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# FROM CHAOS TO CONTROL

5 ways to combat IT sprawl in higher education



Hyland™



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# Introduction

According to industry experts, the goal of consolidating repositories across the enterprise has been difficult to achieve at most organizations. What's more common are multiple systems in which information is siloed, disparate applications are deployed, and there are a large number of separate IT systems to manage and support. In other words: IT sprawl.

Among the most likely candidates for IT sprawl are any of the technologies commonly referred to as document management, document imaging or content management. This is especially true in the all-too-common scenario in which these capabilities have been deployed only in extremely simplistic ways — e.g., to create electronic filing cabinets or basic document routing. Often, the mix includes multiple vendors or a combination of homegrown and purchased software.

Industry reports revealed 70% of organizations are using two or more enterprise content management (ECM) solutions, and 29% are using four or more solutions. AIIM reports that 52% of organizations have three or more ECM, document management (DM) or records management (RM) systems and 22% have five or more systems. The problem is even more challenging at the largest organizations, with 38% reporting more than five ECM/DM/RM systems in operation.

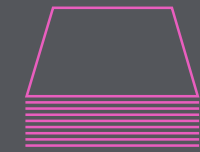
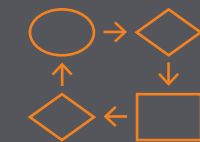
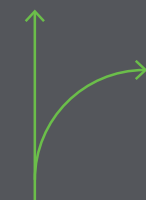
If your institution hasn't yet pondered or taken a more strategic approach at the enterprise level, it should. Left to grow and spread unchecked, multiple content management systems have the potential to wreak havoc in terms of IT administration, governance, support and expansion. That's because true content services — the umbrella category within which these technologies now reside — should truly be an enterprise platform, a core part of the central IT infrastructure, not an aggregated set of departmentally scattered solutions. And, when content services is deployed as a single, enterprise platform across the institution, the capabilities it delivers go way beyond basic paperless filing and routing. Additional, more sophisticated components include records management, advanced capture, business process automation and optimization (call this "advanced workflow"), and application integration.

# 70%

of organizations are using two or more enterprise content management (ECM) solutions

# 22%

of organizations have five or more ECM/DM/RM systems

**CONSOLIDATE****CONFIGURE****CONNECT****CONSIDER THE CLOUD****CONVERT**

That's the only way to ensure that content services — as both platform and strategy — supports your institution's highest level, most mission-critical endeavors: enrolling and retaining students, providing an exceptional student experience, satisfying funders and other external stakeholders, raising the institution's regional or national profile, bolstering its fiscal stability, and so on. For that, you'll need the full range of content services capabilities, available for consistent yet flexible deployment across the institution.

And, make no mistake: you want growth to support enterprise needs. For that reason, content services capabilities need to be able to expand. But that growth must be controlled. More importantly, it must be controllable. It must be systemic and strategic from a broad perspective, rather than a result of ad hoc decisions made at the department level — as has historically been the case. Often such decisions are made without thought about the current needs of other departments and without foresight about longer term needs across the institution.

The five keys, or “C’s”, to gaining control over IT sprawl and multiple systems are: Consolidate, Configure, Connect, Consider the Cloud, Convert. For each “C,” this paper will illuminate tell-tale signs that current approaches on your campus are limited and/or unsupportable over the long haul. Then, for each, we'll offer tips for moving forward with “fixes”: ways IT can manage and leverage content services for long-term enterprise support and expansion.

# 1

# CONSOLIDATE

# 1. Consolidate

## CURRENT STATE

Your campus is littered with one or more basic scan-store-retrieve systems (i.e., electronic filing cabinets) and, at best, rudimentary document routing workflows. As described above, these are scattered across campus department-by-department. Whether or not central IT even knows about all of these systems, it has limited bandwidth and therefore limited influence on how these systems are designed, used and maintained.

Moreover, it's quite likely that none of these systems is equipped to provide advanced capabilities when such needs arise, which they surely will. In fact, users may already be bumping their heads against a low ceiling of capabilities. From a user perspective, here are some common limitations for IT to investigate and confirm:

### Workflow

Business process workflows are limited to basic point-to-point document routing, with little or no capability for complex parallel or nonsequential processing. Or, if they are capable of doing those things, the initial build and any alterations require a heavy reliance on scripting and custom coding. A department IT supports asking to send notifications from one of its process workflows to a user queue in another department's workflow? Is one office asking to do advanced workflow call-outs to an external service? Those are backburner projects for your already overtaxed programming staff.

### Mobility

Functionality is not available on a variety of (or any) mobile devices — smart phones, iPads and the like. Or, if it is, the functionality is limited to basic document retrieval. Are users asking to execute workflow actions from mobile devices? Their request is likely going unanswered.

### Office applications

Users who are heads-down in applications such as MS Office, SharePoint and Outlook can't easily — if at all — interact with more extensive document management tools without leaving those application interfaces. Are users asking to execute workflow tasks while working in their Outlook inboxes? Do they hope to move project-related materials created in SharePoint to a permanent, secure archive yet retain links to those items within SharePoint? Their current level of convenience — and productivity — is clearly being compromised.

## THE FIX

This one's a no-brainer. Map a strategy and timetable for shutting down disparate, redundant and unnecessary systems and moving all departmental document storage and workflows to a single, central content services platform. If none of the current systems on campus can serve as that enterprise supporting platform (i.e., they do not have the capabilities, the scalability or the ease-of-configuration to handle the wide range of current and potential needs), see #5 below.



# 2

# CONFIGURE

## 2. Configure

### CURRENT STATE

This is where the real IT headaches begin. For the document management systems IT supports administratively, much of the setup and tweaking – especially in the area of workflow – requires a heavy reliance on scripting and custom coding. This kind of work either consumes massive amounts of IT resources or dollars to be spent on vendor services for subsequent departmental projects.

At a more fundamental level, the back-end administration tools are nowhere near intuitive enough for IT to even consider handing off administrative tasks to the functional areas. As a result, central IT is constantly burdened with handling requests for basic administration such as managing user privileges, adding document types or running system reports.

For those reasons, the thought of moving to the latest version of the document management software (if there is a new release) is an anxiety-inducing sleep depriver. Upgrades would require re-do's of the various custom-scripted workflows, workarounds and bolt-ons that have resulted from the system's design and configuration limitations. Because no one wants to risk months of downtime, delays and user outrage, a defeatist, “stale but stable” attitude reigns, and upgrades are avoided.

### THE FIX

Make sure the platform you land on (via consolidation or conversion) provides configurable system setup and administration. Look for point-and-click, drop-down-menu-based configuration tools. Undertake a particularly diligent investigation of how the system accommodates the design and setup of business process workflows. If you don't see a wide range of pre-built rules and actions for building user tasks and automated system work into processes, beware. If you don't see them, you can bet a heavy reliance on custom scripting is in your future.

Keep in mind that your ultimate goals should include not only reducing the setup and administration burden on central IT and removing the fear of upgrades, but also having the flexibility to hand off some administration responsibility. When appropriate, tweaking – if not actually building out –department- or process-specific workflows should be passed to functional area leads and business analysts.



# 3

# CONNECT

## 3. Connect

### CURRENT STATE

When it comes to integrations, users are, at best, able to retrieve documents directly from student information system (SIS) screens. Additionally, IT can set up screen-scrapes of data fields from SIS screens to populate indexing values for new documents entering the electronic repository. But, beyond that, the integrations are limited. Users can't do much, if anything, in terms of workflow execution without leaving the SIS interface. IT is similarly limited in that the tools aren't there to perform more sophisticated data exchanges between the two systems.

### THE FIX

You'll need more ways to connect systems - more points of integration. Sure, basic document and file retrieval from SIS screens is helpful, as is the ability to auto-index incoming documents with data exported from the SIS and transferred via a flat file or interim table. But, that won't be enough for some key administrative departments where high-volume processing, fast decision-making and ultra-responsive service are critical.

Users may want to have the SIS checklist automatically updated in real time as new documents enter the system or as users render decisions within a process workflow. Or, they may want the system to be automatically updated in real time when key data values change in the SIS. In the admissions or registrar's office, for instance, they may want line-level course data that has been automatically pulled from transfer transcripts to automatically populate the student record in the SIS - yes, in real time. Without process accelerators like these, staff performance may remain at less than full throttle.

So, to really grease the integration wheels, you'll want to be able to deliver those content services-to-SIS (and vice versa) exchanges not only in real time and in a bidirectional manner, but also at the database level, with guaranteed transaction completion. (Essentially, your goal is to avoid the transaction failures commonly associated with periodic batch updates.) And, most importantly, you'll again want a system that can handle those real-time, bidirectional, database-level exchanges without relying on scripting or custom coding to make them happen.

# 4

# CONSIDER THE CLOUD



# 4. Consider the Cloud

## CURRENT STATE

When it comes to deployment options, essentially you have none. The document imaging systems scattered around your campus are designed primarily (or only) for premises-based deployment on your campus – a campus already overloaded with applications to manage and administer. Even if they try to live in the cloud, the existing systems are distressingly unstable in that environment.

## THE FIX

Migrate your content services needs to a secure, proven and stable environment in the cloud. Be sure the provider offers the flexibility to move the system back on premises at a later date, if you so choose. Also confirm that the cloud-based solution can integrate with related premises-based applications, such as your SIS.

## The Benefits

Migrating to the cloud delivers numerous benefits to institutions, including:

- Increased mobility and ability to empower a remote or hybrid workforce
- Ability to shift attention from maintaining infrastructure to focusing more on staff and student needs
- Decreased costs for maintenance, support and storage as you no longer to keep documents on-premises

5

# CONVERT

# 5. Convert

## CURRENT STATE

Attempting to build out the various document imaging systems on your campus to do more than they were designed to handle ends up laying custom project after custom project at the feet of central IT. More often than not, those projects fail or don't happen at all. That's because IT resources aren't available for initial setup and long-term support and/or because the systems simply can't scale, even with repeated custom-programming efforts.

## THE FIX

It's time to cut bait and run from the existing system(s). Convert to a modern content services platform that provide enterprise-level breadth and depth of capability and expandability. Granted, both for functional areas and for IT, a move of this type may take some nerve. However, when significant, permanent roadblocks to manageable expansion are in the way, nerve is in order.

Plus, done appropriately, a conversion should not require lost sleep from anyone involved. Just be sure that the thoroughly vetted conversion process is characterized by diligent planning, measurable milestones and comprehensive input from cross-campus stakeholders at executive, managerial and operational levels in functional areas and in IT.



# CONCLUSION

In today's competitive and disruptive environment, many higher education institutions are overwhelmed by the sheer volume of documents and inbound information that needs to be processed. Multiple content management systems across departments — and the resulting IT sprawl — only make it harder to control the chaos, negatively impacting efficiencies and decision making. The key to gaining control is to transform the way your institution manages information across the enterprise with a single, modern enterprise content services platform that provides the scalable, configurable capabilities you need for sustainable growth and enhanced student experiences.



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