



MODERNIZING ECM
FOR THE CLOUD SERIES

A Roadmap to Adaptive and Agile Enterprise Content Management

*From Cloud Migration to
Intelligent Document Processing*



KnowledgeLake

Executive Summary

Digital transformation is one of the highest priorities for CIOs and their organizations in 2021.

One of the main targets of that transformation, and indeed the main digital currency of our era, is documents and document management. The question is how organizations can modernize their documents and document management processes without the need for big migration projects, which are costly, time-consuming, inflexible, and likely to disrupt workflows already in progress.

The answer lies in choosing a platform and a partner that allow for more agile adoption and adaptation of document management or ECM solutions. This book serves as a roadmap showing how agility and adaptation can make the digital transformation of document management—what we call “enterprise content modernization”—a reality.

This requires a people-first strategy, a clear migration plan discovered through a migration assessment, a scalable agile system that allows for self-sufficient agility, and a good implementation partner.



Introduction:

The Road Ahead

Today many CIOs are interested in moving more of their stack to the cloud, if not mandated to do so by company leadership. This makes sense, as cloud technology has matured to the point where it offers far more stability, flexibility, security, and compliance than aging on-prem solutions.

Enterprise content management (ECM) software is a ripe target for that shift. ECM traditionally encompasses how organizations capture, manage, store, preserve and ultimately deliver content (namely documents and the information they contain) in support of key business processes, such as order processing, billing, accounts receivable—to name just a few areas.

Moving such ECM systems to the cloud requires more than just “lifting and shifting” applications and data. There is the technical difficulty of dealing with the sophisticated implementations of older software. But there is also the need to understand how workers manage tasks and get things done. With that knowledge, CIOs can give employees more effective tools and make the overall work experience not just more efficient, but better for the humans doing them.

A 2020 survey conducted by Constellation Research found that “digital transformation” was the number one budget priority for Fortune 500 CIOs going into 2021. Still, it is documents that remain the prime digital currency of the business world. Alan Pelz-Sharpe, founder of the firm Deep Analysis and an expert on digital transformation, put this well:

“Document management has been overlooked and under-loved for a long time. Yet they are the systems where the most valuable and sensitive documents businesses create and use



are stored and managed. Documents are essentially digital currency. If we lose or cannot find contracts, invoices and bills, then we literally lose money or businesses stop. Yet despite the critical importance of document management, few have invested well in these systems, fewer still manage them properly.” (Emphasis ours)

Study after study have validated Pelz-Sharpe’s words. For example, the 2020 State of the Digital Workplace Report by CMSWire and Simpler Media Group found that **62% of professionals** felt that document management was a “very important” digital workplace technology. (For reference, only email was considered of comparable importance.) **Yet only 25% of professionals said their document management tools were working well; 33% said they “need work.”**

And yet many organizations hesitate to modernize their document management, especially if they have been burned by heavy investments in overly complex, on-premises systems to manage documents or large migration projects before. The harsh reality is that the enterprise content management industry is somewhat responsible for this state of affairs. With large clients, it has often been assumed that, because the scale of the organization is vast, and the number of documents and processes is likewise huge, implementing a new system must be a huge endeavor, too.

And so the bigger projects become, and the more complexity with the migrations involved, the less organizations want to do them. Even with Microsoft SharePoint, now a fully cloud-based solution, many

large organizations are still hanging on to SharePoint 2013, 2010, even 2007... solutions that are well over a decade old. For some organizations, these older solutions still provide value, but others are straining to maintain them due to maintenance costs, the cost of dedicated staff with outdated (expensive) skillsets, the pricey hardware required to run legacy solutions, and lack of integration.

Resistance to moving away from legacy ECM solutions shouldn’t be a matter of price, security, or reliability. Cloud architecture and platforms satisfied these concerns long ago. The pain lies elsewhere. It is the pain of going through a transformational change.

Documents and document management tools will need to reside in the cloud going forward. The question for most organizations will be how this can be done easily without the need for a big, painful migration—or disrupting what users are already doing.

The answer lies in having both a platform and a partner that allow for agile adoption and adaptation – what we call “enterprise content modernization.” What follows is a roadmap for what that involves.

Fueling Up: Empowering People with Technology

So just what exactly is Enterprise Content Modernization?

Most readers may already be familiar with enterprise content management—solutions that allow a large organization to ingest, convert, and store content digitally. Modernization goes further and addresses the workflow itself, providing solutions for organizing document data, extracting what is needed, routing information appropriately, and ultimately removing humans from repetitive, predictable tasks to refocus their energy on more valuable work. This is exactly what ECM promised—but has so far failed to deliver.

Repetitive Business Tasks Benefit from Content Modernization

Every organization is faced with mundane tasks that eat up valuable time and resources—yet these tasks are essential to everyday operations. These tasks tend to fall into several key areas, including:

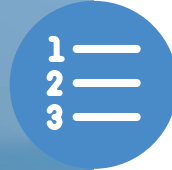
- **New account setup**
- **Case management**
- **Purchase orders**
- **Accounts payable**
- **Accounts receivable**
- **Employee onboarding**

What do all these areas have in common? They are all transactional processes that require a fair amount of content and validation, but follow a more-or-less predictable and well-known set of procedures. When this kind of content-based process is digitized, organizations have the opportunity to evaluate, optimize, and potentially automate repetitive business processes.

Making Modernization Happen Takes a People-First Strategy

The goal should not be to modernize for modernization's sake, but to empower the end-user. Doing so advances digital transformation for the CIO and the organization. Any roadmap that loses sight of this objective, or sacrifices user efficiency in the name of progress, is missing the point.

Before shopping for tools and features, take the time to draw up a people-first strategy:



Analysis & Planning

STEP 1 Identify those tasks that eat up the most time and (employee) resources. The best place to start is to ask the employees themselves. More than likely they will be able to name several right off the top of their head. For a more thorough understanding, formal techniques such as journey mapping, benchmarking or a maturity assessment can yield critical insights. All of these may involve some form

STEP 2 Prioritize those tasks in terms of the inefficiencies or pain that they cause, and what the value would be in solving them—for example, tracking invoices and payments.

STEP 3 Redesign the work. Map out the optimal flow of how tasks get done. Are any tasks obsolete? Can you eliminate steps or manual labor, or the number of people involved in a process? You will likely identify improvements that can be made before factoring in technology.

Selection

STEP 4 Research the tools that you can give to employees to make these aspects of their job easier. The easier these tools are to use, the more likely they are to be adopted. If you can eliminate drudgery and show people how you can improve their work, they'll more readily come along.

Deployment

STEP 5 Offer them automation for the most common use cases. End-users might pause if they have to learn a new interface. Instead, focus on tools that offer easy-to-use “building blocks” for automating tasks. This will ultimately free up your employees for more productive cognitive tasks.



Action Step

Plan for the document modernization stage of your digital transformation by developing a strategy that looks at your people and their workflows first. Ask what tasks are taking up the most time and are ripe for review and/or automation.

A true people first strategy, then, will approach modernization by minimizing the impact of systems setup while focusing on solving problems and creating efficiencies.

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Any new tool should allow for a smooth transition, rather than a disruptive one.

One report, conducted by project management software company Wrike, indicated that, when asked about what stressors they encounter in the workplace, 80% of respondents said that "new processes made them anxious." Such anxiety will naturally make employees hesitant to try new digital tools and processes.

Finding the On-Ramp: Migration Assessment

With the end user in mind—and a people-first strategy in place—it is time to evaluate what it would take to migrate to a new platform. This is where a migration assessment comes in. The goal of a migration assessment is to extract as much detail as possible (dependencies, folder structures, permissions, metadata, etc.) about your existing system (if there is one), or other document sources; the destination system; and migration requirements. Being as thorough as possible helps to mitigate risk and home in on the scope of the migration.

Migrations Differ in Their Overall Complexity

No two migrations are the same, and even the most “basic” involve some degree of complexity.

A critical aspect of the migration assessment is to discover the level of complexity involved and come up with the right approach:



Low Complexity

A like-for-like migration, for example moving from one version of SharePoint to a different (newer or cloud) version:

- No real changes in structure, metadata, or permissions
- Little filtering — most files moved like for like
- No document conversions or transformations



Medium Complexity

Migration that involves some or all of the following:

- Migration between different systems
- Partial migration of content based on certain metadata or search results
- Conversion of certain documents to different formats, e.g., scanned TIFF images to PDF
- Transformation or enrichment of some metadata elements, e.g., adding new metadata fields, or updating certain metadata



High Complexity

Highly complex migrations can take many different forms. These may include:

- Migration and aggregation of content and metadata between multiple different systems
- High levels of content enrichment, e.g., adding full text indexes on all files
- High levels of metadata enrichment, e.g., using AI to classify content during migration
- Metadata validation and enrichment against external databases
- Migration based on complex rules, e.g., using retention rules to only transfer relevant content

In addition to technical complexity, the volume of content and metadata involved in the migration needs to be considered. The higher the volume, the longer the migration will take, and the more care needed to validate that a successful migration has occurred.

9 Questions to Ask During a Migration Assessment

Whether you and your team are performing the migration assessment yourself or hiring an outside partner to handle it, the following questions will need to be answered:

1. **What is the current file plan like?** What is ideal for the work that needs to get done? If your organization already has a file plan, are you actually following it? If not, consider an “as is” assessment of what there is and how it’s structured.
2. **What file types currently exist?** Are those file types common, or are there some more rare and exotic ones? Overall, how much conversion will be needed?
3. **What metadata exists for each document?** What is needed here?
4. **Which applications depend on that metadata?** More specifically, which applications are synchronized with the metadata in your documents?
5. **What APIs are connected?** Are they compatible with the system/framework you are migrating to?
6. **How many corrupted files are anticipated?** What needs to be done with them?
7. **What kind of testing and validation is needed at each step of the project?**
8. **What other business applications are integrated or dependent on the document management system and/or their or its workflows?**
9. **Most good migration projects filter out junk/redundant/duplicate files — otherwise its life and shift?**



Action Step

Prepare for your migration through a **migration assessment**. Determine the overall complexity of the migration in terms of file structure, file types, metadata available, and APIs. Also, make sure you take into consideration file conversion, file corruption, and validation/testing. All of these factors will inform the timeline and steps for a proper migration.

Depending on the size of the project, it is common for preparation to take longer than the actual migration. That is completely normal, and even optimal. Planning mitigates risk.

Getting in Gear

From Mere Migration to Agility

Even with a fully comprehensive migration assessment, there will always be something new when moving from a legacy platform to a new solution. This is why the most efficient and cost-effective option is to bring on a partner that has experience in multiple migrations and who knows how to be agile and adaptive.

For CIOs familiar with the challenges of software migrations, “agility” means having the flexibility to address concerns and change priorities on the fly, both during and after a system migration. This requires finding a proven partner with the right experience and a structured process that breaks down the work into smaller, independent pieces that can be stood-up or scaled-down as needed.

Key Elements of the Migration Process

When considering a migration partner, the essential thing to look for is a structured migration process that is proven, reliable, and flexible.

- **Proven:** Has the process been tried and tested many times? Has it been used on a wide variety of organizations? Can they share outcomes?
- **Reliable:** Are problems caught and flagged early enough to mitigate risk? Are there clear decision points that help protect budgets and workflows?
- **Flexible:** Is the migration committing the organization to a big up-front investment? Or, can different pieces of the project be handled at different times, based on priorities, or as resources and budget become available?



Action Step

Find a partner who can conduct a migration assessment and use the findings to outline the stages of your migration. Find the “hot spots” and determine the first actionable steps for addressing those areas of concern. Ask how the solution can be implemented quickly and, if need be, scaled down quickly if there is a problem or a pivot based on new learning.

Examples of Agile Migrations

Once a migration assessment is done, and a people-first strategy is in place, it is possible to use a modular approach to execute the migration in stages.

For example, a migration partner could:

- **Migrate** the application for enterprise content management while keeping documents and data where they were. This allows an organization to validate a solution and address security concerns without putting actual data “on the line.”
- **Begin processing** and storing new documents in the cloud but maintain a legacy repository with older documents. This way, users can begin using the new tools right away without having to wait for the backlog of previous documents to be processed and migrated.
- **Start with a single document** or form type — a claims form, for example— and use it as a pilot to work out the modernization process for other types of documents.
- **Invest in a SaaS solution** that can be scaled, which removes the worry that budgets will be exceeded or timelines for the migration rushed.



Cruise Control: Self-Sufficient Agility

Both user empowerment and agility are essential when it comes to adopting new content management solutions. When the right system is implemented in the right way, the two reinforce each other and lead to something we refer to as “self-sufficient agility.”

What is Self-Sufficient Agility?

Self-sufficient agility is the power to respond quickly and nimbly to changing circumstances by enabling users to easily setup and modify the tools they need. This can be achieved by choosing a platform that allows users to create and manage their own workflows and make changes on the fly, with minimum complexity (and without relying on IT).

It’s the same idea seen in open-source website content management systems, project management software, and more. It should be the gold standard for enterprise content modernization as well.

When a system is easy to set up, use, change, and deploy—with a low-code or no-code interface—users will naturally find ways to adapt the system to their own ends.

The Benefits of Self-Sufficient Agility

- **It saves on implementation costs.** A traditional enterprise content management system comes with a hefty price tag. It is not unusual to see line items of \$100K to \$200K just in service hours needed to get the system up and running. By implementing a user-friendly platform, an organization can assign IT administrators and users themselves—as opposed to consultants—the task of setting up specific system details. Not only will this lead to users getting exactly what they need, but it will also result in money saved by the IT department, allowing it to prioritize other projects.
- **It helps with employee empowerment.** With an agile system, employees themselves can choose, implement, and integrate the specific tools they need, when they need them. Instead of being overwhelmed by a complex (and potentially clunky) system, employees can focus on just those things they need to get their job done.
- **It cements user buy-in.** When users are involved in designing a process themselves, they automatically have more of a stake in it. Low-code solutions for designing workflows can give users a sense of ownership in the design without allowing them to tamper with potentially system-breaking controls.



Action Step

Identify how workflows are discovered and taught for different roles at your company. What is the logic behind them? Who can best articulate them? Assign to those people the task of re-designing workflows within the new system. Train them to find and utilize the right tools at the right time.



Action Step

Once you've identified the need for document modernization, look for partners who can not only recommend solutions, but can also help guide you through their implementation. Be sure to ask what their role will be at every stage: Decision, implementation, maintenance/upgrades, and troubleshooting. Also, decide how their performance will be assessed. How will your new partner prove their value?

Choose Your Travel Partner(s) Wisely

The benefits of having both a platform and a partner that allow for agile adoption and adaptation—while avoiding a massive migration—are clear. However, the two do not carry equal weight.

Only about 20% of any new initiative is truly about the software involved. The other 80% is about strategy, planning, training, and ongoing maintenance.

Therefore modern organizations need to focus first on a “people-first strategy” and migration assessment, rather than a feature list. It is also why finding a partner who can help with purchase and implementation is so important.

Of course, every organization is different. This is often what pushes leaders to bring projects in-house to begin with, but the decision to do so is often shortsighted. Being unaccustomed to complex document management projects, internal teams are less likely to know what they need to know for success.



When a business situation is complex and needs are distinct, it means the organization should choose an experienced and responsive partner — the opposite of an out-of-the-box solution.





Conclusion

Customers tell us all the time that the main thing they need when adopting a content management system is better control. The problem has been that the bigger a system is, and the more complex its implementation, the less control there is. That is why more and more organizations are asking for solutions that are adaptive and agile.

We understand that you, your team, and your users want to stay in control. You want to stay on top of security, protect critical workflows, and manage the process so that you pay only for what you need.

We get it. And we want you to stay behind the wheel.



About KnowledgeLake



What we do best.

KnowledgeLake provides content management solutions that help organizations intelligently automate their most important document processes. **Today that means helping customers optimize processing their transactional content in the cloud by removing longstanding constraints around data classification and capture, content searchability, and system integration.**

We've spent the better part of two decades perfecting both our SaaS software and our migration process, including migration assessment. Now that you have our roadmap, we hope you can use it to inform your digital transformation efforts, and that you will reach out to us for help as needed.

Please reach out to discuss your document management needs:

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