

A Practical Guide for Successful CMS Selection, Implementation, and Value Creation



Dr. James L. Smith, MD



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INTRODUCTION

Why should I read the definitive guide to healthcare CMS?

For the last several years, each new year has been billed “the year of the consumer” in healthcare, led mostly by a shift from a provider-led to a consumer-led landscape that has become very competitive.

According to Accenture,¹ The problem is exacerbated by a marketing sea change called “liquid expectations,” when consumer experiences seep over from one industry into another, creating an expectations chasm. 59% of consumers now want their digital healthcare experience to mirror retail.² Specifically, they expect personalized content and offers, transparency around quality and costs, and convenient self-service options that work seamlessly across responsive websites, mobile apps, social channels, and more.



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Progress against these rising consumer expectations is painfully slow, in part because legacy web content management systems (CMS) make it difficult to deliver. Their feature sets, architectures, deployment models, and cost structures are dated and problematic, impeding digital transformation efforts.

If that describes your situation, the onus is on your marketing and technical leaders to mutually identify a forward-thinking CMS that will satisfy both marketing's need for speed and ease of use in content editing, authoring, and cross-channel publishing as well as IT's requirements for a secure, scalable, and easily supported solution.

This guide is designed to help those leaders arrive at a shared vision and roadmap for digital consumer experience and decide which CMS features are essential to achieve their goals.

In this guide you will receive answers to these important questions:

- 1 Does my organization need a new CMS?
- 2 What deployment model is right for us?
- 3 How do changing consumer behaviors impact our selection?
- 4 What common and advanced features should a contemporary healthcare CMS include?
- 5 What steps should we take to select the right CMS for our needs?
- 6 How do we build a business case and convince internal stakeholders to act?
- 7 How does my organization advance its personalization strategy?
- 8 How do we measure CMS success?
- 9 What does the future of healthcare CMS look like?

CHAPTER 1

5 challenges that scream, "We need a new CMS!"

Since the web made its debut in the 90s, IT professionals have been working to make sure their organizations have an online presence. In recent years, we've seen responsibility for web presence shift right onto the marketing department's doorstep, signaling a pivot in strategic thinking. CMS is no longer viewed as a stagnant piece of technology, but as a dynamic, evolving hub for your organization's online branding, consumer engagement, and lead generation efforts. Despite CMS now being viewed largely as a marketing tool, IT is often still responsible for maintaining and modifying the technology. Dual ownership can work, as long as stakeholders agree on what's needed to respond quickly and cost-effectively to rising consumer demands and emerging competitive threats.



Marketing and IT can agree it's time to replace your current CMS if your organization is experiencing one or more of the following.

1 SLOW PROGRESS AGAINST TOP-DOWN OBJECTIVES

Marketing is under pressure to quickly launch compelling digital campaigns and cross-channel consumer experiences but finds IT has other high-priority projects to focus on. Putting out website fires, handling granular content updates, and debugging layout issues are laborious tasks that inevitably distract both teams and hinder your organization's digital transformation. Executives are under the impression your organization's digital presence is "behind" local or national competitors.

26% of organizations are "completely ready" to execute digital strategies. [Source](#)³

2 MIND-BOGGLING COST & COMPLEXITY

Upgrades to your CMS are frustratingly difficult or painfully expensive. Boosting site performance depends on ramping up hardware infrastructure or increasing your hosting spend. Launching new experiences and adding new features result in additional license or subscription fees. Your system doesn't scale with your organization without breaking your back or the bank.



3 FRAGMENTED, STATIC USER EXPERIENCES

Your CMS lacks capabilities to deliver relevant, timely content to individual users or A/B testing tools to measure the effectiveness of your personalization efforts. Marketing can't use consumer data to display relevant content or offers because your CMS, CRM, social media, marketing automation, and contact center applications are connected loosely, at best. You need your CMS to more easily integrate with your growing martech ecosystem.

4 LEGITIMATE SECURITY CONCERNS

Privacy and data security are real concerns. You're worried about collecting and storing PHI in web forms. You're concerned about hacks and denial of service attacks. You can't afford for your high-traffic sites or conversion environments to be down. The time it takes to set up internal users with appropriately restricted access to the site's back-end is a burden. You need a system architected to ease these headaches.



5 A SHORTAGE OF DEVELOPMENT AND DESIGN RESOURCES

How often do you say, "What if our website could..." and then dial yourself back due to time or talent constraints? Every time you want to make a modification, you tap the same employee familiar with the investment-specific development language. You need a system that is intuitive enough for non-technical users to leverage and robust enough to support customizations implemented by front-end developers using their native tools.

CHAPTER 2

On-premise vs. hosted vs. SaaS

You know it's time for a new CMS. Now, it's time to choose between an on-premise, hosted, or SaaS solution. There are important technical and financial implications associated with each option. Knowing which model works best for your organization upfront will help narrow your list of potential vendor options early in the process.



**WHICH ONES
LIFT YOU UP?**

**WHICH
ONES WEIGH
YOU DOWN?**



On-premise CMS

In this model, you buy a license from the vendor and install the software on your own servers. The CMS provider is only responsible for maintaining and updating the software; everything from installation to security to infrastructure upgrades will be handled by you. With an on-premise CMS, marketing will always be highly dependent on IT, a third-party hosting partner, or an agency.

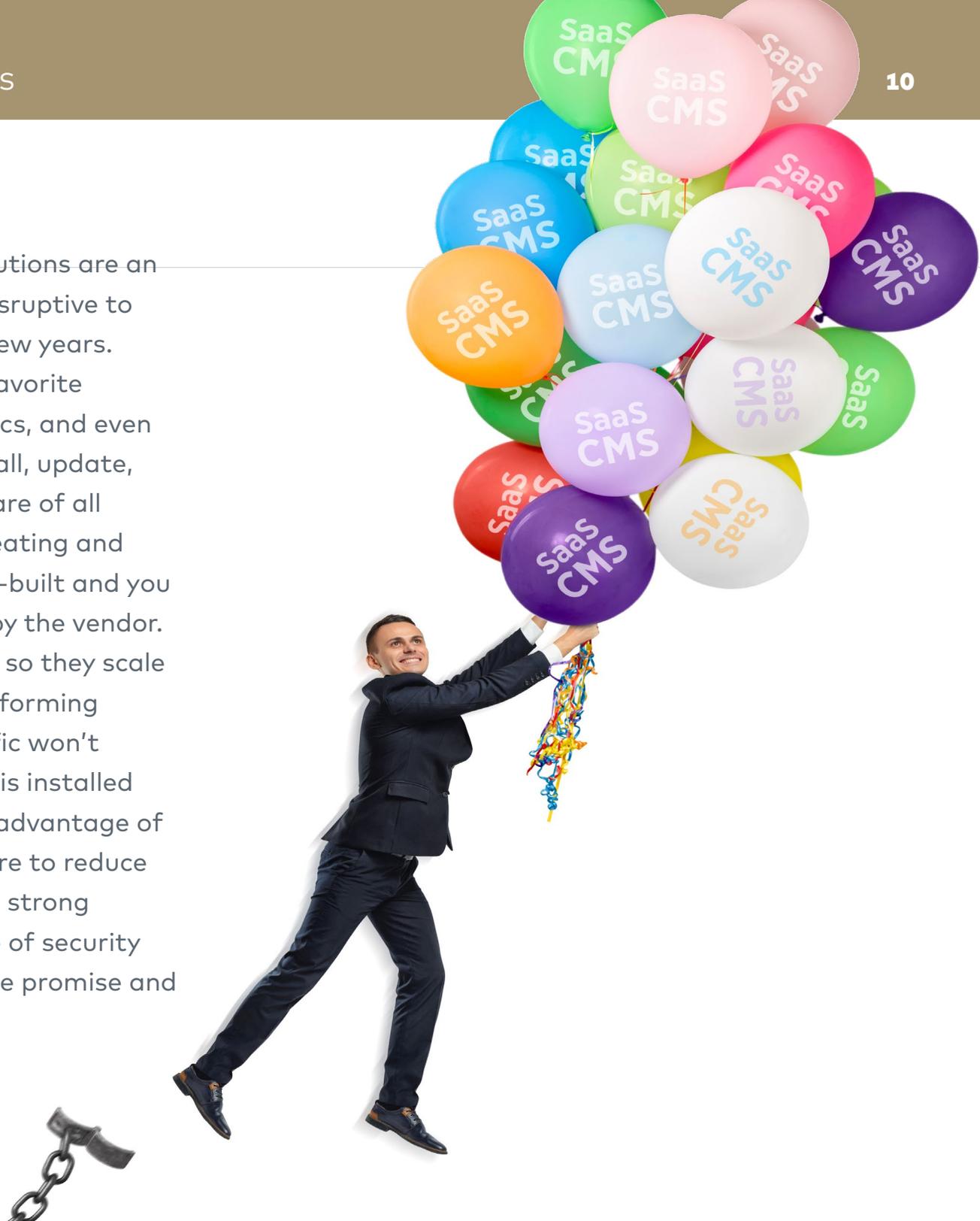


Cloud-hosted CMS

With a cloud-hosted solution, you buy a license and then install the software at a data center where you lease server space. This works just like an on-premise CMS, except that it is installed on third-party servers you don't directly own. Typically, any on-premise solution can also be a hosted solution provided the web host meets the server requirements. In this model, marketing may rely less on internal IT resources, but the responsibility has just shifted externally. You will still incur longer implementation cycles, more downtime, and interruptions associated with installations, upgrades, and maintenance.

SaaS CMS

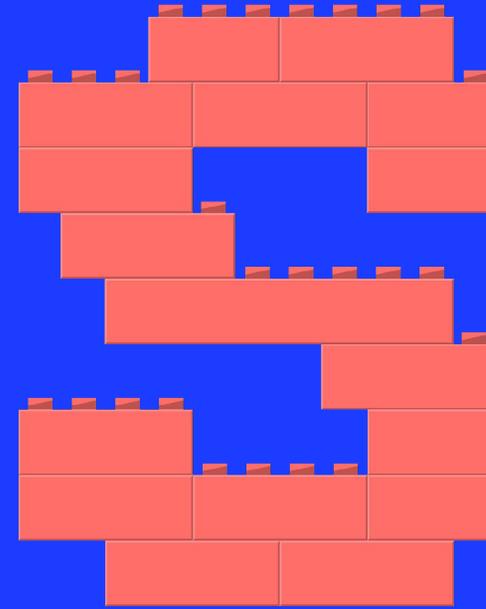
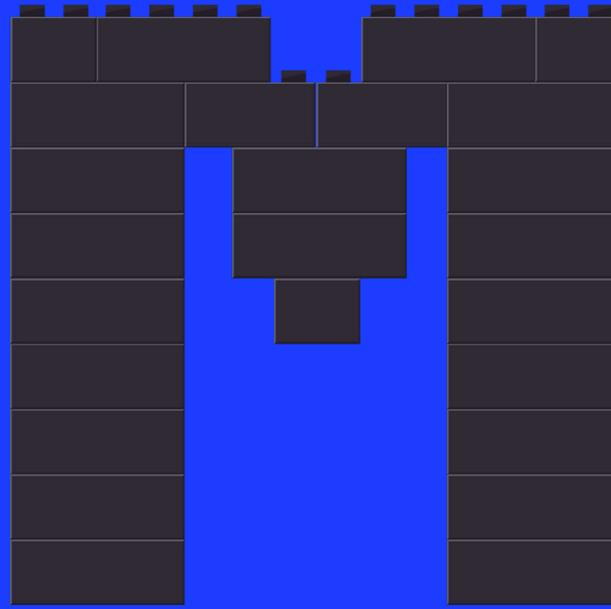
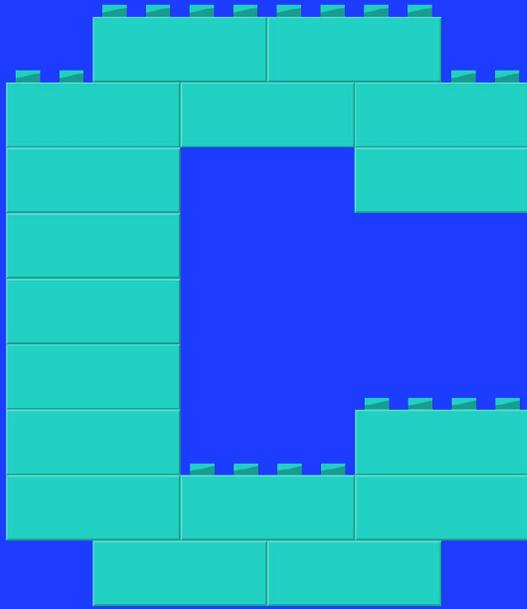
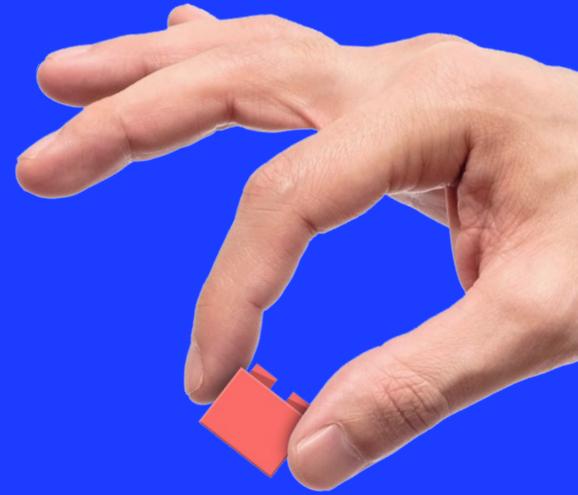
Software as a Service (SaaS) CMS solutions are an emerging category that has become disruptive to traditional CMS providers in the past few years. The SaaS CMS works like any of your favorite SaaS tools (e.g., Salesforce, Google Docs, and even Gmail). There is nothing for you to install, update, or maintain. The CMS provider takes care of all technical issues so you can focus on creating and managing content. The software is pre-built and you benefit from ongoing upgrades made by the vendor. SaaS solutions are hosted in the cloud, so they scale with your demand, meaning a high-performing campaign or sudden burst of viral traffic won't take your site down. Because the CMS is installed away from the premises, you can take advantage of established processes and infrastructure to reduce security risks. SaaS offerings also have strong backups and a recovery process in case of security concerns. Most offer a minimum uptime promise and redundancy plans.



CHAPTER 3

An argument for decoupled architecture

When we talk architecture, a good number of people tend to tune out. Don't do that. Choosing an integrated CMS with a decoupled architecture matters to everyone involved in evaluating the technology solutions because it solves a very real and growing business challenge.



Look at all the channels and devices you currently use to engage with your consumers. Your content needs to be consistent, quickly updatable, and perhaps personalized to the visitor's context. Now, be realistic about how many new channels and devices are going to emerge over the coming five years. It's a lot.



Your efforts simply won't scale!

This is where a decoupled CMS comes in handy. Yes, it still powers your organization's website, but it can do so much more. With a decoupled CMS, there is a healthy separation between the back-end of your CMS (the place where you manage and store content) and the front-end or many front-ends (the places where you publish and your consumer interacts with your content). Content is managed in one place, but the user experience can take many forms: a desktop or mobile website, mobile app, or a digital display or kiosk.

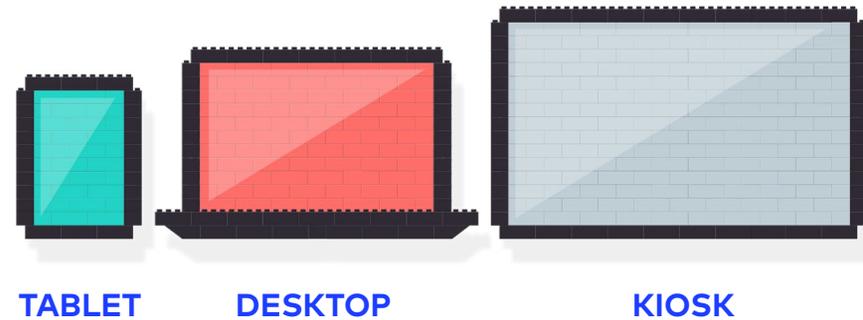
This sounds promising, and it is. However, to meet marketers' day-to-day workflow needs, there are some strong dependencies between vital parts of the back-end content management component and the front-end publishing experience, so a completely decoupled (or headless) CMS may not make sense either.

For instance, let's talk about page preview. Authors need to see what the content they are writing will look like to an audience. Content needs to live by itself to adapt to any form or screen, yet still needs to be presented to authors in a specific context. Now what?

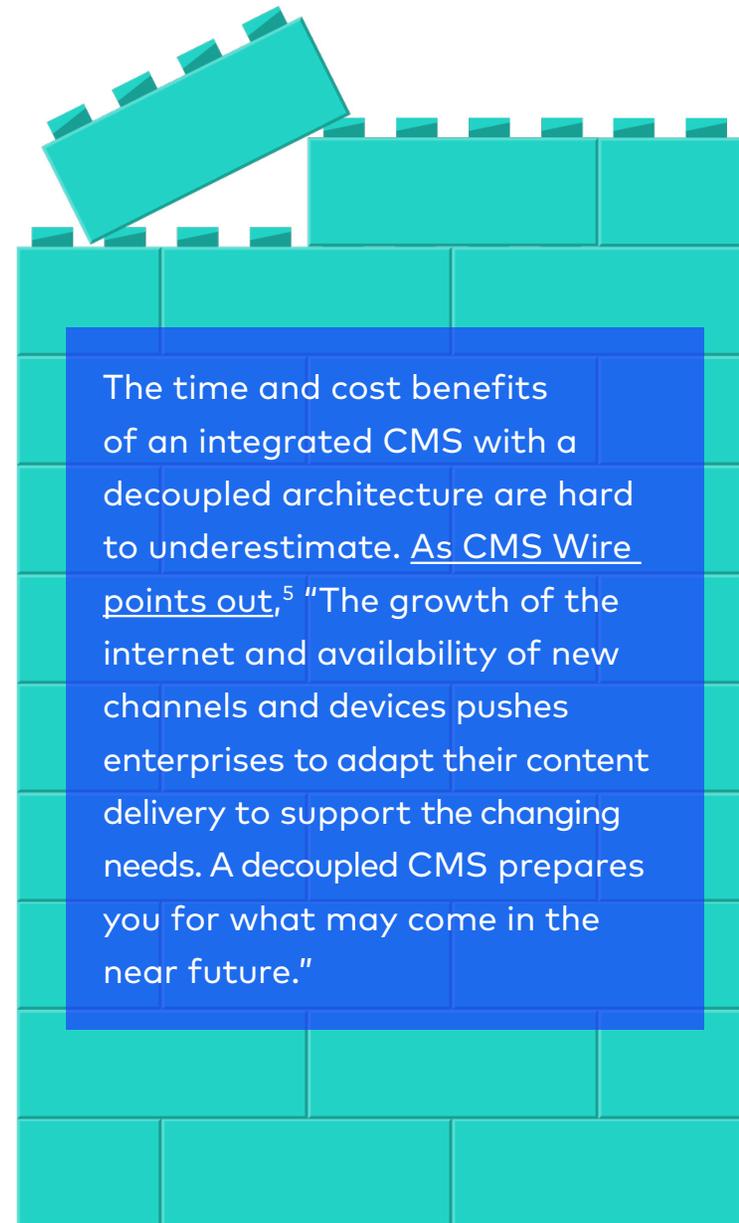
Enter the integrated CMS, built on a decoupled architecture. With this hybrid approach, marketers can author the content in the back-end and then preview how it will look in different front-end experiences (desktop, tablet, mobile, etc.). It's truly the best of both worlds!

Choosing an integrated CMS with a decoupled architecture offers several advantages to both traditional (coupled) and headless (decoupled) CMS solutions:

- 1 Content contributors create content once and then publish it wherever they want to engage the consumer. As part of the authoring experience, they can preview pages for desktop, tablet, and mobile, as well as edit content inline.
- 2 A RESTful API provides content services to other applications. For example, if you want to offer a digital signage solution or kiosk, you simply pull content from the CMS using the API.
- 3 Front-end developers can utilize any technology to render the front-end experience without being bogged down by all the website page theming and presentation layers that come out-of-the-box with a coupled CMS. "News" content is entered once but can look and function one way on your desktop site, another way in your mobile app, and yet another on a digital display.



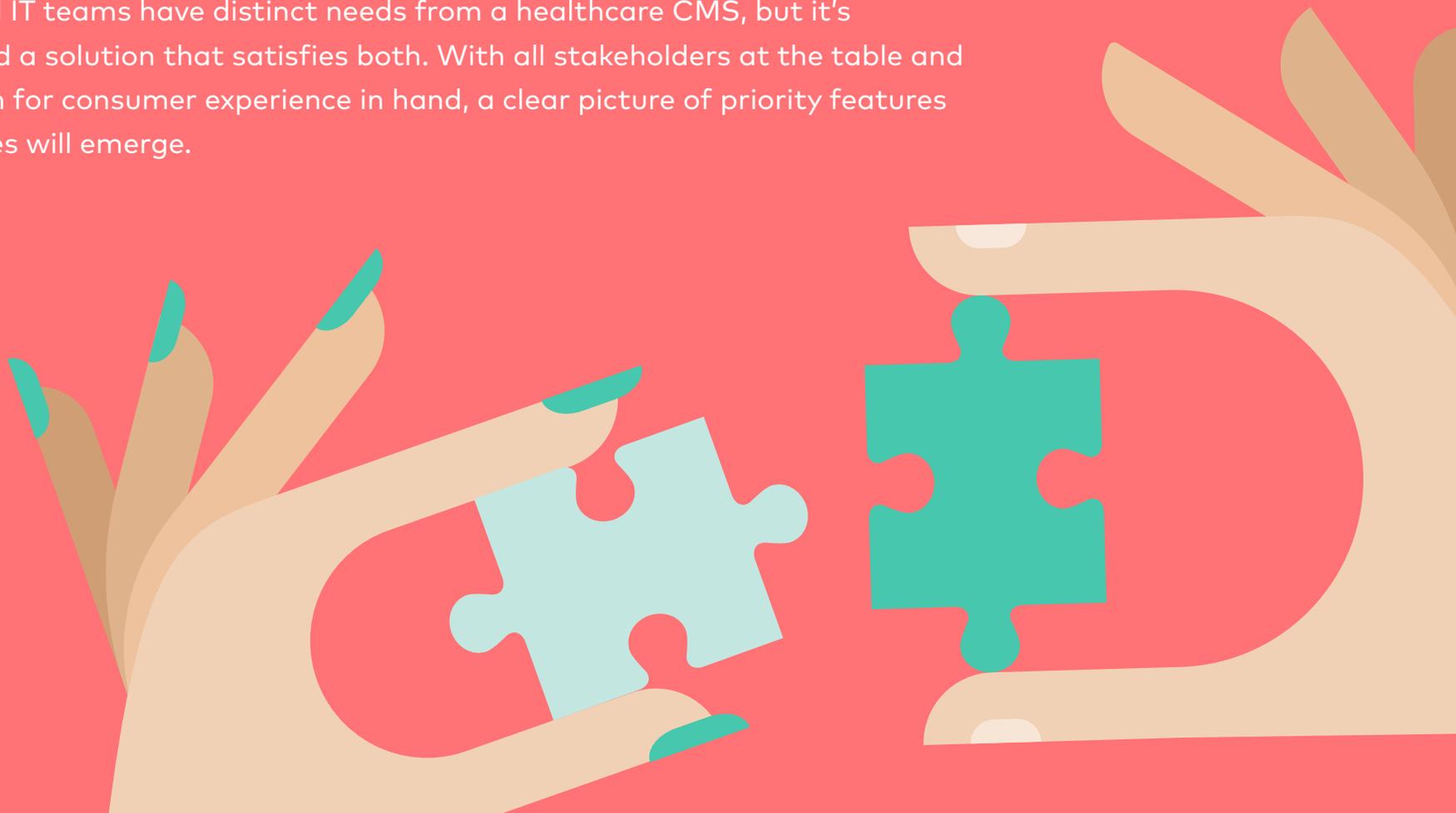
- 4 When you need to add new or update existing content types, you can make these changes in the back-end, without affecting the front-end user experience.
- 5 You can test updates on a separate staging server and publish the changes to the delivery tier when they're ready to go live.
- 6 Because you don't have the overhead of the CMS application on every web server, delivery speed improves, which directly impacts conversions.
*Walmart found that for every 1 second of performance improvement, there was a 2 percent increase in conversions. **Source**⁴*
- 7 If the back-end CMS software goes down or needs maintenance, your live website continues to operate.



CHAPTER 4

Common and advanced healthcare CMS features

Marketing and IT teams have distinct needs from a healthcare CMS, but it's possible to find a solution that satisfies both. With all stakeholders at the table and a shared vision for consumer experience in hand, a clear picture of priority features and capabilities will emerge.



Marketing must-haves

Marketing teams need to quickly deliver on internal and external expectations for consumer experience. They sometimes need to develop and maintain multiple digital projects simultaneously — and will benefit from a CMS that makes it easy to test campaign ideas, experiment with new user experiences, and nimbly respond to market changes without requiring IT assistance at each step.



Marketers need a CMS that boasts deep capabilities in the following areas:

Fast authoring, editing, and publishing

For a CMS to bring any value to the table, marketers and content editors must find the solution's content authoring, editing, and publishing interface intuitive, helpful, and highly efficient.

- 1 Users should be able to create original content independently without HTML.
- 2 An elegant inline editing feature should help users visualize how content appears in the mobile, tablet, or desktop environment.
- 3 The CMS should support custom content approval and publishing workflows that go through the stages of authoring, editing, and publishing very rapidly, so content authoring can be distributed without losing control over branding and quality guidelines.

Marketing must-haves

Personalization and targeted content

To meet today's consumer expectations, marketers need to seek a CMS capable of displaying targeted content and offers to individual visitors based on their unique interests and preferences.

- 1 Select a healthcare CMS that can collect, persist, and leverage multiple dimensions of data about anonymous and known consumers and use those insights to promote the most relevant content and offers.
- 2 Everything from current location to browser or device type to onsite behavior and demographic information should be able to be leveraged to create a more relevant experience.
- 3 No programming should be required for marketing to create these personalization rules and content variations.
- 4 A/B testing tools should be included to measure the performance of these variations and optimize engagement and conversions over time.

80%

of consumers are more likely to do business with a company that offers a personalized experience.

Source⁶

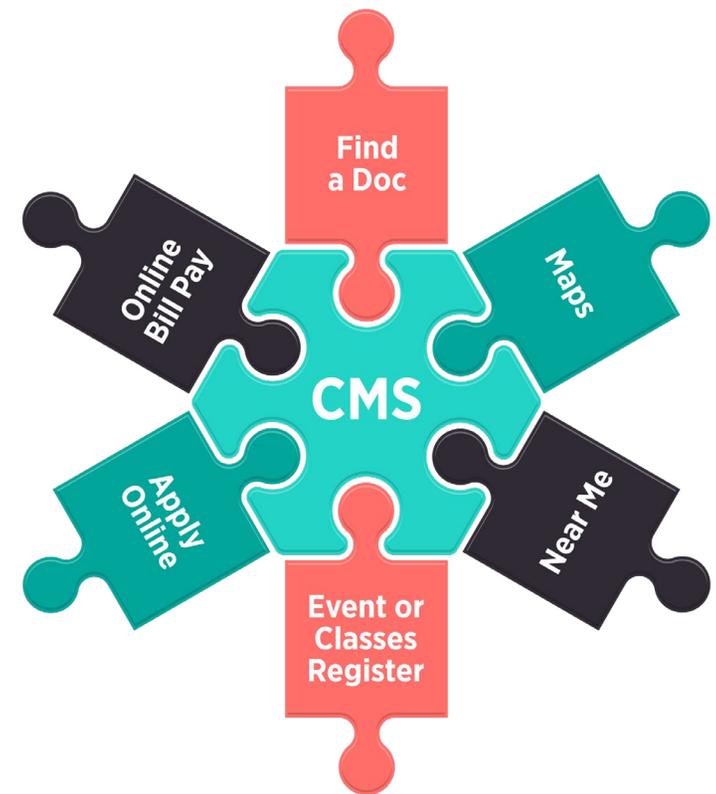


Marketing must-haves

Healthcare content and interactions

The best-performing websites make it easy for consumers to quickly find information of interest and complete their desired transaction.

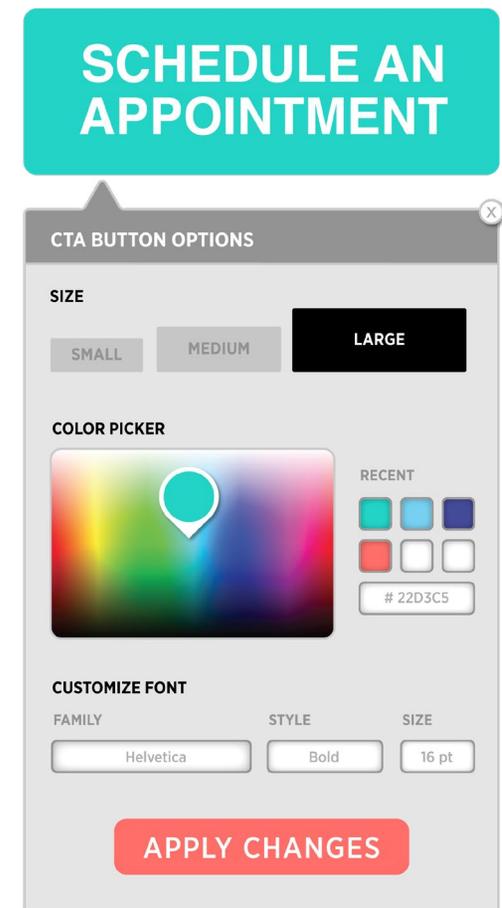
- 1 Look for a CMS with pre-built content apps that address consumers' needs to find a provider, get driving directions or a phone number for a preferred location, register for classes or events, apply for a clinical trial, pay a bill, and so on.
- 2 Ensure these healthcare apps integrate with your third-party data sources, such as credentialing systems, or have an open API for custom integration development.
- 3 Check to see if these apps support configurable SEO formulas for the most important meta tags, enable custom SEO configurations, automatically insert geographic modifiers, and apply schema markup for structured data so every provider and location page is automatically optimized for hyper-localized search.



Marketing must-haves

Healthcare content and interactions

- 1 Ideally, these apps will offer a drag-and-drop customizable presentation layer so that marketers can change the “look and feel” of the end user experience (add or remove fields, change labels, reorder data elements, etc.) without coding or custom development.
- 2 Ensure the vendor supports an ecosystem of best-of-breed app partnerships to augment the user experience, such as direct scheduling, online bill payment providers, and chatbots.
- 3 Last but not least, ensure the vendor offers a secure forms and lead management solution designed to meet healthcare’s stringent privacy requirements. In the context of a health transaction, even basic demographic information, like a prospect’s name, may be considered PHI and needs to be protected.

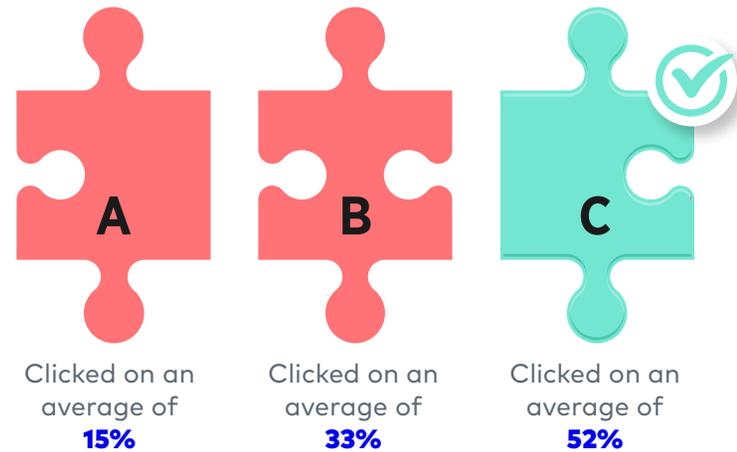


Marketing must-haves

A/B testing and analytics

Subtle adjustments to your content and conversion strategy⁷ can make all the difference in marketing performance.

- 1 Don't underestimate the business value of a CMS that displays key analytics in the same interface where your users manage content, so important insights are always front and center.
- 2 Choose one that makes it easy to quickly craft A/B tests to include permutations of your banners, layout, call-to-action, copy, and images to see what generates the highest conversions.
- 3 A/B tests should work for parts of a page or a full page and allow you to preview variants to simulate what the experience will look like before you pull the trigger.
- 4 You should be able to easily identify the winning creative and deploy to one site or hundreds of digital touchpoints.
- 5 Ensure there's intuitive reporting on how many times each campaign was viewed and how effective it was at achieving a predetermined goal.
- 6 Pick a solution that integrates with all major analytics technologies and allows your team members to measure site traffic, A/B test results, and social engagement in real-time.
- 7 Give preference to a CMS that offers dashboards, reports, and widgets that are fully customizable to meet each team member's unique needs.



Marketing must-haves

Digital Quality Management (DQM)

In today's dynamic digital environment, marketing teams are creating more content than ever before and that content is being displayed and published to more devices and across more systems⁸. They need automated quality tools to help ensure that all this content is on-brand and delivered at a consistently high-quality standard.

- 1 Choose a system that automates key content governance processes, making identifying and fixing errors and inconsistencies simple for content authors and editors.
- 2 Validation rules and tooltips should be built directly into the authoring experience to help users optimize content for WCAG and Section 508 accessibility requirements, SEO, mobile optimization, and compliance with brand standards. An ounce of prevention is worth a pound of cure.
- 3 Give high marks to a system that notifies users of misspelled words, broken links, or forbidden terms, before and after the content is published, and that links directly to the problem content so it can be fixed quickly.



1000 Pieces Scanned

38 Errors

- 13 From Another Puzzle
 - 20 Damaged
 - 05 Missing
-

38 FIXED ERRORS

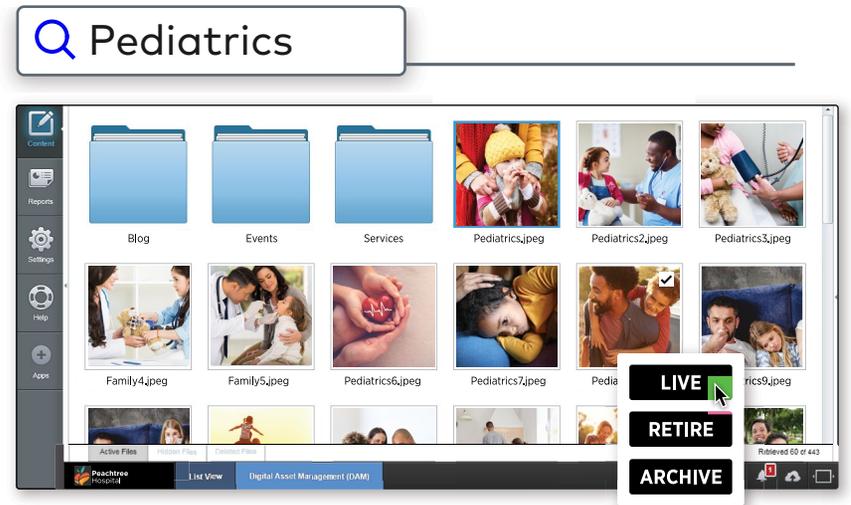
- 4 Ensure the post-publishing auditing capabilities and the workflow tools included in the DQM system help users identify and correct errors and find instances of outdated content that need to be updated or removed. This is an ongoing process.

Marketing must-haves

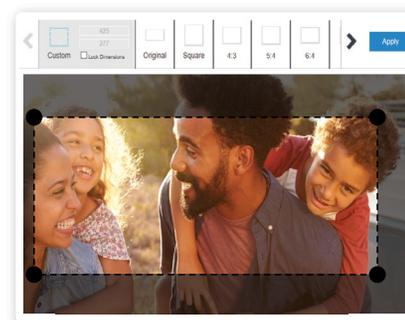
Digital Asset Management (DAM)

A CMS with an integrated DAM will help maintain brand consistency across multiple websites and digital experiences. It also saves time and money by streamlining the way content contributors access and manage digital assets across the enterprise.

- 1 A DAM should track and organize digital assets with native platform integration to best-of-breed data and content sources where image files, audio, and video are stored.
- 2 It should allow users to filter and classify digital assets by tagging attributes such as file type and meta-data tags (e.g., "Ortho photos") or by creating named collections (e.g., "2018 Breast Cancer Awareness Campaign").
- 3 Based on their permissions, teams should also be able to browse, search, move, and manipulate assets across the entire digital experience portfolio from within the CMS authoring experience — saving time and eliminating asset redundancy.



- 4 Expect the DAM to offer basic content editing tools so marketers can crop or rotate images, add text, etc. on the fly, without relying on a designer to make small changes.

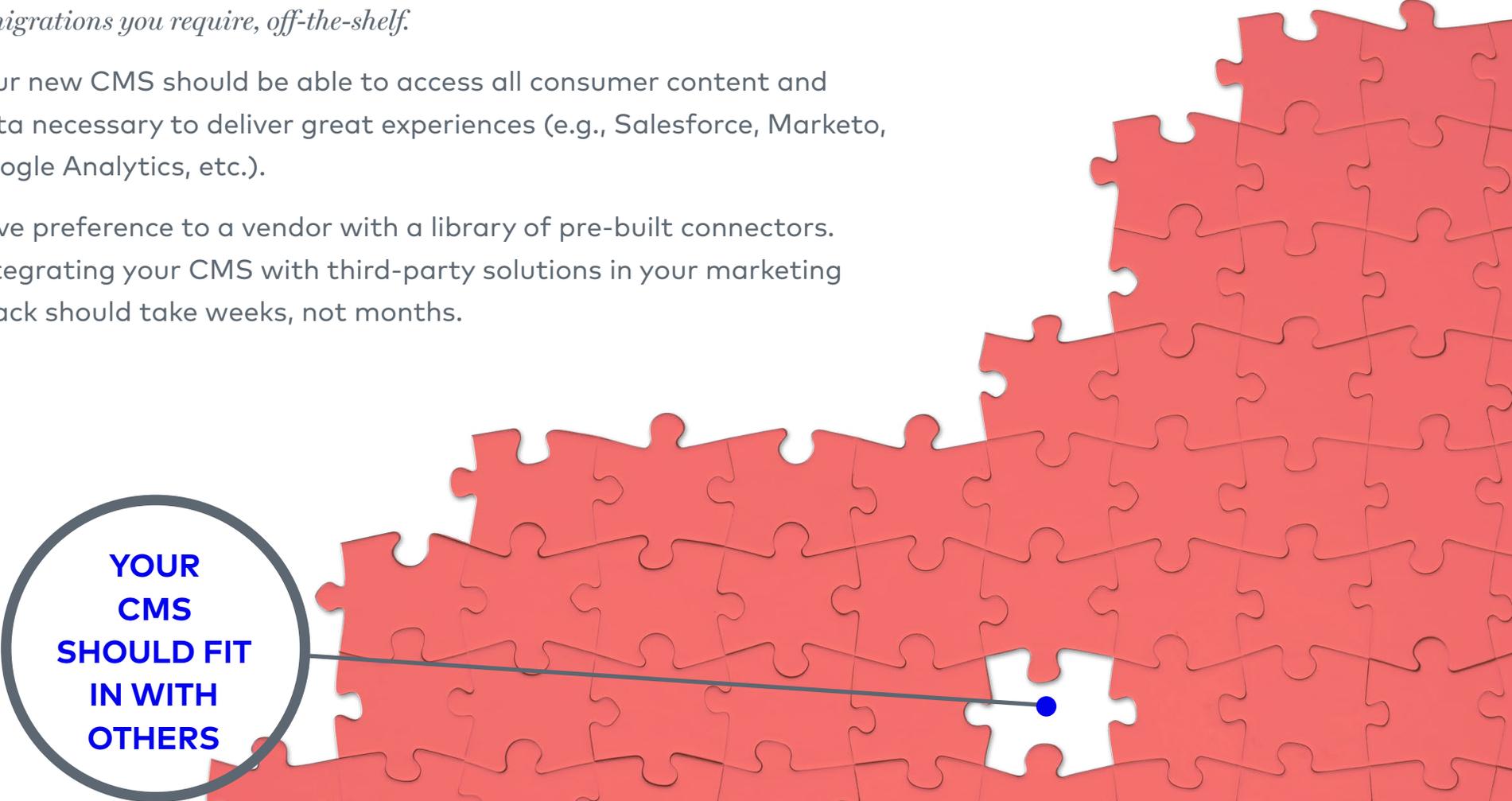


Marketing must-haves

Connectors and plugins

Look for solutions that support the back-end integrations and migrations you require, off-the-shelf.

- 1 Your new CMS should be able to access all consumer content and data necessary to deliver great experiences (e.g., Salesforce, Marketo, Google Analytics, etc.).
- 2 Give preference to a vendor with a library of pre-built connectors. Integrating your CMS with third-party solutions in your marketing stack should take weeks, not months.



**YOUR
CMS
SHOULD FIT
IN WITH
OTHERS**

IT & developer must-haves

Your marketing counterparts are operating on a tight timeline, under pressure to respond to the demands of digitally-savvy consumers and executives that want to crush local competitors. They need a CMS that empowers them to create a more contemporary online experience that is on par with progressive industries like banking, hospitality, retail, and travel, without a ton of your team's support.

Additionally, this team is depending on you to help them prepare for future needs in a smart and thoughtful way. Encourage them to look beyond the next project and seek a solution that will scale as your organization's consumer experience roadmap evolves. Give serious consideration to technology that will stay relevant as the Big Reverse⁹ of the web continues, and as mobile, IoT, and AI continue to disrupt marketing approaches.



31%

Preparing for and dealing with internet security has become one of the top four issues CIOs deal with, taking up 31% of daily activities as compared to other duties.

Source¹⁰

IT & developer must-haves

Dependable security

IT has a long list of concerns that need to be addressed and balanced with marketing's desire for strong, industry-leading technology. Especially in healthcare, where PHI and HIPAA compliance are factors, a system that protects against breaches and denial-of-service (DOS) attacks is essential.

- 1** Combining a responsive cloud architecture with a built-in content delivery network (CDN) results in a system that is inherently scalable, offering protection from DOS attacks by its very nature.
- 2** These systems scale to meet demand, supported by horizontally scaled server farms that automatically expand and contract as necessary to support varying levels of demand.
- 3** Multiple monitoring systems continuously measure a range of system load parameters and manage capacity accordingly to ensure the solution always delivers a consistent and dependable experience, regardless of current traffic patterns.

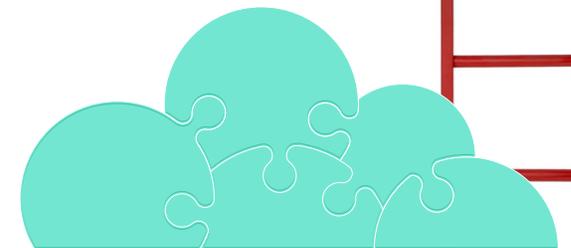
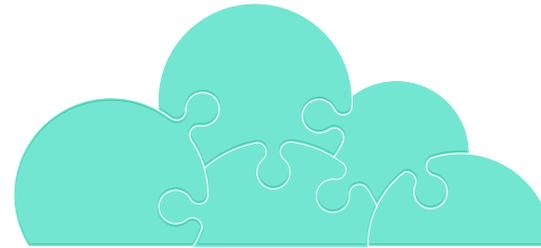


IT & developer must-haves

Stable, scalable, and performant

More IT leaders are looking beyond cloud-hosted to true SaaS solutions that offer enhanced stability, scalability, speed, and agility to support modern marketing efforts.

- 1** SaaS-hosted websites are deployed in multiple data centers that are geographically dispersed. The result is local websites being served by locally-deployed resources, which translates to faster performance.
- 2** File and database servers are replicated continuously to minimize potential for data loss and ensure preservation of your current-state content.
- 3** SaaS solutions deployed on web servers in multiple Amazon Web Services (AWS) Availability Zones in multiple AWS Regions provide the added protection of redundancy.
- 4** Technologies such as AWS Elastic IP keep traffic routed to alternate resources in the event of server or infrastructure outage. All this contributes to enhanced performance.
- 5** You can reassure marketing that when their new campaigns generate heavy traffic they don't have to worry if the website can handle it, because you know SaaS architecture will support whatever they — or malicious attackers — can dish out.

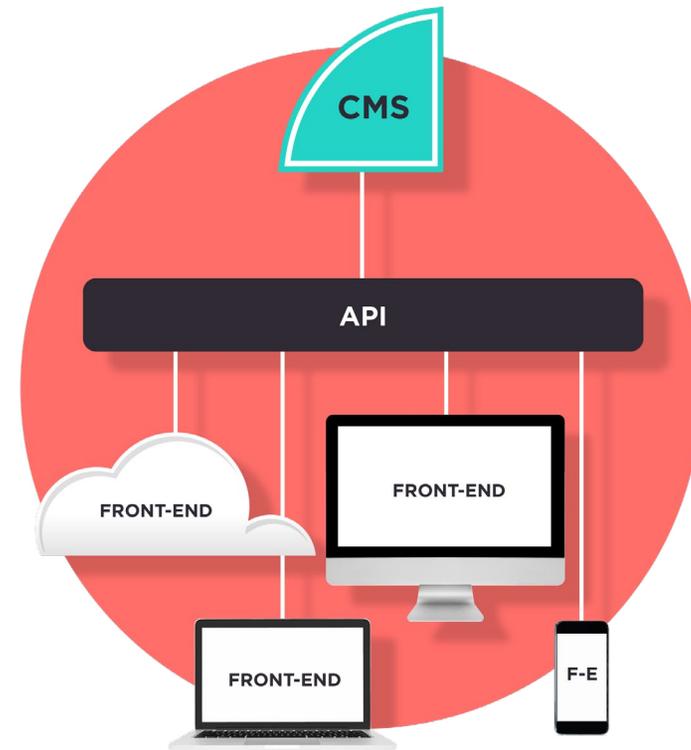


IT & developer must-haves

Decoupled architecture

Decoupled CMS architectures are forward-thinking and skillfully embrace the distributed and asynchronous nature of the web itself. The healthcare CMS you endorse should treat content just like any other information service, allowing it to flow freely between systems using a RESTful API.

- 1 Content can be published in XML or JSON or retrieved from the content repository via REST API calls and delivered in HTML, JavaScript, or any other language or data structure, enabling it to be embedded in any web or mobile-based application.
- 2 Decoupled CMS architecture sets front-end developers free from the conventions and structures of the back-end, giving them full control over the user experience using their native tools.



- 3 Structuring things this way speeds up the site by shifting display logic to the client side and streamlining the back-end. An application focused on delivering content is much more responsive than one that assembles completely formatted responses based on complex rules.

IT & developer must-haves

Parallel development and deployment

Transforming the speed with which your organization can get things done necessitates two things: a solution that lets you leverage current resources and common skills, and the ability to develop and deploy multiple projects in parallel for multiple facilities or regional teams who need to build and release on independent timelines.

- 1** Demand a healthcare CMS that offers an integrated development workbench, decoupled content deployment architecture, and enterprise class real-time API familiar to any .NET, PHP, or Java programmer.
- 2** Content should be able to be deployed from the CMS in any technical language, whether a fully-featured ASP.net or J2EE application, a single-page application, native mobile device application, or kiosk presentation package.

APIs

are the currency that makes modern digital experiences possible, structuring information exchange so that it can be shared and rendered agnostic of platform and interface.

Source¹¹

IT & developer must-haves

Proven, but future-proof

Everyone wants to make a sound investment — technology that will perform and remain relevant for years or decades to come. If there's one idea that is arriving ahead of its slotted time, it's the transition from a pull-based to a push-based web, something web economists have coined "The Big Reverse." The idea, which economists predicted would occur by 2025, was that instead of visiting a website, consumers would be notified proactively of what is relevant and prompted to act. In other words, content, products, and services would find consumers, rather than consumers having to find them. That transition is already well underway. We now live in an age where Nike® will let us know to replace our shoes, your refrigerator tells you when you're out of milk, and Hilton® will automatically present you room options if you missed your connecting flight. The dominant function of the web is to let us know what is happening or what is relevant, rather than us having to find out. Understanding this is crucial to selecting the right CMS for the long game.



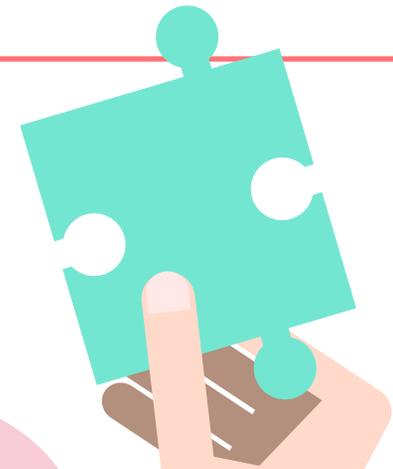
IT & developer must-haves

Proven, but future-proof

- 1 As you're evaluating different solutions, consider where the company falls on Gartner's Magic Quadrant¹² or the Forrester Wave report.¹³ You want reliable technology, not some garage-based startup dot.com marketing vaporware.
- 2 Experts suggest there's a fine balance between proven and stale technology.
- 3 Be sure to select a healthcare CMS that you are convinced is architected not only for today's requirements but also for the future – the revolution coming from the Cloud, the Internet of Things,¹⁴ Content-as-a-Service,¹⁵ and the Big Reverse¹⁶ of consumers looking for push-based vs. pull-based content.

*Finding a partner
with exemplary vision
should be an important
determining factor.*

*I found the piece you
were looking for.*



CHAPTER 5

7 steps to select the right healthcare CMS

Deciding when and how to leverage a CMS to enhance consumer relationships is a priority for everyone, but is often approached in departmental silos. When you can get all stakeholders in your organization to work together, anchored around an agreed-upon consumer experience roadmap, finding a CMS solution that fits those requirements becomes much simpler.



START

#1 Write down your goals

#2 Assemble a team

#3 Talk to actual customers

#4 Get to know the new team

CMS



Step One

Write down your goals. Seriously, write them down.

Studies have shown that documenting your goals makes achieving them more likely. Write down your primary, secondary, etc. goals for implementing a new CMS. Include everything from cohesive design to building conversion environments that work. Once your goals are outlined, it's time to start building a business case to get buy-in for a new technology investment from the C-suite and other organizational leaders.



Step Two

Assemble a team to choose and manage the solution.

If you're working toward enterprise goals around consumer experience, it's especially important to have all teams involved buy in to your CMS solution so your efforts in web personalization, provider promotion, and more can be integrated with other efforts. One team may own the budget for CMS, (maybe marketing), but other teams like IT will have checklists that must be met for a solution to pass muster. The primary users, designers, and developers should also weigh in during the decision-making process.

Step Three

Assess the vendor landscape and (possibly) issue an RFP.

Before you can select the right vendor, you must understand your landscape of options. There are clear differences between the three categories of “players” in this arena, and knowing what you need to be successful can help bring clarity to the process right away.



PLAYER 1

Marketing Agency

Agencies tend to focus on delivering a website full of eye-catching visuals and flashy elements that are impressive and inspirational at first glance. Unfortunately, there is rarely any real focus on sustained engagement, conversion performance, and ROI. In addition, agencies serve many masters and therefore often fail to appreciate the stringent privacy implications associated with healthcare interactions. They rarely understand the liability associated with collecting personal health information (PHI) via non-secure web forms. The horizontal CMS they bring to the table is unlikely to clear the bar with internal security and compliance teams. They also tend to operate in a “pay as you go” model, which may seem less expensive upfront but end up costing more in the long run because you ultimately are dependent on them to make even small changes to your site.



Step Three *(continued)*



PLAYER 2

Horizontal CMS Vendor

Horizontal CMS vendors focus on delivering a set of robust capabilities, without any real investment in how those capabilities can be applied to your business goals. They have little to no domain expertise and therefore cannot define what it takes to deliver a stellar healthcare consumer experience. Features like provider directory, locations directory, and events will need to be custom developed, which takes time and is expensive. You will likely be referred to a systems integrator (aka “partner”) for consulting and implementation services and will be expected to provide a design or choose an agency. Because none of these professional service providers are healthcare experts, the final product is all too often not anchored around the personas, consumer journeys, and user experience you are trying to create — and will fail to deliver an ROI.



Step Three (continued)



PLAYER 3

Dedicated Healthcare Partner

A dedicated healthcare partner should bring “the full enchilada” to the table. They should help you plan beyond the surface to deliver a digital consumer experience that can attract – and convert – prospects into patients and help keep them loyal for years to come. Finding a partner with exemplary vision should be an important determining factor. The best in the business will help you maximize your investment by creating strategic cross-channel experiences that deliver real, bottom-line results, year after year. You should expect these vendors to showcase a variety of previous work in the healthcare space, provide full consulting, design, implementation, post-go-live support, and ongoing optimization services. But not all healthcare CMS solutions are alike. Vast deployment model, architectural, and feature differences exist. Be sure to choose a partner with vision and a future-proof platform to back that vision up.



CONGRATULATIONS!
You have a whole
team of dedicated
healthcare pros at
your organization's
fingertips!

MOVE AHEAD

2

SPACES

Step Three (continued)

An online search is always a good place to start building a list of vendors that align with your high-level requirements. At this stage you're making sure potential partners meet your minimum list of requirements and noting any other features or benefits available.



CMS Vendor Questionnaire

1. Is this an on-premise, cloud-hosted, or SaaS solution?
2. Is this CMS built on a decoupled architecture? Can you publish content to channels beyond the web using an API?
3. How often is the CMS updated with new capabilities? How difficult are those upgrades?
4. How long will implementation take? Can the vendor meet your target go-live date?
5. Will the vendor conduct all professional services needed, or will they be outsourcing or referring you to a third-party?
6. How much experience do they have building healthcare consumer websites and cross-channel experiences?
7. Which healthcare-specific applications come with this solution? Which will you need to purchase separately or build on your own?
8. What are your options for using the CMS to personalize web experiences?
9. What integrations does the vendor offer for marketing automation and CRM software?
10. What development resources, if any, will your team need during the build and for ongoing site maintenance?
11. What's the total cost of ownership for this solution, including professional services and technical support?

It's very possible you won't be able to find all this information on the vendors' websites, but you can always issue an RFP with your specific criteria to help further evaluate vendors and narrow your list as you go. Healthgrades provides a [Sample CMS RFP](#)¹⁷ that can help jumpstart your efforts.

Step Four

Conduct demos and onsite presentations.

Each vendor that successfully answered your initial questions and met your basic criteria can then be invited to demonstrate their technology's capabilities and differentiators. You're looking for the solution's ability to help you meet your goals; how intuitive the user interface, dashboards, and analytics are; and how simple or complex it is to do things like build landing pages, format provider profiles, set up personalization rules, etc.

As you learn what's possible with a given CMS, you may want to update and advance your goals. Just make sure every choice is founded in solid business reasoning.

Insider Tip

It's a great idea to create a demo script that includes three to five sample use cases you want to be sure are included. These use cases should consume about sixty percent of the time allotted to the vendor, providing some time for them to showcase their differentiators. Send this demo script to the vendor at least three days in advance, to give them adequate time to prepare. This will ensure the demonstration is anchored around your needs — how your users will use the system day in and day out — so you don't get overly distracted by "widgets" that look great but don't add a ton of value.

Step Five

Get to know the team that will be an extension of your own.

Beyond software, you're investing in a strategic partnership for delivering an exceptional and highly differentiated consumer experience.

- 1 How well does each vendor understand the current and future landscape for healthcare CMS and consumer experience?
- 2 Do they offer best practices that help you gain value from your investment?
- 3 What kind of support and services come with the relationship?
- 4 Is there a community of peers, thought leaders, and innovators with similar goals to your organization?

Step Six

Talk to actual customers.

Speaking with customer references is one of the most helpful parts of your decision-making process. You'll get insight into how effective each CMS solution is at helping organizations achieve their goals as well as information on best practices and lessons learned for CMS implementation. Don't limit yourself to references provided by the vendor. Reach out through professional and social networks to find other clients and talk to them, too.



Step Seven

Decide.

You've done your homework, checked and double-checked your requirements, and pitted vendor against vendor in internal discussions to make sure you choose a partner that best fits your needs and expectations. Now is the time to decide. Budget always factors high on any organization's priority list, but you should make sure you're choosing the solution that will take you further — one that's architected for helping you reach your goals and measure your progress — rather than just the cheapest.



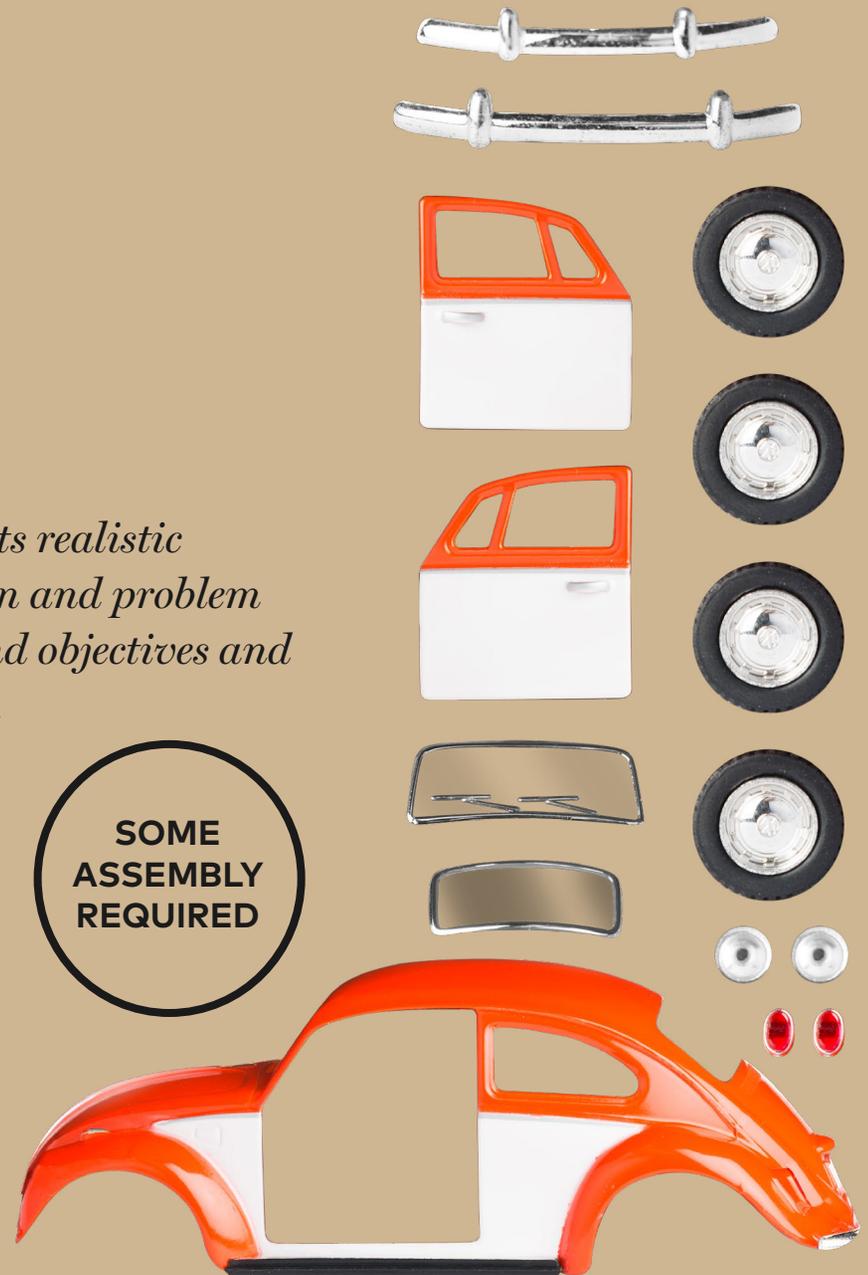
CHAPTER 6

6 key ingredients in building a healthcare CMS business case

A compelling CMS business case is honest and thorough, sets realistic expectations, and provides a solid framework for discussion and problem solving. It considers an organization's current situation and objectives and fosters understanding of potential benefits, costs, and risks.

A complete, mature CMS business case:

- 1 Establishes a vision for digital consumer experience
- 2 Outlines the roadmap for achieving that vision
- 3 Sets realistic strategic and financial goals and expectations
- 4 Outlines the benefits, costs, and risks of inaction
- 5 Helps prioritize allocation of marketing and IT resources
- 6 Provides measurable accountability for CMS projects



Executive summary

Start building your business case with a simple, concise argument.

Example:

Our three-year strategic plan calls for us to become a “consumer-centric” healthcare organization. This means we must respond to pent-up consumer demands for exceptional, personalized digital experiences on par with the banking, retail, and hospitality industries. Our current CMS isn’t sophisticated enough to track ambient or behavioral data, much less deliver rules-based personalized messaging and offers. Our mobile site speed and lack of responsiveness are driving site visitors away. Without these capabilities, we’ll be losing market share to [named competitors]. In today’s environment, we’re at increased risk of hacking and other security problems. Moving our CMS to the cloud will bolster our security and save us money in terms of infrastructure as well as mitigate potential loss from downtime or breaches.

Challenges and risks

Clearly lay out the problems your team deals with that new technology might solve. Which specific issues affect productivity? Which contribute to lost revenue?

Example:

Even with our four-person marketing team and cooperation from IT, building new landing pages for service line campaigns takes weeks, slowing down progress and detracting from ROI.

Since the rebrand, we still have teams using old images, logos, and other assets. This inconsistency and lack of control of our digital assets is contributing to a poor consumer experience.

Last month we had 17 broken links in our provider directory alone. Without a solution to crawl our site pre-publication and consistently monitor for changes like this, we’ll be frustrating and losing patients who want to engage with us.

Solution

Show how the CMS you've selected specifically addresses the challenges you've described as well as enables you to move to creating better consumer experiences across your organization.

Example:

A cloud-based healthcare CMS with decoupled architecture will allow us to save time and money by creating content once and publishing in multiple places. The rules-based personalization modules will help us engage consumers in a more targeted way, driving service line growth and increasing loyalty among our current consumers. A healthcare CMS with built-in DQM and DAM capabilities will ensure we're always publishing high-quality content without having to purchase additional technology.

Cost

Breakdown all costs associated with implementing and maintaining a healthcare CMS solution.

Example:

Does the software have an initial implementation fee as well as an annual subscription fee? What are the fees associated with professional and strategic services? Are there fees for ready-made templates, or do you have budget and need for custom ones? What happens after the initial experience launches, when you need to make modifications? Are there licensing or hosting fees for adding additional sites?

Future benefits

Hopefully, you've already made the case for how implementing a new healthcare CMS will deliver short-term ROI. Now, it's time to illustrate how the solution will help with future goals and initiatives. These benefits could include everything from improved consumer experiences to freeing budget from software upgrade costs.

Example:

A modern CMS will give us the power to leverage our valuable content to reach consumers across an emerging number of touchpoints, no matter which channels or devices become relevant in the future. With both marketing and IT's needs met, we have inter-organization alignment, which will help us move confidently toward more comprehensive consumer engagement strategies as the industry continues its transition to value-based care.

Execution timeline

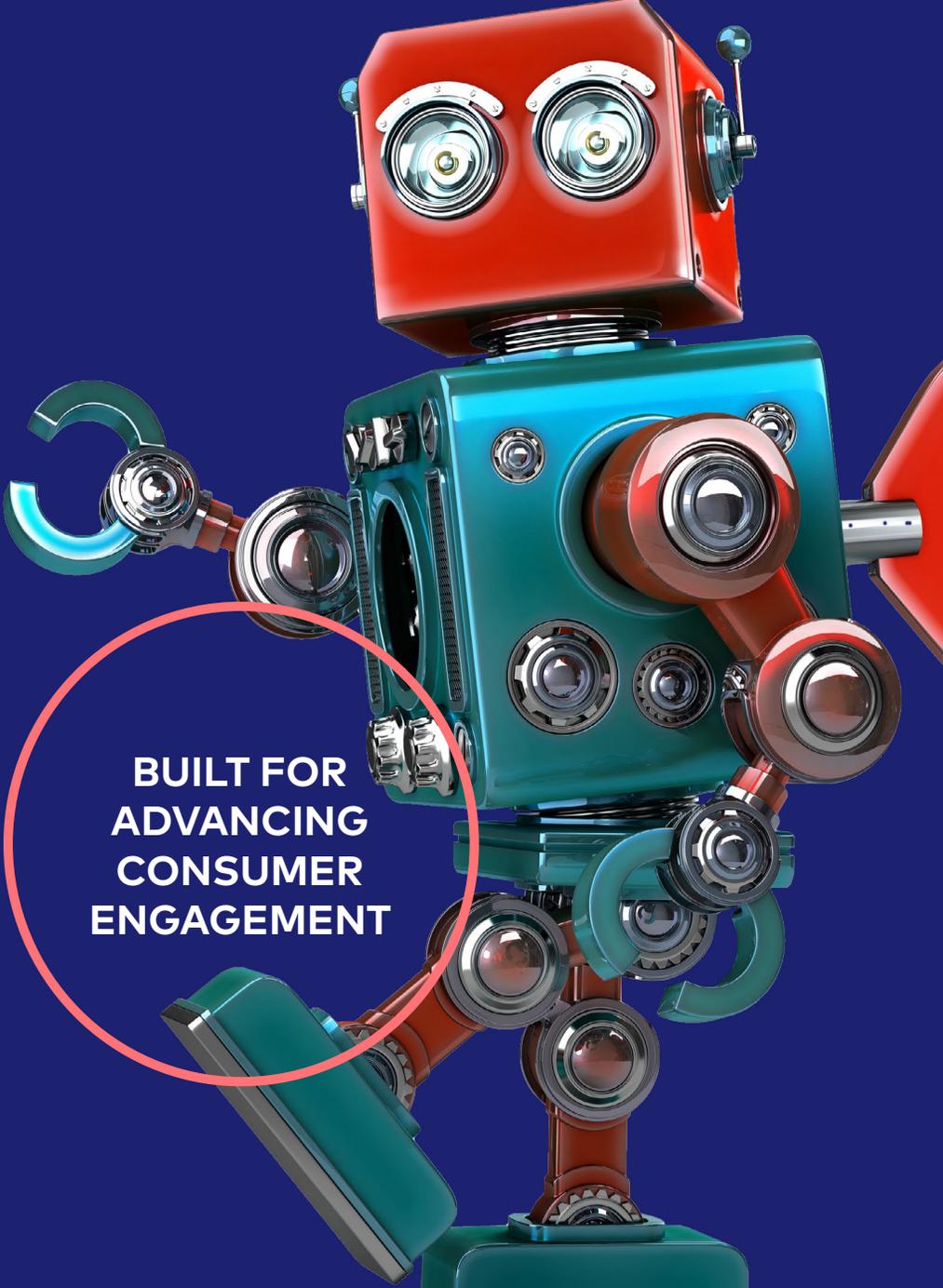
Now that you've made your case for moving to a modern healthcare CMS, you should outline a reasonable timeline for implementation. Include the time it will take for your content audit and training as well as any other pre-software strategy sessions you might need.



CHAPTER 7

Getting prepared for project success

Before you flip the switch on new technology, it's important to set your goals and outline the steps you'll employ to achieve them. Whether your mission is as simple as executing a rebrand or as complex as an enterprise initiative around creating better consumer experiences, knowing where you want to improve will set the tone for everything else that follows. Taking the time to complete these three activities will pay dividends when things kick off with your new vendor partner.



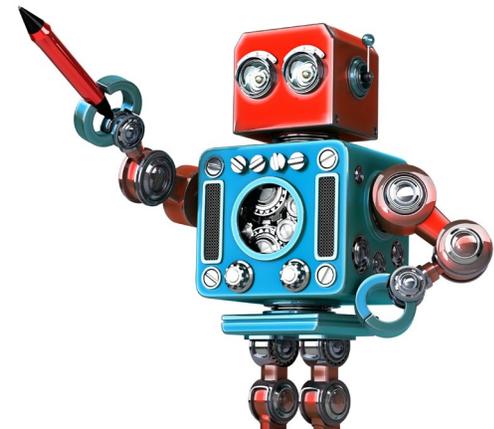
**BUILT FOR
ADVANCING
CONSUMER
ENGAGEMENT**

Step One

Start with a Marketing-owned mission statement

Your brand has a mission statement, but do you have one for the marketing team? Who are you as a department, and who do you want to be? How do you want healthcare consumers to experience your brand in the digital space? How do you want to be thought of in relation to your closest competitor? If you don't already have a mission statement that steers your team, now is the time to craft one. State in clear terms your vision and aspirations.

***We believe** creating compelling digital experiences across our website and the search and social ecosphere helps today's healthcare consumers*



Step Two

Develop personas and journey maps

Personas and journey maps are important strategic tools that help provide an in-depth understanding of who your target consumers are, what they need, and how they interact with your organization across all touchpoints. In addition, these tools can be critical for sharing consumer insights across the organization, building buy-in, and helping teams take targeted action to improve consumer experience.

To get started, you'll want a clear understanding of what personas are, why they're important, and what makes a good persona. Once you've created your personas, you can walk in your consumers' shoes with a journey map.

Insider Tip

Your organization should have secured strategic consulting services as part of your web services package so that you are working with an expert to guide you through this process. If not, you'll need to tackle these critical artifacts internally, as they are essential to inform your web design, information architecture, content, and call-to-action strategy.



Step Two *(continued)*

What are personas?

Personas are fictional, believable archetypes that represent your target consumers. They go deeper than generalized consumer segments by having individual names and stories that reflect personal attributes and behavioral characteristics such as needs, concerns, motivations, attitudes, and pain points.

Tips for creating highly effective personas:

- 1 Align with consumers' and business objectives to help make your personas powerful tools for teams across the organization. Engage key stakeholders to gain diverse perspectives on consumers' and organizational goals, processes, and issues unique to different service lines and conditions.
- 2 Use data and research to identify and inform each of your personas. Market segmentation research, surveys, interviews, and social consumer insights are all useful methods. This qualitative research can augment your understanding of how consumers behave with insight into the "whys," providing important nuance and detail that humanize your personas.



KNEE PAIN NANCY

Age: 51

Children: None at home

Marital Status: Married

Employment: Teacher

Health Needs:

Has been managing knee pain at home for a year. She wants to find a reputable orthopedist and would be willing to undergo surgery, if needed.

Step Two (continued)

Tips for creating highly effective personas

- 1 Bring your personas to life by crafting engaging, first-person narratives that are realistic representations of your target consumers. Give each a name and photo to help foster a connection to your actual patients. Include a variety of attributes, such as:
 - ▶ **Demographics:** Age, location, education, income, household or family size
 - ▶ **Personal attributes:** Goals, needs, and interests when interacting with your brand
 - ▶ **Consumer lifecycle:** How needs may vary for different channels and touchpoints, and how they may evolve over time
- 2 Make them eye-catching and memorable with polished, professional quality photos and information layouts for socializing the personas across your organization. The more “real” you can make them, the more your teams can identify with them and map their own actions and attitudes toward delivering the best possible consumer experience.



PULMONARY PABLO

Age: 68

Children: None at home

Marital Status: Married

Employment: Business Owner

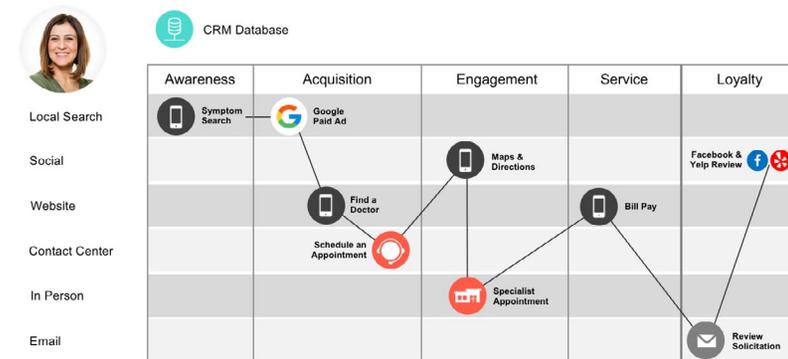
Health Needs:

Was just diagnosed with Lung Disease. He has had his son searching for a reputable pulmonologist and would be willing to undergo surgery, if needed.

Step Two (continued)

Using personas to map the consumer journey

Once you've created distinct personas, you can use them to create consumer journey maps that describe each persona's experience at various touchpoints during their lifecycle with your organization. An effective journey map¹⁸ is based on real research and behavior and should represent the true consumer experience – good or bad. Whether by service line, condition, or procedure, someone must do the hard work to understand how consumers experience the brand at each critical touchpoint. When stakeholders live a day in the life of a patient with CHF or COPD, when they come to understand what a first-time mom goes through when her child is diagnosed with cancer, then they really begin to understand what that person is dealing with every single day. Only then do the opportunities to improve their experience become obvious.



Much of the information for creating a journey map will come from your personas (e.g., their goals, motivations, key tasks they want to accomplish, and current pain points), which is why it's best to create the personas first¹⁹.

At each step, the journey map should consider factors such as:

- 1 Context:** Where is the interaction taking place (e.g., at home, on the phone, online or mobile, in social media)? What is going on around the consumer? How might their current context influence how they need to interact and what they want to do?
- 2 Progression:** How does each step enable the next?
- 3 Emotion:** How does the consumer feel at each step? (e.g., are they engaged, scared, overwhelmed, or frustrated?)

Step Three

Identify the universal problems and opportunities

With detailed and insightful consumer journey maps in hand, it's time to dive deeper into specific areas for improvement and identify targeted actions to resolve pain points that span multiple consumer journeys. This "low-hanging fruit" will provide the biggest bang for your buck with your initial go-live and then you can work to augment your experience with additional capabilities over time. It's also time to understand how your web strategy will intersect with your other efforts, like healthcare CRM and digital marketing. With these goals documented, you'll be in the right position to evaluate which CMS features are essential and help further outline the project scope and success criteria.

Examples:

Embedded provider ratings in provider profiles, onsite personalization based on preferred location, access to direct scheduling, etc.



Step Four

Curate your content

Organizations that feel they've had the most success post-website launch have many things in common, but one stands out: they did an honest evaluation of their current website prior to setting up a new platform, identified areas where content could be improved, and did the hard work to get it done.

3-5x happier

Yes, it's true. Those that seize the golden opportunity to evaluate their current content and assets and who do the work to get rid of what's stale, redundant, or just plain unnecessary are 3-5x happier with their overall results when their new experiences go live.



Start by looking at every single page on your site or sites. Every. Single. Page. This isn't necessarily the most glamorous work, but it's important to build your new site on the right foundation. Make sure all stakeholders can review and comment. You can unpublish any pages that aren't migrating to your new site and make a list of new pages you might want to create. You'll also need to inventory any forms that need to move to your new site as well as any custom templates and features to update or recreate.

During your site freeze you can send internal communication to stakeholders about the migration as well as update your forms and templates. You should also keep a log of any changes that are essential to be made during the site freeze, so the corresponding updates can be made more easily.

A case study:

How Advocate Health Care laid the foundation for successful CMS implementation

When Advocate Health Care decided to move their website to a modern CMS solution, they knew they had a big job ahead of them. As the largest integrated health system in Illinois, they were used to a lot of web traffic – more than 8 million website visits annually. With healthcare's increasing focus on the consumer, and on providing an integrated digital experience, Advocate knew nailing the strategy for their new CMS implementation would be crucial to their ability to engage more meaningfully with consumers long-term.



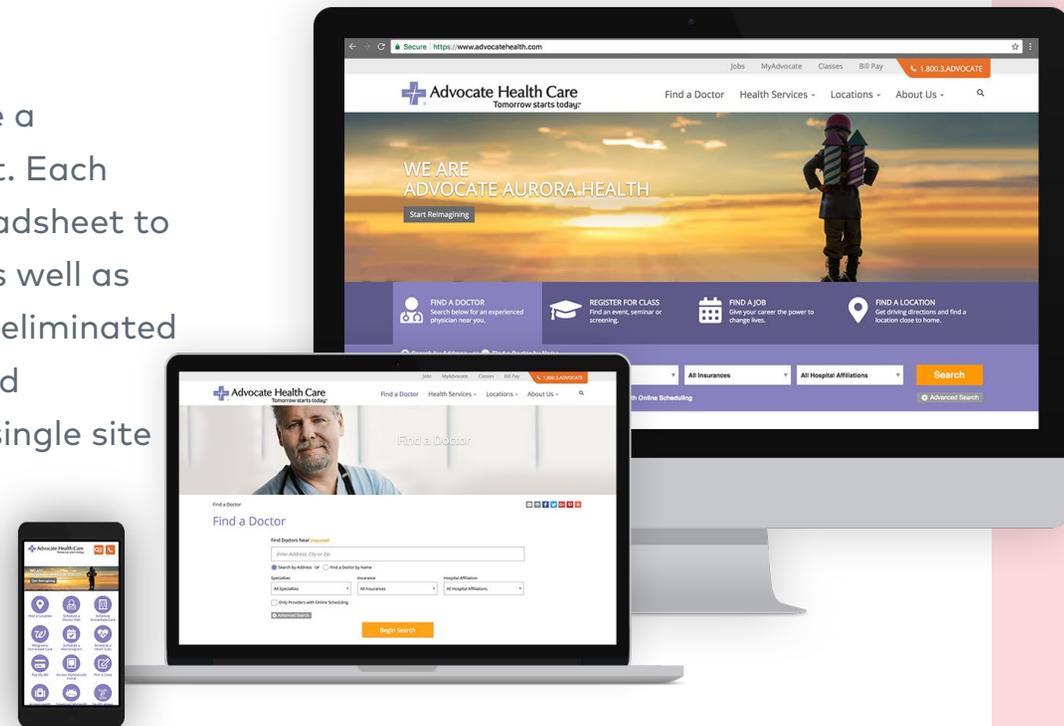
A case study (continued)

Advocate had an enterprise-wide goal to redefine the way healthcare is accessed and delivered to consumers, with their CMS being only one part of that larger initiative, which meant integration with other technology was crucial. Moving quickly and providing no interruption from the front-end for current consumers was also important to their strategy. In addition to the larger goals, implementing a new CMS brought to light organizational challenges like 13 separate hospital site architecture trees and content that needed revision or removal.

With these considerations in mind, Advocate made a strategic plan to audit the entirety of their content. Each hospital site marketing team was given an IA spreadsheet to identify which content to keep, remove, or revise as well as document 301 redirect needs. Within 60 days they eliminated 2,000 pages of old and outdated content and could consolidate multiple site architecture trees into a single site structure. By taking the time to prepare for implementation in this way, with the end-result consumer experience in mind, Advocate set themselves up for faster success.



Advocate Health Care



A case study (continued)

During implementation, Advocate they also budgeted time for user experience testing – essential for digital experience initiatives – and training for all team members on everything from the basic solution to templates, content updating, and additional features.

Planning carefully, staying goals-oriented, and focusing on a consumer experience strategy helped Advocate not only create an effective site architecture but also realize faster wins around site traffic, form fills, and productivity.

New Site

Search Rankings Increase

Website Traffic Increase

Conversions Increase

Conversion rates surged following Advocate's new website launch thanks to increased search rankings and website traffic.

CHAPTER 8

The journey to delivering personalized experiences

Personalization is a proven effective method to guide consumers down a preferred path to conversion and to maintain their loyalty. Selecting a CMS with personalization capabilities is the easy part. Figuring out when and how to deliver relevant and timely content is harder. Developing targeting groups, creating content variations, and A/B testing your variations to ensure they perform takes time and requires a sustained effort. It is rarely, if ever, "finished" during the initial site build and launch.



Organizational Readiness Assessment

To succeed, you need to have all the right data and resources in place. Use this Organizational Readiness Assessment to determine if your organization is ready to tackle website personalization.



Question 1

Do you have enough insights about your consumers?

While you don't need to have all your personas built out to get started, it's best to have at least one completed and at least fundamental audience segments in place for the rest. These might be larger cohorts at first, such as visitors researching a certain service line (vs. a symptom or procedure). Cohorts can also be focused on referral source (visitors coming from Facebook or Google AdWords), visitor location (based on IP address or ZIP code), time of day, or device type data (mobile vs. desktop).

Yes, I do.

Probably not.

Organizational Readiness Assessment

Question 2

Do you have the data needed to successfully implement personalization?

Before you consider tackling personalization, identify available sources of data upon which you can base your targeting rules. There are four main categories of data that are required to personalize most web experiences.

1 Ambient data:

- Geography**
- Devices**
- Browser**
- Operating system**
- Date/Time**

For ambient data, let's consider the time of day that a web visit takes place and how this information might be used to promote different services. Visitors during daytime (business) hours may be "at work" visitors, while those visiting after business hours may be "at home" visitors. Accordingly, visitors to the site during business hours will see a Primary Care CTA. Between the hours of 5pm to 9pm, visitors will see an Urgent Care CTA. Visitors between 9pm and 8am would see an Emergency Department CTA.

You can also create location-based personalization with ambient data. Contemporary CMS systems can detect a user's location using the IP address, or this can be implemented through self-selected personalization, using a pop-up that asks the site visitor to identify where they are geographically located. Then you can:

- 1 Promote the closest Emergency Department on the home page
- 2 Promote a specific practice/location/center of excellence on interior pages or in a banner or message based on user activity and location
- 3 Pre-select/display preference for location-based on user geo-location

Organizational Readiness Assessment

Question 2 (continued)

2 Behavior data:

- Searches conducted
- Pages visited
- Information viewed
- Content downloaded
- Event registrations
- Forms completed

Based on information from a completed online form, you could personalize promotion of Women's Services in general or a specific campaign such as breast health or mammography. Identify visitors who indicate that they are interested in learning more about women's services, and promote to them. If a consumer has indicated an interest in related content or related terms for a specific service line, engage them further by promoting those specific services, physicians, classes, outcomes, quality, and educational content.

Organizational Readiness Assessment

Question 2 (continued)

3 User-provided data:

- Form data**
- Social authentication data**

Maybe you learned from a box checked on a women's services form your consumer completed that they are also interested in pediatric services. Now you can customize landing page banners when that consumer next visits your site to show ads for the new birthing center and offsite pediatric groups affiliated with your hospital.

Self-selected personalization can be implemented as a first touch when someone lands on your website. Ask your consumers to self-identify and segment themselves based on interests to trigger highly relevant content.

A personalization strategy for congestive heart failure could start with a landing page pop-up asking visitors to choose from the following:

- 1 "I am concerned I have heart failure."
- 2 "I have recently been diagnosed with heart failure."
- 3 "I have late stage disease."
- 4 "I manage the disease while I'm working."
- 5 "I'm a physician treating the disease."
- 6 "I want to work at a hospital that treats this disease."

The selection they make from this pop-up then determines the path, next page, or other personalization strategies that greet them throughout your site.

Organizational Readiness Assessment

Question 2 (continued)

4 System-integrated data:

- CRM system data
- Marketing automation system data
- Legacy application data

Using integrated data for personalization is the pinnacle of personalized marketing. When you can combine data from your CRM that lets you understand how things like your consumers' health literacy, median income, and family status affect their choices with marketing data that tracks which campaigns brought them into your site or system, your content suddenly becomes more relevant to that specific person and thus more valuable. If a consumer came to your website after completing a heart HRA from Facebook, you could promote your \$99 heart screening exam, a local heart health fair, and a Same Day appointment to get them connected in your primary care network.

Organizational Readiness Assessment

Question 3

Do you have a process for refining your personalization ideas?

You must always think of personalization in the context of the bigger picture of marketing optimization. Insights gained from A/B testing will inform your future audience segments and personalized messaging, while insights derived from personalization experimentation informs future A/B testing hypotheses, and so on.

A great personalization strategy begins with having a rigorous process that allows for:

- Gathering insights about your consumers**
- Validating those insights through testing and performance measurement**
- Optimizing content over time to improve conversions and other performance metrics**

Organizational Readiness Assessment

Question 2 (continued)

What can and should be personalized:

- Variable content:** This refers to creating dynamic zones of content on a web page designated to change based on the web visitor. One way to accomplish this is showing content based on the detected geographic location of the visitor. Your organization could promote a new primary care facility in County A to web visitors from that county while promoting orthopedic services to visitors from County B, where your orthopedic surgical facility is located.
- Related content:** Personalization with related content is what Amazon® does when they serve up a list of suggested purchases based on your previous purchases and browsing history – cross-promoting related/additional products or services. In a healthcare setting, a web visitor who scheduled an appointment online with an obstetrician could be shown articles on choosing a pediatrician for newborns or promotions for your labor and delivery services.
- Calls-to-action (CTAs):** These can deliver a high ROI when behavioral data is used for personalization. If a consumer views or downloads a content piece titled "How to Know if You're a Good Candidate for Knee Surgery," that should trigger your site to display automatic CTAs for events like upcoming classes on knee problems or a CTA to schedule an appointment with a knee specialist. Related services such as physical therapy and low-impact exercise classes could also be included in the CTAs.

CHAPTER 8

Measuring CMS Success

To effectively measure CMS success, there must be benchmarks set and goals established at the beginning against which performance can be measured. This work should have been done as part of your business case, and as part of writing down your goals prior to project launch. Your specific goals will influence the types of tracking and measurement to be used.

IS YOUR CMS
GROWING
WITH YOU?



Set benchmarks and goals.

- 1** If your current CMS is an operational bottleneck, take measurements of the time and financial costs using your current process. You can use these numbers to compare against the new measurements you take after you install a CMS.
- 2** If your current CMS makes it difficult for authors to reuse content and assets, measure that. Content reuse is the key to much of the CMS's return on investment. Measure the amount of content reuse you are getting by using the new CMS. Reuse saves on writing and design time and ensures that your content is consistent across your experiences.
- 3** If your primary goal is to increase consumer engagement and create a conversion-oriented website, tracking visits, event completions, and conversions is a good place to start.
- 4** If your goal is to better engage mobile site visitors or improve site performance, measure that. Measure load times, time on site, and bounce rates.
- 5** If your goal is to improve content quality and performance, testing a landing page or campaign or piece of content will help you learn more about your consumers and can help you make more informed choices in the future. Measure the amount of time spent in the editorial cycles – writing, editing, reviewing, and proofreading. This time should diminish as content reuse rates rise, making your editorial cycles move faster. Measure the number of errors in live content using your DQM tool, and make sure they are trending down over time.
- 6** If your goal is to implement personalization, measure its efficacy on engagement and conversions. Not every personalized experience will resonate, so it's important to always understand how these experiences are performing and adjust accordingly.



CONCLUSION

There you have it...

...Everything you ever wanted to know about healthcare CMS solutions, and then some. If we've done our job, you now understand that your hospital or healthcare system can no longer limit its thinking around digital consumer experience to a website. To keep up with consumer demand, your CMS needs to be architected to deliver content to a multitude of emerging channels and devices, over time.

Your website itself must do more than look good. It needs to offer the content and self-service capabilities consumers crave based on their fluid expectations, and it needs to be personalized and conversion-oriented to deliver an ROI.

The technology needs to be super easy for marketers to use, but secure and scalable to meet the stringent privacy and security requirements of healthcare. SaaS-based offerings built on a decoupled architecture offer both marketing and IT professionals serious advantages like faster implementation, better performance, protection against downtime and malicious attacks, and continuing upgrades and support.

Whatever solution you choose, having an experienced healthcare strategy and services team will "seal the deal" and ensure your organization's vision for consumer experience and shared goals are achieved. You're looking for a partner, someone who understands your current challenges and dreams for the future. This is just the beginning.

about



Healthgrades empowers meaningful connections between people and healthcare providers. At [healthgrades.com](https://www.healthgrades.com), we help millions of consumers to find and schedule appointments with their provider of choice. With our scheduling solutions, CRM, advanced analytics applications, and omnichannel communications services, we help more than 1500 hospitals cultivate consumer relationships, improve access, and build patient loyalty.

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- 3 <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/ebook-big-data-analytics-and-the-future-of-marketing--sales>
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- 11 <https://www.cmswire.com/web-cms/10-factors-to-consider-when-choosing-a-web-cms/>
- 12 https://en.wikipedia.org/wiki/Magic_Quadrant
- 13 [https://www.forrester.com/Web-Content-Management-\(WCM\)](https://www.forrester.com/Web-Content-Management-(WCM))
- 14 <http://internetofthingsagenda.techtarget.com/opinion/10-ways-CIOs-can-prepare-for-the-Internet-of-Things>
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