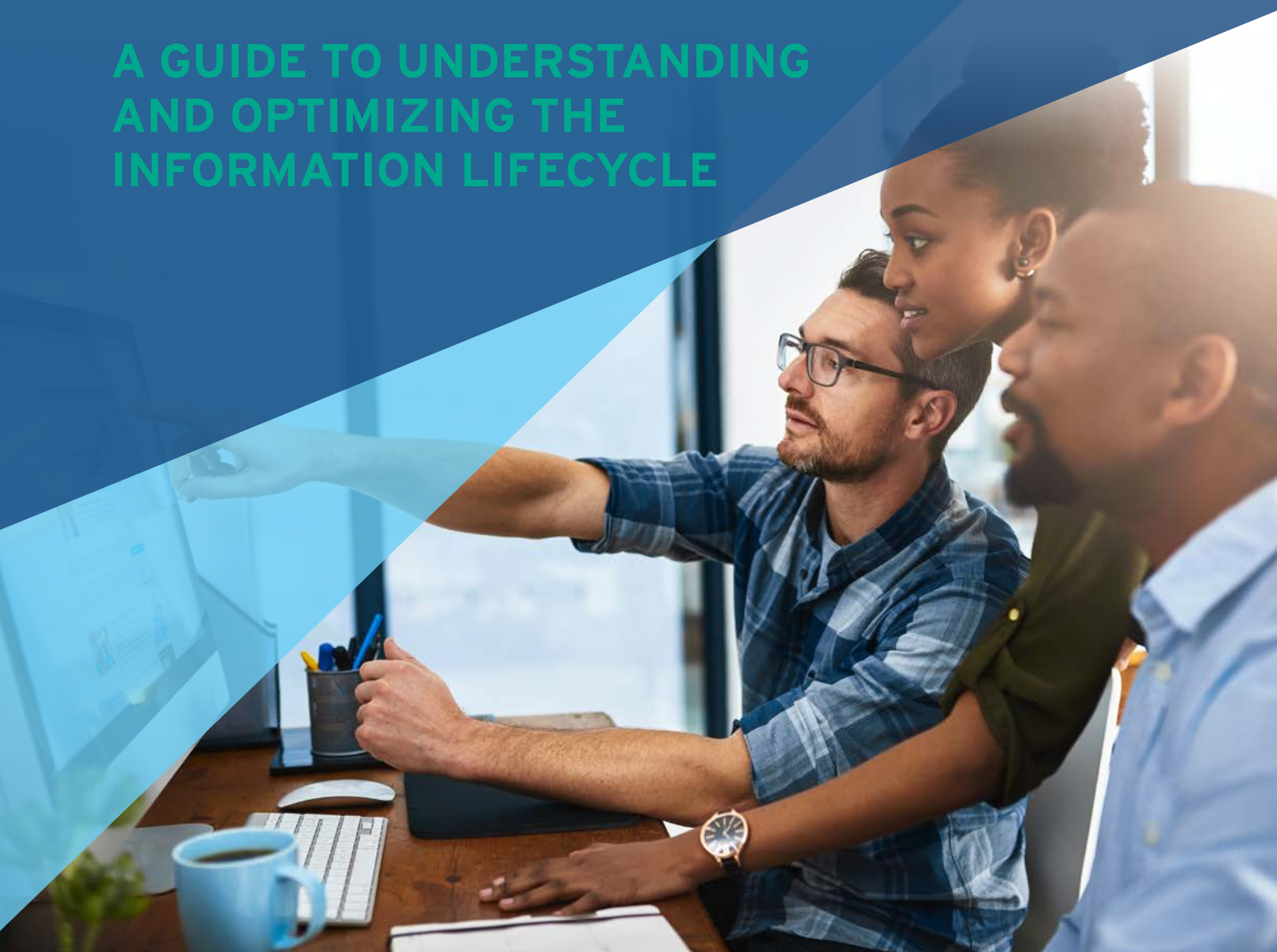
IRON MOUNTAIN®

WHAT EVERY SMALL BUSINESS SHOULD KNOW ABOUT MANAGING INFORMATION

A GUIDE TO UNDERSTANDING AND OPTIMIZING THE INFORMATION LIFECYCLE



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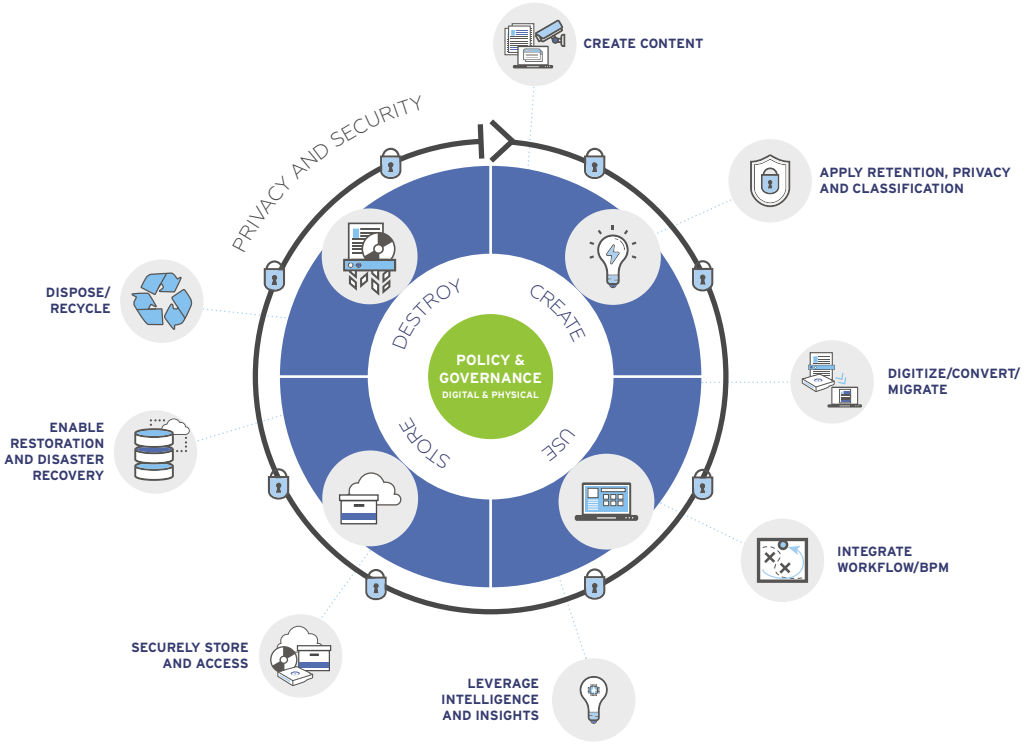
WHAT IS INFORMATION LIFECYCLE MANAGEMENT

LIKE ANY COMMODITY, INFORMATION HAS A NATURAL LIFECYCLE FROM WHEN IT IS CREATED OR ACQUIRED, THROUGH ITS USE AND MANAGEMENT, AND ULTIMATELY TO WHEN ITS VALUE IS SO DIMINISHED THAT IT SHOULD BE DESTROYED.



In a nutshell, information lifecycle management (ILM) is all about what you should be doing at each step of this process – making the right decisions to keep the right information in the right place for the right amount of time.

The ultimate goal of ILM is to help you craft a plan for classifying and retaining content. This plan helps determine how information is managed, stored, retrieved and maintained and governs disposition and destruction or permanent retention. The plan will help you meet the goal of getting the greatest value, at the lowest cost, all while meeting legal and regulatory obligations and operational needs.

Adopting ILM principles in your business will help ensure that information is accessible, protected and put to good use, and that information with little or no value is safely and defensively destroyed.

This graphic provides a simplified view of ILM showing its four stages – create, use, store, destroy – as well as the key steps/impacts this has for the following:

- Applying a risk/value metric
- Classifying and retaining content
- Workflows and processes
- Digitization
- Data access
- Business continuity and sustainability

APPLYING A RISK/VALUE METRIC

THE CHALLENGES OF MANAGING INFORMATION ARE DIFFERENT DEPENDING ON THE INDUSTRY IN WHICH THE COMPANY OPERATES AND WHETHER IT'S PUBLICLY TRADED OR PRIVATELY OWNED. A FINANCIAL SERVICES COMPANY HAS DIFFERENT NEEDS AND LEGAL REQUIREMENTS THAN A CONSTRUCTION COMPANY OR A RETAILER.

But while the challenges are different, all companies share this reality: nearly every business today is managing more information than ever before. And the amount is increasing at a much faster rate than even the boldest predictions.

You're probably devoting more office space to storing records, buying more hard drives (and perhaps worrying if they might fail) and/or signing up for growing amounts of cloud storage.

Having the right amount of storage space is the most common metric businesses apply when thinking about information management. But it shouldn't be the only one. You also need to factor in value and risk, which includes:

- The value of the information you are holding
- The risk you incur by doing so (or not doing so)

That value/risk evaluation is at the core of the ILM approach. Not all information has the same value:

- Some information is so essential to your business that if it was suddenly lost or became unavailable, you might not be able to function. This may include information related to accounting, orders and inventory, personnel, payroll, customers and business licenses.
- Some information has value because when compared over time it provides important insights. For example, information from invoices can help organizations identify projects that were the most profitable at the end of each year.
- Some information has value because someone outside the organization believes it has value, such as regulatory agencies, the IRS and lending institutions and investors.
- Records that contain personally identifiable information (PII) are an example of information that if not handled correctly could lead to fines, costly litigation and brand damage.

ILM provides you with a framework for classifying your information – to define the value of retaining it and the risks associated with both storing and/or disposing of it prematurely or incorrectly.

Assigning risk and value to information essentially comes down to a records audit. Look at the records you maintain – accounting, corporate documents, customer records, personnel files, tax records and so on – and ask the following questions:

What's the value of maintaining all of this information?

- Is it essential to running your business?
- Do you need it for customer service?
- Do you need it for tax, regulatory or legal compliance?

What risks do you incur?

- What will be the impact on your business if you store it incorrectly and it's not available when needed?
- What would happen if it were lost irretrievably?
- What would be the impact if you became the victim of data theft, and private information about your business, your customers and/or your employees was stolen digitally or taken from paper records?
- What are the financial implications of these risks? What damage would they inflict on operations and your brand?

Answering these kinds of questions will help you address practical, everyday challenges such as these:

- Who gets access to what information? Every employee? A select few? Outside contractors?
- Do we allow it to be copied and stored anywhere or to be accessible any time?
- How long do we keep it?
- Should it be stored to be easily and quickly accessible or archived in a way that keeps it secure but less easily accessible?

CLASSIFYING AND RETAINING CONTENT

ONCE INFORMATION IS CLASSIFIED, IT'S MUCH MORE MANAGEABLE TO APPLY POLICIES AND PRACTICES TO MIGRATE AND STORE IT APPROPRIATELY.

Information can be classified based on the characteristics of individual records, the software that manages the information or the person generating/using the information. Other options are to organize your data by department or process.

Let's look at the pros and cons of these different approaches:

MANAGE BY RECORD

A typical first step is to classify by record type, such as customer accounts, personnel files, tax documents and so on. This is often the default approach, and it can be successful when there are a limited number of different types of records. However, many organizations start down this path and find the process overwhelming because they simply have too many different kinds of records.

MANAGE BY SYSTEM

A popular and effective strategy is to classify records by the software in which they are managed. You may opt to keep all the information related to an online billing system, for instance, for the longest period of time required by the IRS. But the billing software manages information from lots of different record types, and because the rules you set up may not be record specific, records may end up being kept for longer than necessary.

MANAGE BY BUSINESS PROCESS

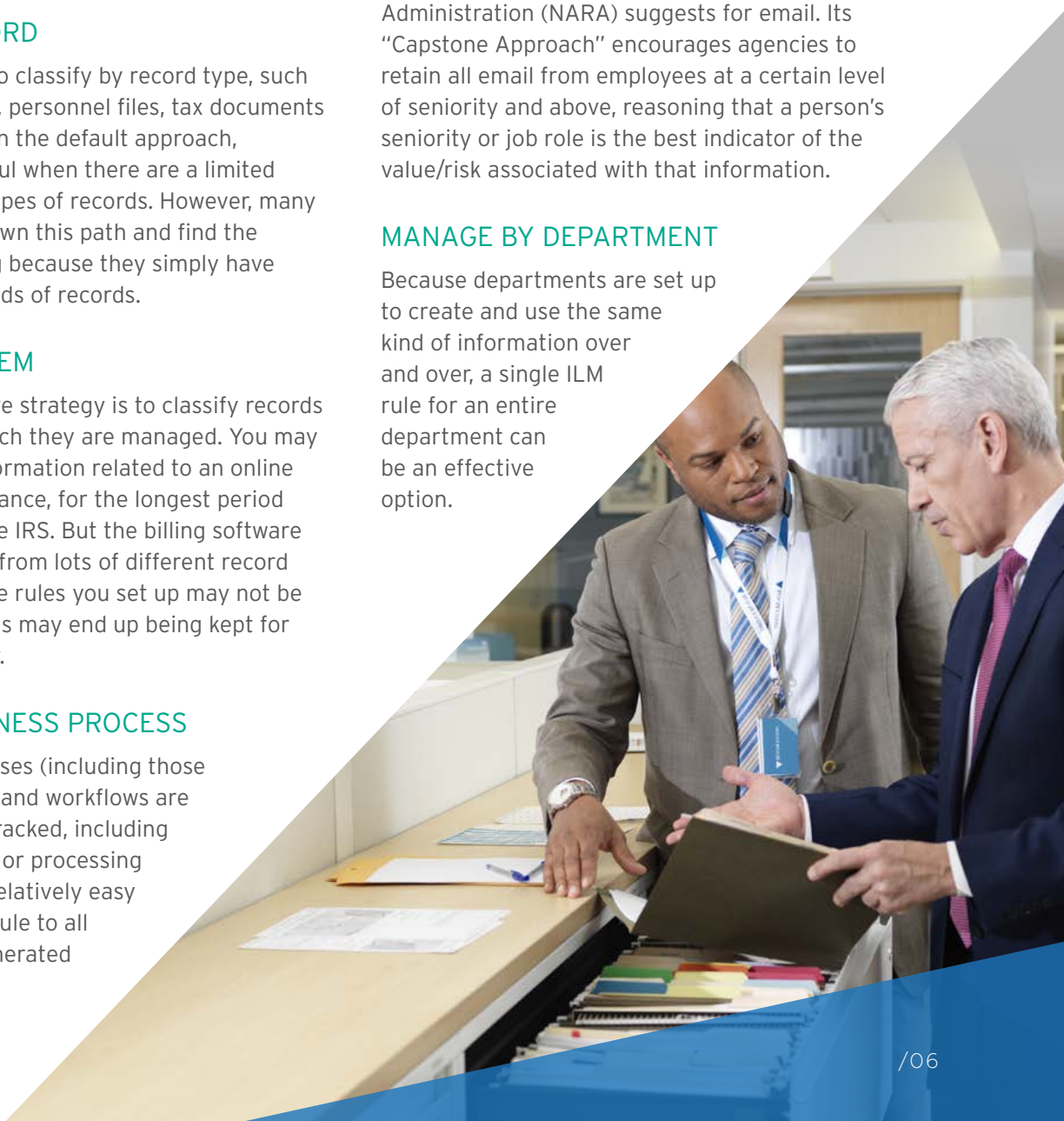
Some business processes (including those managed by systems) and workflows are easily identified and tracked, including hiring new employees or processing payments. It may be relatively easy to apply a single ILM rule to all of the information generated specific to these business processes. (We take a further look at business processes/workflows in the next section of this guide.)

MANAGE BY PERSON OR ROLE

For some kinds of information, it may make sense to manage by person. This is the approach that the United States National Archives and Records Administration (NARA) suggests for email. Its "Capstone Approach" encourages agencies to retain all email from employees at a certain level of seniority and above, reasoning that a person's seniority or job role is the best indicator of the value/risk associated with that information.

MANAGE BY DEPARTMENT

Because departments are set up to create and use the same kind of information over and over, a single ILM rule for an entire department can be an effective option.



WORKFLOWS AND PROCESSES

TODAY, MANY COMPANIES ARE TRANSFORMING THEIR WORKPLACES INTO "DIGITAL WORKPLACES." THEY ARE REVAMPING PROCESSES AND WORKFLOWS SUCH AS ACCOUNTING, INVENTORY AND ORDER MANAGEMENT, CUSTOMER SERVICE, PROJECT MANAGEMENT AND MORE. ILM PLAYS AN ESSENTIAL ROLE IN SUPPORTING THESE EFFORTS.

You can see this in action by looking at the processes associated with invoicing:

- **Extracting value** – invoices typically contain a wealth of information – the who, what, when and where of a transaction as well as the cost, terms, taxes and so on – all or some of which can be relevant for many different departments. Information from the invoice helps an organization get paid on time and ensure cash flow, which facilitates revenue forecasting, budgeting and ensures accurate financial statements and reporting.
- **Compliance** – an authoritative copy of an invoice must be kept for all relevant tax authorities.
- **Customer service** – an invoice, and the information it contains, can be essential for customer service, that is, figuring out what was purchased, the terms, credit issues, and so on.
- **Marketing and sales** – data in invoices can be used to help monitor sales patterns, upsell existing customers and get new clients.
- **Legal** – invoices can play an essential role in the event that a transaction ends up in litigation.
- **Privacy** – invoices often contain sensitive personal and financial information that must be protected in accordance with privacy and confidentiality laws and regulations.
- **Contracts and agreements** – clients may require signed agreements stating that they have the right to inspect records for many years and/or view an invoice for proof of compliance or accuracy of a transaction.

Because invoices play such a central role in most businesses, it's easy for them to be managed inconsistently and end up being stored in multiple places and formats.

Here is a look at how invoices are managed with and without ILM and how proper implementation of ILM can help streamline it all – minimizing duplication of the invoice and reducing the overall risk to the company.

	WITHOUT ILM	WITH ILM
Value/Risk Assessment	None	Through the ILM process, the company assesses the value/risk that invoices have for the organization and determines that the key elements are (1) being able to quickly make payments and resolve customer service issues, (2) complying with relevant tax authorities and (3) understanding profitability and forecasting revenue.
Retention	The organization has no systematic approach to records retention so by default follows a records-based approach in which invoices are kept indefinitely and multiple copies are generated.	Based on an ILM-based assessment, the organization chooses to manage invoices within the accounting system. A policy is established to retain invoices for six years. As invoices age (and become less valuable) they are moved to lower-cost storage options.
Creation	A copy of the invoice is emailed to the client through the accounting system (COPY #2–client's inbox).	A copy of the invoice is emailed to the client through the accounting system (COPY #2–client's inbox). In addition, the IT department (or built-in functionality in the accounting software) allows for an integrated but more personalized email with the invoice. The email also suggests that the client print the invoice if they prefer or require a paper copy.
	The invoice also goes to the employee in charge of the invoice (COPY #3), who sends an instant message to inform the client of the email.	The employee in charge of the invoice is provided with a copy of the invoice (COPY #3) and notified that the invoice has been sent.
	Because the automated emails from the accounting system seem too impersonal, the employee handling the invoice exports a PDF copy of the invoice and emails it to the client contact with a personal note resulting in three more copies: › COPY #4 – the employee's downloads folder › COPY #5 – the employee's sent items › COPY #6 – the client's inbox	N/A
	Many clients also require paper invoices, so a copy of the invoice is printed and mailed to the client (COPY #7), and the employee places another paper copy in the company's paper files (COPY #8).	N/A
Destroy	Invoices are not destroyed – they are stored indefinitely.	Invoices are destroyed after six years.

A QUICK GUIDE TO RECORDS RETENTION

RETENTION REQUIREMENTS SPECIFYING THE AMOUNT OF TIME INFORMATION MUST BE KEPT VARY FROM RECORD TO RECORD. TAX AND REGULATORY COMPLIANCE OFTEN REQUIRE SPECIFIC RETENTION TIMEFRAMES FOR CERTAIN RECORDS. AND IF THERE IS A LEGAL DISPUTE, RECORDS MUST BE KEPT UNTIL AFTER THE LEGAL MATTER IS RESOLVED, EVEN IF THE INFORMATION COULD HAVE ORDINARILY BEEN DISPOSED OF.

AND IT'S NOT JUST THE LENGTH OF TIME BUT HOW THE RECORD IS RETAINED:

Format – For legal and tax purposes, a record such as an invoice should be retained in a format that is as close as possible to the way it looked when it was generated.

Security – If the record contains sensitive or private information – personal, financial and intellectual property information – how it is stored, protected and disposed of needs to be reflected in the policy.

For small and mid-sized companies, Iron Mountain addresses many records retention issues through the solutions we provide for offsite records storage, digitization and shredding. We also encourage all our clients to consult with their attorneys, accountants and other professionals in making decisions on storing or disposing of any files.

HERE'S A QUICK LOOK AT THREE PRIMARY CATEGORIES OF RECORDS:

Customer records – Well-maintained customer records are invaluable to your growth. Keep them as long as you can, with up-to-date information, but no longer than you have the legal right to do so. There are regulations governing data privacy, and not complying with them carries financial and reputation risk.

Tax documents – Federal, state, sales and local tax regulations are complex. For that reason, most experts advise retaining everything for seven years in case of audits. Important documents to keep for this recommended period of time include the following:

- Gross receipts, including deposit information, invoices and credit card statements
- Payroll
- Proof of purchase for assets
- Expenses, including account statements and credit card receipts
- Employee receipts for expenses related to meals, travel and entertainment

Personnel records – US federal law specifies how long each of the following document types must be retained ranging from one year to three years after an employee's termination date.

- Hiring documents
- Performance reviews
- Training records
- Medical insurance records
- Termination letters
- Employee income data
- Social Security and Medicare tax files

DIGITIZATION

TO MAKE THE MOST OF ILM, YOU WILL WANT TO START TRANSITIONING PAPER RECORDS TO DIGITAL.

The value extends well beyond organizing all your data. Some level of digitization is essential to streamline workflows and processes, enable effective collaboration among remote employees and to free up valuable office space necessary for today's socially distant office configurations.

There's no one single way to begin digitization. It all depends on your needs and the level of investment you are prepared to make. The key is finding the route to digitization that's right for you.

HERE ARE THREE OPTIONS THAT CLIENTS OF IRON MOUNTAIN TYPICALLY CONSIDER:

Backfile Conversion – The logical, first option for any digitization strategy is a Backfile Conversion – a complete scan of all your existing documents. This is important for any digital workplace initiatives. Although cost-effective in the long run, scanning is labor intensive so the up-front costs can be significant.

One way to make the costs more manageable is to break the project down into bite-size chunks, categorizing and prioritizing your files into smaller conversion projects – for instance, by department – and converting when convenient.

Image on Demand – In situations where complete conversion is not a practical choice, another option is Image on Demand: digitizing individual documents on an as-needed basis and paying as you go. Although only a partial approach, this does reduce the initial capital outlay and gets your digitization effort underway.

Day Forward Digitization – A third option – Day Forward Digitization – involves scanning and indexing paper documents as they are produced or received in the normal course of business. Because so many documents come in through the mail, this is also referred to as Digital Mailroom. This is typically done in conjunction with Backfile or Image on Demand solutions but can also be performed separately should converting legacy documents not be a top priority.

MAKING DIGITIZATION EASY

Iron Mountain digitization services – such as Backfile, Image on Demand and Day Forward – are among our most popular offerings for supporting clients that undertake digital workplace initiatives. We work with you to design a scanning strategy that meets your needs and budget.

Your documents are delivered, shipped or picked up via secure transportation and brought to our imaging facility where our specialists prepare and convert them – ensuring that your indexing, classification and quality assurance requirements are met. Once scanned, we deliver your images via secure media for you to store and manage. Or you can opt to have your images securely hosted by Iron Mountain with 24/7 web-based access to your critical information at any time. All clients have access to the Iron Mountain Connect™ portal for placing orders, running activity reports and accessing inventory data – anytime from anywhere. The Iron Mountain® Mobile App™ helps you stay up to date with your orders, including Image on Demand, using your smartphone or tablet.

DATA ACCESS

AT THE CORE OF ILM IS MAKING IMPORTANT INFORMATION EASILY ACCESSIBLE.

If you are regularly consulting a file, you don't want to have to go through an elaborate and time-consuming search. To make it quickly accessible – as well as properly back it up – you may want to rely on cloud storage.

Object storage in the cloud – so-called hot storage, where data is stored in the cloud as individual objects (vs. traditional file or block structures) – has grown increasingly popular as the primary option for storage of frequently used data, such as current financial records and customer data. It offers both high scalability and sharing capabilities. But it can quickly get costly, especially with the kind of storage growth we will see in the coming years.

Realistically, most organizations need quick access to no more than 10% of their data, experts say. Also, even critically important data becomes less important over time. For example, after current financial data has aged beyond the time needed for financial reporting and compliance, it may be possible to safely move it off-line.

For data not needed on a regular basis, backing it up to off-line, air-gapped storage that isn't connected to the internet is a practical, cost-effective option that reduces the risk of data loss and keeps important information available.

Using the ILM process to take a close look at what data is needed online can drive significant savings. For example, on the major cloud services, the cost of quickly accessible object storage can be more than five times that of archival storage and more than 20 times pricier than deep archival storage.

Even bigger are the fees (sometimes called egress fees) providers charge customers to take data out of their cloud accounts, which can run between 8 and 12 cents per gigabyte. That means downloading 10 terabytes of data can cost about the same as four months of cloud storage.

Whereas today's digital workplace might seem to thrive on instant access to information, when organizations do a thorough analysis of their actual storage needs, they find that they can function just fine and save considerably by moving to less expensive cold storage options, such as backup tapes where data is kept off-line in an inactive state until needed.

A TIERED APPROACH TO DATA STORAGE

To meet the storage needs of the widest range of businesses and organizations, Iron Mountain offers tiers of hot and cold storage that also integrate with the offerings of other cloud providers.

One of our primary offerings is secure online storage (SOS) service – an ultra-low-cost storage service that combines the convenience of the cloud with the cost advantages of archival tape. SOS works seamlessly with both Iron Mountain's cloud-based object storage as well as the growing number of S3-compatible backup services (i.e., services based on Amazon Web Services Simple Storage Service). Choose the cloud service that meets your needs and rely on Iron Mountain to migrate that data to off-site tape storage in one of our secure facilities while still making sure it's readily accessible whenever retrieval is needed. There are no egress fees to access the data, and you can retrieve most files within 24 hours. The service eliminates the burden on IT staff to perform time-consuming downloads or backup tape restoration.

BUSINESS CONTINUITY AND SUSTAINABILITY

TAKING A CAREFUL APPROACH TO MANAGING YOUR INFORMATION CAN HAVE A BIG IMPACT ON YOUR ABILITY TO RECOVER IN THE EVENT OF A DISASTER, ENSURE BUSINESS CONTINUITY AND ACHIEVE ENVIRONMENTALLY SUSTAINABLE BUSINESS OPERATIONS.

BUSINESS CONTINUITY

Business continuity has been synonymous with disaster recovery and office continuity. The focus has been on keeping the business going if a fire, flood or a pandemic made it impossible for people to get to the physical workplace, or damaged or destroyed records, threatening the ability to conduct business as usual.

Now, how to ensure business resiliency and critical document access is not only about ensuring continuous office operations but also to accommodate a growing desire by today's workforces to regularly work remotely.

Implementing ILM practices helps address the new realities of business continuity in these ways:

- Making effective use of the right online and off-line data storage options ensuring that critically needed information is quickly available, while cost-effectively preserving information that may not be immediately needed but is essential for long-term survival.
- Planning for destruction and working out schedules for what to keep, how long to keep it and how to destroy records when they are no longer needed establishes strong records management discipline that is essential to mitigating the effects of disasters and controlling costs.

SUSTAINABILITY

Cloud computing, artificial intelligence (AI), the Internet of Things (IoT) and more are helping even small businesses achieve environmental and sustainability goals in a number of ways:

- Cloud computing supports remote working strategies that reduce commuting
- IoT devices, coupled with AI technology to "make decisions" on temperature or lighting, can help make buildings green and more energy efficient
- Sensors and infrared cameras can proactively detect problems such as leaks of methane gas

However, these and other initiatives can lead to the inaccurate perception that today's digital workplace is inherently greener. It's not. The digital workplace has its own environmental footprint, ranging from the increased energy consumption from cloud data centers, to the ongoing consumption and disposal of everything from paper to old IT assets.

In effect, the challenge of being more sustainable doesn't simply disappear as organizations digitally transform; rather, it evolves.

Implementing an ILM approach is an opportunity to become more conscious of these impacts and implement sustainable practices, such as:

- Reducing paper consumption to avoid printing documents that can easily be used digitally
- Practicing responsible shredding and secure IT asset disposition
- Destroying, recycling or repurposing IT equipment with reliable, environmentally friendly and secure services
- Establishing a defensible, documented and repeatable process to prepare, transport and destroy hard drives, backup tapes and other e-waste
- Working with partners (such as Iron Mountain) that comply with all environmental and data privacy laws and regulations

YOUR JOURNEY TO THE DIGITAL WORKPLACE

WHETHER YOU ARE GETTING STARTED WITH ILM OR BRINGING YOUR STRATEGY IN LINE WITH THE REALITIES OF YOUR BUSINESS TODAY, RELY ON IRON MOUNTAIN'S ARRAY OF STORAGE, DIGITIZATION, SHREDDING AND ASSET DISPOSITION SERVICES TO HELP YOU SAFELY MANAGE AND PROTECT YOUR PHYSICAL AND DIGITAL RESOURCES.

READY TO GET STARTED? WANT A FREE QUOTE?
GO TO IRONMOUNTAIN.COM/CONTACT OR CALL 1.866.493.7394