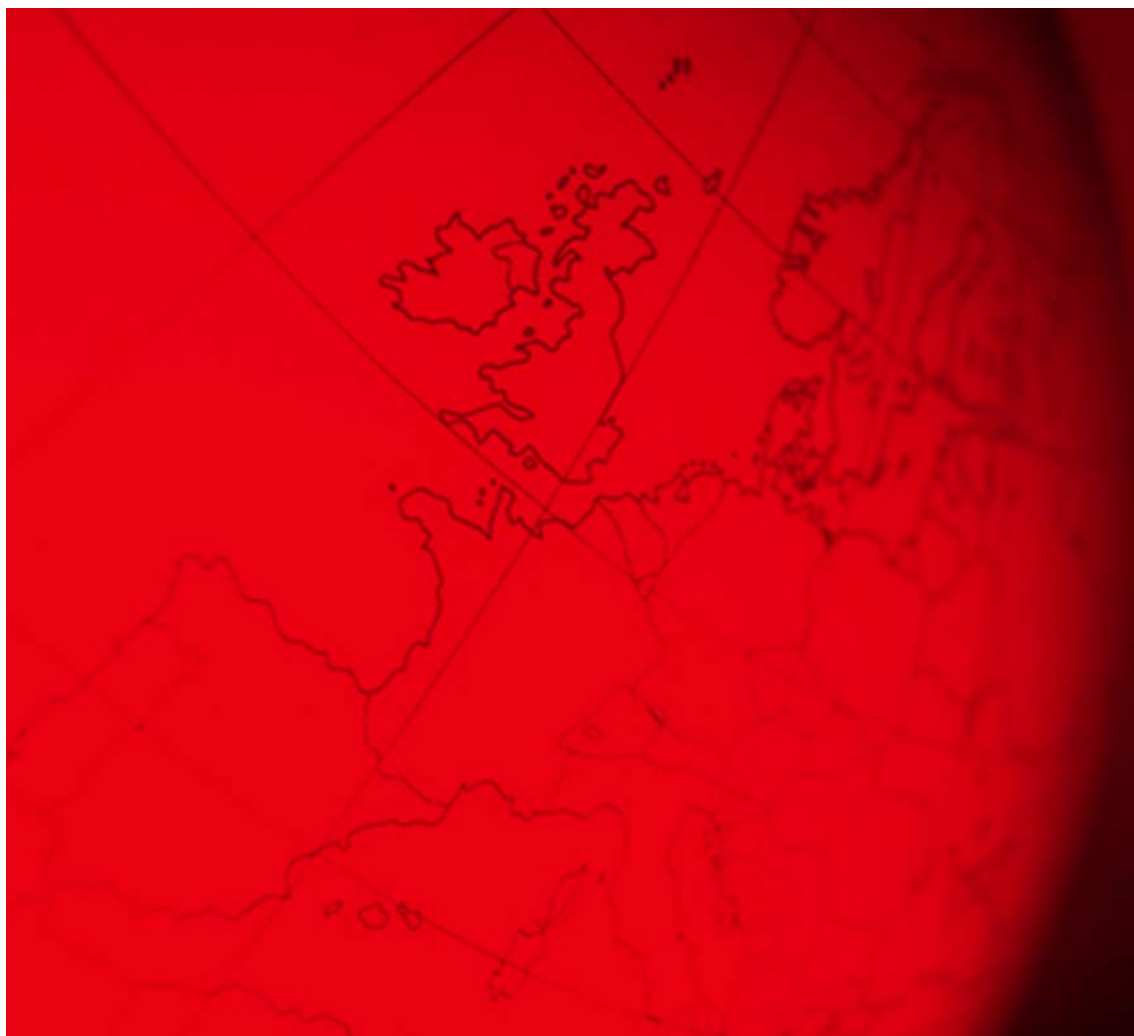


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GUIDEBOOK

CONTENT MANAGEMENT



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THE BOTTOM LINE

The growing volume of enterprise content and silos of information are fueling user frustration and information overload. At the same time, evolving content management technology, mergers and acquisitions, and a renewed focus on usability mean there are opportunities to improve your content management strategy. Looking at new options, adding user-appropriate training, and consolidating content through less costly tools are a few strategies to deliver greater value.

As the definition of enterprise content has evolved, so have the solutions to manage it, leaving many organizations today with multiple content management systems and multiple new options – such as lower-cost commodity and on-demand content management solutions – to explore. In the past, content management solutions have been divided into some basic categories:

- Document Management (DM), the old-fashioned “heavy” solution initially used to capture, track, version, and store electronic documents (often forms). These solutions were big in heavily-regulated industries like pharmaceuticals and aerospace.
- Web Content Management (WCM) arose from the document management solutions when managing one’s Web content became just as important as tracking internal records. Designed to manage intranets, extranets, and Web sites, WCM tools often include templates and other publishing capabilities.
- Then came Digital Asset Management (DAM), to manage the organization, storage, and retrieval of digital media assets such as audio files, logos, graphics, animations, digital video and more. Common functions of DAM systems include download facilitation, renaming, backing up, grouping, archiving, and exporting of an organization’s digital files.
- Adding collaboration, agents, and other technologies gave us Knowledge Management (KM) to facilitate the capture, transfer, and reuse of intellectual capital across an enterprise.
- As the Web cooled down and accountability heated up, Records Management (RM) solutions – basically content management for the legal department – were marketed for securely storing sensitive, confidential, and regulatory information while capturing and maintaining evidence relating to business activities and processes.

Today all of these areas fall under the broader area of content management – and the terms are often used interchangeably.

Whatever you call it, the goal of any content management initiative should be to provide users with faster access to the information they need to do their jobs.

THE SITUATION

Many enterprise decision makers are looking to improve their content management strategy today because growth in content, departmental initiatives, and mergers and acquisitions have created an environment with multiple sources of content, making it difficult for users to find the information they need.

RELATED RESEARCH

- H10 Vignette ROI case study – Catholic Health Initiatives
- G80 Digitech ROI case study – Children’s Hospital New Orleans
- G75 Benchmark Research Content Management
- G74 Insights on Content Management
- G33 Perceptive Software ROI case study – Citizens Memorial
- G29 Perceptive ROI case study – AmFed
- F126 Digitech ROI case study – Labconco
- E82 Vignette ROI case study – Ball State University
- E34 Getting more from content management
- E10 Hummingbird ROI case study – Transport Canada
- D43 Hummingbird ROI case study – Public Services New Mexico
- C58 Open Text Content Management

A recent Nucleus Research study found that two out of three people are overwhelmed by the amount of information they must sift through in order to do their jobs.

Recognizing this challenge, many organizations are trying to consolidate their content management efforts and provide broad access to content repositories. The initial ROI from deploying content management – shorter search time, reduced rework, increased productivity, better content auditing – can be multiplied by providing more users with better content management tools. However, justifying a content management consolidation effort can be challenging because content conversion costs can be significant and there are often political reasons for supporting different silos.

Nucleus found one out of every two people search more than five document repositories to find the information that they need.

Whether you’re looking to deploy content management for the first time today, or considering how to improve your content management strategy, Nucleus has identified a number of best practices to follow, missteps to avoid, and ways to leverage more value from content management.

FIVE BEST PRACTICES**Keep both content and users in mind**

When outlining an implementation and deployment strategy, organizations should focus on two things:

- The content. Because content migration can be a costly and time consuming component to a content management implementation, it is important for organizations to identify and determine the types of files, documents, and unstructured content the new system will manage. Doing this will allow organizations to realistically gauge timelines, properly outline management strategies, and envision the effects of long-term benefits. For organizations that are not sure about how to prioritize which content to migrate, they should consider how frequently information is used and how many people will be using a particular piece of content. Identifying the content with the greatest breadth and repeatability will provide organizations with a starting point for determining the most valuable content to migrate.
- The users. Since user adoption tends to be a key implementation success factor, organizations should determine who will be using the system, how regularly, and for what reasons. This will allow the business to determine which training techniques will be most efficient. By accounting for variation in user capabilities, programmers can figure out how to design a system to accommodate different user behaviors and encourage greater adoption.

Public Services of New Mexico, an energy holding company used a two-pronged deployment strategy that focused on document indexing and categorization as well as advanced search training for users. These user adoption strategies increased productivity and the project delivered a 105 percent ROI.

By identifying these factors before deployment, enterprises can implement appropriate strategies to encourage user adoption, determine best collaboration practices, and improve enterprise search capabilities.

Phase deployment

Many organizations faced with multiple content management silos look to a broad-scale effort to consolidate to one system, which can be costly and time consuming to implement while requiring significant user adoption efforts. Breaking that large project into phases can reduce risk and can enable organizations to adapt to unexpected project issues, initiate proper training, encourage employee adoption, and adjust to other market opportunities or events.

With a phased approach, enterprises can monitor user responses across different user groups, react to any system glitches or incompatibilities, and make future decisions based on previous lessons learned. In addition, a phased approach will provide organizations with the flexibility to make needed adjustments, limit the impact of operational interruptions, and reduce deployment risk.

Deployment tip: If your project plan doesn't deliver value within six months, consider a phased deployment to reduce risk.

Apply features appropriately

As vendors continue to compete on features and functionality, it can be difficult to focus on the goal of your content management project: to deliver the greatest value. For example, a team may assume they "absolutely need" sophisticated audit trail capabilities and version control, but all groups may not.

Buying and implementing unneeded features can create a more complicated system that is difficult for users to navigate and adopt.

Some of the most successful deployments Nucleus has seen in the past 12 months have utilized basic functionality and rapidly delivered success because the application isn't overwhelming to users – and then added more complexity over time to deliver more value. Conversely, companies in certain verticals such as government organizations, health care institutions, and highly regulated industries have experienced higher returns on investment, adhered to compliance, and increased productivity by deploying full-featured applications from the beginning.

Content management is not one size fits all anymore: companies that have more basic content management challenges may find an on-demand solution or more simple repository can meet its ongoing needs at a far less costly price tag.

Manage on milestones

If you develop a business case for your content management project – and you should – make sure it's a living document. If you expect the implementation to be 80 percent complete after 50 hours of consulting, use that as a milestone to manage your project. If it looks like you're missing, you'll know earlier, and you'll know exactly what impact that "miss" will have on the ROI of your project. By setting milestones for vendors, users, and IT, management and project teams have

the necessary benchmarks in place to know how any misstep, mis-estimation, or scope creep will impact the bottom line.

Deployment tip: Setting milestones based on your business case can help limit scope creep and enable faster decision making if your project appears to be moving a bit off target.

Milestoning can help avoid unwarranted expenses, manage project delays, and accelerate delivery.

Fluent Inc., a provider of computational fluid dynamics software and services, found that working with the vendor closely to milestone its deployment helped accelerate delivery, optimize workflows, and manage process changes. The company achieved a 50 percent ROI from its content management project.

Other strategies to accelerate ROI from a new content management project include:

- Continuous communication between vendor and enterprise. A strong relationship with technology vendors can improve the deployment process by having the necessary expertise available for consultation.
- Avoid lengthy approval processes. Quick decision making and approvals will eliminate delays and momentum losses ensuring a faster deployment.
- Appoint internal teams to prepare enterprise content for system integration. Proper indexing, migrating, and data preparation can reduce the time it takes to go live with the new system.
- Reduce customization. The less customization needed will reduce the amount of time needed to implement the system within the organization.
- Get a fixed-price implementation. A fixed-price implementation will eliminate unexpected cost overruns and structure the implementation schedule.

Drive the evaluation process

When you buy a new car, you spend time researching, negotiating, test driving, and asking experts before you drive it off the lot. Why? Because it's a significant investment and a bad decision can cost you dearly. The same can be said for content management purchases and implementations. Security, functionality, dealer relationships, and price are key factors for decision making whether you're buying a car or a content management solution. However, the most important similarity between the two purchases that buyers often forget is that an educated buyer has the power.

Vendor consolidation and increased commoditization of content management means you have the negotiating power. Use it.

You shouldn't buy without demanding references, negotiating better prices, and shopping around for the perfect deal. Businesses that fail to "kick the tires" one last time before purchasing a content management system – or don't look beyond the preconceived "short list" – run the risk of potentially discovering hidden problems later.

There are five key factors to consider when evaluating content management vendors:

- **Price.** Many large and well-known vendors carry a large price tag, but with a consolidating market, vertical solutions, and on-demand options driving prices down, enterprises are well positioned to negotiate better deals.
- **Scope, flexibility, and functionality.** Many vendors today provide basic capabilities at a much lower price and overhead than traditional content management. If that's all you need, why pay for more?
- **Integration capabilities.** Particularly if you're moving from a siloed environment, you'll want to clearly understand your prospective vendors' integration capabilities. Remember: API doesn't mean "Always Perfect Integration."
- **The vendor relationship.** Organizations should carefully consider the vendor from both a product and strategic perspective to ensure that the relationship is a good fit.
- **Training requirements.** Some content management systems are inherently more intuitive and usable than others. Some deliver great value and deep functionality to power users. You should know whether you're buying tools to support one profile or the other, or both.

FIVE FINE TUNINGS

Investigate expanding benefits out of the system

Many companies do buy content management to support a discrete business need, which is a great way to deliver value. However, it shouldn't be the end game. Selecting a solution that can grow over time to support future needs without a lot of expensive consulting can help you leverage more value out of your existing investment.

To identify the opportunities with the greatest potential, organizations should think in terms of breadth and repeatability. The actions and processes that are performed frequently or that span the entire organization are likely candidates for automation and streamlining. Two common ways to drive greater ROI from a content management deployment include:

- **Add workflows.** By streamlining processes and automating workflows using a content management system, organizations will be able to improve productivity, reduce costs, and improve content accuracy.
- **Extend user groups.** By having more users within the system, enterprises can stretch the costs of implementation over more people while simultaneously increasing indirect benefits.

The New Orleans Children's Hospital achieved a 103 percent ROI using Digitech Systems to improve productivity and reduce costs. The company was also able to identify additional ways to drive greater profitability by using the system's autofax functionality to automate additional workflows and plans to extend its user population to include doctors and nurses.

Consider portal systems

Portal systems may be an interesting opportunity for many enterprises looking to improve knowledge management and group collaboration. A basic content

management system provides users with the ability to access information but often lacks sophisticated collaboration capabilities. Some organizations find that collaboration tools are key assets for information sharing. A portal system provides the necessary technologies to reach a large audience, access electronic documents, and maintain a forum for information posting.

Halliburton Energy Services Group's 13,000 employees have improved data collaboration with access to company information from remote and offsite locations. Halliburton's portal system enabled them to reduce printing and mailing costs, improve resolution of technical problems, and increase revenue, delivering a 564 percent return on investment.

Actively manage your content management

Organizations with content management systems will find that on a daily basis users will encounter two types of content: new content and old content. In many cases, organizations have already indexed and stored the old content and tend to focus primarily on doing the same for any new content that comes into the organization. Unfortunately, taking this approach can be like stuffing a closet full of a bunch of different things where the objects inside can be useful, too old, or forgotten about. What this means is that it's not only important to just keep the information, but that it's equally as important to periodically "clean house." The best way to do that is to schedule regular or routine "content checkups" where system managers can analyze the data to remove unused documents, duplicate materials, and outdated information. Organizations will find that doing this will create a valuable data repository, simplify user searches, and reduce the risk of regulation mishaps.

Public Services of New Mexico adds 1.2 million documents to its content management system each month, and to properly manage its steadily increasing libraries, focuses its efforts on regularly consolidating and condensing the various repositories it supports.

Extend the definition of managing content

Although many businesses today have adopted the use of instant messaging, wikis, and other unstructured ways of communicating to save time, money, and employee headaches, a majority of companies often overlook the importance of managing this information. Because so many employees see this form of communication as informal, conversations and documents shared in this way often do not get stored or indexed. This significantly can increase compliance risks, reduce employee productivity, and limit the ability to capture and leverage best practices.

Adding instant messenger, wikis, or other content to your content repository can help capture brainstorming and best practices as organizational knowledge.

Keep an eye on the market

We've seen a lot of merger and acquisition activity in the content management market in the past 12 months, and will continue to see more as the market matures. You can prepare yourself for the ongoing consolidation activity by staying engaged with your current vendors and monitoring the ongoing changes in the

market. Knowing where your vendor's headed can help you better evaluate upgrade and consolidation efforts.

FIVE MISSTEPS TO AVOID

Not encouraging user adoption

Certainly user adoption is an obvious goal of any technology deployment and is never expected to warrant any concern, but as it turns out, this is one of the biggest challenges organizations face. Many companies fail to consider how a system's complexity, layout, and unforeseen benefits will effect overall user adoption. Unfortunately, barriers to user adoption occur at such late stages in the project that organizations are forced to spend a significant amount of time and money correcting the issue.

One way to avoid this mistake is to create an intuitive and easy to use system. The easier the system is to use, the more likely users will be to adopt it. When users are confronted with complicated system layouts and hard to understand navigation, frustration tends to build up and can cause users to abandon the system all together. The organizations that take into consideration user preferences for design layout will likely generate the greatest user adoption.

Labconco Corporation, during its Digitech Systems deployment, invested in additional development work on the interface so that users would have the option to retrieve documents in various ways depending on personal preference. Similarly, Ball State University included users on the design layout process to determine which features would add the greatest value and drive user adoption.

Another strategy that many organizations find works well is demonstrating the benefits of using the system. Getting users to migrate from other existing systems with which they feel comfortable can often be more difficult than it may seem. It is important to demonstrate to employees how they will save time and achieve other benefits from using the system. For example, Cuatrecasas, a major Spanish law firm, avoided user adoption challenges during its Open Text (then Hummingbird) deployment by emphasizing to users key benefits the system would deliver and how reliance on the system would drive value.

You may also want to consider incorporating contests. Although it may sound juvenile, it can appeal to users' fun side and seem less commanding than direction to use the system. For example, one organization embedded little hidden prizes within the system to make performing key tasks a simple game with opportunities for reward. This fun approach can reduce the likelihood of resistance by creating an informal atmosphere to encourage user adoption.

One-size-fits-all training

Coincidentally, many organizations that overlook the importance of user adoption also overlook the importance of proper system training. Although user adoption and training are closely linked, it is important to differentiate between the two. Barriers to user adoption tend to be more functionally and behaviorally based, while training issues tend to be financially and individually based. Because content management systems are generally intended to have a large volume of users due to the magnitude of their reach within an organization, training tends to be costly

and time consuming. This often leads to a variety of materials and a few training sessions that may not be adequate enough to suit the needs of various user skill levels. As a result, only a fraction of the organization is properly trained, a few are somewhat skilled, and others are barely knowledgeable at all.

Many organizations find that the best way to avoid these obstacles and support a range of skill levels, are likely to drive greater ROI by doing some or all of the following:

- Provide multiple types of training materials.
- Offer classes or seminars to those who require additional training or expertise.
- Work with vendors to determine the best methods for system training.
- Take advantage of online vendor help.

Training tip: If you expect to have power users and casual users, plan different training programs for each group, and provide online or paper documentation for casual users.

Underestimating additional system costs

For technology implementations, especially large-scale content management ones, there are almost always unforeseen costs. Often these problems arise because of system incompatibilities that went undetected during the evaluation process and often include unplanned system upgrades, integration challenges, and global incompatibility. For example:

- A Canadian government organization found that its simultaneous Microsoft operating system upgrade and its Hummingbird deployment integrated with existed systems posed potentially damaging and destabilizing harm to the organizations many offices. Although the issue was resolved, the organization had to reschedule implementation, examine application upgrades and replacements, and retest corrected versions.
- Fluent Inc. encountered a technical setback in its German deployment because of incompatible US code with German printers, slowing down implementation.

Careful planning is important, but planning your best and worst case scenario – and polling reference customers on any unexpected changes that shifted their schedules or any unique features of your deployment – can help you avoid cost overruns.

Relying on brand names

You should buy the content management solution that delivers the greatest value to you with the least risk, not the one that has the greatest market share or brand recognition. Nucleus has found many organizations find lesser-known vendors are willing to work harder to be an effective partner because their goals are focused on 100 percent referenceability. Keep this in mind as you develop your short list.

Spending more time on technology than politics

Many organizations see content management implementations strictly as technology endeavors and nothing more. As a result, businesses deploying CM solutions focus a considerable amount of time ensuring proper system set up and

adequate document indexing and migration, but overlook the importance of managing how this will effect other areas of the organization.

Dealing with change can be difficult for many people, especially in the work environment where job positions can easily change when a new system is implemented that can streamline processes and improve productivity. Not properly addressing this may have ROI-limiting consequences such as adoption resistance and internal conflict. Addressing the politics of change is just as important at higher levels as user adoption is at lower ones.

LOOKING AHEAD

Nucleus expects the content management market will continue to evolve with a focus on usability and rapid deployment.

The effects of vendor consolidation

Although continuing vendor consolidation can create some short-term uncertainty and confusion, buyers will benefit in the long run by lower costs, fewer vendors to manage, and more commoditized solutions. Remaining vendors are pressured to continue to deliver innovation, integration capabilities, and verticalized modules that shorten deployment times. One vendor to watch this year is Oracle, which announced a push around its existing content management solution and the acquisition of Stellent, an established content management vendor. Given Oracle's market presence and the breadth of functionality available from the Stellent solution, a combined option at a lower price point may be an attractive alternative in the market.

The increased development of on-demand options

As on demand's popularity continues to grow, content management is a key growth area. On-demand content management gives many organizations the possibility to have enterprise-class content management without the traditional dollar and resource investment needed for content management. On-demand tools give smaller organizations an opportunity to compete with their larger competitors at an affordable cost.

On-demand solutions are valuable to larger organizations as well. For example, a hybrid solution that has both on-premise and on-demand capabilities can enable large companies to create and manage content centrally while extending those capabilities on an on-demand basis to partners, customers, or branch offices without additional IT resources.

What about Microsoft?

Given the current dominance of Microsoft on the desktop and the growth in adoption and marketing of Microsoft SharePoint Portal Server, we expect to see companies continuing to look to Microsoft for content management offerings. However, it's important to note that SharePoint also requires careful planning to ensure SharePoint repositories become more than just expensive file shares. Companies will also want to consider the SharePoint investment as part of their overall desktop strategy as Microsoft pushes a move to Vista and Office 2007.

Google Docs

For organizations that need basic collaboration, versioning, and storage of documents, Google Docs may be the perfect fit for their content management needs – particularly at the departmental or local office level. As Google's offerings continue to evolve, and other technologies such as wikis become more broadly adopted, look to Web 2.0 solutions for content management as well.

CONCLUSION

The content management technology market has evolved, and the growth of content in organizations has made effectively managing it critical to employee productivity and overall performance. Taking a closer look at your content management strategy today – whether you're looking to make an initial investment beyond shared files, consolidate systems, or extend content management capabilities beyond the walls of the enterprise – will likely help you identify potential ROI opportunities. Looking at new options such as on-demand content management, adjusting your training strategy to make it more user-appropriate, and streamlining content management using less costly tools are all potential avenues to explore. Building a business case with breadth and repeatability in mind, and with a clear understanding of ongoing costs, will help you deliver greater productivity to users and greater content management ROI to your organization.

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