The Rise Of Content Intelligence: A New Era Of Innovation In ECM

Insights From The Sixth Annual Content Services Pulse Study, 2025 Edition

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Executive Summary

Enterprise content management (ECM) is reorienting its focus from incremental back-office enhancements to driving vital imperatives like innovation and experience improvements. These goals are now more attainable than ever before as artificial intelligence (AI) introduces novel ways to derive value from enterprise content and unstructured data. AI developments have expanded ECM's bounds, enabling leaders to set their sights much higher than just storing content. Now, content is leveraged for intelligence. AI and machine learning (ML) can extract data from enterprise content to derive actionable insights. Sixty percent of enterprise decision-makers are making content intelligence a priority and aspire to apply these insights in myriad innovative ways.

In August 2024, Hyland commissioned Forrester Consulting to launch the sixth study in a research series that has tracked the evolution of ECM to modern content services since 2018. This year's study included an exploration of content intelligence. To evaluate this topic, Forrester conducted an online survey with 426 global content management decision-makers representing a variety of roles and industries. The findings underscore the growing importance of harnessing the power of enterprise content and unstructured data to drive innovation and deliver superior customer and employee experiences. However, success hinges on having strong foundational capabilities upon which content intelligence can flourish effectively and securely.

Key Findings

Content intelligence unlocks insights that lie dormant in most content formats. Deriving insights from structured data, while not always easy, is a more established practice. Most organizations, however, struggle with extracting insights from the more plentiful unstructured data they possess.[1] Content intelligence enables decision-makers to leverage the knowledge hidden in these assets to make their organizations more innovative, responsive, efficient, and aligned with customer and business needs.

More effort is needed to strengthen critical areas. While most decision-makers feel prepared to meet the content intelligence opportunity, this capability is evolving rapidly. Many are extracting data from content but are still in the early stages of turning it into actionable insight. To keep pace, foundational areas need to be addressed, especially infrastructure and technology, skills, and compliance considerations, which more than 70% of leaders acknowledge need improvement.

Content services play a key role in organizations' content intelligence journeys. To best leverage AI for content intelligence and advance vital imperatives, decision-makers need to mitigate the complexity involved in surfacing, governing, and deriving insights from content that lives across many content stores. By enabling organizations to find, manage, secure, and draw intelligence from content no matter where it lives, content services are well suited to meet these needs and further strategic goals.

Organizations have a powerful means to optimize their operations, experiences, and competitive position by extracting more value from the unstructured data that resides with enterprise content in all its varied forms (e.g., documents, PDFs, internal communication, images). That's why decision-makers, no longer primarily motivated by incremental back-office process enhancements, are making business-critical goals like driving innovation (58%) and customer experience (CX) improvements (84%) the focus of their ECM strategies.

These pursuits are not without their challenges (see Figure 1). The proportion of respondents citing obstacles with the proliferation and integration of overlapping technologies has increased in the last several years. This sprawl leads to frustrating search experiences, inconsistent application of security or lifecycle policies, and duplication of information.[2] With organizations' content silos and poor content hygiene, too much time is spent looking for and validating critical information — time that could instead be directed to strategic initiatives like those that advance innovation and experience goals.

AI IS PAVING NEW AVENUES FOR INNOVATION ACROSS THE CONTENT MANAGEMENT LIFECYCLE

Just as cloud-native computing reinvigorated the content management space over the past 15 years with an emphasis on collaboration, mobile support, and productivity, AI enhancements — particularly generative AI (genAI) — represent another new phase of, and opportunities for, this market.[3] AI introduces novel ways to construct, revise, summarize, and transform content. It can provide recommendations, help with the archiving or disposal of aging information, and surface knowledge in forgotten documents.[4]

FIGURE 1

"Which of the following, if any, are obstacles to leveraging your organization's content to drive decisions and strategy?"

- ● Difficulty integrating with repositories/new business apps
- ● Managing many technologies/partners
- ● Inadequate content/data hygiene or quality
- ● Lack of available expertise
- ● Employees spend too much time looking for the information they need
- ● Large amounts of critical content hides in information silos
- ● Architecting a hybrid environment
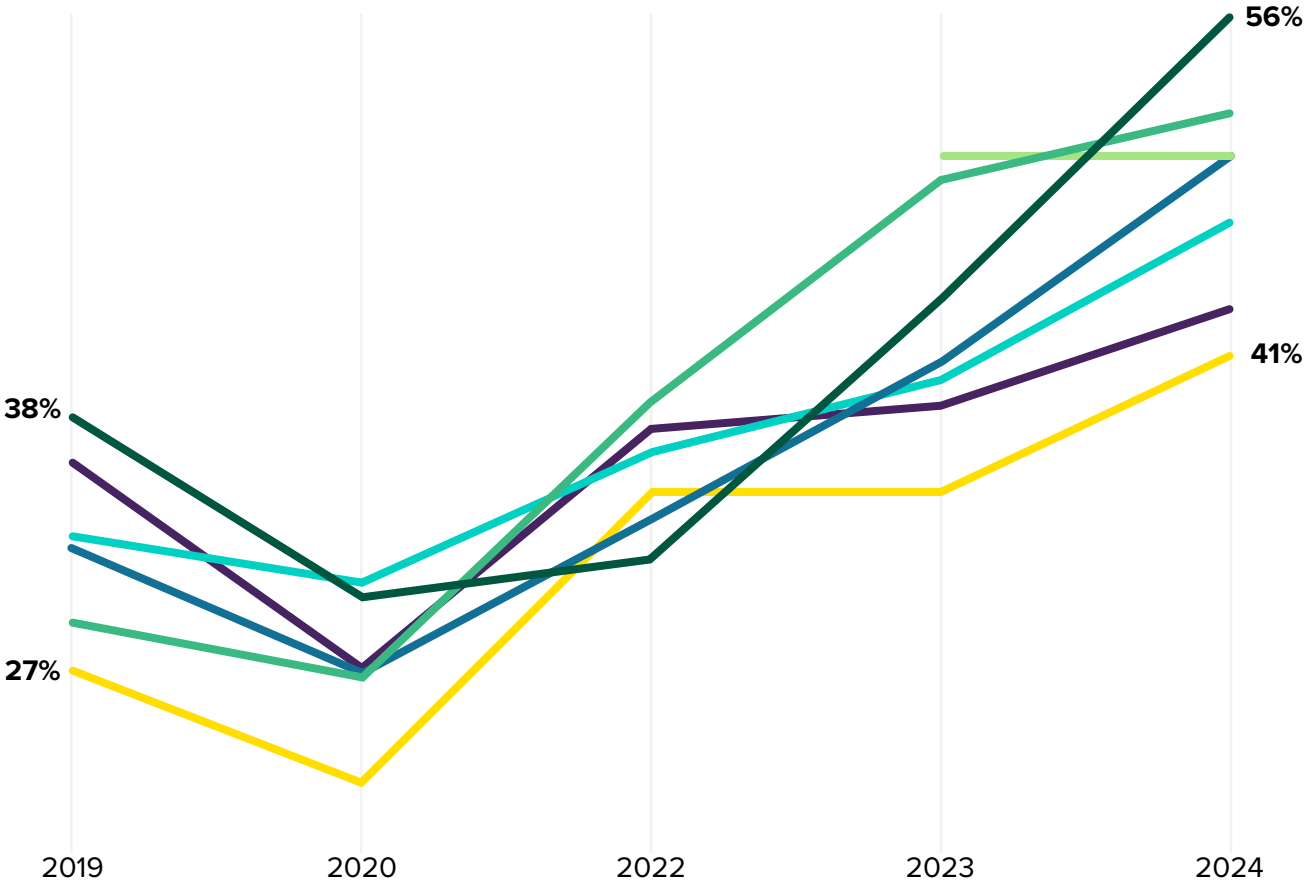
Base: Variable; global enterprise content management decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, December 2019, December 2020, November 2022, October 2023, and November 2024

Decision-makers' interest in using AI to mitigate content management complexity, support knowledge work, and drive new value is growing. Sixty-four percent report t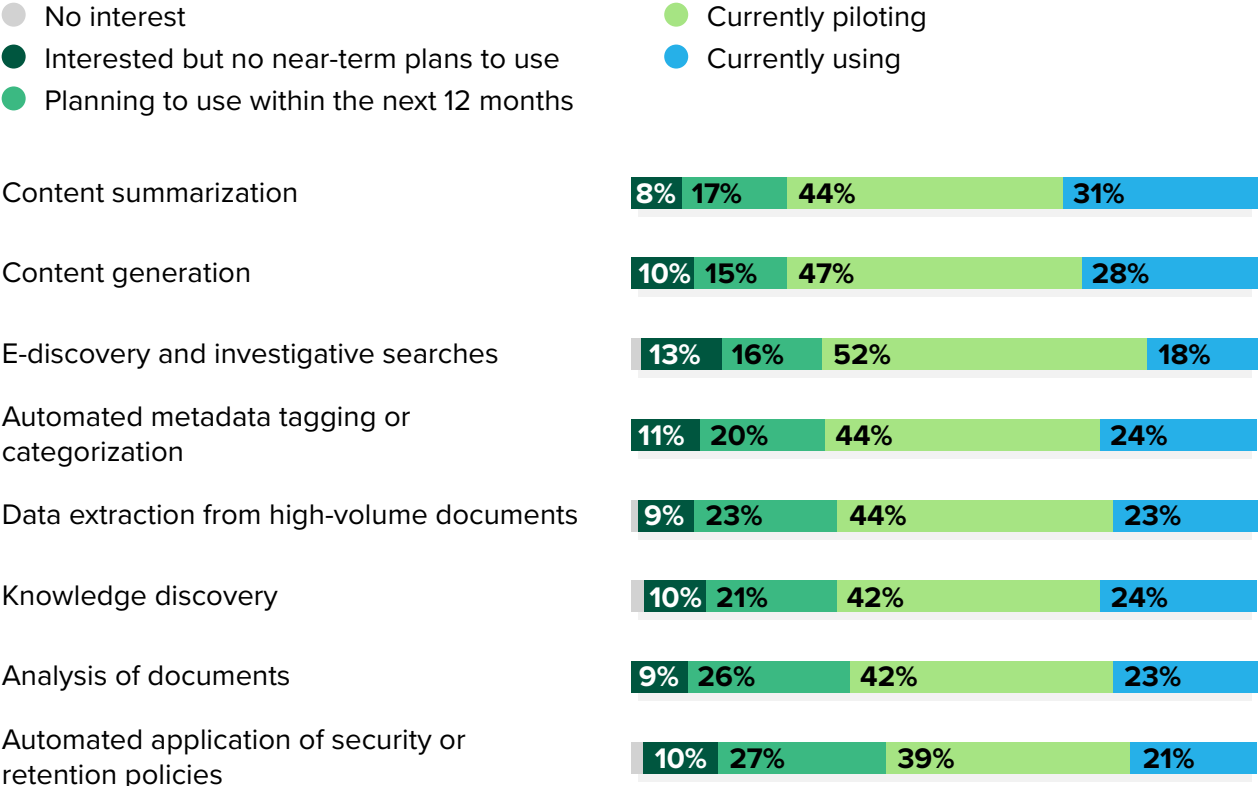hat their organization has "significantly" or "completely" transformed its content management approach because of AI, a 21% increase since 2019. Additionally, 74% expect AI to have a large to significant impact on their ability to meet their priority content management objectives, up from 65% 12 months ago. Signaling AI's growing potential, most are using, piloting, or planning to leverage AI in the near term with their enterprise content across a wide range of use cases (see Figure 2).

FIGURE 2

"For which scenarios is your organization using or interested in using AI with enterprise content?"

(Showing top use cases)

- ● No interest
- ● Interested but no near-term plans to use
- ● Planning to use within the next 12 months
- ● Currently piloting
- ● Currently using

Use case	No interest	Interested but no near-term plans	Planning to use within next 12 months	Currently piloting	Currently using
Content summarization		8%	17%	44%	31%
Content generation		10%	15%	47%	28%
E-discovery and investigative searches		13%	16%	52%	18%
Automated metadata tagging or categorization		11%	20%	44%	24%
Data extraction from high-volume documents		9%	23%	44%	23%
Knowledge discovery		10%	21%	42%	24%
Analysis of documents		9%	26%	42%	23%
Automated application of security or retention policies		10%	27%	39%	21%

Base: 426 global enterprise content management decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2024

CONTENT INTELLIGENCE PUTS ENTERPRISE CONTENT TO WORK

Thanks in large part to AI, leaders are now looking beyond core digitization needs to seek more insights from content, processes, and related metadata.[5] Information about enterprise content, including its business context and relationship to other data, can be mined for insights in a way that wasn't possible before. This treasure trove of new insight can improve decision-making, empower the workforce, deliver superior experiences, and facilitate innovation. That's why leveraging enterprise content for intelligence, rather than simply managing it, is now a priority for 60% of organizations.

Content intelligence involves using advanced technologies like AI or ML to extract data from enterprise content to derive actionable insights that can improve decision-making, content quality, experiences, and workflows.

LEADERS ENVISION ENDLESS POSSIBILITIES FOR CONTENT INTELLIGENCE

Decision-makers believe strong content intelligence capabilities would lead to several benefits, including an improved ability to boost data quality (58%), accelerate decision-making (55%), and deliver superior employee (50%) and customer (46%) experiences. Most of all, content intelligence would improve the ability to innovate their products and services (61%).

Study respondents speak of using content intelligence in a variety of innovative ways that enable their organizations to be more responsive, efficient, and aligned with customer and business needs. Examples include analyzing user behavior and preferences to deliver hyper-personalized experiences that are dynamically updated based on the user's context; automatically checking and updating content in real time, ensuring adherence to regulatory compliance and brand standards; and generating multilingual, culturally relevant, and accessible content formats at scale. Surveyed leaders desire to use content intelligence to support industry-specific needs as well (see Figure 3).

- In manufacturing, it enables the efficient production of highly technical content that's easy to understand, helping to support personalized training programs and product recommendations that are tailored to

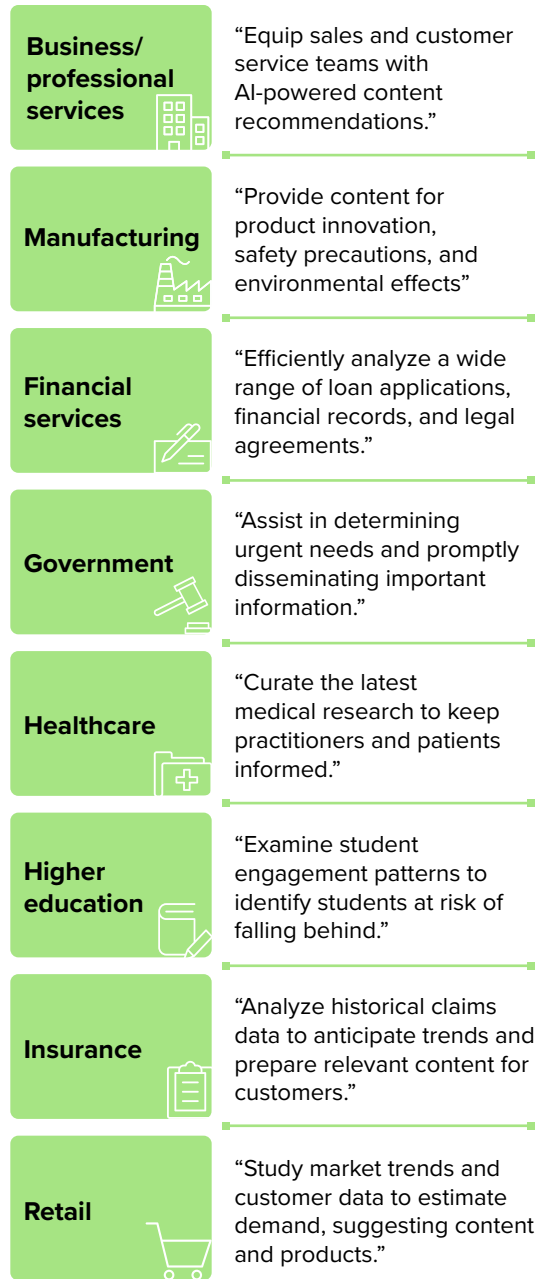an individual's work experience or a consumer's preferences.

- In healthcare, insights based on a patient's symptoms and health profile better position healthcare professionals to design personalized treatment plans and suggest relevant health resources.

- In higher education, content intelligence reduces the administrative burden through automated grading and syllabus updates. Intelligently tagged course assets enable easier discovery and reuse and support individualized learning plans that meet specific needs and learning styles.

- In insurance, content insights speed up the evaluation of insurance documents and claims processing while also monitoring for areas of risk, helping to detect fraudulent transactions in real time.

MOST ARE STILL DEVELOPING THEIR CONTENT INTELLIGENCE CAPABILITIES

While many organizations are extracting data and information from enterprise content for intelligence to some degree, most are still early in their journey (see Figure 4). Just 33% of decision-makers say their company is already competent at analyzing extracted data and information for insight, and only 9% have also acted on those insights to drive transformation and impact. As such, most of the content intelligence opportunity still awaits those willing to harness it.

FIGURE 3

Across Industries, Decision-Makers Hope To Use Content Intelligence In Innovative Ways

Business/ professional services	"Equip sales and customer service teams with AI-powered content recommendations."
Manufacturing	"Provide content for product innovation, safety precautions, and environmental effects"
Financial services	"Efficiently analyze a wide range of loan applications, financial records, and legal agreements."
Government	"Assist in determining urgent needs and promptly disseminating important information."
Healthcare	"Curate the latest medical research to keep practitioners and patients informed."
Higher education	"Examine student engagement patterns to identify students at risk of falling behind."
Insurance	"Analyze historical claims data to anticipate trends and prepare relevant content for customers."
Retail	"Study market trends and customer data to estimate demand, suggesting content and products."

Base: Global enterprise content management decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2024

FIGURE 4

"Which of the following best describes your organization's maturity in using AI for content intelligence?"

Less developed

We do not extract data/information from enterprise content for the purpose of content intelligence at all.
5%

We extract data/information from enterprise content but are not yet using it in any meaningful way.
17%

We extract data/information from enterprise content and are beginning to analyze it for insight.
43%

We extract data/information from enterprise content and are competent in analyzing it for insight.
24%

We extract data/information from enterprise content, competently analyze it for insight, and use that insight to drive transformation and impact.
9%

More developed

Base: 426 global enterprise content management decision-makers
Note: Percentages may not total 100 due to rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2024

Enterprises Must Bridge Competency Gaps To Transform Content Intelligence Aspirations Into Action

Like other AI-powered capabilities, content intelligence is evolving at a rapid pace. Companies that wish to use their content and unstructured data to drive innovation, process, or experience improvements — which our research suggests is an overwhelming majority — are wise to build a strong foundation for content intelligence to keep up with developments in this space. This includes selecting the best technologies for the task, engaging in data hygiene, shoring up security protocols, and crucially, ensuring that employees have the skills and ethics to successfully use AI.[6]

Even though organizations' current capabilities are largely immature, most decision-makers are generally confident in their ability to rise to the content intelligence opportunity, with six in 10 indicating that they are prepared. However, a gap between perceived and actual preparedness is evident, as more work is needed to shore up areas critical to true readiness, including (see Figure 5):
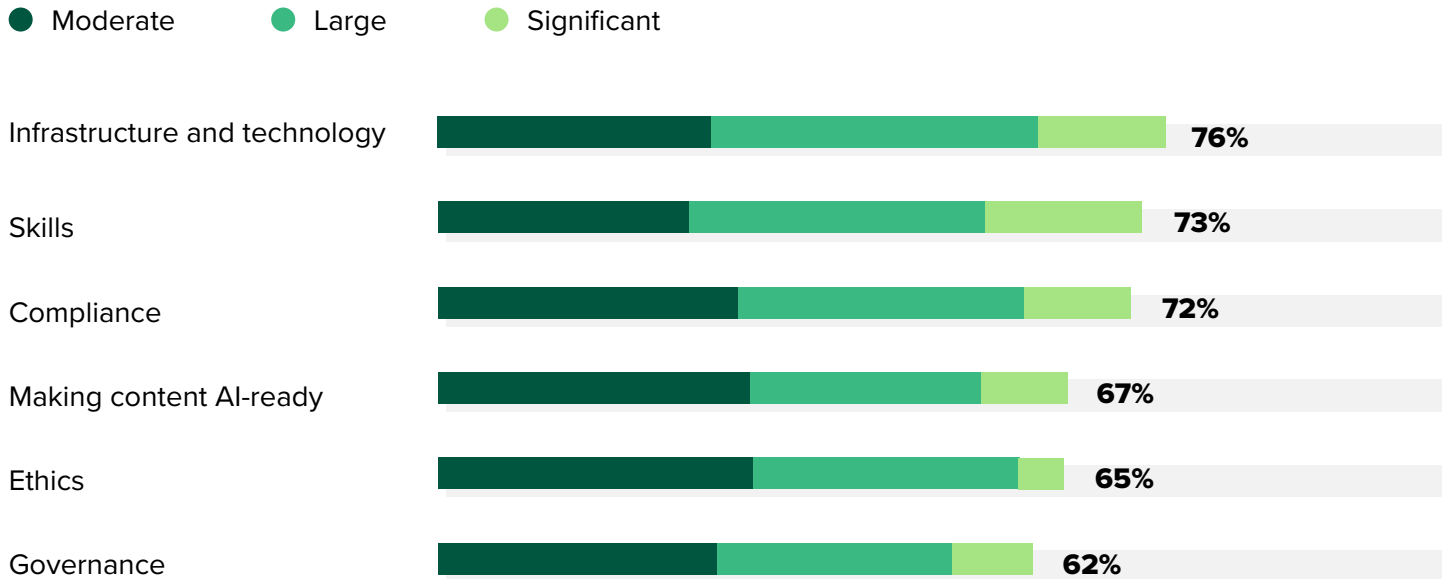
- **Infrastructure and technology.** Having content scattered across multiple systems is a reality for most organizations.[7] Predictably, difficulty surfacing relevant content that lives in silos across the enterprise is a top content intelligence obstacle. Organizations need comprehensive and scalable content management and AI tools to find, ready, and securely use content that lives in pockets throughout their technology landscapes.

Enterprise content is stored across 21 systems, on average.

- **Skills.** Even the best technology and data can't compensate for human unreadiness. Two companies could acquire the same technology, use a similar dataset, and still generate radically different results. Thus, human factors, including people's AI skills and understanding, are crucial to success.[8] Employees need a baseline level of hard and soft skills to effectively and safely use AI for content intelligence.

FIGURE 5

"What level of improvement is needed in these areas, if any, for your organization to best leverage AI for content intelligence?"

● Moderate   ● Large   ● Significant

Infrastructure and technology — **76%**

Skills — **73%**

Compliance — **72%**

Making content AI-ready — **67%**

Ethics — **65%**

Governance — **62%**

Base: 426 global enterprise content management decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2024

- **Compliance.** Organizations, especially those in regulated industries, must meet the compliance obligations imposed by laws or regulators when it comes to protecting, preserving, and securely disposing of content.[9] Compliance matters must be handled consistently and thus extended to AI-powered capabilities like content intelligence within the flow of work.

- **Making content AI-ready.** Machines and humans don't consume content the same way; content must first be made ready for AI. Ensuring content's quality before it's used by AI models is critical; insights are only as good as the data they're based on. Unfortunately, poor content hygiene, like obsolete, untrusted, or duplicate information, is a common challenge. Sixty-two percent are taking steps to enrich or improve their content, making it more suitable for content intelligence. However, 52% say most of their content is not AI-ready.

A lack of AI-ready content is to be expected given that most enterprise content exists in unstructured formats.[10] AI has provoked fresh conversations about the value of unstructured content whose volume and variety continue to expand (see Figure 6). From using AI to draft, summarize, and reformat text and media content to optimize tasks, extract data, and query collections of files in natural language, the use cases are numerous for leveraging unstructured data and content to maximize time, cost savings, and output.[11]

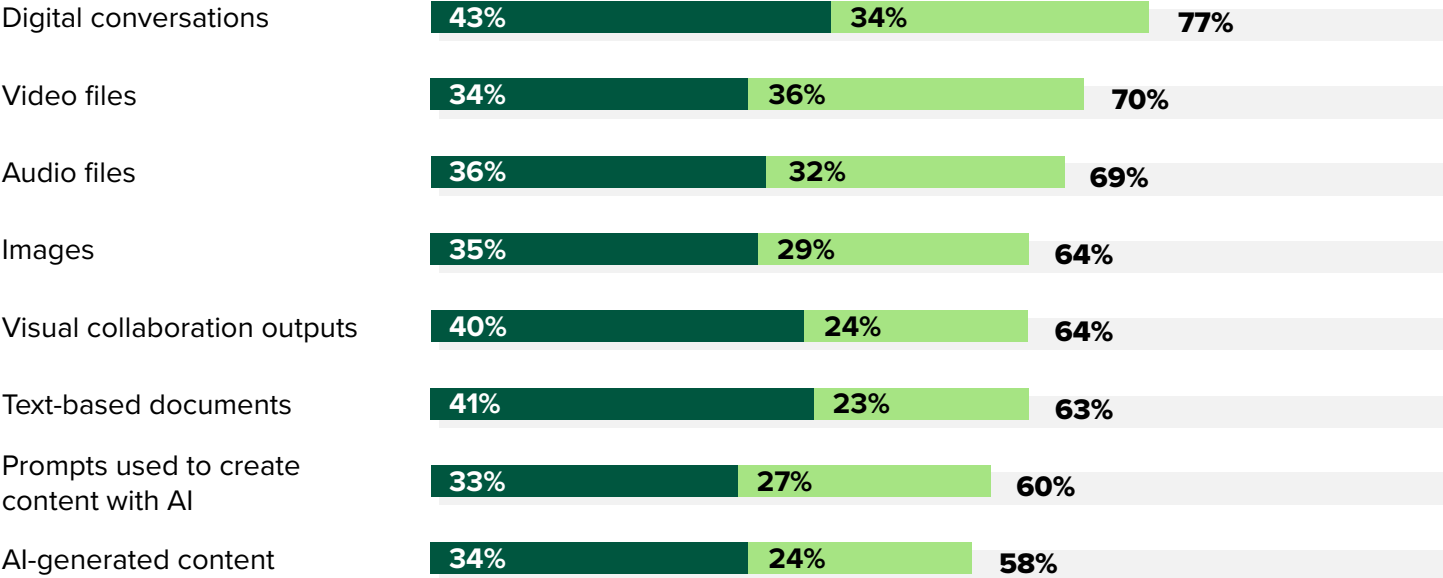# 65%

say unstructured data represents a largely untapped opportunity for content intelligence at their organization.

FIGURE 6

"Over the last year, what changes in volume have you observed, if any, to the content types your organization has been creating or ingesting?"

(Showing top responses) ● Moderate increase ● Significant increase

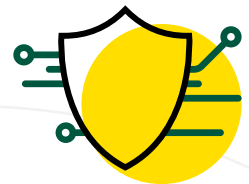|	Moderate increase	Significant increase	Total
Digital conversations	43%	34%	77%
Video files	34%	36%	70%
Audio files	36%	32%	69%
Images	35%	29%	64%
Visual collaboration outputs	40%	24%	64%
Text-based documents	41%	23%	63%
Prompts used to create content with AI	33%	27%	60%
AI-generated content	34%	24%	58%

Base: 426 global enterprise content management decision-makers
Note: Individual percentage values may not sum to totals due to rounding.
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2024

- **Ethics.** AI poses numerous thorny problems around ethics, risk management, and privacy, so employees should have an understanding of each. The details will vary by company, vertical, and geography, but leaders need established guidelines and principles to ensure responsible and ethical AI use.[12]

- **Governance.** While content formats continue to evolve, especially in some industries, governance isn't keeping pace. For example, more than 60% of respondents reported an increase in the volume of digital conversations, video, and visual collaboration outputs over the past year alone, yet less than 60% at least partly govern these formats. And despite AI's rise, some do not govern AI-generated content (19%) — nor the prompts used to create it (23%) — at all.

  Companies, particularly those in litigious or regulated industries, need up-to-date security, privacy, lifecycle management, and other governance approaches given enhanced AI use in the workplace.[13] This includes retention policies, versioning, access controls (by group, user, role, etc.) for source content and generated insights.

After a lack of expertise, privacy and security concerns are the greatest content intelligence obstacle.

Interest in content intelligence aligns with a growing trend of transforming ECM decisions from tactical to strategic considerations in support of today's vital imperatives. Spending on ECM is increasing, particularly for furthering strategic goals like modernization, experience, and innovation improvements (see Figure 7).

FIGURE 7

Investment In Three Imperatives Underpins ECM Success

(Showing percentage investing "moderately" or "significantly" in each imperative)
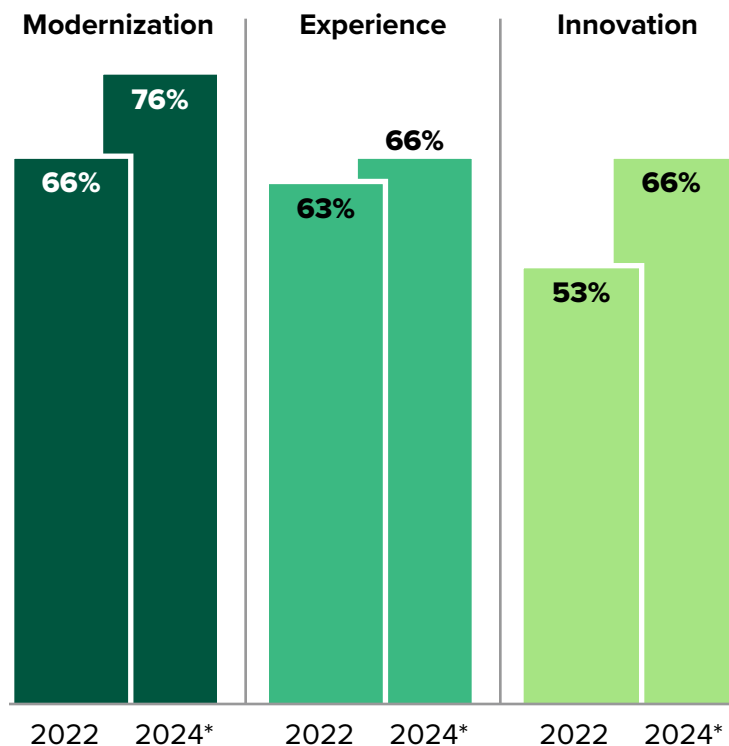
Modernization

Moving from legacy tools to modern solutions to reduce risk, eliminate silos, and improve IT agility in supporting the organization to meet evolving business needs

Experience

Investing in integration, intelligent automation, and app-like UIs to improve the ease and effectiveness of employee and customer experiences, including improved user engagement and productivity

Innovation

Supporting a culture of innovation by equipping employees with tools that make it easy to design, develop, and/or collaborate on content-based processes or apps, better enabling them to deliver greater customer value

Base: 209 global enterprise content management decision-makers
*Base: 195 global enterprise content management decision-makers
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2022, November 2024

For enterprise content to be used effectively and safely in support of these imperatives, decision-makers must equip their workforce with the right guidance and tools. This includes resources to mitigate the complexity of finding and managing content within sprawling technology landscapes, extract the most value out of structured and unstructured content, and take advantage of emerging AI capabilities.

Decision-makers say a solution that can surface, govern, and derive intelligence from content stored across their enterprise would have a large impact on their ability to advance their modernization (59%), innovation (67%), and experience (73%) goals. Content services are uniquely positioned to meet this need.

CONTENT SERVICES CAN MEET ORGANIZATIONS WHERE THEY ARE ON THEIR CONTENT INTELLIGENCE JOURNEY

Content services are granular capabilities and APIs, often delivered in a flexible software platform, allowing developers and designers to create document- or process-rich applications. Content services support cloud, on-premises, or hybrid deployments, and they can integrate content management capabilities into other enterprise applications. Increasingly, these platforms are being infused with intelligent content services, including ML, AI, and support for large language models (LLMs).[14] Modern platforms have evolved to serve a variety of both horizontal and vertical use cases with increasingly sophisticated capabilities to put content back to work — not merely store it.[15]

By unifying complex technology environments, improving governance, and providing access to AI-enabled features, content services help organizations find, manage, secure, and draw intelligence from content no matter where it may be stored. The content services capabilities that are most in demand provide the essential building blocks for content intelligence. At least 80% of the leaders surveyed describe these features as important:

- **Intelligent document processing** helps mine text and data from enterprise content to extract information that can be used to populate business applications and derive business insights.

- **Records and document management capabilities** ensure compliance with legal and regulatory requirements of important records and streamline the process of creating, storing, and sharing documents within organizational guardrails.

- **Content federation services** provide a one-stop interface to consolidate content regardless of the storage location, preparing it for content intelligence. This approach eliminates the need to migrate data to a single repository.

> Decision-makers have long associated content services with supporting vital imperatives, including digital transformation, CX, governance, and process improvements, and those associations have grown over time.[16]

SHIFT LEADERS LEAD THE WAY WITH MODERN TOOLS AND APPROACHES

One segment of companies is ahead of the curve in not only modernization, experience, and innovation investment but also in adopting content services (see Figure 8). As a result, they more often enjoy benefits closely tied to content services' advantages. Notably, they are more likely to deliver content experiences that exceed customers' expectations (62% for Shift Leaders vs. 47% for Shift Laggards), rate their digital transformation as successful (52% vs. 46%), and face fewer governance challenges (34% vs. 48%).

Organizations can learn from the actions of Shift Leaders, which include a range of content management best practices that boost the odds of success in today's AI-laced digital workplaces.

FIGURE 8

Shift Laggards Vs. Shift Leaders

Shift Laggards

Have not yet adopted content services and make average or below-average investments in modernization, experience, and/or innovation to support their enterprise content management strategy
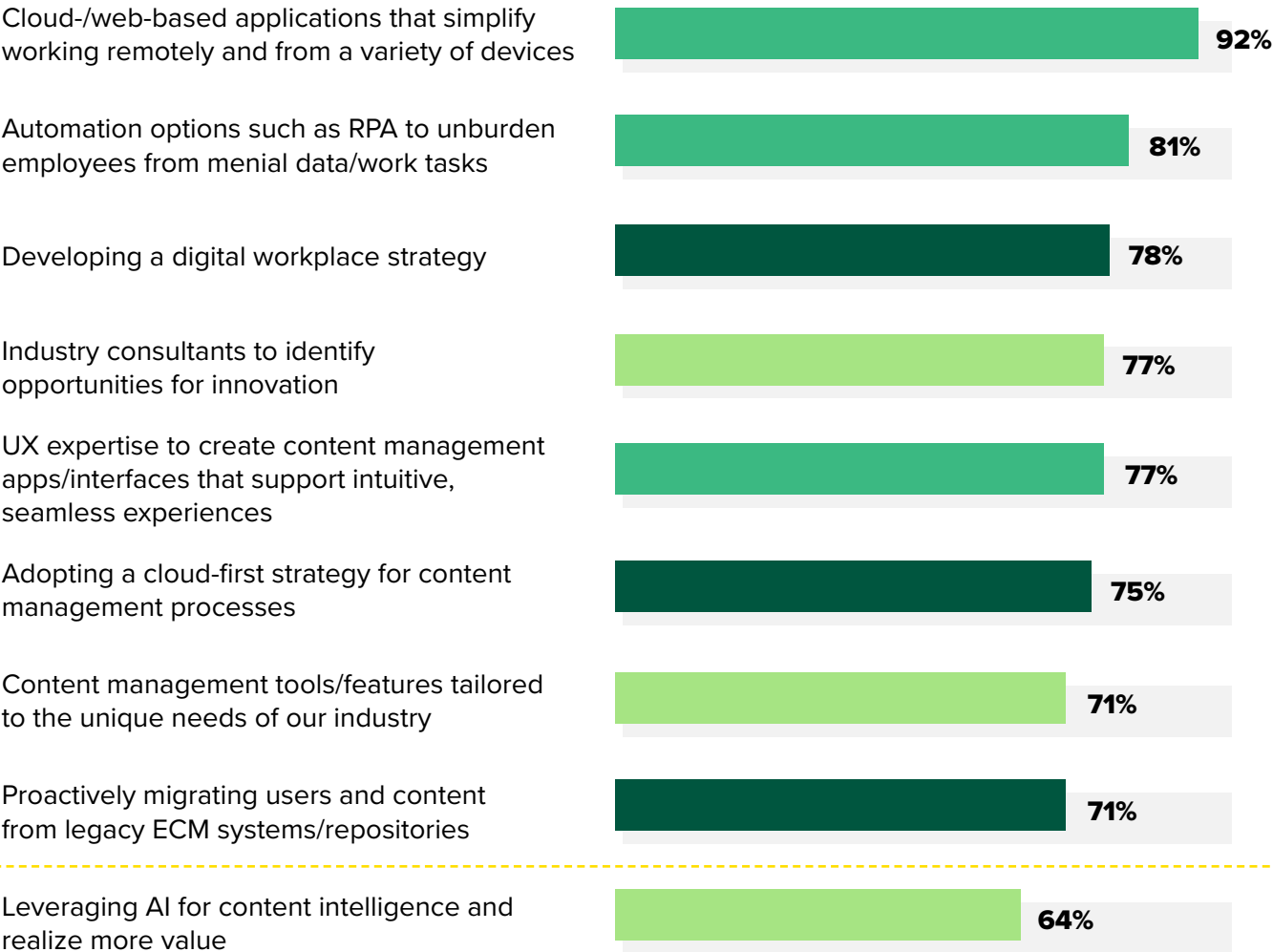
Shift Leaders

Have adopted content services and make above-average investments in modernization, experience, and innovation to support their enterprise content management strategy

In addition to leveraging AI for content intelligence, Shift Leaders are focused on a cloud-first approach to content, a well-defined digital workplace strategy, and initiatives that make content processes more intuitive and efficient (see Figure 9).

FIGURE 9

"Which of the following initiatives is your organization investing in to support its content management strategy?"

(Showing top responses)   ● Modernization   ● Experience   ● Innovation

Initiative	%
Cloud-/web-based applications that simplify working remotely and from a variety of devices	92%
Automation options such as RPA to unburden employees from menial data/work tasks	81%
Developing a digital workplace strategy	78%
Industry consultants to identify opportunities for innovation	77%
UX expertise to create content management apps/interfaces that support intuitive, seamless experiences	77%
Adopting a cloud-first strategy for content management processes	75%
Content management tools/features tailored to the unique needs of our industry	71%
Proactively migrating users and content from legacy ECM systems/repositories	71%
Leveraging AI for content intelligence and realize more value	64%

Base: 77 global enterprise content management decision-makers who qualify as Shift Leaders
Source: A commissioned study conducted by Forrester Consulting on behalf of Hyland, November 2024

Key Recommendations

While AI and ML are not new to the broader ECM market, the rapid rise of genAI has sparked the imagination of technology and business leaders. New possibilities to extract insights from content and put information to work in fresh ways are here now. Content intelligence represents not just a new technology capability; it will also enhance and expand organizations' business capabilities, drive critical operational improvements, provide opportunities for competitive differentiation, and help them create better experiences for those they serve.

Forrester's in-depth survey of 426 global decision-makers about the evolution of their organization's content management strategies yielded several important recommendations:

Model behaviors from the Shift Leaders. Prioritize investments in innovation, modernization, and both customer and employee experiences. Great digital experiences can improve retention, drive growth, and fuel productivity.

Prepare your workforce to embrace AI responsibly. While creative experimentation can be a great way to put AI into the hands of employees, ensure that new AI initiatives have the right guardrails in place. Consider education needs — both hard and soft skills — along with the governance, compliance, and ethics requirements of your organization.

Harvest intelligence from your siloed repositories with content federation. Enterprises average more than 20 systems for their content, and it may not be feasible or cost-effective to migrate everything to take advantage of new content intelligence capabilities. Explore platforms that can connect to your key repositories to more quickly gain insights and value.

Look beyond basic automation to unlock the potential of content intelligence. While more than half of decision-makers are taking some steps to extract data and information from content, the use cases are relatively immature and are not focused on truly deriving and using insights. Use the promise of content intelligence to evolve beyond basic data extraction to reveal the new insights, relationships, trends, and patterns currently locked away in your documents.
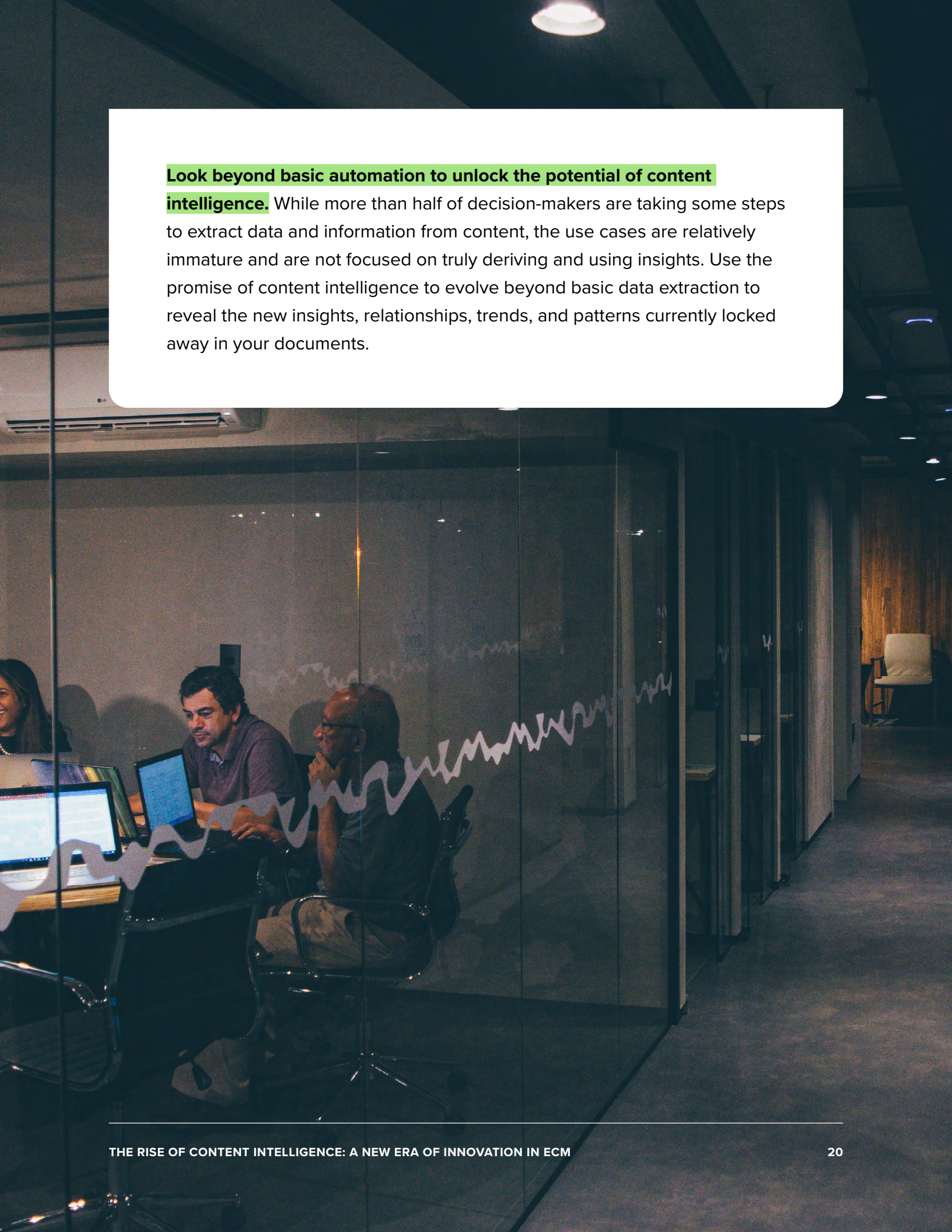
Appendix A: Methodology

In this study, Forrester conducted an online survey of 426 ECM decision-makers from insurance, manufacturing, government, financial services, business/professional services, healthcare, higher education, and retail organizations in the US, the UK, France, Germany, and Australia. Survey participants included decision-makers in IT and non-IT roles with responsibility for or influence over their organization's ECM strategies. Questions provided to the participants asked about their organization's content management objectives, the impact AI would have in advancing their organization's goals, obstacles in their organization's ability to leverage AI for content intelligence, and the role a modern platform would have on advancing vital imperatives. Respondents were offered a small incentive as a thank-you for time spent on the survey. The survey fielding began in October 2024 and was completed in November 2024. In cases where responses are compared to those given in studies from prior years, the respondent profile was adjusted to match for continuity purposes.

Appendix B: Demographics

COUNTRY	
United States	**41%**
United Kingdom	**20%**
Germany	**13%**
France	**13%**
Australia	**13%**

SIZE	
500 to 999 employees	**12%**
1,000 to 4,999 employees	**48%**
5,000 to 19,999 employees	**27%**
20,000 or more employees	**14%**

DEPARTMENT	
IT	**64%**
Customer experience	**9%**
Operations	**9%**
Line of business	**8%**
Human resources/employee experience	**7%**
Research and development	**4%**

SENIORITY	
C-level executive	**15%**
Vice president	**16%**
Director	**35%**
Manager	**34%**

INDUSTRY	
Government	**14%**
Insurance	**13%**
Financial services	**13%**
Business or professional services	**13%**
Higher education	**12%**
Retail	**12%**
Healthcare	**12%**
Manufacturing	**12%**

Note: Percentages may not total 100 due to rounding.

Appendix C: Endnotes

[1] Source: An Executive Guide To Text Analytics Strategy, Forrester Research, Inc., September 22, 2022.

[2] Source: The Content Platforms Landscape, Q3 2024, Forrester Research, Inc., September 17, 2024.

[3] Ibid.

[4] Source: Five Key Trends That Will Shape Your Content Services Strategy In 2024, Forrester Research, Inc., April 29, 2024.

[5] Source: The Content Platforms Landscape, Q3 2024, Forrester Research, Inc., September 17, 2024.

[6] Source: Prepare Your Entire Workforce For AI Now, Forrester Research, Inc., March 27, 2024.

[7] Ibid.

[8] Source: Prepare Your Entire Workforce For AI Now, Forrester Research, Inc., March 27, 2024.

[9] Source: Five Key Trends That Will Shape Your Content Services Strategy In 2024, Forrester Research, Inc., April 29, 2024.

[10] Based on conservative estimates, 60% of enterprise content is unstructured (28%) or semi-structured (32%), though strong anecdotal evidence suggests that the amount of unstructured or semi-structured content may be as high as 80%. Source: An Executive Guide To Text Analytics Strategy, Forrester Research, Inc., September 22, 2022.

[11] Source: The Content Platforms Landscape, Q3 2024, Forrester Research, Inc., September 17, 2024.

[12] Source: Prepare Your Entire Workforce For AI Now, Forrester Research, Inc., March 27, 2024.

[13] Source: Five Key Trends That Will Shape Your Content Services Strategy In 2024, Forrester Research, Inc., April 29, 2024.

[14] Source: The Content Platforms Landscape, Q3 2024, Forrester Research, Inc., September 17, 2024.

[15] Source: Five Key Trends That Will Shape Your Content Services Strategy In 2024, Forrester Research, Inc., April 29, 2024.

[16] Since 2019, the proportion associating content services with these benefits has grown: advance digital transformation (103% increase), improve CX (86% increase), improve process efficiency (43% increase), improve cross-office/interdepartmental collaboration (69% increase). Since its introduction to the study in 2022, the proportion of decision-makers who associate content services with improving information governance grew by 14%.

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