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Component Content Management Systems: Supercharge Long-Form Content For Personalized And Consistent Experiences

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Executive Summary

Customers demand more relevant and personalized content experiences at different touchpoints across the customer journey. But many organizations aren't equipped to deliver on these expectations. As organizations increasingly focus on customer experience (CX) improvements, optimizing content experience can go a long way towards creating happier — and more loyal — customers.

A component content management system (CCMS), which is built on fundamentals of structured content management, can help organizations author, manage, and deliver personalized and consistent experiences at scale. While it is generally used for managing technical content, it's now increasingly adopted for use cases beyond technical content, especially by marketing professionals. It reduces cost and improves productivity through effective content reuse and powerful content management.

In January 2021, Adobe commissioned Forrester Consulting to evaluate the content priorities, challenges, future scope of organizational content management systems, and the role structured content management via a CCMS can play in addressing strategic and operational gaps. Forrester conducted an online survey with 450 respondents, including documentation professionals, content experience professionals, technology leaders, and marketing decision-makers at organizations with 500 or more employees and with an annual revenue of US$500 million or more.

Our survey found that a CCMS provides organizations an edge in driving higher content ROI through more effective content management.

Without robust content management solutions like a CCMS, it's impossible to deliver personalized experiences at scale.

Key Findings $\longrightarrow$

Key Findings

Traditional methods of content management are causing significant challenges. Disjointed content tools make content creation, management, and delivery difficult for organizations. A lack of content reuse and unified content strategy, inefficient authoring tools, cumbersome review process, and inept collaborative authoring tools stifle content creation. So much so that 64% of respondents reported meeting the modern content creation demands is a challenge.

A CCMS provides significant benefits and lowers risks. Content marketing success hinges on overcoming legacy tools and inept content management. A CCMS solves functional challenges, including improving content consistency and accuracy, providing omnichannel publishing, increasing content reuse, and creating more personalized content experiences. More than 80% of respondents whose organizations have deployed a CCMS said it eliminates regulatory compliance, reputational, financial, and workforce risks.

Organizations are expanding adoption of structured/extensible markup language (XML)-based authoring to gain a competitive advantage. Organizations have an appetite for structured/XML-based authoring. Sixty-nine percent of respondents reported that having content in a flexible format like XML enables easy reuse or syndication. Fifty-seven percent of respondents who are either interested in or planning to use a CCMS expected it will increase their ROI on content strategy — but the benefits don't end there. Our study also found that marketing, CX, IT, and documentation professionals are closely aligned on CCMS adoption plans.

Inadequacies in content authoring tools and content management strategies fuel the challenges organizations face in delivering a personalized customer experience. We found that there is a chasm between the need for content visibility and the inability to track its progress.

Fifty-five percent of respondents reported that having visibility into the content lifecycle is more necessary than ever before. At the same time, 44% of respondents cited that their organizations' leadership had difficulty tracking the progress of content from creation to delivery. This disconnect negatively impacts several aspects of content creation, management, and delivery (see Figure 1). Far too frequently, content authoring and management tools are from different vendors and thereby disjointed, hindering productivity and business process efficiency. Results from our study highlight that:

- **Organizations still focus on keeping the lights on.** Fifty-nine percent of respondents said that content creators have the tools required to collaborate efficiently. That's the good news. The bad news? This doesn't always translate into an improved experience for content creation, management, and delivery. In fact, 44% of respondents cited that their organizations use outdated or inappropriate tools to author content (see Figure 2).

Without a component content management system, it would prove difficult for any forward-looking organization to progress and be future-ready.

2 in 3

C-level executives said that customers expect a unified, consistent content experience across channels during brand interactions.

Figure 1

Key Content Challenges Organizations Experienced

Content Creation

Review and collaboration for content creators and contributors	56%
Structured or XML-based authoring	52%
Finding the right tool to author content	39%
Migrating legacy content	35%
Scaling content creation to meet demand	35%

Content Management

Lack of unified content strategy across teams/organization	68%
Content silos	53%
Lack of content reuse	49%
Managing content lifecycle across different systems and processes	49%
Optimizing high translation costs	46%
Ability to easily move content from one system to another via a flexible format	31%
Controlling internal user access to content	19%

Content Delivery

Producing and distributing personalized content	58%
Omnichannel publishing/content delivery	55%
Maintaining speed of publishing/content updates	51%
Tracking content consumption and gathering customer insights	42%
Providing a rich documentation experience/postsale content experience	34%

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

Figure 2

Organizations Face Critical Challenges In Five Dimensions

64% It's challenging to meet modern demands for content creation.

Inability to scale content development

55% It's challenging to integrate our content creation and management tools as they are from different vendors.

Disjointed solutions from multiple vendors

52% It's hard to understand if the content we create is successful or impactful.

Lack of integrated content analytics

49% Our postsale documentation and help/support content experience is not as rich as our presale marketing content experience.

Inconsistent experiences across presale and postsale content

44% We are using outdated or inappropriate tools to author our content.

Inefficient authoring tools

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

- **Fragmented content strategy, content silos, and legacy challenges are impacting content management.** The inability to reuse content and a lack of collaborative authoring tools leads to significant content inconsistency. More than 50% of respondents cited that fragmented content strategy, content silos, review/collaboration, personalization, omnichannel delivery, and content velocity are top challenges with content creation, management, and delivery. Furthermore, 50% said incorrect or unclear documentation poses significant risk to organizations' support centers.

An inefficient content creation, management, and delivery process poses significant compliance and regulatory risks.

- **Poor content delivery practices are barriers to more immersive and omnichannel content experience.** Sixty-three percent of respondents said that their organizations can't deliver the content their customers need. Why? Existing content systems are inadequate, leading to poor content management capabilities that hinder an organization's ability to deliver personalized and omnichannel content experiences.

- **Organizations are unable to enhance the postsale experience.** Many organizations are failing to deliver a consistent content experience despite respondents saying that postsale customer experience is a top priority (see Figure 3). Nearly half (49%) of survey respondents admitted that their organizations' postsale documentation and help/support content experience is not as rich as their presale marketing content experience. Further analysis of this shortcoming reveals that 63% of these respondents have still not adopted a CCMS for content management.

Figure 3

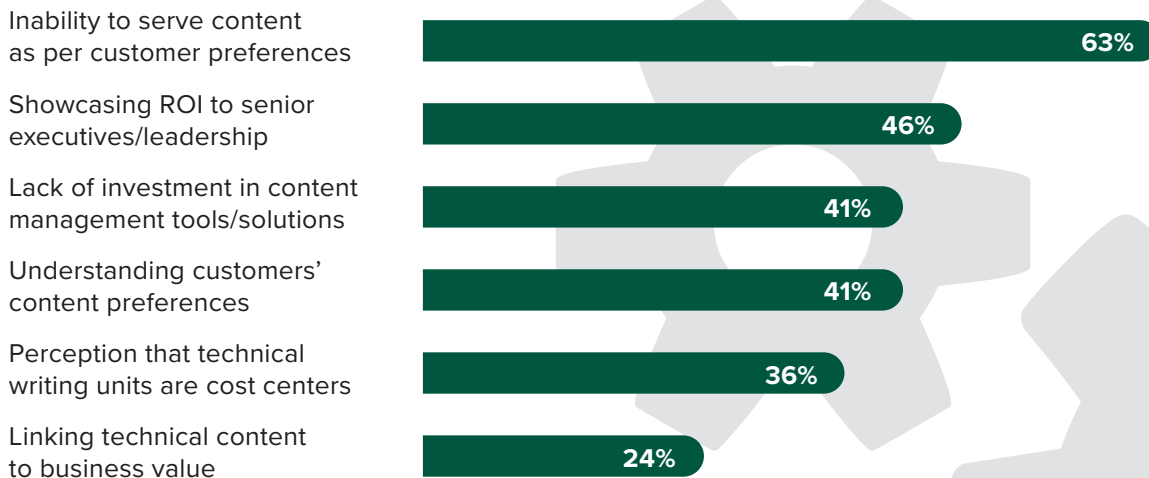**Postsale Customer Experience Is A Top Priority**

67%

said it is important for their company to deliver a **great postsale customer experience**.

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

- **There are challenges in showcasing technical content as a valuable business asset.** One of the major reasons why some organizations struggle to deliver rich postsale content experiences is because their technical content teams are not empowered. Nearly half (46%) of respondents said that it's a challenge to showcase ROI to senior leadership, leading to a lack of investment in content management tools and a perception that technical writing teams are cost centers. Forty-one percent of respondents highlighted poor investments in content management solutions as an issue. The inability to serve content as per customer needs is another major issue (see Figure 4).

Figure 4

Key Issues In Showcasing Technical Content As A Valuable Business Asset

Inability to serve content as per customer preferences: **63%**

Showcasing ROI to senior executives/leadership: **46%**

Lack of investment in content management tools/solutions: **41%**

Understanding customers' content preferences: **41%**

Perception that technical writing units are cost centers: **36%**

Linking technical content to business value: **24%**

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

WHAT IS A CCMS?

A component content management system manages content by breaking it into granular chunks or components called topics rather than managing it at a file or document level. This structured content management approach makes content highly suitable for single-sourcing, content reuse, release management and omnichannel publishing (see Figure 5).

Figure 5

What Key Problems Does A CCMS Solve?

High-Level Functional Problem	Benefits
Single-sourcing	• Greater content accuracy • Faster go-to-market for content
Content reuse	• Greater content consistency
Structured content management	• Reduced maintenance costs • Reduced delivery costs • Reduced translation costs • Improved modularity • Ease of links and content maintenance
Release management	• Managing documentation releases • Traceability • Improved collaboration and automation with workflows
Omnichannel publishing	• Reaching audience on their preferred medium

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

CCMS USERS ARE SPREAD ACROSS THE ORGANIZATION

A CCMS has various use cases across different types of content, including long-form marketing content, learning and development content, product documentation (e.g., technical, help and support documentation), policies and procedures, knowledge base articles, and more (see Figure 6).
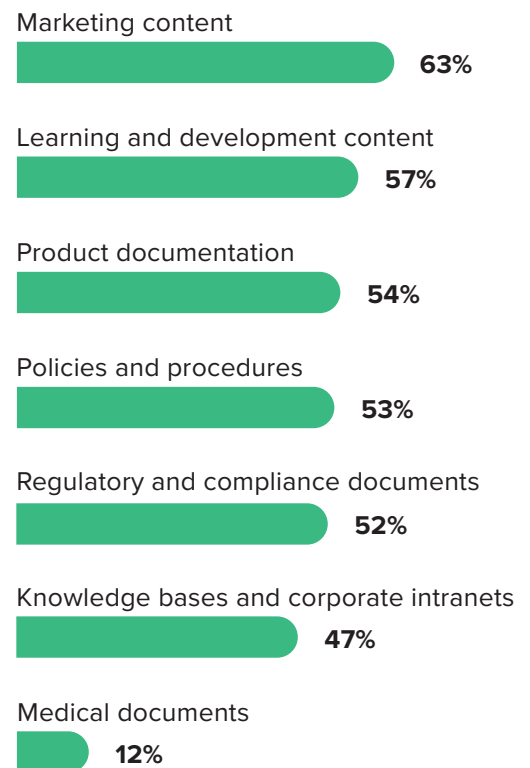
Evaluating business needs based on different departments and workgroups is crucial to an effective sourcing strategy for structured content management technology. Despite the differences across business groups, there are a core set of responsibilities that unite teams:

- Content strategy

- Content creation (e.g., development, writing/technical writing, editing, review/approval of content assets)

- Content performance measurement/ content analytics

- Content publishing/content delivery

- Content management platforms

Figure 6

Content Use Cases Across Industries

Marketing content
63%

Learning and development content
57%

Product documentation
54%

Policies and procedures
53%

Regulatory and compliance documents
52%

Knowledge bases and corporate intranets
47%

Medical documents
12%

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

To help their organizations succeed, decision-makers must source a content management solution to serve customers and employees, while meeting evolving business demands for content creation at scale. The right CCMS platform enables all teams across the organization to create, manage, and deliver consistent experiences across touchpoints. Marketing, CX, IT, and documentation professionals are closely aligned on CCMS adoption plans (see Figure 7).

Figure 7

Functional Teams Are Aligned On CCMS Adoption Plans

● Planning, implementing, or expanding CCMS implementations

Marketing professionals — 90%

CX professionals — 82%

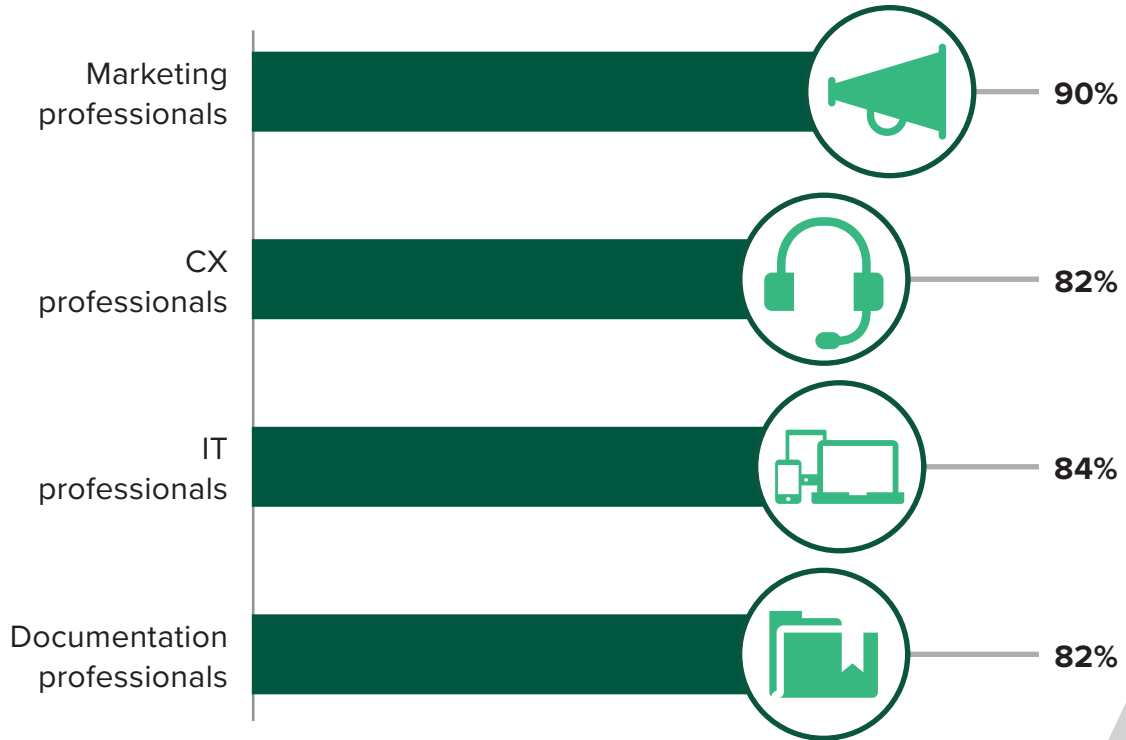IT professionals — 84%

Documentation professionals — 82%

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

The Benefits Of A CCMS Are Significant

Organizations are quickly realizing that content consistency and accuracy across channels is critical for business success. Decision-makers recognize that embracing a CCMS will scale content creation, simplify content management, and accelerate content delivery. It will also increase collaboration, reduce costs, increase ROI on content, and deliver personalized experiences at scale. We found that there are many benefits of using a CCMS (see Figure 8). These include:

3 in 5

respondents that are interested in or plan to implement a CCMS solution anticipate increased ROI on their organizations' content strategy.

- **Content reuse and cost savings.** A CCMS leverages content reuse, which eliminates redundancy and improves content consistency and accuracy because it draws from a centralized repository. This drives significant operational efficiencies and cost savings. It also facilitates content lifecycle management and interdepartmental collaboration for higher business agility.

- **Increased profitability, customer acquisition, and retention.** With a CCMS, organizations can deliver consistent, highly personalized content experiences for their customers and have faster go-to-market across channels. When asked about the top three benefits of a CCMS, respondents mainly mentioned increased ROI on content strategy, improved customer acquisition and retention, and increased focus on personalized experience.

1 in 2

respondents reported that their organizations' investment in a CCMS solution will reduce translation costs.

Figure 8

The Benefits Of A CCMS Solution Are Significant

Expected Functional Benefits

● Expected Business Benefits*
● Realized Business Benefits**

1 Greater content consistency and accuracy across channels

2 Wider publishing options for omnichannel content delivery

3 Higher content reuse

4 More relevant and personalized CX

5 Faster and easy process for content review / collaboration

6 Centralized content creation through single sourcing

7 Better management of content history and versions

8 Increased portability/ interoperability of content

9 Lower translation costs

Increased ROI on content strategy

57%
44%

Improved customer retention and loyalty

54%
43%

Improved customer acquisition

53%
56%

Improved ability to deliver personalized customer experience

50%
43%

Improved ability to deliver a unified customer experience

41%
33%

Base: 450 decision-makers with responsibility for content management strategy at their organization
*Base: 206 decision-makers that are either interested in or planning to adopt CCMS
**Base: 244 decision-makers that have either implemented or expanded CCMS adoption
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

- **Mitigated regulatory, compliance, financial, and workforce related risks.** Organizations that have implemented a CCMS are less susceptible to risks, arising out of incorrect, outdated, or unclear content and documentation. Our study found that more than 80% of respondents whose organizations use a CCMS reported it eliminates regulatory compliance, reputational, financial, and workforce risks while creating and delivering content (see Figure 9).

Figure 9

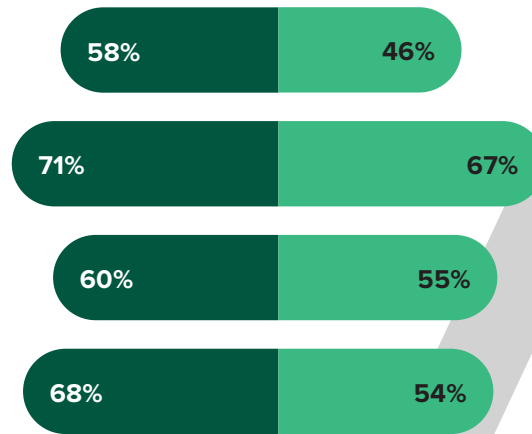**CCMS Adoption Could Eliminate Content Creation And Management Risks**

● Business leaders
● IT leaders

Risk of increased strain on our workforce in help desk or contact center due to unclear/incorrect content/documentation

58% **46%**

Regulatory compliance risk due to inconsistent informaton across channels

71% **67%**

Financial risk owing to lawsuits by clients/ customers endangered by consuming incorrect/outdated content/documentation

60% **55%**

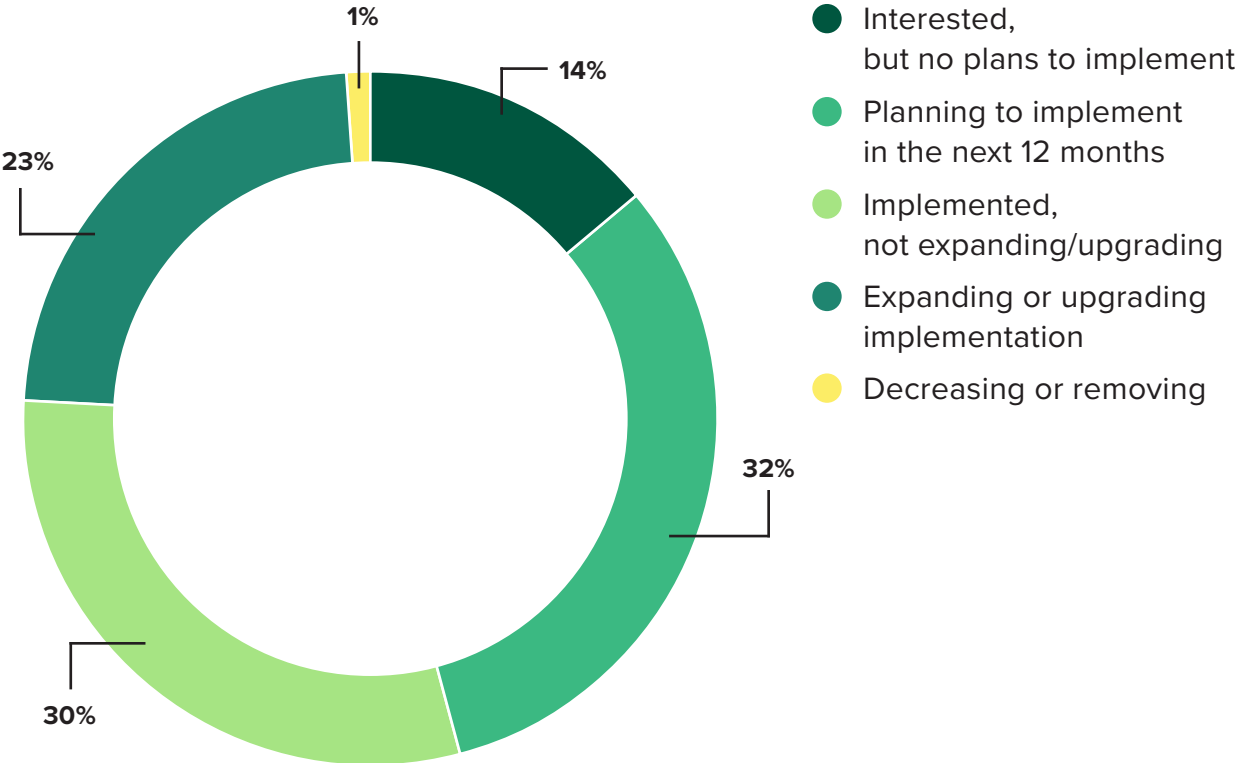Reputational risk due to publishing out-of-date or inaccurate content

68% **54%**

Base: 392 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

A CCMS is a vital element for customer-centric organizations. As a result, the move to structured content management via a CCMS is in full swing. Fifty-three percent of respondents reported their organizations have either implemented or expanded the use of structured content management tools. Nearly one-third of respondents reported their organizations' plan to implement a CCMS in next 12 months (see Figure 10).

Organizations embrace CCMS to move faster, improve workforce productivity, stretch tight budgets, and deliver content services rapidly.

Figure 10

A CCMS Adoption Journey

- Interested, but no plans to implement
- Planning to implement in the next 12 months
- Implemented, not expanding/upgrading
- Expanding or upgrading implementation
- Decreasing or removing

1%
14%
23%
32%
30%

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

Whether they are early in the adoption cycle or seasoned CCMS users, enterprises plan to use a CCMS for new and expanded purposes. It provides necessary visibility into an organization's content ecosystem. This speaks volumes for the success of early deployments and the potential of CCMS platforms in driving a competitive advantage while enabling content creation, management, and delivery. Top drivers for a CCMS adoption are (see Figure 11):

4 in 5

respondents expected to achieve greater content consistency and accuracy across channels with a CCMS.

- **Improved customer experience across channels.** In the digital age, contextually relevant and personalized content experiences are critical for successful customer engagement. Moreover, customers demand consistent content experiences across channels, irrespective of whether it is presale or postsale content. A CCMS allows organizations to publish across multiple channels from a single source ensuring omnichannel delivery.

- **Improved productivity through more efficient content creation, management, and delivery.** A centralized content management strategy drives operational excellence, better management of content history, and steers faster go-to-market for content. Our study found that the adoption of a CCMS streamlines the content review and collaboration process.

- **Increased ROI on content strategy.** A CCMS leverages intelligent content authoring, facilitates faster content search, and provides contextually relevant content to customers. This enables customer self-service, so they can find answers themselves, thus reducing customer support queries and ensuring higher return on content. At the same time, having content in a flexible format like XML maintains a high level of interoperability.
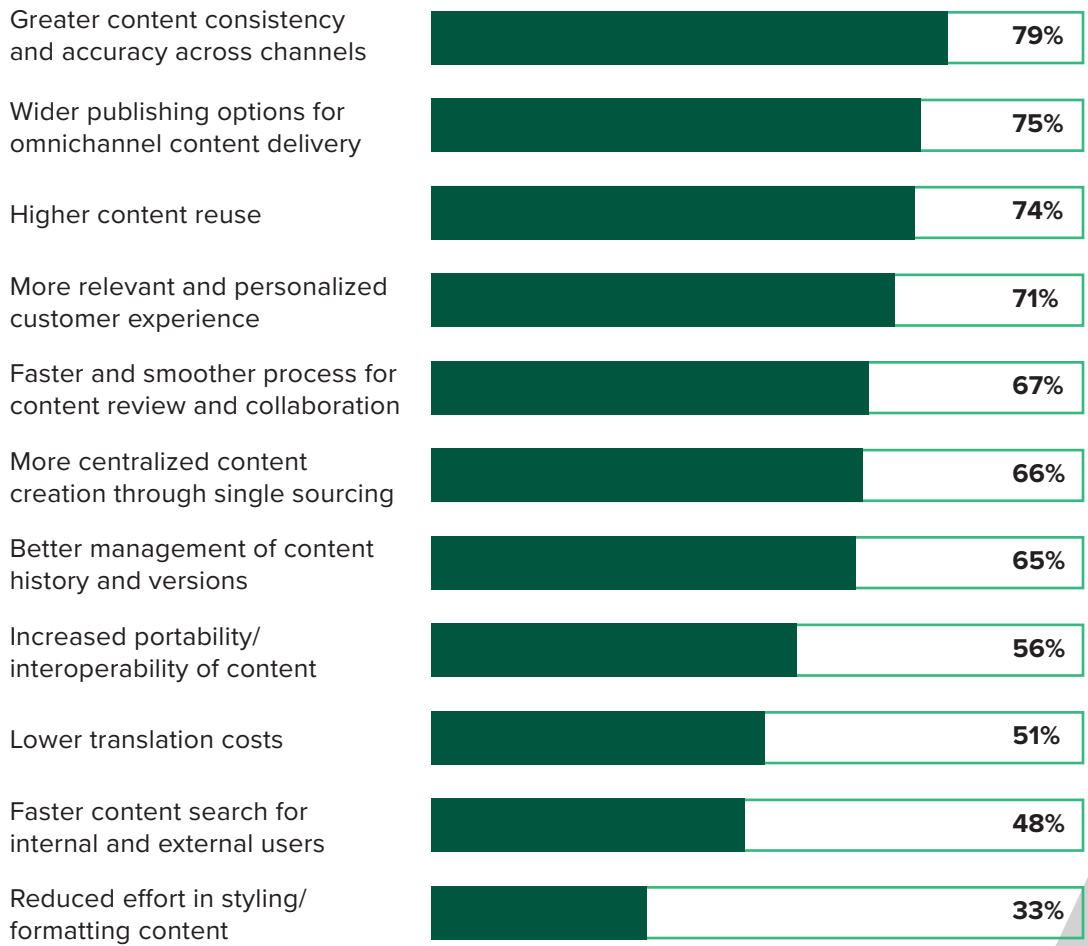
2 in 3

respondents believed that it will be valuable to have content in a flexible format like XML that enables easy reuse or syndication.

Figure 11

Factors That Drive CCMS Adoption

Factor	Percentage
Greater content consistency and accuracy across channels	79%
Wider publishing options for omnichannel content delivery	75%
Higher content reuse	74%
More relevant and personalized customer experience	71%
Faster and smoother process for content review and collaboration	67%
More centralized content creation through single sourcing	66%
Better management of content history and versions	65%
Increased portability/ interoperability of content	56%
Lower translation costs	51%
Faster content search for internal and external users	48%
Reduced effort in styling/ formatting content	33%

Base: 450 decision-makers with responsibility for content management strategy at their organization
Source: A commissioned study conducted by Forrester Consulting on behalf of Adobe, March 2021

Key Recommendations →

Key Recommendations

Organizations that have embarked on the structured content management journey should expect to drive operational excellence and improve CX — but they should continue to reassess their content strategy, execution, and fix gaps.

Forrester's in-depth survey of 450 decision-makers about the content priorities, challenges, future scope of organizational content management systems, and structured content management via a CCMS yielded several important recommendations:

Invest in a unified content strategy built on a unified platform rather than disconnected technology.

It's easy to get distracted by hot, cutting-edge technologies, but buying technologies without a clear integration plan is a waste of money. Instead, smart organizations must chart a course for the future with content reuse and omnichannel delivery as their North Star. This means aligning organizational structures and processes to support omnichannel content delivery before investing in the technology that will support it. The technology must be connected and integrated rather than operate in silos within the organization.

Build your content management foundation on structured content and use a CCMS to manage it.

When content is unstructured it leads to content duplicity and redundancy. By adding structure and single-sourcing via a CCMS, the content becomes fluid and can be transformed easily. When centralizing content, start with a content audit. Create a comprehensive list of the documentation needs that play a role at different touchpoints across channels. This process identifies reuse opportunities and gaps in coverage. It also highlights opportunities to further break down content into smaller modules that will drive additional reuse and applicability across channels.

Build a foundation for enhanced personalization and content automation.

Without a foundation of structure, it's near impossible to deliver on the promise of content personalization. Centralizing content into a core repository and enhancing it with metadata — both from humans and AI — helps power search for all constituents. For internal stakeholders, it will mean finding the right component or topic for a campaign or a piece of content. For external customers, the enhanced metadata means getting to the right content faster. Once content is enriched and architected for better search, the next hurdle is pairing that content to personas, segments, and individuals. This phase will unlock the ability for enterprises to automate content creation at scale; all built on the foundation of structured scalable content.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 450 decision-makers across 14 countries to evaluate the content priorities, challenges, and future scope of content management systems, along with the role a CCMS can play in addressing strategic and operational gaps. The custom survey was conducted with organizations that have an annual revenue of US$500 million or more. The interviewees were from ANZ (Australia, New Zealand), Europe (Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden, and the UK), Japan, India, and North America (Canada and the US).

Survey participants included documentation professionals, content experience professionals, technology leaders, and marketing decision-makers at organizations with 500 or more employees. Questions provided to the participants asked about their views on the importance of content authoring tools, CCMS adoption trends, drivers, challenges, and benefits of a CCMS. Respondents were offered a small incentive as a thank-you for time spent on the survey. The study began in January 2021 and was completed in March 2021.

Appendix B: Demographics

SURVEY REGION	
North America	**33%**
Europe	**33%**
APAC	**33%**

RESPONDENT LEVEL	
C-level executive (19%)	**19%**
Vice president (21%)	**21%**
Director (30%)	**30%**
Manager (30%)	**30%**

RESPONSIBILITY LEVEL FOR TECHNICAL DOCUMENTATION	
Final decision-maker	**25%**
Part of team making decisions	**51%**
Influences decision	**24%**

BUSINESS ROLES	
Marketing professionals	**35%**
Documentation professionals	**8%**
Content strategy/management professionals	**26%**
CX professionals	**31%**

COMPANY REVENUE	
$500M to 999M	**20%**
$1B to $4.99B	**48%**
$5B or more	**32%**

EMPLOYEES SIZE	
500 to 999	**13%**
1,000 to 4,999	**34%**
5,000 to 19,999	**29%**
20,000 or more	**24%**

INDUSTRY	
Government and education	**16%**
BFSI	**16%**
Healthcare and pharmaceuticals	**15%**
Manufacturing	**23%**
Technology	**16%**
Others	**12%**

RESPONDENT TYPE	
Business	**70%**
Technology	**30%**

Note: Percentages may not total 100 because of rounding.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

"Now Tech: Agile Content Management Systems, Q1 2020," Forrester Research, Inc., February 27, 2020.

"The Future Of Documents," Forrester Research, Inc., December 9, 2020.

"Optimize Cross-Organizational Content- And Process-Rich Apps For Construction And Engineering Firms," Forrester Research, Inc., February 19, 2021.

"The Forrester Wave™: Agile Content Management Systems (CMSes), Q1 2021," Forrester Research, Inc., February 22, 2021.

"Modular Content, The Forrester Way," Forrester Research, Inc., August 2, 2021.