



Enterprise Digital Marketing in dotCMS





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Introduction

Currently, Digital Marketing is by far one of the most exciting functions in the broader marketing play. It can make or break an enterprise's digital ambition if executed perfectly/poorly.

According to Gartner¹ Digital marketing is:

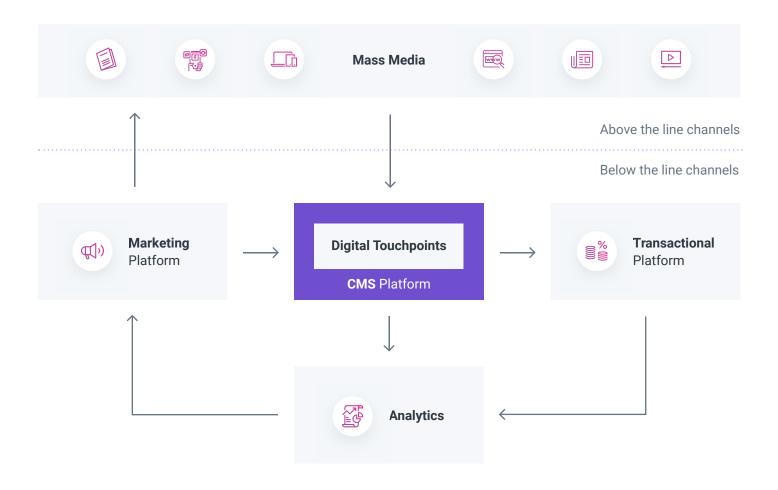
"a set of integrated **techniques**, **technologies** and **information** that enables marketing to create new products and services; enter new markets; improve the processes needed to engage in a dynamic conversation with people who are influencers and buyers; and ultimately target, acquire and retain using content from all three platforms.

The previous definition still leaves much for interpretation. However, if we focus on it holistically from an abstraction layer, **digitally marketing can be simplified as follows:**

Digital marketing involves executing campaigns both above-the-line (online & offline media) as well as below-the-line (direct marketing), which converts into net new revenue and profits via increasing brand engagement and loyalty.

The three platforms, which are CMS, a marketing platform, and transactional platform, that are involved in executing all these campaigns bring online & offline together (hence integrated digital marketing) for both acquiring new customers, as well as retaining and upselling to existing customers. The CMS, along with potentially additional tooling are the 'experience layer' and form the content foundation that helps marketing teams to tell stories, which focuses on experience rather than the transaction, and hyper-personalize every touchpoint along the customer journey. Creating, curating and using content from all three platforms.

The three platforms graphic



The common **pain points** we see within marketing teams using their legacy set of tools, is two-fold:

01. Dependencies on IT involvement is too high:

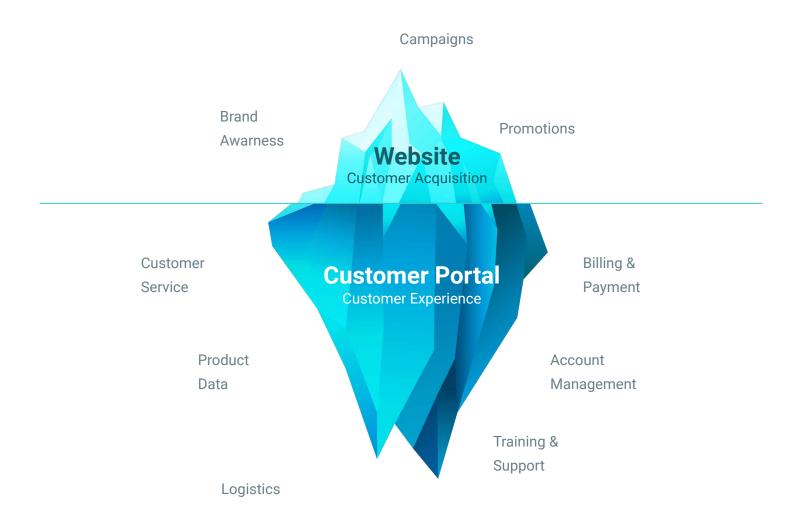
Developers are needed for day-to-day operations of the creation of content and applications. Needless to say, this has an **impact on time-to-market/value and ROI.** Furthermore, we have to keep in mind, that in this digital age, speed is the new currency.

02. Limited tools to fully execute on digital ambition:

Enterprises have invested heavily in legacy content management solutions and have not written off the investment, even though the technology has become outdated. The product is lacking key capabilities to support the business at reasonable costs. Marketing teams are literally stuck and locked-in with a monolithic solution.

A modern CMS like dotCMS helps to remove these pain points & allows for an ROI-effective execution of your digital ambition

while being able to maximize your brand experience, engagement and loyalty, hence see a potential increase net revenue and profits. The digital marketing platform should not stop at just new customer acquisition, but it should support the entire customer lifecycle, and turn prospects into brand ambassadors.



In this white paper, we will **identify and explain the tools and capabilities dotCMS offers to digital marketing teams** enabling them to successfully execute on their company's digital ambition at scale.

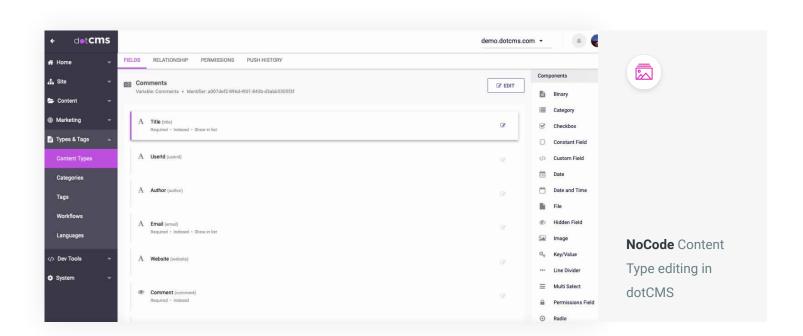


Content Management Essentials

Let's begin with the fundamental aspects of content management by taking a look at the tools marketers have at their disposal out-of-the-box with dotCMS.

Content Creation

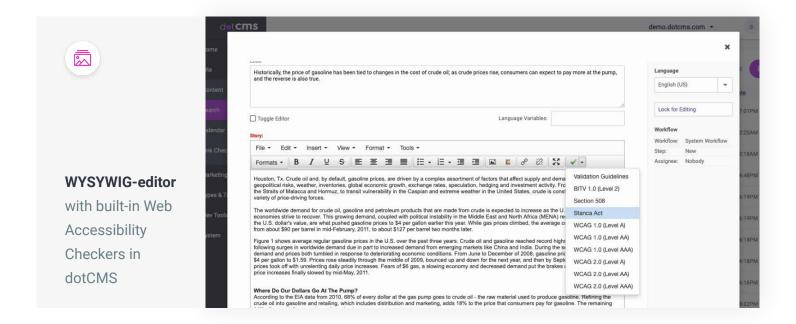
Structured content is typically generated in a formbased manner, where copy and images are entered into predefined forms, that have been set-up for the different content types, which includes news articles, events, product information and more.



01. Content types

dotCMS provides an **intuitive interface to create and manage different content types** without
touching a single line of coding or IT involvement,
right from creation to making them available in the
live environment. This tool is fully permissioned in

order to guarantee corporate content governance. Marketers can build content types while having access to a **full library of standard fields** as well as the option to create their own **custom fields**. This allows for even more flexibility to support your content model and information architecture



02. Content object

01. WYSIWYG content editing

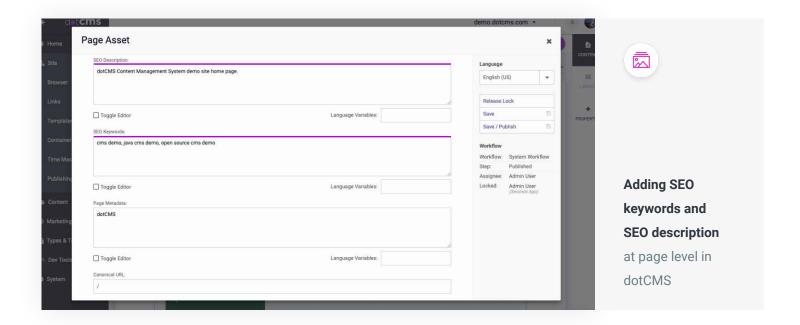
A CMS without a What-You-See-Is-What-You-Get (WYSIWYG) editor is like driving a car blindfolded. A WYSIWYG editor allows a content marketer to create content and edit its layout and styling without having to go through lines of HTML code or even take the

time to understand it. dotCMS ships with the most complete editor on the market at the moment: TinyMCE², where the individual editor functions can be enabled/disabled based on permissions or context. Apart from layout and styling, dotCMS comes with a variety of digital accessibility checkers to deliver ADA compliant content.

O2. Search Engine Optimization(SEO)

With the amount of content produced on a daily basis, along with the mind-boggling Google searches conducted per second (40,000)³, it's a digital marketing imperative to have Search Engine Optimization in your CMS that is top notch, without any compromises.

In the era of voice search and IoT, there might be some impacts to take into account 4, but let's focus on the CMS foundation of Search Engine Optimization for now. It makes sense to have this done right as organic traffic converts better and easier than paid traffic in general, and is about 41% cheaper than paid ads 5. Getting more ROI out of your content marketing strategy has to be a priority at all times 6. Apart from commercial drivers, web accessibility and SEO also have some overlap that you need to be mindful of 7.



To stay at the very top for specific searches, content marketers need to rely on tools that guarantee top ranking, while they are generating high-quality and well-optimized content in a high pace. This is a real

dotCMS offers the fundamental SEO capabilities directly from the authoring interface, and marketers can optimize their experiences without IT involvement. **The SEO capabilities** provided by dotCMS are:

challenge for marketers.

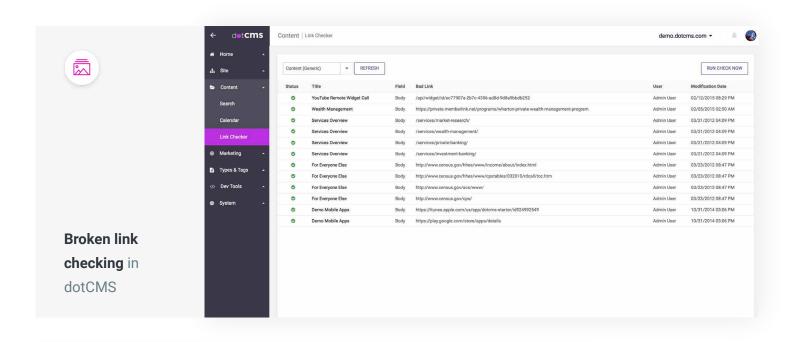
- Manage metadata such as Title, H1, meta descriptions, alt texts etc.
- Broken link reporting.
- Generate related content based on metadata.
- Manage redirects.
- Auto-generation of SEO optimized URL & the ability to control them.
- Easy adding sharing buttons on content pages.

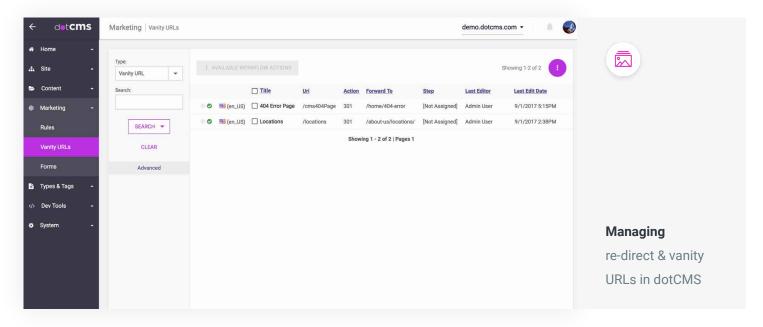
In addition, dotCMS offers a **native integration** with Amazon Rekognition⁸, which allows you take advantage of **machine learning capabilities** autogenerate tags for images and video, at scale. It is one of the first applications of machine learning in the CMS context.

A hot trend that we are seeing among enterprise brands right now, is the use of a headless CMS to feed content to a Single Page Application (SPA). While SPAs offer a superior user experience compared to traditional web applications, some cautionary measures need to be considered when it comes to

SEO-primarily because SPAs are almost always written in JavaScript, while most search engine crawlers only recognize HTML.

Thankfully there are a number of ways you can over these concerns like server-side rendering and prerendering.





Managing redirects, custom error pages and vanity URLs is a NoCode marketing tool. It allows marketing teams to manage any redirect as well as the following custom error pages:

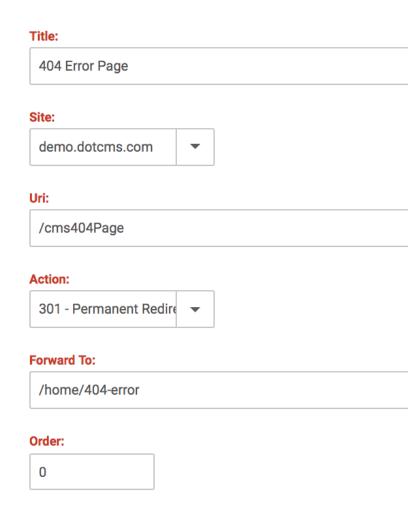
Customer Error pages	Error
400	Bad Request
401	Unauthorized Access
402	Payment Required
403	Forbidden
404	Page Not Found
500	Internal Server Error
503	Service Unavailable

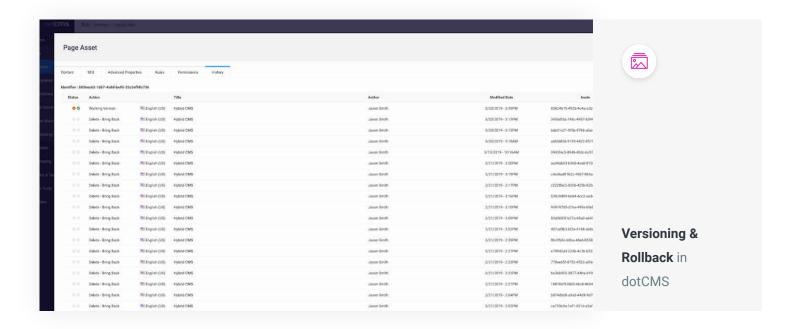
The redirecting mechanism is supported by the core of dotCMS. You'll need to set up the specific pages you redirect to in dotCMS, but **for a 404 error page, it should only take a marketers about 10 minutes to build** with the Page Builder in dotCMS - a NoCode tools for marketing.

dotCMS does not have any SEO restrictions ¹⁰ when managing content-driven SPAs and having an undisrupted editor experience (Edit Mode Anywhere) as well.

READ MORE:

SEO Best Practices with dotCMS





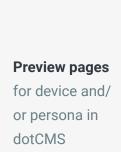
03. Versioning/Rollback

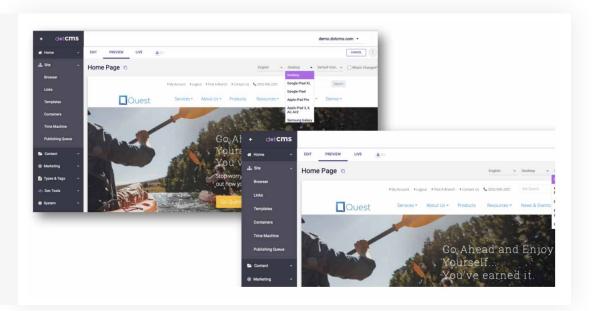
Managing customer experiences in today's digital age means delivering hyper-personalized and very dynamic content. A key tool for any digital marketer is to be able to create and test versions of a single content object or page, while executing a content marketing strategy with an entire team. Having insights to who created content and when is fundamental, as well as having the option to rollback a content object or page to a previous version at any time.

03. Page Composition

Managing individual content objects is one thing, but ensuring your content is consistently exposed to your targeted audience on a page for a **certain persona and device** is absolutely critical. This is where some of the core capabilities of dotCMS come into play for any marketing team.



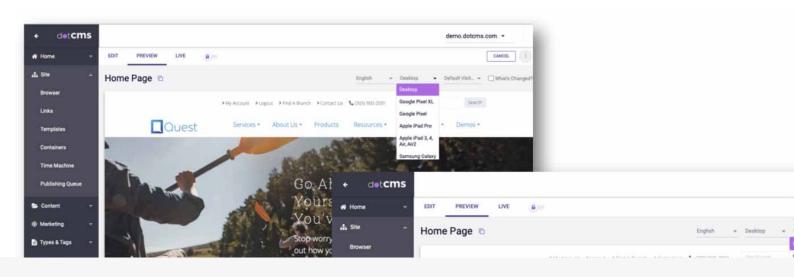




01. Preview

Being able to preview a page at all times before it is published on the live environment should be a standard feature of all headless content management systems—but it isn't.. With the plethora of devices your visitors use to engage with your brand, you need to be able to preview your content for any device type so you can ensure the experience is optimal. If you are executing on hyperpersonalization and have persona-driven content experience, dotCMS also offers content previews for each specific persona.

The challenge we see for marketing teams, where their organization has deployed a headless CMS for one or more content-driven applications, is the inability to preview a page in this scenario without publishing. This is a no-go for dotCMS. With the introduction of **Edit Mode Anywhere, marketers** have an undisrupted editor experience, regardless of where and how the content is delivered to targeted audiences, hence Edit Mode Anywhere acts as if the content is rendered by dotCMS. Marketers have unprecedented access to Preview, Inline Editing, and drag-and-drop for whatever third-party application that utilizes the dotCMS content APIs.

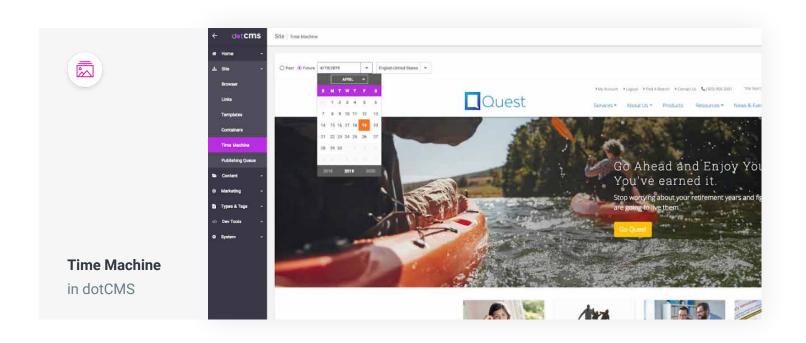




02. Inline Editing

In addition to previewing unpublished content, having the ability to make **inline edits** before hitting "Save & Publish" is a must-have for today's CMS. For marketers, it's imperative to be **able to make last-minute content edits** without any hassle or IT involvement.

As indicated previously, a modern CMS should have no disrupted editor experience for the marketing team when content is exposed to a third-party system such as an SPA, eCommerce solution, or any other commercial tool off the shelf. dotCMS provides Edit Mode Anywhere out-of-the-box since dotCMS 5.1 11.



03. TimeMachine

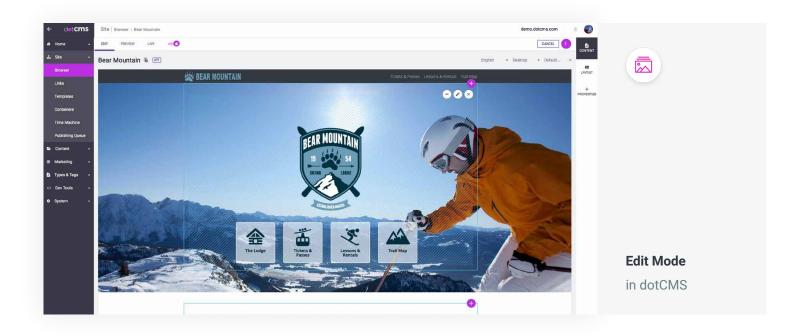
A modern CMS should give marketers the ability to go back in time, and check how a page looked at a specific date and time. The same goes for unpublished content that is scheduled for publication at a future date. Having this ability **makes life easier**

for marketers to optimize the content experience and track changes over time. For frontline customer support staff, it's also a must to be able to talk to customers while having the ability to go back in time. dotCMS offers the so-called TimeMachine to support both these scenarios.

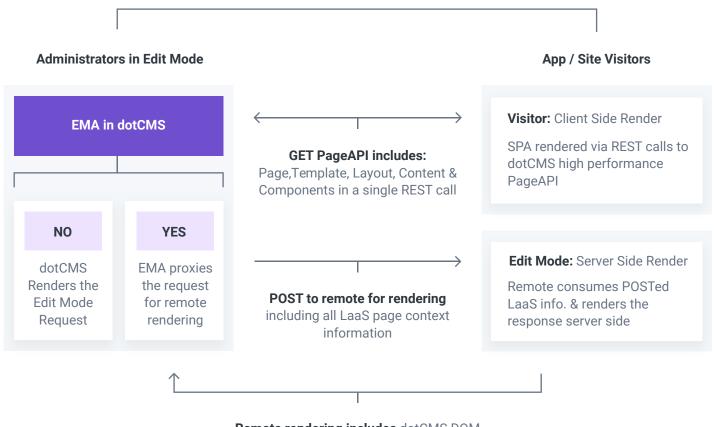
04. Edit Mode Anywhere

As the number of digital touchpoints increase across the different channels like mobile, IoT devices, and technology teams embrace new technologies like headless CMS, Single Page Apps or even legacy content-driven applications, it's important that digital marketing teams maintain its self-sufficiency when it comes to the creation of content and pages.

A modern CMS like dotCMS secures this by providing an undisrupted editor experience, regardless of how and where the content/experience is delivered. Maintaining key tools like **Preview, Inline Editing and drag-and-drop is the new standard. NoCode at it's best.. Edit Mode Anywhere is available from dotCMS 5.1** onwards and the unprecedented new standard to manage content in the era of Internet of Things.



Edit Mode Anywhere



Remote rendering includes dotCMS DOM markup required to enable dotCMS edit mode, e.g. <a href="https://doi.org/10.25/10.25/20.

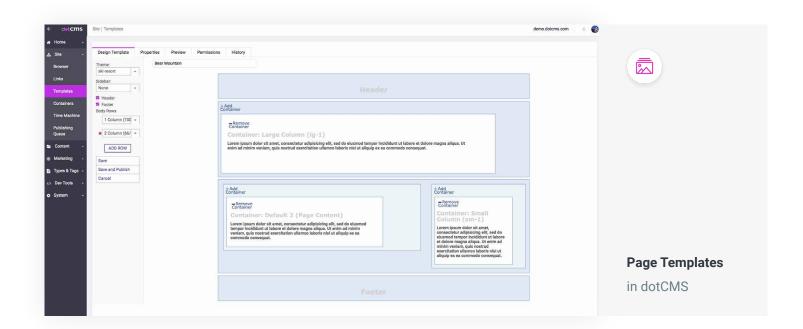
Notes:

- EMA = Edit Mode Anywhere
- EMA can be enabled on a site by site basis
- To view what data is posted/consumed: view the response for any page in edit mode by clicking on the API button in Edit Mode.
- Code base is the same for server side and client side SPA code.
- dotCMS Edit Mode for SPA is written in React and requires a Node.js server to provide rendering.
- Edit Mode Anywhere Pattern can support Edit Mode in any 3rd party server side rendering, e.g. Node.js SPA, .NET, .PHP

Content Layout

Besides creating content and pages, being able to control the layout of content is equally important. This is where a modern CMS should support agile marketing to significantly reduce the involvement

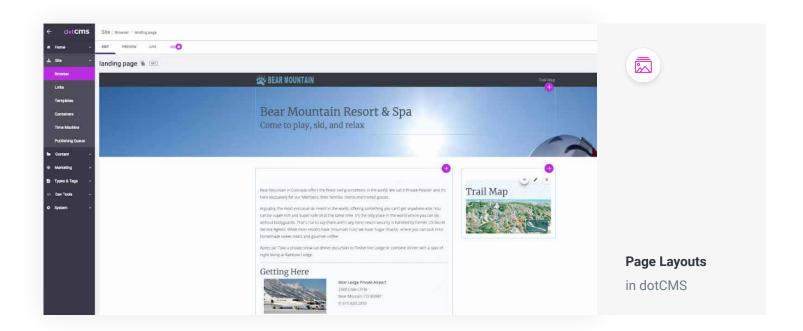
of developers. **NoCode**¹² **is the standard in dotCMS** when it comes to tools related to content layout management.

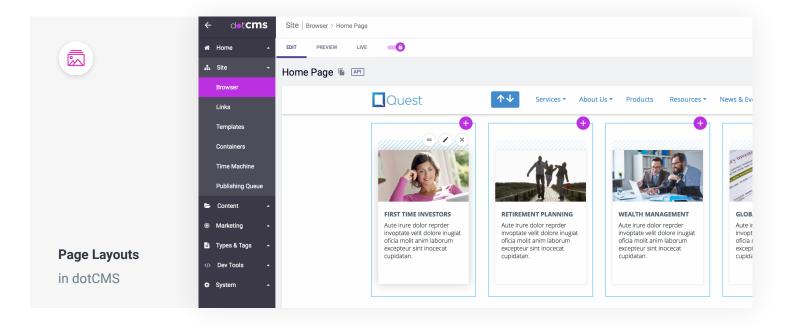


01. Page Templates

The premise of any CMS is to have predefined page templates to manage every website or application and allow marketing teams to build and create pages and websites. On paper this sounds great, and most modern CMS solutions use templating or blueprinting.

But where the majority of CMS solutions fail is the ability to make changes to templates without the involvement of developers and system administrators. In dotCMS, marketing teams can create new page templates without any knowledge of templating technology /coding, and directly through the editor interface in a very intuitive way.

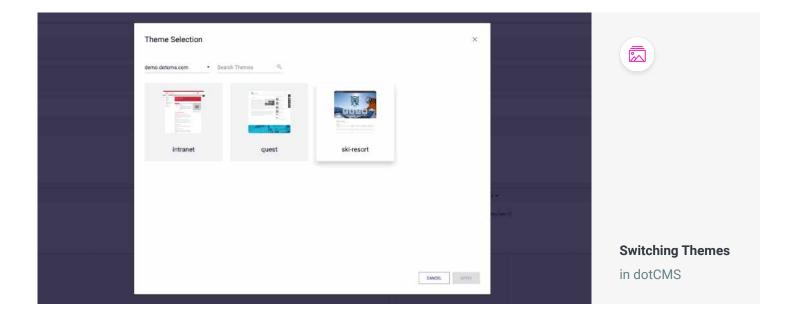




02. Page Layouts

The positioning of relevant content (particularly when it comes to calls-to-action) on a page has to be a low-effort activity, and be 100% NoCode. Being

able to drag-and-drop anywhere onto the page with automatic scaling to the height & width of the destination content container, should be supported by any modern CMS, in order to drive time-to-market and total-cost-of-ownership.



03. Switching Themes

A modern CMS is typically not used for managing a single website. It is used for a multitude of applications for specific marketing functions or targeted audiences. This helps to rationalize the expenditure of digital marketing efforts and drive time-to-market and ROI. Reaching out to different audiences with a single CMS means that marketing teams want to control the experience that is relevant for them.

There are three levels to control themes:

- Global site level: style sheets being applied to every single page associated with the top-level domain.
- Landing Page: styling applied to a landing page within a top-level domain.
- **Content widget on page:** styling applied to a single content container on a page.

dotCMS supports all the scenarios as described above.

Content Approval

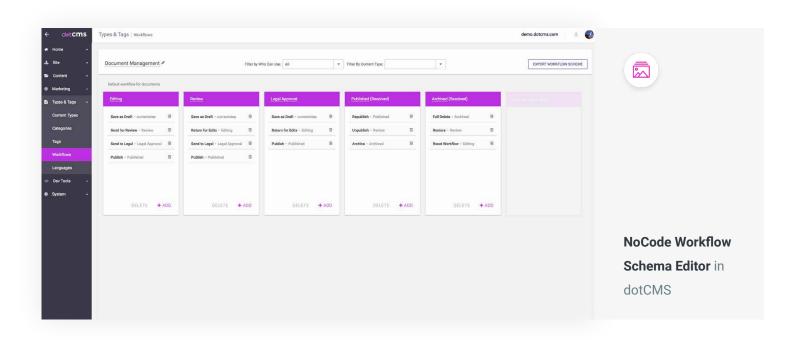
Creating content in a high-paced, business-critical environments requires a streamlined process that balances quality control and time-to-market. We all know what happens when incorrect content becomes available for a limited amount of time, it has an immediate impact on revenue ¹³.

Digital Marketing is a team sport, which means that content is typically not generated by just an individual. There are different stakeholders involved from writers, photographers, editors, marketers, and senior management. And in vertical industries like healthcare, finance, pharmaceuticals, review by legal & compliance teams is mandatory.

Content marketing teams have to be able to create and manage content approval workflows without any restrictions and the involvement of IT. In embracing our NoCode philosophy, dotCMS offers a **Workflow Management module**, that allows marketing teams to:

- Create any multi-step content approval workflow.
- Have multiple workflow schedules on a single content type.
- Create multiple sub-actions within an individual workflow step.
- Create personalized notifications (e-mail, SMS text etc.) to groups or individual editors.
- Integrate with the content publishing framework and have maximum flexibility in this regard.

Having this level of flexibility is still not mainstream in the enterprise CMS vendor landscape, and dotCMS is proud to deliver these capabilities out-of-the-box 14.

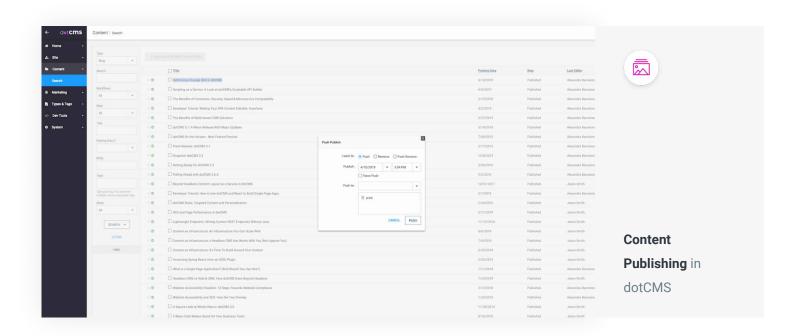


Content Publishing

Once content is created and approved to be exposed on all the applications that are driven by the CMS, it's time to publish. Enterprise-grade CMS solutions should offer the flexibility and the tools to cater the needs for all **publishing scenarios**:

01. Direct or scheduled publishing:

Some content needs to go-live immediately once approved, but for campaign-related content that needs to be prepared in advance, being able to schedule the publication and take it offline once the campaign is over, is a crucial tool.



02. Dynamic or static publishing:

Being able to publish content dynamically has pretty much become the standard for driving customer experiences. In some cases, it's a requirement to publish static content to a file share or S3 bucket for a number of reasons. Both have to be done from the CMS authoring environment without any IT-dependencies.

03. Push Publishing:

In an enterprise setup, there is usually multiple environments associated with the live / Production environment where visitors hit your content. Being able to promote content from one authoring environment to different environments, or even to **multiple environments at the same time,** is standard for a robust CMS solution like dotCMS.

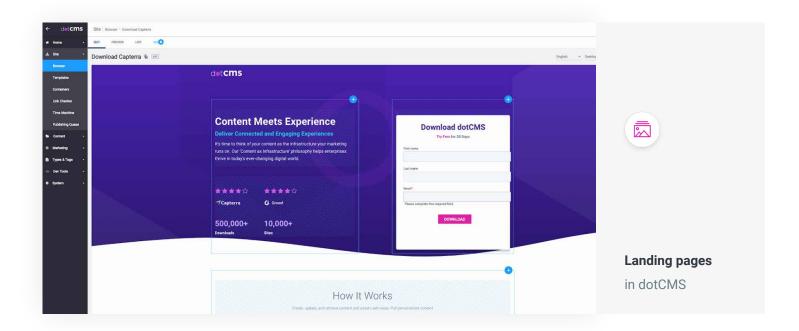


Omnichannel Experiences

Marketing teams are usually not just responsible for a single website. The number of digital properties that they have to manage in order to support every customer touchpoint, has increased dramatically. This is where enterprises now want to consolidate to a single content management platform, instead of having point solutions for every specific touchpoint. Needless to say, the key drivers are the usual suspects here: reducing Total-Cost-of-Ownership (TCO), increasing ROI and increasing time-tomarket. More importantly, your audience wants to pick their channel-of-choice when they want to engage with you, and that is why an omnichannel strategy must be supported by CMS.

01. Content reuse:

Having a content-centric CMS, where content is created once and published everywhere ¹⁵, is a key prerequisite to managing multiple applications from a single CMS solution efficiently. A decoupled CMS like dotCMS separates content from the presentation layer and allows for API access and updates. This architecture is essential for managing multiple content-driven applications, regardless of the device, context or application that takes care of the presentation. For mobile devices, there is less space to render content, so it makes sense to expose a limited number of content items relative to a desktop experience.



02. Landing Pages:

Digital marketing teams spend a lot of their time to create and execute campaigns, and landing pages play a role in their execution. Whether it's creating them from scratch, using existing Landing Page templates, or copying an existing landing page (with or without specific content), having a CMS that allows them to quickly (under five minutes) create landing pages, tie it into their campaign via their Marketing Automation solution of choice, and personalize the experience is a standard.

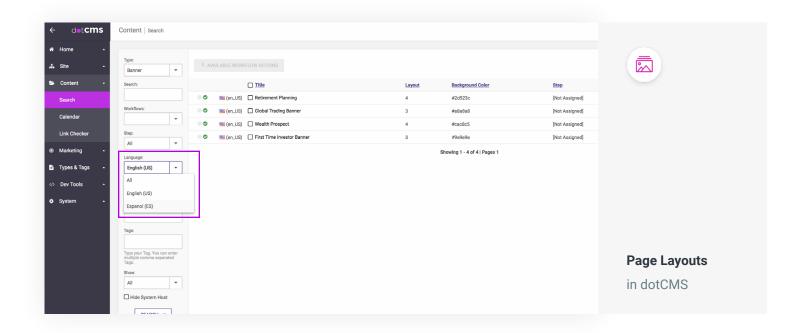
03. Micro-sites & blueprinting:

Organizations who have a multitude of public facing websites (1000+) need a mechanism that allows for the creation and rollout micro-sites or even full websites with very little effort. dotCMS has customers supporting this scenario, where **releasing 40 websites** (with all unique top-level domain and styling) **on a weekly basis, is not uncommon.**

dotCMS supports all these capabilities out-of-the-box for marketing teams, so IT can focus on innovation.

Multilingual Support

There is a strong relationship between language and buying behavior [reference]. For brands operating in multiple language territories, it makes sense to **deliver content that is both translated as well as localized.** Global content orchestration is a key tool for digital marketing teams operating in multi-lingual territories ¹⁶.



01. Supporting non-Western character sets:

Whether it's the content exposed to your customers or the UI of the CMS authoring interface, it needs to **support non-Western character sets** to support distributed content marketing teams, who prefer to work in their native language.

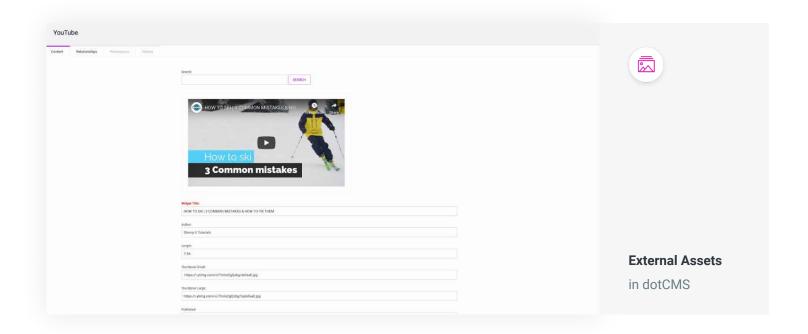
02. Integrated Translation Engines / Services:

Translating content is an industry in itself, and industry specific lingo is not eligible for Google Translate. This is where specialized Translation Engines and Services support global brands. From a CMS perspective, this means seamless integration of these external tools into the content approval & publishing workflow.

Digital Asset Management

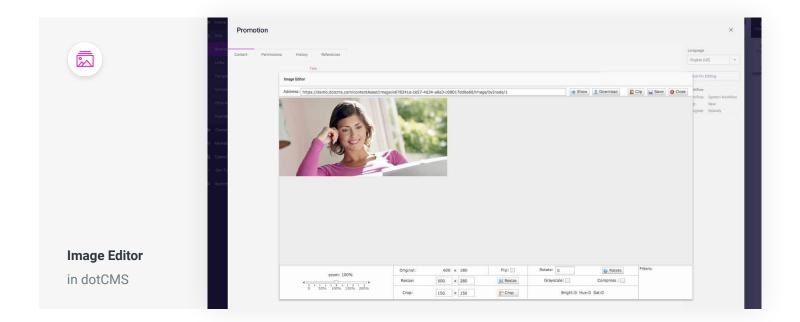
Web experience these days do not go without enticing visual content, like images and video. Depending on the volume of the media assets your brand is utilizing, and the creative process to support

it, the use of a Digital Asset management should make sense. In any case, marketing **teams who want to use this type of content, need to have access to them without disrupting versions** (single-source-oftruth).



01. Accessing external assets:

Digital assets do not need to reside in a CMS's content repository. For a number of reasons, it's a given that it's quite the opposite, where multiple asset stores are given to a marketing team to work with. A modern CMS should support seamless access to these external sources directly from the authoring UI without the need to toggle to a different application. Being an API-driven CMS, dotCMS supports this out-of-the-box, and helps marketing teams deliver great content creation experience.



02. Image Editing:

In some cases, it makes sense for marketers to manipulate existing imagery. It helps tremendously where the CMS has the tools to make crops and perform standard image processing (filters, resizing) on-the-fly within the CMS authoring UI.

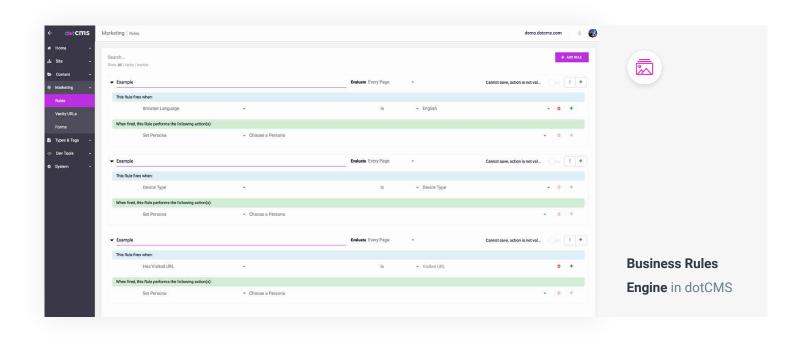


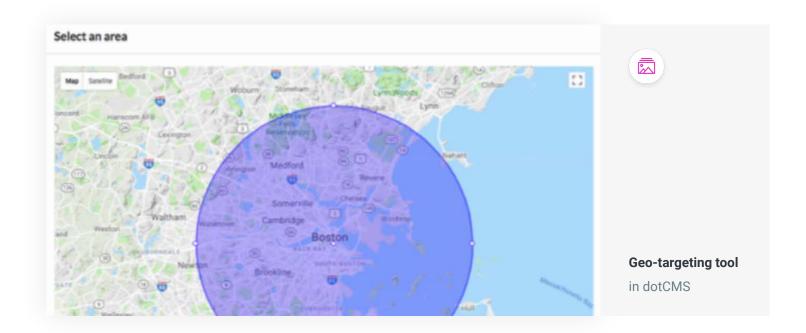
Content Targeting & Personalization

Brands can no longer afford not to have a personalization strategy. In fact, it is one of the key differentiators to win in the digital turmoil [reference to WEF/Accenture paper 2016]. Any enterprise-grade CMS¹⁷ has tools to help marketers execute on their personalization strategy, while leading solutions empower marketers to deliver hyper-personalized ¹⁸ experiences for every visitor hitting the brand's digital touchpoints.

01. Persona-driven content targeting:

Based on persona definitions, specific content is exposed to an anonymous visitor as soon as it meets the persona criteria, which can change over time (progressive profiling). Typically, the persona definition is defined by a set of business rules. Any modern CMS must offer a rules engine for marketing teams to define personas intuitively and without developer efforts.





02. Geo-location content targeting:

In order to target audiences in specific territories and helping to localize customer experiences, an enterprise-grade CMS offers **geo-targeting tools** that help marketing teams to specify the segment at a very granular level (state, city, county, etc.)

03. Data-driven content targeting:

Brands collect, generate and aggregate data in their marketing platforms (CRM, Marketing Automation), their transactional platforms (e-Commerce, ERP, system of records, etc.) as well as their CMS. Being able to leverage internal as well as external data to personalize the customer experience is standard for any modern CMS

A CMS is the content foundation for any digital experience platform brands build to drive customer experiences. More and more, machine learning tools are needed to personalize experience at scale. In retail, there is a number of vendors (Evergage, Insider, Unboxed, Reflektion) who offer products that help to personalize search, browse and buying experiences. These solutions can easily integrated with CMS vendors. dotCMS has an open architecture and open APIs to integrate these products ¹⁹.



Analytics

In this day and age, there is no digital marketing possible without **having access to actionable insights through underlying analytics.** This area still requires some more development in general, but from a CMS perspective, there are some requirements a digital marketer should expect:

01. Content Performance & utilization:

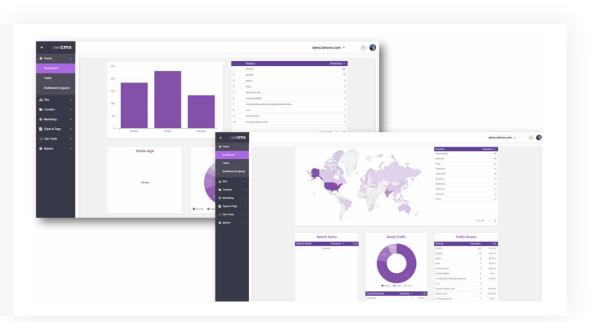
Having insights where people are coming from, how content is being utilized and consumed helps marketing teams to make informed decisions to optimize customer experiences.

02. Integrated web analytics:

Analytics and reporting from a CMS supplements the existing web analytics tool (like Google Analytics, Omniture, etc.). Having an aggregated view inside the CMS helps marketers to have a real-time overview without having to login to their web analytics tool.



Analytics
dashboard in
dotCMS



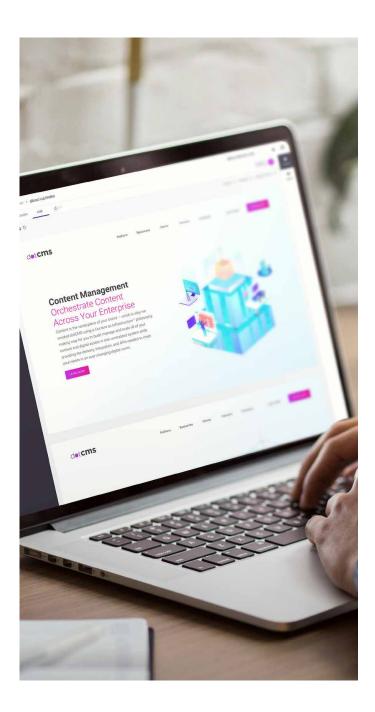


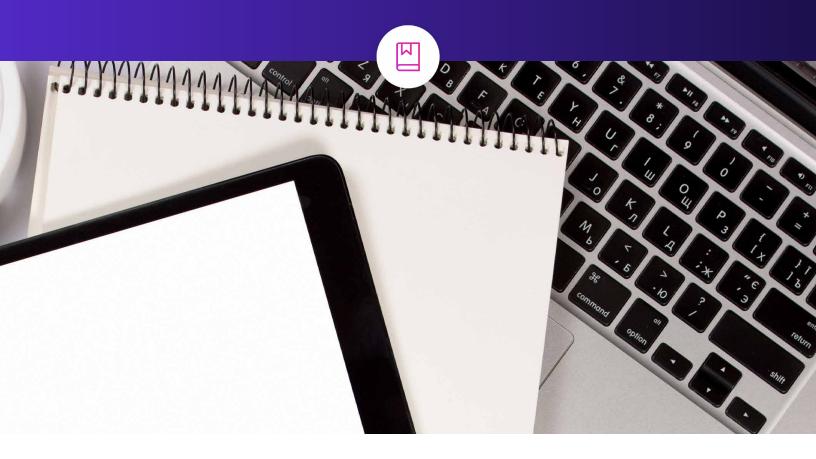
dotCMS: The No-Hassle CMS for Digital Marketers

This white paper is aiming digital marketing teams who are looking to replatform their current solution. This is an exciting and intense process, where a decision for the next five-ten years has to be made by the evaluation team. All the CMS capabilities that we have addressed in this paper help marketing teams to reduce or entirely remove pain points with their current solution(s) and even bring new tools to the table that they currently don't have at their disposal.

The dotCMS sales team is happy to help you in this process and provide greater detail on how dotCMS can help you to pick your next CMS platform.

Please reach out to sales@dotcms.com to start the conversation.





Checklist Digital Marketing and CMS

In order to support your evaluation process, we have condensed all key requirements from a digital marketing perspective in an organized spreadsheet at your convenience.

Spreadsheet:

https://docs.google.com/spreadsheets/d/1bzHzNebet8i2BQ9bSv7Z-Om3r_rCABx759yQNjsLeNE/edit?usp=sharing



About dotCMS

Founded in 2003 and at the forefront of enterprise content management. It is our belief that the days of monolithic, all-in-one suite solutions are gone and will never come back. Building a digital experience platform -by definition- requires the art of seamless integration into an existing technology stack that brings marketing, transactional and experience platforms together. Integrations should be built

'on the fly' or based on NoCode capabilities to drive time-to-market, Total-Cost-of- ownership and return on investment on digital.

Business and marketing teams can orchestrate content and personalized experiences for every touchpoint along your customer journeys for any device, with real-time and actionable insights, on-premise, in the cloud or hybrid, but most of all at scale and with an availability of 99.95% if needed.

The Content Management System is the foundational infrastructure of your digital experience platform.



















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References

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