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YOUR SMALL BUSINESS DIGITAL
TRANSFORMATION JOURNEY:
A STEP-BY-STEP GUIDE

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Let's be honest. There's a power struggle between "business as usual" and the undeniable force that is modern digitization. That conflict can be palpable in a small business, where connection to the company often runs deep, but pockets do not, and every digital initiative carries high stakes for success.

The current climate hasn't made it any easier on small businesses. Prior to the COVID-19 pandemic, many already felt the pressure to digitize business processes, products and services. Conditions created by the pandemic accelerated all of it, with projects scoped to take months needing to be spun up in weeks.

Whether you are well underway with digital transformation or just beginning your journey, one thing is for sure: standing still is no longer an option.

DIGITAL TRANSFORMATION: WHAT IS IT AND WHY IS IT SO IMPORTANT?

Digital transformation isn't any one thing. It encompasses any initiative to use technology to improve existing business processes or create new ones. It includes using technology to better meet the needs of customers, better compete with other companies in your industry or market (especially digital natives) and create entirely new monetization models for delivering your product or service to boost revenue and increase customer loyalty.

It's imperative for every business, but especially crucial for small ones. Between 2019 and 2020, the financial conditions of small and midsize businesses (those with 499 employees or fewer) declined sharply, according to a recent report from the [Federal Reserve Bank](#). Some 78% of the 9,693 firms surveyed reported a decline in revenues and 46% said they reduced their workforces in 2020.

To recoup and boost revenues, small businesses are being challenged to reimagine their business models and the processes that govern them.

IDC's group vice president [Rick Villars](#) put it well in a [recent report](#): "The COVID-19 pandemic highlighted that the ability to rapidly adapt and respond to unplanned/unforeseen business disruptions

will be a clearer determiner of success in our increasingly digitized economy. A large percentage of a future enterprise's revenue depends upon the responsiveness, scalability, and resiliency of its infrastructure, applications, and data sources."

Digital transformation means different things to different types of businesses. You may need to boost recurring revenue by putting a subscription model in place for customers to buy your products. You may want to employ AI-powered algorithms to serve up personalized recommendations to customers. To speed month-end close, the accounting team may look to implement robotic process automation (RPA) for intensely manual and repetitive tasks, such as parts of the reconciliation process. These projects all represent steps toward digital transformation.

THE FOUNDATION OF DIGITAL TRANSFORMATION: DATA AND INFORMATION MANAGEMENT

By 2022, [IDC predicts](#) 70% of all companies will accelerate the use of digital technologies to transform existing business processes that drive customer engagement, employee productivity, increased cash flow and business resiliency.

Every good baseline digital initiative starts with modernizing data and information management systems. How can you effectively digitally transform high-value, customer-centric operations when your basic, everyday workflows are still reliant on even partially manual or paper-based processes?

HOW TO DIGITALLY TRANSFORM YOUR SMALL BUSINESS

To help you develop a strategy to modernize your data and information management processes and procedures, a solid digital transformation guide is key. From small things you can do now to initiatives that may require longer-term coordination, we've put together a comprehensive guide to laying the foundation for your digital transformation. Feel free to jump around in whatever order works best for your company.

PART ONE: RETHINK YOUR RELATIONSHIP WITH PAPER

While there will always be instances where using or storing paper is required for compliance, tax and other business purposes, you should do your best to seek balance between your physical and digital files. Not only will it ease your digital transformation efforts, but it will also mitigate the drawbacks of overdependence on paper.

COST

Most people don't think about the cost of paper beyond the price of a few reams. However, research shows all associated paper costs (storage, copying, printing) could reach as much as 31 times the initial purchase cost. By that measure, a \$5 ream of paper could cost close to \$155¹.

RISK

While cyberattacks and breaches grab headlines, regulators investigate loss of paper records equally as much. And while the Chief Information Officer (CIO) is typically responsible in a small business for ensuring data security, that purview doesn't extend to physical records. The theft or loss of physical records is still a major source of breaches of confidential information, even if the intent may not be malicious. The majority of information loss is due to breakdowns in processes such as employees losing sensitive files².

As an example, the average large organization misplaces a physical file every 12 seconds.

A record-keeping strategy must also consider what happens if paper records are damaged or destroyed in a fire or a storm, and contain business critical information about customers, inventory, or personnel needed to comply with tax, employment, data privacy and financial reporting regulations.

INEFFICIENCY

Paper dependency breeds reliance on manual processes, many of which may be repetitive, time-consuming and have the ability to introduce errors. Small businesses need to keep overhead low, and that means almost everyone needs to be focused on tasks that add value.

What's more, as some processes become digital and others remain manual, the resulting hybrid work environment can introduce complexity. Without digitization, the small business risks doing something as simple as paying an invoice twice or missing out on discounted payment terms for a key vendor because someone in accounts payable was on vacation. Without accurate and easy access to transactional information, it's very challenging to realize the full benefits of any customer-facing improvement.

WHERE DO WE GO FROM HERE WITH PAPER?

UNDERSTAND WHAT YOU OWN

At the outset of any type of digital transformation, you must have a complete understanding of all the records and information you possess. This can be achieved by conducting a thorough information audit.

Yes, you will have to comb through every last filing cabinet and storage closet you can find. It's an overwhelming and exhausting task for sure, but a necessary one that will pay off.

After conducting this audit, you'll be ready to start or accelerate a digital transformation initiative, the returns of which will far exceed the initial time investment.

IF YOU DON'T NEED IT, DESTROY IT

Don't be that company that keeps everything "just in case." While keeping everything may seem like a good plan, it's also potentially damaging. Here's why:

- It costs more. The more you store, the more you pay.
- It can impact compliance. With more to physically keep track of, record loss is more likely. This increases risk for loss of sensitive and confidential data, fines and reputation risks.
- It is inefficient. With paper files, the average employee spends 25%³ of their week filing, copying, indexing or retrieving documents.

YOUR COMPANY'S RECORDS RETENTION SCHEDULE DETERMINES WHEN TO DESTROY RECORDS BASED ON LEGAL, TAX, REGULATORY AND OPERATIONAL REQUIREMENTS.

DIGITIZING YOUR BUSINESS PROCESSES

When it comes to digitizing paper and processes, you have options. Here, we've outlined each paper converting process with its respective benefits and drawbacks:

- **Entire Backlog:** Backfile conversion involves digitizing all paper records by scanning them and storing the document in digital format for access via an image. It requires a significant upfront capital investment and works best when segmented and prioritized into a series of projects.
- **Image On-Demand:** A "pay as you go" method for converting paper documents to digital, this allows the business to directly request records stored in an Iron Mountain facility to be prepped (staples removed, pages aligned, damaged documents repaired) for scanning and then scanned for digital access. This includes using specialized technology to scan damaged assets.
- **Day Forward and Digital Mailroom:** This is both a service and a business process methodology. Documents that come in on paper are scanned right away, and processes are put in place to better organize and reduce the volume of paper transactions. It also provides associated storage and shredding services. It's typically used in conjunction with backfile conversion or image on-demand.

Remember, paper records that are still fundamental to your business operations can be converted into digital formats. Originals can be stored or destroyed, depending on your needs and obligations.

Here are just a few benefits of digitizing:

- Expediently extract and catalogue valuable data and insights from legacy files
- Gain quick electronic access to records (no more digging through file cabinets) without subjecting originals to wear and tear or loss
- Create a centralized, electronic information repository for easy access and sharing from any location

STORE WHAT YOU HAVE LEFT

Is the paperless office ever going to be a possibility? While it's a nice notion, 100% removal of physical documents is far from feasible. Consider these stats⁴:

- Paper use is increasing in 32% of businesses
- 77% of invoices that arrive in PDF format get printed
- Only 45% of paper documents scanned by businesses were created digitally

Changing the way you produce, access and store information is a large undertaking. For decades, paper has been the way to go for many operational processes. We're shifting our mindsets as we progress further into the digital age but, even after destroying and digitizing, you'll be left with more than your fair share of physical documents. How you store those documents depends largely on your digital transformation goals.

Here are the two storage options for remaining paper records.

- **Onsite Storage:** With this strategy, your records are never far away. Accessing a record could be as simple as walking into the next room and thumbing through a filing cabinet. Depending on your record inventory size, onsite storage could be cheaper than moving it offsite.
- **Offsite Storage:** By working with a trusted partner that can guide you in proper labelling, indexing and storing records, you'll likely have faster access times than if records were stored onsite.

In addition to quicker access, there are other benefits to offsite storage not directly related to digital transformation, including improving security and compliance as well as increasing protection from both manufactured and natural disasters.

CONSIDER THE VALUE OF METADATA

Metadata is descriptive information about your data.

It defines its content and characteristics and calls out key identifiers such as:

- Record owner
- Document type
- Dates
- Legal holds
- Associated values (for example, John Doe, project plan)

When it comes to locating records efficiently, extracting data and information, establishing ownership, applying legal holds and identifying retention-fulfilled records, metadata is indispensable. It's also critically important in legal, audit, compliance and regulatory activities because it demonstrates the authenticity and reliability of the requested information.

Metadata is increasingly becoming a key component of data analytics and digital transformation success. Without metadata to provide context to information (including its authenticity and level of business value), companies tend to store records just for storage's sake-increasing operational confusion and overall workplace inefficiencies.

HOW TO DEVELOP YOUR METADATA STANDARD

The development and approval of a metadata standard is a collaborative exercise. It's important to establish a set of universally agreed upon rules applicable to all records. Depending on your company, developing metadata standards requires input from IT, legal, compliance, data management or data governance, audit and records and information management (RIM). A major part of this process is agreeing on and establishing uniform naming conventions and eliminating redundancies.

By using metadata, you can identify additional markers to supplement baseline standards for different business units, record types, location, security and retention periods. However, keep in mind that an overly subdivided system can undermine the goal of locating and retrieving records more easily.

HERE'S A BASELINE METADATA CHART.

DATA ELEMENT	DESCRIPTION	ANSWERS THE QUESTION...	EXAMPLES	RETENTION	PRESERVATION	PRIVACY/ SECURITY
Unique Identifier	Barcode/box/file number for physical records. Batch number/file number/account number for electronic records.	How can we identify or locate an individual record/carton/file/batch?	Physical: Typically the barcode number provided by the storage vendor Electronic: Generated by the application.	✓	✓	
Record Retention Class Code	Code (typically alphanumeric) that corresponds to a record class and its associated retention period. (For multi-national retention schedules, the record code must be used in conjunction with record class jurisdiction).	To which record class does the record belong? How long must the record be retained?	Alphanumeric: HRO01-222 Numeric: 111-222 Named: Payroll Records	✓	✓	
Record Class Jurisdiction	<i>For retention schedules that cover multiple jurisdictions, this element works together with the record code - as the same record class/code can have different retention periods across jurisdictions.</i>	To which geographical jurisdiction does the record belong?	Can be full country/jurisdictional name or a code, such as US, CA, GB, etc	✓	✓	✓
Retention Start Date	The date upon which the retention countdown begins.	When does the retention period countdown begin?	Create Date, Trigger/Event Date, To Date, From Date, Receipt Date, Legacy Receipt Date, Ingestion Date	✓		
Preservation Status	Indicates whether the record is under Preservation (Legal Hold, Litigation Hold, Destruction Hold).	Is the record under Preservation?	"Preservation/ Hold" checkbox, Yes/No selection, Field for Matter Name/ Preservation Name/ Preservation Code		✓	✓

In reviewing this chart, you can see the five standardized identifiers in the left column detailing when a record was created, how long it should be stored, what laws are applicable to the record and where it's located.

THE BENEFIT OF METADATA STANDARD IMPLEMENTATION

OVERCOME HUMAN ERROR

Entering multiple metadata elements is a burdensome process for most employees. This often leaves the company with inadequate or inaccurate record information. To help alleviate this, capturing metadata at every stage of the information lifecycle is recommended.

Here are a few other ways we recommend optimizing the metadata standard building process:

- › Create a parent/child relationship among records by applying metadata at a higher level that can be inherited automatically by lower-level records.
- › Use roles to apply metadata standards based on the type of records each employee creates and receives.
- › Leverage business process workflows to apply metadata automatically as the record moves through a repeatable process.

CREATE AND ENFORCE METADATA POLICIES

We understand just how difficult it can be to put new processes in place, especially when it's something that touches nearly all operational functions.

Here are our best practices for creating your metadata standard:

- › Set system rules specifying which, if any, metadata fields can be altered by an application or a person other than the data owner.
- › Enable a mandatory requirement for all applicable current and future information management systems and applications once the standard is in place.
- › Freeze metadata once a record is declared so that it is only editable by administrators and

applications under special circumstances.

- › Capture a metadata stub as a record when digital files reach the end of their retention period and are purged. In the metadata standard, include specific directions regarding which elements are retained in the purged record stub.
- › Provide instructions when a record is sent outside of your company that contains metadata. For example, if the text of a record does not include Personally Identifiable Information (PII) but its metadata does, that record should be protected and labeled "PII."
- › Outline a systematic elimination process that names roles required to approve information destruction.

HERE'S HOW TO AVOID REPEATING THE PAST

Five, 10, 15 years from now, do you really want to find yourself in the same position you're in now? Stuck in an unmanageable hybrid digital/physical state without a complete grasp of what records you possess? After you've finished your thorough records audit along with the removal and digitizing of legacy paper records, the last thing you need to do is to repeat the process.

A records retention schedule is a must for avoiding the arduous process of digitization from scratch down the road. It's a policy document that defines a company's legal, operational and compliance recordkeeping requirements. This schedule exists to help guide employees as to how long to keep records for legal and operational purposes and when it's okay to securely dispose of them.

Here are a few more benefits of having a records retention schedule:

- Control the unrestrained growth of records volume
- Demonstrate compliance with statutory and regulatory record keeping requirements
- Improve the ability to locate and retrieve records when required
- Reduce litigation risks

How you establish and maintain a records retention schedule is a matter of choice. Here are a few options:

- Track and record your records manually (in an Excel document, for example), then disseminate the policy as needed
- Use a third-party platform that automates the more laborious processes
- Attach rules to applications or actual records using metadata

What works for your company depends entirely on your needs and to what degree you want or need to automate records management as part of your digital transformation efforts.

To be clear, a records retention schedule is not, in the strictest sense, necessary for digital transformation. It's intended use is to ensure your digital transformation journey remains on track and compliant - both now and in the future. Consider it a long-term digitization management blueprint.

PART ONE SUMMARY

HOW REMOVING, DIGITIZING AND STORING PAPER GETS YOUR COMPANY CLOSER TO DIGITAL TRANSFORMATION

No digital transformation can begin if business-critical, transactional information is paper-based. Paper records slow down almost every business aspect of operations. As the digital world around us continues to pervade every part of our personal and work life, digitization of records is the fastest way to ensure efficient and effective processes.

If you're looking to automate any business process, the removal of paper is key to success. Digitization helps alleviate administrative tasks which frees up employees to be more productive and innovative in their respective roles.

PART TWO: AUTOMATION

AUTOMATE YOUR WORKFLOWS

When you begin to digitize paper, you can further digitize the processes that the paper helps manage. It's no surprise that 39% of the firms with less than \$499 million in revenue [surveyed by Robert Half](#) have automated document storage as a foundation for business process automation.

This is especially relevant to the parts of the business that must manage a large number of records, such as human resources, accounting, procurement and legal.

As a simple example of the benefits of digitizing paper as it relates to automating business processes, let's look at human resources.

AUTOMATED WORKFLOWS IN ACTION

Records in human resources can easily accumulate as the function touches everyone in the business. Here are the biggest sources of paper piling up:

- **Recruiting:** Resumes and cover letters, applicant correspondence, references and recommendations, interview notes and offer letters
- **Onboarding:** Emergency contacts, tax forms, direct deposit forms, equal employment opportunity information, technology requests, employment contracts and I-9 forms
- **Employee file management:** Vacation tracking, employee status change notifications, employee referrals and travel requests

- **Administrative policies and procedures:**

Updates disseminated through email or paper

- **Employee separation:** Supervising the return of access and equipment, conducting an exit interview and handling the necessary paperwork

Even with the removal and digitization of paper, it's still time-consuming and difficult to ensure all newly digital records (sometimes hundreds per employee) are stored and accounted for as well as routed to and seen by the appropriate stakeholders for whatever business process they need to accomplish. Missing or incomplete documents can introduce many risks, and the system should automate alerts to help resolve issues right away.

These same problems that paper presents to HR extend to every other business function. How often has month-end close been delayed because an item couldn't be reconciled, or deals with vendors bogged down by unnecessary red tape?

From function to function, breakdowns in the management of records and information wastes employees' time, as they chase down solutions to entirely avoidable problems. It's unnecessary and runs counter to the goal of becoming faster, more efficient and adaptable in today's digital age.

IDC shows us that automating workflows can lead to a more than 30% reduction in errors and 25-30% increase in productivity, depending on the specific functional area and process⁵.

PART TWO SUMMARY

BACK-OFFICE WORKFLOW AUTOMATION: THE PATH TO DIGITAL TRANSFORMATION

Automating ongoing administrative tasks eliminates bottlenecks that slow down work and makes your business faster, leaner and more agile. It also frees up your employees to spend their time focusing on strategic, high-value activities, rather than being hamstrung by busy work that has less business impact.

PART THREE: MODERNIZE THE WAY YOU MANAGE DIGITALLY BORN DATA

Now that we've covered how you manage physical records through digitization, it's time to focus on digitally born data.

Although it is easier to handle digital data than paper, the reality is not all data should be treated equally. The way you choose to manage and store data has a profound impact on your company's digital transformation success.

DO YOU REALLY NEED A DATA LIFECYCLE MANAGEMENT STRATEGY?

Yes, the answer is yes. Without a solid data lifecycle management strategy in place, all of the work you've done to convert physical records to digital will be worthless.

A data lifecycle management strategy is about creating and executing a plan to protect, preserve and manage digital data at each stage of its lifecycle, from creation through destruction as informed by your records retention schedule. This includes making strategic storage decisions.

Establishing your data lifecycle management strategy is no small feat. Combing through your data inventory to tag and classify it all requires significant investment and can be enough to dissuade many from fully pursuing digital transformation. But it's precisely this type of leg work that makes the difference when it comes to meeting the needs of today's customers and regulators.

WHY A DATA LIFECYCLE MANAGEMENT STRATEGY?

New data is constantly being created in multiple formats and added alongside old data. Extracting valuable insights from it - a key component of digital transformation - depends on having easy and reliable access.

At the same time, the value of data changes as more information is added into your work environment. Your company doesn't need all of its data all the time, but a lawsuit, audit, customer request to "be forgotten" or other sudden event can make quick retrieval a necessity.

For digital transformation to work, you must find the most efficient way to classify, manage and store different data types. For data that needs to be accessed regularly, you might consider onsite or cloud storage. Older, keep-it-just-in-case data can be stored in less expensive tape archives. There's no one right answer because it all depends on your company's needs and budget. The key is to develop a strategy to optimize your data in order to best fuel your digital transformation goals.

DATA LIFECYCLE MANAGEMENT STRATEGY BENEFITS

Now that you have a better understanding of data lifecycle management strategies, you'll want to know how it benefits your business. In addition to being able to easily extract valuable insights, here are a few other benefits:

- > **Manage and control costs:** A data lifecycle management plan incorporates a wide range of technologies to keep costs contained as your company's data intake continues to grow. The technologies you will use (all with varying costs) include everything from on-premises storage and storage tiering to cloud storage and offsite tape backup.

- **Improve Service Level Agreement (SLA) business processes:** In any digitally run business, everything relies on IT. Any amount of downtime is unacceptable. Today's average cost of downtime is \$16 million a year⁶. A data lifecycle management plan incorporates the need for greater uptime and deploys a variety of solutions to help you lower Recovery Time Objectives (RTOs) and Recovery Point Objectives (RPOs).
- **Drive innovation:** Digital transformation helps reinvent business processes. Through data management best practices, even the smallest companies can drive innovation through initiatives such as big data analytics, mobility and the Internet of Things (IoT).

Bonus added benefits unrelated to digital transformation include:

- Protecting and securing data at all times
- Meeting compliance and e-discovery requirements

HOW DO YOU FORMULATE A DATA LIFECYCLE MANAGEMENT PLAN?

You will accelerate digital transformation at your own pace. Not every data lifecycle management plan will be the same. That said, we've put together some basic general guiding questions to help you get started.

- To what extent is the company embracing digital transformation, including extracting value from data?
- What are the current gaps in data storage and management?
- Is critical information isolated in silos?
- Is data being tagged properly at the point of creation?
- What is the budget for data storage, including backup, archiving and replication, and will that budget shrink, grow or remain flat?

This is by no means an exhaustive list, but it gives you a sense of the strategy building process. Depending on the size of your company, you may be able to answer these questions yourself, or you may need to seek outside help.

EXECUTING A DATA LIFECYCLE MANAGEMENT STRATEGY

Once you've set your goals and built the framework for your data lifecycle management strategy, the next step is to implement it.

Here is an example of what your plan could look like:

Stage One: Store active data (documents and current information used on a regular basis) locally and on a network server while also backing it up to local storage appliances or cloud storage.

Stage Two: As data ages, move it from primary storage into less costly off-site tape vaults or cloud storage.

Stage Three: Retain your older, inactive data (documents and information not required for daily operations) in case of a legal, regulatory or audit event in off-site tape archives that offer high security, quick access and lower storage costs.

Stage Four: Adhere to laws and federal, state and industry regulations for destruction.

DEFINITIONS YOU MIGHT NEED

- **DATA RESTORATION:** Regaining access to data from obsolete or unused storage mediums.
- **DATA MIGRATION:** The process of transferring data from older storage mediums to more modern ones.

Chances are your team has been storing data for years - if not decades - across different systems and technologies. If you have old data stashed on 3.5-inch floppy disks, you probably won't be able to get to it without specialized equipment.

There's also the possibility all your information is contained in electronic formats but stored in systems spread across the company with some saved on local servers, backed up to the cloud and archived in offsite tape vaults.

For a data lifecycle management strategy to be effective, your company's IT staff must prioritize the restoration and migration of that data away from disparate and legacy formats toward more readily accessible modern storage media. Why? Remember complete digital transformation depends on getting the most out of all your data. That's not possible if you have unknown data stored on outmoded equipment.

Throughout this process, keep in mind that data retrieval requests can overwhelm many IT departments. Large-scale data migration and retrieval processes require considerable resources and pulling IT staff away from their routine activities could invite unintended risks. Overworked and understaffed IT departments are often cited as a factor⁷ in companies falling victim to cyber-attacks.

OUTSOURCE OR IN-HOUSE? THAT'S THE QUESTION.

Restoring data from legacy systems and migrating it to more accessible storage options is a massive request for any IT department. It's also one of the most crucial parts of digital transformation.

Of all the steps toward digital transformation we've mentioned so far, digital restoration and migration warrants consideration of outsourcing the most. The benefits of outsourcing are not limited to faster and safer data restoration. Because you're outsourcing to a third-party data management provider, you'll never have to worry about future technology obsoleting today's storage mediums. Any provider worth its salt will always keep your data easily and readily available on whatever platform the future may hold.

A QUICK NOTE ON COMPLIANCE AND CHANGING REGULATIONS

We'd be remiss if we didn't mention one of the biggest and most stress-relieving benefits of digitizing records - compliance.

Industry, regulatory and legislative compliance mandates are constantly changing, each increasing the bar for information management. It also provides huge benefits in terms of tax compliance and audit capabilities. Organized, accessible data makes compliance easier to achieve, which can prove significant because even small fines are a big deal for small businesses. Modern data storage compliance is arguably even more important to the long-term vitality of your business than it is for any digital transformation initiative.

PART THREE SUMMARY

CHANGING THE WAY YOU MANAGE DATA: 1 STEP CLOSER TO DIGITAL TRANSFORMATION

You can't make good business decisions if you don't know what information you have.

Data lifecycle management strategies give you a firm understanding of what information your business owns and where it's located. Having a management system in place that includes data restoration and migration makes it easier for you to extract data for analysis, a key to digital transformation.

PART FOUR: CHOOSE THE RIGHT STORAGE

OPTIONS FOR YOUR SMALL BUSINESS

After you've completed your data lifecycle management strategy, it's time to figure out where you'll "put" all that data.

Since every company is different, we've created a list of pros and cons for each of the available storage options.

KEEPING YOUR DATA ONSITE

Pros: Onsite storage is far and away the most convenient storage option. There's no third-party involvement. There's no need for offsite data transfers. There's no risk of someone else's downtime affecting your business. In short, you're the master of your own domain.

Cons: Thanks in large part to the dramatic increase in device usage and IoT projects, data creation is predicted to swell to a total of 175 zettabytes (ZB) by 2025. While more data presents greater opportunities to extract insights and achieve digital maturity, trying to store it all onsite is far too inefficient and expensive, even if you can afford to build out infrastructure and hire additional staff.

KEEPING YOUR DATA IN (COLLOCATED) DATA CENTERS

Pros: Shared data centers essentially allow the company to rent space in a third-party data center but still maintain control and management of its own hardware, including servers and storage and networking equipment. This allows you to share and therefore reduce costs associated with cooling, utilities and physical security.

By choosing a third-party data center storage option, you'll have a lower total cost of ownership compared to private data center build outs. Offsite data storage also has a higher degree of guaranteed

security and protection from both manufactured and natural disasters.

Cons: In general, co-location requires purchases and maintenance of your own hardware, including servers and storage. You will need to use a third party and transfer your data to their offsite location. There is a risk (although a small one) of someone else's downtime affecting your business.

KEEPING YOUR DATA IN THE CLOUD

The cloud comes with the added benefits of reducing the burden on your internal IT staff, frees you of making capital investments in hardware and the operating expense of maintaining it. Cloud storage is ideal for today's remote workers who need on-demand access. As resource demands intensify, cloud technologies can easily scale, in a flexible way. For example, it can be used to backup active data or it could be used as an archive for legacy data.

Not all cloud solutions are the same. Many providers have built clouds that emphasize storage volume and scalability, while others were designed specifically for business data management with greater focus on security.

KEEPING YOUR DATA IN "OLDER" STORAGE

When it comes to legacy data storage, it doesn't make much sense to choose a solution that promises 24/7 connectivity and on-demand access to data, as you'll ultimately be paying for features you don't need.

Stripped of the extra bells and whistles of co-location and the cloud, comparatively older data storage methods are less costly to maintain and offer lower energy consumption and total cost of ownership than any of the other storage options.

We'll briefly look at two of the most popular:

Disk

- > **Rapid recovery.** Finding a particular file with a disk system is faster than with a tape data backup system.
- > **High-level security.** One undeniable virtue of disk-based data backup solutions is that a data center is hard to misplace. You need not worry about secure data transportation, because the data's not travelling anywhere.
- > **Efficiencies from deduplication.** This process removes duplicate copies of saved data to free up space. You can store data faster and perform full backups less often.

Tape

- > **High-capacity storage.** LTO (linear tape-open) is the leading tape backup format, able to store terabytes of data on a single tape.
- > **Low cost.** Tape media costs are low and often the least expensive option. Tape's cost per gigabyte is less than \$0.01.
- > **Low energy.** Once a company stores its data for the long term on tape, it no longer requires electricity. Disk systems, on the other hand, are always on and require constant cooling.

PART FOUR SUMMARY

3 WAYS STORAGE CHOICES IMPACT DIGITAL TRANSFORMATION

The choice you make for how to store your company's data really matters. Here, we've outlined the three ways storage choice affects your digital transformation:

1. Many digital transformation efforts depend on the insights you are able to extract from your data. Strategic storage makes data access and analysis more streamlined.
2. Modern data storage methods make your company faster and more agile - the whole purpose of digital transformation in the first place.
3. Outsourcing data storage relieves IT of the burden of managing onsite infrastructure, freeing them to focus on more high-value initiatives related to business intelligence.

PART FIVE: PROTECT YOUR DIGITAL TRANSFORMATION INVESTMENT

Completing parts one through four may put you in a state of minor upheaval for a while and that's not necessarily a bad thing.

Investing time in a digital office transformation is akin to spring cleaning but with a far bigger payoff. You'll come away with a digital inventory of your entire backlog of paper records, with digitization, destruction and storage behind you. You'll begin to work toward automated workflows and a data lifecycle management strategy. Your data will be stored in a way that's not just cost-effective but ready for any data-led initiatives you wish to pursue.

To get faster, leaner and more agile to better meet your company's goals, you may even decide to upgrade your technology with new laptops, tablets and smartphones.

There's also the chance you may come across boxes and boxes of unused and outdated IT equipment lying around. There's no reason to let that old technology continue to pile up. Make sure you're disposing of it in a secure, compliant and eco-friendly way. Let your digital transformation efforts transform every part of your workplace.

CONCLUSION

Now you know, there's no escaping it. Every company, of every size, in every industry is affected by digital transformation.

But you're up for the challenge. You're resilient. You know you have to be. U.S. Small Business Administration data shows only about half of small businesses remain open for five years or longer and only about a third last 10 years. You'll do whatever it takes to innovate in order to build your legacy.

We hope this guide sets you on the right path toward your digital transformation. Iron Mountain is here to help as a trusted partner offering expert guidance.

ENDNOTES

1 'The 3 E's of Office Paper Reduction', Carleton College, https://apps.carleton.edu/.../Office_Paper_Reduction__factsheet.pdf

2 SaaS Data Loss: The Problem You Didn't Know You Had

3 "Five Proven Ways to Maximize Your Resources With Records Management Efficiencies," Iron Mountain

4 "The Paper Lite Office," Iron Mountain

5 "Market Note: IDC Review of Iron Mountain Workflow Automation Powered by Hyland," IDC

6 "Availability Gap Inhibits Digital Transformation and Costs Enterprises \$21.8M Each Year," Veam

7 "After WannaCry, the government must focus on local NHS security," Wired



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ABOUT IRON MOUNTAIN

Iron Mountain Incorporated (NYSE: IRM), founded in 1951, is the global leader for storage and information management services. Trusted by more than 220,000 organizations around the world, and with a real estate network of more than 85 million square feet across more than 1,400 facilities in over 50 countries, Iron Mountain stores and protects billions of information assets, including critical business information, highly sensitive data, and cultural and historical artifacts. Providing solutions that include secure storage, information management, digital transformation, secure destruction, as well as data centers, art storage and logistics, and cloud services, Iron Mountain helps organizations to lower cost and risk, comply with regulations, recover from disaster, and enable a more digital way of working. Visit www.ironmountain.com for more information.

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