

The Future of Higher Education: Your Guide to Efficient Information Management

Solving your Institute's Security, Compliance, Information Management, and Efficiency Challenges with Intelligent Information Management



What to Expect from This Guide

This guide provides a detailed overview of how intelligent information management (IIM) technology can facilitate increased efficiency, security, compliance, and information visibility in higher education. Whether your college or university is looking to streamline admissions, automate financial operations, secure student, faculty, and staff information, or ensure a holistic flow of information throughout your institution, this guide will serve as the ideal starting point on your search for the perfect solution.



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State of Higher Education

As thriving centers of learning and discovery, colleges and universities serve as safe, enriching environments to mold free-thinking, creative individuals who can solve the pressing challenges of our world. Creating such an environment, though, requires checks, balances, and regulations that, while absolutely necessary, can slow efficiency when managed sub-optimally. Some of the most pressing challenges faced by higher education due to this predicament include:

✓ Information Agility

A focus article by AIIM found that more than 60% of colleges sign contracts, orders, and booking forms on paper, while more than 45% mainly scan documents for archival. This, coupled with the fact that most digitized information is siloed to different systems in specific departments, leads to a severe lack of information visibility across campus and lackluster administrative efficiency.

✓ Enrollment Efficiency

Every college strives to attract the most prospective students, but ensuring their qualifications while getting ahead with their acceptance offer can be a challenging balance to strike. Student information systems help mitigate these challenges, but vast swaths of high school transcripts, application forms, enrollment essays, and other documents may still lead to disorganization and inefficiency during the application process if managed incorrectly.

✓ A Security Epidemic

According to data from antivirus software provider MalwareBytes, cyber attacks from 2021 to 2022 rose 70% from 68 to 116 incidents. The majority of these attacks were through ransomware, shutting down entire systems or threatening to leak information if a ransom is not paid. As a result, bolstering cybersecurity and protecting student information has become a paramount priority for many colleges and universities.

✓ Tracking Compliance

Colleges must navigate countless legal regulations that ensure equity and adherence to best practices and provide opportunities to historically underrepresented groups. Navigating the complexities of laws like the G.I. Bill and those governing student aid can be an incredibly challenging experience, which is only exacerbated by a need for more access to the information needed to make case-by-case decisions.

Enter Intelligent Information Management

Intelligent information management solutions, or IIM solutions, control the flow of information throughout organizations and institutions. Using tools like information routing, secure, permission-based access, optical character recognition, index-based, and full-text search, these solutions enhance efficiency and provide needed information visibility without sacrificing security or best practices.

Benefits of IIM in Higher Education



More Efficient Processes

Intelligent information management can simplify tasks in departments ranging from admissions to finance to human resources, facilities, and academics through controlled, convenient information access and the automation of monotonous administrative processes.



Hassle-Free Compliance

By ensuring case information is ready and available to determine eligible opportunities while simultaneously retaining mandatory information that may be called upon years later, the intricate web of compliance in higher education can be much more straightforward.



Enhanced Security

By hosting information in an encrypted network bound to security best practices, colleges and universities can rest assured that private information is safe and protected while still being accessible by those permitted.



A Better Student Experience

With increased efficiency across departments and faster response times to student inquiries, your students will have the tools and resources to stress less and stay focused on their academics.



Finding The Right Solution

Intelligent information management systems are used across various industries and departments and are never a one-size-fits-all solution. Despite this, higher education institutions frequently share several needs that a solution with these qualities can meet.

✓ Versatile in Use

A versatile solution can be implemented across a wide range of departments immediately or over time as your institution's needs expand. Look for providers with experience in the key areas you are looking to implement while still having the capacity to expand to additional departments when needed.

✓ Scalable for Future Expansion

The ability to easily add additional storage space, processing power, workflows, and users will be instrumental in ensuring departments currently using IIM can continue to scale their workload while also paving the way for use in future departments.

✓ Highly Secure

With ransomware attacks rising in higher education, a secure solution will protect sensitive data and prevent legal and reputational repercussions. Look for solutions with encrypted servers, security compliance certifications, and investigative tools like audit trails.

✓ Capable of Maintaining Privacy

Higher education prides itself on creating a safe environment and maintaining student privacy is integral to that environment. User and account-based access permissions and oversight on any access or changes to records ensure that the right people can access the right information at the right times.



Ensuring Cyber Security

Ensuring information security on your campus can be incredibly simple with the right solution. In fact, outsourcing the technical aspects of this security to a trusted, cloud-hosted provider allows both your institution and the provider to specialize in what they do best. When looking for a secure solution, make sure to check for:



Login Requirements

Password length and character requirements, two-factor authentication, and the ability to log in through secure, third-party platforms all reduce the risk of compromised individual user accounts.



Compliance Certifications

Solution hosts with certifications for System and Organizational Controls (SOC) validate that they have implemented the proper controls and best practices to mitigate security risks and remediate potential breaches. Hosts with HIPAA certifications must also implement reasonable security measures to safeguard the information they protect.



Data Encryption

Encrypting data while it is stored and transmitted ensures that, if intercepted, it can't be deciphered without access to an authorized account for your solution.



Audit Trails

If a user account is compromised, audit trails grant visibility into all actions taken by that account to minimize damage and facilitate a thorough investigation.

Simplifying Compliance

Regulatory compliance comes in many forms for colleges and universities, and intelligent information management can assist several of them. Whether determining eligibility for grants, accommodations, and other equity opportunities, meeting legal privacy standards, or adhering to retention policies, intelligent information management simplifies across numerous departments.

✓ Information Access

Regulations that ensure student equity and provide opportunities, such as the G.I. Bill and the Americans with Disabilities Act, can be challenging enough to navigate without access to specific student information. With IIM solutions, documentation on student qualifications can be easily searched for fast responses to these requests and applications.

✓ Privacy Compliance

Sensitive information such as personal, financial, and health information is only accessible by law to those with designated roles. Assigning access by document type to specific users and accounts and taking advantage of features like redactions and audit trails ensures adherence to federal and local privacy standards.

✓ Retention Compliance

Documents ranging from student records to financial and building records have mandatory retention periods spanning years. Intelligent information management solutions archive these documents for easy retrieval and can even automatically notify staff or delete the records once the retention period expires.



Intelligent Information Management By Department

Accelerating Admissions

Colleges and universities looking to attract the most promising prospective students must be able to thoroughly vet student qualifications while offering admission ahead of the competition. This can be an incredibly difficult task with mountains of information to sift through, including:

- A high school transcript
- Standardized test scores
- Letters of recommendation
- A personal statement or essay

A modern IIM solution can streamline this process and help efficiently qualify prospective students. Capture student application information through a web form, collect recommendation letters, personal essays, and other documents in the form of attachments through AI and machine learning powered OCR. Create a complete digitally reviewable student portfolio effortlessly and easily route these documents to the correct repositories so your administration department can make informed decisions in record time.

Automation in Your Finance Department

To maintain an environment for quality education, college budgets include numerous purchases and expenses that must be paid off and justified in financial reports. Having access to the information needed to pay and be paid in a timely fashion and reporting your institution's finances to regulators and trustees can improve cash flow, enhance vendor relationships, simplify financial audits, and gain the backing of donors and investors.

Accounts Payable

Higher education institutions manage numerous vendors for goods and services such as educational technology, food and beverages, building maintenance and repair, and more. These vendors are frequently paid on credit, requiring efficient management of invoices and timely payments. By automating the accounts payable process, educational institutions can reduce errors, build better relationships with vendors, reduce operational costs, and take advantage of early payment discounts.

Steps to Effective Accounts Payable Automation

- Invoices are scanned, and data is extracted using OCR
- Extracted data is validated for accuracy and quality
- Invoices are routed to approvers, where they can be confirmed or denied
- A payable invoice is created in the ERP or accounting system of your choice
- The invoice is archived in an ECM system to meet regulatory standards

✓ Accounts Receivable

Higher education also provides many campus services and programs on credit, often requiring manual data entry into financial management systems, follow-up reminders for payment collection, and organized management of invoices and purchase orders. These time-consuming and error-prone activities can be drastically improved with intelligent information management by:

- Capturing purchase order and invoice data to be shared with a financial system
- Prompting automatic payment reminders based on the information within these documents
- Providing convenient access to transaction records to answer incoming questions about payment and services

✓ Financial Audits

U.S. federal law requires that colleges and universities provide certain forms and reports to be filed annually.

For many, this includes an audited financial statement that provides documented evidence to an independent auditor as backup. In addition, the Internal Revenue Service Form 990 and an Integrated Postsecondary Education Data System report may be required, which includes detailed information regarding an institution's fiscal and operational health. A well-managed Information Management system makes the audit process fast and painless, as evidence can be quickly provided upon request without chasing a long paper trail.



Streamlining Human Resources

Colleges and universities employ workers of all kinds, from vendors and contractors to faculty and staff. As such, these institutions must manage information related to their employment, which, if done incorrectly, can result in inefficiencies and compliance violations.

✓ HR Onboarding

Time-consuming, confusing, and typically requiring follow-ups from HR staff, onboarding forms are a necessary but monotonous part of starting a new job. Implementing an IIM solution with web forms grants HR staff visibility into onboarding completion. It simplifies these forms with guided workflow-based questions that show only the fields form-fillers need. Fields repeated from previous forms like name, address, and phone number can even be remembered and automatically filled, while totals and tax calculations on forms like the W-4 and W-9 can also be automated. The result is a fast and painless onboarding experience.

✓ Managing HR Documents

Human resources departments are responsible for vast amounts of documentation, including:

- Hiring notes
- Payroll information sheets
- Direct deposit authorization forms
- Employee handbook contracts
- Tax forms
- Employment authorization forms
- Background authorization forms

Retaining employee hiring and payment information is crucial to protecting your institution from potential litigation. Failure to produce forms like the I9 employment verification form or the W-4 and W-9 tax forms can result in steep fines of thousands of dollars per violation. Intelligent information management solutions allow your institution to effortlessly archive and retrieve these records when called on, protecting you from financial and legal liability.



Simplifying Legal

Colleges and universities must navigate the legal landscape to adhere to agreements and avoid and resolve disputes. This involves excessive amounts of information, ranging from contracts and records to communications and evidence, that can only be managed with a system in place.

✓ Contract Management

Contracts, including vendor agreements, property acquisitions, union contracts, and more, often have hectic sign-off and approval processes and multiple versions stored sporadically, creating chaos and confusion when term disputes arise.

The ability to search these records in full-text and control which versions of the documents are displayed by default can settle these disputes with clear, convenient information access. Workflows for these contracts can streamline signing and approval and notify staff of upcoming expiring terms.

✓ Litigation

Litigation involves countless records ranging from notifications, filings, and correspondences to transcripts, briefs, and memorandums. It's no wonder litigators often face accessibility and storage issues for the documentation involved. Intelligent information management solutions can capture the full contents of all of these records, facilitating easy searches for the records needed. And being stored digitally, litigators can forgo offsite storage for cost savings and convenience.

✓ E-Discovery

All organizations try their best to avoid legal disputes, but should the need arise, being able to produce the records necessary for the case and scan their contents for relevant information can ensure a swift resolution. AI-assisted OCR can capture legal documents and search them in full, including the machine-printed body and handwritten information within the margins. Even documents not typically maintained in your IIM solution, such as email files, can be captured and searched.

Reimagine Academia

Higher education brings bright minds together to make impactful discoveries and mold the next generation of thinkers. Often, though, necessary but monotonous administrative tasks can slow this progress and create inefficiencies. But with proper information management and automation tools, your institution can carry out its mission disruption-free.

✓ Organize Research

Effortlessly manage proposal templates, grant documentation, and research contracts while complying with federal regulations.

✓ Centralize Academics

Manage faculty records, store and route reprints for academic peer review articles, and centrally store, secure, and track student grades.

More Efficient Campus Life

Ensuring students and faculty have the proper facilities and services for success while feeling safe in their environment requires fast, secure access to information. Intelligent information management solutions control access to key records, facilitating effortless retrieval for the departments that rely on them while maintaining privacy compliance and best practices.

✓ Streamline Facilities

Organize building plans and schematics, provide remote access to these documents for tradespeople, and fully automate the project approval processes with information routing.

✓ Enhance Public Safety

Manage and distribute case knowledge, control access to reports and evidentiary records, and deliver building plans, HAZMAT reports, and other intelligence to first responders.

✓ Simplify Student Services

Guarantee student record safety, organize test results, and accelerate housing assignments with easy access to information.



User Adoption

Change is conflicting for most people, and it can be difficult for people who have worked one way for multiple decades to adopt a new approach. Despite this, there are a few key ways to help your campus embrace change and take advantage of the newfound benefits.

- ✓ **Help your Staff Feel Vested:** Involve them in the solution selection process. Hear their concerns and input and explain the factors that led to the final decision. This will help ease concerns about the suddenness of the change and show them that you are working with their best interests in mind.
- ✓ **Assign Someone to Manage the Transition:** A primary point of contact for any questions or concerns can help ensure a smooth transition and act as a liaison between your staff and your solution provider for any additional assistance.
- ✓ **Provide Tools for Success:** Solution education, customer support, and self-help resources such as a knowledge base all ensure your solution kicks off without a hitch and your faculty and staff can hit the ground running.



Success Story

Intelligent Information Management in Action

Ohio State University Streamlines Student Records with Square 9

The Ohio State University College of Dentistry, the third largest public dental school in the United States, sunk its teeth into intelligent information management to help manage student records and maintain privacy compliance with FERPA. According to Michael Murray, Assistant Director of Academic Affairs, “Before GlobalSearch, our biggest problem was that our hard copy files could be misfiled, misplaced, or lost, and sharing files was problematic.”

This sharing problem stemmed from the fact that opening original files to many people resulted in returned files with mistakenly missing information. In addition to these privacy concerns, large amounts of time were lost each graduation year due to voluminous student records that needed to be manually archived.

After implementing a solution from Square 9, the college was able to successfully save time on archival while enhancing privacy compliance. By lifting crucial information from these documents and storing them in a searchable repository with secure, user-based permissions, student records were highly accessible to staff, while still being safeguarded from accidental or purposeful privacy breaches.



“GlobalSearch has streamlined our operations considerably, helping us to do our jobs much better and faster—for less money. All things considered, I estimate that our overall efficiency gain with GlobalSearch is in the neighborhood of 25 to 30 percent. GlobalSearch has given us greater control over our records and is helping us comply with FERPA. And, for the first time, we have a reliable disaster recovery system.”

- Michael Murray

Assistant Director of Academic Affairs



Common IIM Terms Glossary

✓ Intelligent Information Management (IIM)

A software solution that facilitates secure and compliant access to information while providing opportunities for automation.

✓ Optical Character Recognition (OCR)

A technology that lifts information from image files such as PDFs, JPEGs, and scanned images and converts it into computer-legible text.

✓ Information Routing

An automation tool in intelligent information management solutions that automatically directs information to a person or group, usually after a specific trigger.

✓ Index-Based Searching

A form of text-based search that uses index fields assigned to the archived items to return the desired results.

✓ Full-Text Searching

A form of text-based search that uses the entire body of text within the archived items to return the desired results.





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Why Square 9

Square 9 Softworks is a generative AI-powered platform that removes the frustration of extracting data from documents, forms, and all external sources, so you can harness the full power of your information. Release your team from repetitive tasks while your work flows freely in areas like accounts payable, order processing, onboarding, contract management, and more. The Square 9 platform captures your unstructured content, transforms it into clean, searchable data, and securely shares it across your organization to accelerate your decisions and actions.

Contact Square 9 for a no-obligation discovery session and see how transforming your organization can lead to a more efficient, secure, and informed agency.

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