businesses Embrace Content + Commerce to
Drive Customer Engagement. A custom technology adoption profile
commissioned by commercetools.

10
Wise, Greg (2015). 7 creative content ideas for your e-commerce
site. https://blog.hubspot.com/marketing/creative-content-for-
your-ecommerce-site

11
Forrester (2016). State of Retailing Online: Key Metrics, Business
Objectives and Mobile.

12
Forrester. Powers, S. and Sheldon, P. (2013). Content and Com-
merce: The Odd Couple or the Power Couple?

13
Forrester (2014). Bridge the Commerce/Content Divide. A consulting
thought leadership paper commissioned by Acquia.

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