

Iron Mountain Managing the Storage Switch to Digital

Companies: CTAS, DLR, EMC, EQIX, IBM, IRM, LXX, MSFT, ORCL, QTM, TSE:OTC, WDC

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Research Question:

Can Iron Mountain continue its steady climb, or will the industry move toward digital data storage services cause the company to tumble?

Summary of Findings

- Although [Iron Mountain Inc.](#) (IRM) is not on the cutting edge of the document storage industry's shift to digital, it nevertheless will continue to occupy a position of strength in the near term. The company will be able to assist its existing customers in their transition to [digital storage](#) while using its large scale to secure international business, according to Blueshift Research's 21 sources comprising Fortune-1000 storage customers, data storage competitors, real estate professionals, and industry specialists.
- Physical storage needs are giving way to digital overall, most notably in the financial industry. Still, heavily regulated fields like healthcare, government and legal continue to require physical record storage. With its unrivaled levels of security and regulatory compliance, Iron Mountain most often is the ideal solution for document storage.
- Iron Mountain has [acquired](#) much of its U.S. competition but still has plenty of room for growth in international markets, many of which are just now creating document preservation regulations. Sources said the company operates on a scale that could easily be expanded outside of the United States. However, several also said recordkeeping needs and regulations vary widely by country and that Iron Mountain must familiarize itself with other cultures.

Silo Summaries

[1\) Data Storage Customers at Fortune 1000 Businesses](#)

Eight of these nine sources noted their companies' rapid move to digital recordkeeping and storage, and yet seven also cited a continuing need for physical document storage. **Iron Mountain is the industry leader because of its superior security, its ability to customize solutions, and its pricing structure.** The future of pricing for digital data storage solutions—particularly those cloud-based—is up in the air. **Seven sources said fees, especially for quick data retrieval, may push them to look for more cost-effective solutions, including in-house management.**

[2\) Data Storage Competitors](#)

Three of these four sources reported growth in their digital storage business, with each pegging the increase in the high single digits year to year. **Financial companies in particular are increasingly moving their records to digital form. All sources foresee consolidation of the digital storage industry but not for at least two years. Iron Mountain is storage industry's top vendor, with its biggest advantages being its security and regulation compliance.**

[3\) Data Storage Real Estate Professionals](#)

All four sources said the proliferation of digitized records has led to digital data storage becoming the standard in the United States. **Internationally, data storage is at an earlier stage and has a greater potential for growth.** However, recordkeeping regulations vary by country. Digital leaves a smaller real estate "footprint" than physical storage. **Industry leader Iron Mountain is building out data centers and adapting other facilities to meet its customers' changing storage needs.**

[4\) Industry Specialists](#)

All four sources were adamant that data storage has moved well beyond recordkeeping and has evolved into a concept described as content management, information management or information governance. **Managing and classifying information as it is created is important so that it may be stored for optimal location and retrieval. An effective data storage vendor offers privacy, security and smooth e-discovery in addition to reliable storage itself.** Iron Mountain holds more growth opportunities outside of the United States.

	IRM Well Positioned	Physical Doc Storage Still Matters	Digital the Future of Data Storage
Fortune 1000 Storage Customers	↑	↑	↑
Competitors	↑	→	↑
Real Estate Professionals	↑	→	↑
Industry Specialists	→	↑	↑

Background

Iron Mountain reported earnings in late July, beating analysts' expectations by 12¢ per share. Quarterly revenue increased to [\\$787 million](#), up 4.3% from the year-ago quarter based on higher storage and service revenues. Year-to-year operating income rose by 12% because of lower operating expenses. Since the beginning of 2014, the company has acquired five international storage-related businesses and the records inventory of nine document storage companies for a total sum of \$72 million. Because of its recent conversion to a [REIT](#), Iron Mountain expects to distribute between \$1.3 billion and \$1.4 billion to shareholders from its accumulated earnings in the third and fourth quarters to meet REIT compliance standards.

Iron Mountain's domestic, organic growth has been flat to slightly negative during the last three years. Companies are producing and storing fewer printed documents and are instead utilizing cloud-based or digital solutions. Iron Mountain's data management segment, which houses information on tapes, may fade into obsolescence as this practice becomes replaced by cloud solutions. Some analysts doubt Iron Mountain can grow its international segment fast enough to make up for the inevitable decline in paper-based storage. Iron Mountain management stated in the recent earnings call that the company will [seek stable and low-risk growth](#). Analysts expect a five-year annual growth rate of just 4% that will produce nearly \$3.7 billion of revenues by 2018.

Iron Mountain [recently restructured its sales team](#), which turned the negative domestic growth trend into a slight increase. The company sees [great opportunity in international growth](#), including a 15% annual growth rate over the next five years in emerging markets. CEO [William Meaney](#) came from a Hong Kong-based company and has extensive international business experience in Europe and Asia. Iron Mountain has focused its international growth only in markets in which leadership potential is greatest.

Iron Mountain boasts a customer churn rate of less than 2% per year and serves [950 of the Fortune 1000](#) companies. Enterprise businesses are unlikely to switch records storage vendors given the high costs of logistics and transportation. Therefore, Iron Mountain can implement modest annual price increases without worrying about losing business.

Current Research

Blueshift Research assessed if and how Iron Mountain could continue growing its data storage business. We employed our pattern mining approach to establish five independent silos, comprising 21 primary sources and three secondary sources focused on Iron Mountain and its short-term growth opportunities:

- 1) Data storage customers at Fortune 1000 businesses (9)
- 2) Data storage competitors (4)
- 3) Data storage real estate professionals (4)
- 4) Industry specialists (4)
- 5) Secondary sources (3)

Next Steps

Blueshift Research will continue to assess how Iron Mountain has adapted to the move to digital data storage. We also will examine how much international business Iron Mountain has obtained, and how effectively the company can leverage its existing customer base as its clients transition to digital storage solutions.

Silos

1) Data Storage Customers at Fortune 1000 Businesses

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a continuing need for physical document storage. Iron Mountain is the industry leader because of its superior security, its ability to customize solutions, and its pricing structure. The future of pricing for digital data storage solutions—particularly those cloud-based—is up in the air. Seven sources said fees, especially for quick data retrieval, may push them to look for more cost-effective solutions, including in-house management.

KEY SILO FINDINGS

Iron Mountain and Other Storage Companies

- Iron Mountain was cited as the clear industry leader, with superior security, customization and pricing.
- 2 said Iron Mountain is adapting to the changing landscape by building out its digital capabilities.

Current Storage Trends

- 8 of 9 acknowledge a shift for at least some records to digital form.
- 7 of 9 emphasized a continued need for physical document storage as well.

Future Storage Trends

- Pricing within digital data storage solutions, particularly cloud-based, is an unanswered question for 5 sources.
- 7 of 9 said high fees, particularly involving data retrieval, are a concern in digital storage solutions.

1. Executive in the entertainment industry

As businesses move away from paper, Iron Mountain will have to change its business model to include more digital materials and data. This source is weighing the use of in-house digital infrastructure against the costs of cloud storage and has not started using Iron Mountain's data services. The changes to storage often involve a new realm with new players, such as T3. Price competition has not yet increased, but new companies are trying to distance themselves by offering additional services.

Iron Mountain and Other Storage Companies

- "Iron Mountain is trying to build out various data stores for the video side."
- "The changes to archiving are still a new realm. The key elements that are essential are assurance of persistence and preservation. Those are the things we're looking for from companies like Iron Mountain and others."
- "We have very specific requirements around the preservation of our digital assets. Making sure we have [access to] the material is a critical part of our business."
- "We are also considering trying to do that ourselves. We are trying to decide if our own digital infrastructure can handle some of that material or if it's best to use a vendor "
- "Iron Mountain deserves credit for trying to focus on how the digital model will look. We haven't decided to use that service at this time because we're doing it ourselves, but we have reviewed them."
- "There are reasons to look at doing it ourselves—cloud storage vs. building out our own infrastructure. The business model for cloud storage is transactions. Every interaction amounts to a transaction—to put something in, take something out, do queries, view the status. A lot of people are looking at cloud storage and comparing costs."
- "There are many different cloud companies we've looked at. Some offer multiple types of storage, and some are focused on bigger files like we have in the entertainment industry. Iron Mountain is in the category providing storage like that. But we haven't found any that are ideal in terms of cost for our requirements."
- "[Bonded \[Services Group LLC\]](#), a physical storage company and a competitor of Iron Mountain, is also entering the digital space and building out a platform. Their offer is not that different."
- "People are still trying to figure out what they can provide that will be useful to companies at the same time as companies are trying to figure out what they want to do."
- "T3 is a small company that's gotten into the ring, and its business model is adding services on top of storage to entice customers. They're looking for active, shorter-term customers."
- "I haven't seen much competition yet on long-term storage. The shorter-term model is a better business model, with lots of activity over a shorter time period. There's less responsibility and more financial activity."

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Executive, Entertainment Industry

- “A company like T3 might be best placed to get business during this time. Companies like Iron Mountain and Bonded that have long-term business models focused on physical storage will have to figure out how to turn the ship, to see how their overhead fits in with a brand-new business model.”
- “Storage has been really good for these companies because people rent the space and then forget. They’ve been charging people for accumulating things. It’s been a good model.”
- “Digital is a different kind of business model. You can’t put digits on a shelf. They need care. That leads to a different kind of thinking.”
- “A company like T3 has more of a tech startup mentality than a traditional logistics type of business. They, or another company like them, might provide the service that’s the differentiator. Possibly, it could even be a company like [Dropbox \[Inc.\]](#), which can build up the infrastructure and efficiency that it already has, as long as it can provide persistence of data.”

Current Storage Trends

- “We’re moving away from paper as a final resting place for content. The creation of documents and video materials is rapidly moving to data and digital. We want to store that material in the same way it was created.”
- “I haven’t seen a great rush to bring down pricing to compete. That might well happen as companies using storage move to building their own infrastructure.”
- “The storage companies and cloud companies are looking for short-term customers, who need a lot of storage for a short amount of time. They also want customers who need other services such as extra processing.”

Future Storage Trends

- “That [movement to digital] is changing the need for physical space. Things are not arriving at the archives as much. This makes for a reduction of needs in physical space over time, and it also reduces the need for additional storage going forward.”

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Executive, Entertainment Industry

2. Specialist in information governance at a technology company

Iron Mountain is diversifying and meeting many of the changing needs in document storage. Among other services, it has a [consulting arm](#) that helps customers identify ways to save money on storage. This helps the company build relationships and creates customer loyalty. The need to store paper is diminishing but has by no means disappeared. Hard copies still are needed for many documents, and the vast quantity of information still amounts to a large volume of paper. Also, digital storage has high costs in terms of servers, and sorting through the information can be arduous. Industry consolidation took place years ago as Iron Mountain absorbed its competition. However, the company still has growth opportunities outside of the United States.

Iron Mountain and Other Storage Companies

- “Iron Mountain has seen the writing on the wall and has tried to get away from pure hard-copy records.”
- “Iron Mountain tried to get into more digital content, but they had to sell that part of their business when an activist investor became concerned they were getting away from their core business.”
- “Their strategy continues to be heavily invested in hard copy records and to be the experts in hard copy records, but they also have a consulting arm that helps organizations with their digital content.”
- “When we got rid of boxes that were stored with them, we worked with their consulting arm to create that process. They made money on that, but we also got an ROI very quickly.”
- “They also help companies create records management programs as part of their consulting work.”
- “Iron Mountain also does a lot of work with digital backups and backup tapes. They get a lot of business from people who have to back up their content.”
- “They’ve also become a REIT now, focused on the value of their property.”
- “There’s still a need for the real estate for physical storage, but it’s not growing as much. It’s become a lower-margin thing. Most companies are still generating paper. There’s still a business there, just a more challenging one than a decade ago.”

- “The professionals at Iron Mountain recognize that by giving good service and identifying ways to save money, it can actually result in more business for them.”
- “Iron Mountain worked with us on a process to analyze the metadata associated with the boxes we stored with them. We went through an aggressive effort over three years to get rid of boxes of records we no longer needed. That added up to substantial savings in storage fees.”
- “There are, however, other costs we pay to Iron Mountain besides storage. This includes retrieval and other fees.”
- “And if we destroy some of the records stored with Iron Mountain, because of the good service they provide, we might decide to move records that are stored elsewhere to Iron Mountain.”
- “Iron Mountain is smart and savvy enough to continue to do OK. It’s not exactly a hard-charging, big growth business, but they know their business well enough so they’ll do as well or better than anybody else. They are finding other opportunities and ways.”
- “Iron Mountain gobbled up a lot of its competitors about a decade ago. Overseas, they might still be working on it, but in the U.S. there are no major competitors left anymore.”
- “It’s hard to know how and if their REIT strategy will impact things. It’s hard to understand what else is behind that move, which has been a major strategic shift for them.”

Digital storage has costs from many perspectives. There’s a need to buy servers and more servers as storage needs increase. Even cheap cloud storage will sooner or later have added costs that will catch up.

*Specialist in Information Governance
Technology Company*

Current Storage Trends

- “Companies like Iron Mountain are still storing paper.”
- “Paper is needed in the case of legal action, where companies have to find content and preserve it. People need to have hard copy records off-site because there’s so much they’re not allowed to throw away.”
- “There are also many people that don’t realize they don’t have to save all that paper.”
- “The need to store paper is diminishing. When someone at this company wants to ship records to Iron Mountain, we first check to see if it’s necessary.”
- “For the purposes of records management, there is no need for paper when there’s a digital copy. There’s a caveat related to legal documents where a wet signature is required, but even that is moving more to electronic signatures.”
- “However, we’re producing such a volume of information in the world, that even though the percentage of the documents that need to be sent off to storage is much smaller, even that small amount means that the needs for physical storage are not going away.”
- “A lot of people think digital storage is cheap. But there is such a proliferation of information in organizations, that it can be astronomical.”
- “Digital storage has costs from many perspectives. There’s a need to buy servers and more servers as storage needs increase. Even cheap cloud storage will sooner or later have added costs that will catch up.”
- “Another cost is having to sort through the information you’re looking for. And there’s the cost and risk involved in keeping all that information, as opposed to being selective about it.”
- “Many organizations are being impacted by e-discovery. The need for legal review, to identify texts, select relevant documentation for a government investigation—the more you keep, the more you have to spend to sort through it. It can get very expensive.”
- “Another issue with digital storage is if you keep information for a very long time, the evolution of technology can make that information difficult to retrieve over time. Operating platforms and standard formats can change.”
- “It can actually be easier to keep paper for a long period than it is to keep digital content. No one has figured out yet what it will take to keep digital content long term—that is to say more than five to 10 years.”
- “It’s very easy to go back to 100-year-old paper and to read it, but not so for digital content that is more than a decade old.”

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Future Storage Trends

- “Physical document storage is not declining at the rate people have been predicting. We won’t be able to totally get rid of paper.”

- “It costs money to digitize paper documents. You have to find them, but you also have to preserve many of the hard copies. If you have legacy documentation in hard copy form, it’s better to keep that hard copy.”
- “Companies are starting to look at the use of technology to help sort through content. There are ways to set up the system to make that process easier. Technology can be enabled with the use of metadata that will help find that content later through tagging and consistent categorization.”
- “There is also auto-classification. It’s the technology that combs through the content and helps add tags and metadata to organize things in a way that makes sense.”
- “This is the direction of the future. But getting auto-classification to work will require training and effort, probably consulting time. There’s very good technology, but it’s expensive. It’s also difficult to find the ROI to invest in that sort of thing.”
- “There’s concern over that technology being reliable. I believe that’s a false concern. But it causes some organizations to back off—that and the concerns about the cost.”

3. Executive at a health insurance company

Iron Mountain can continue its climb by adapting to industry changes. For this customer who must meet federal [NARA](#) requirements for storing documents, Iron Mountain has provided secure storage facilities and at competitive prices. NARA paper storage has increased in the past five 10 years and is likely to grow further unless guidelines are loosened. Iron Mountain’s secure data facilities represent an asset, considering recent data breach scandals. For the standard paper storage business that might be seeing less growth, Iron Mountain could release its warehouses to other tenants and still benefit from its real estate.

Iron Mountain and Other Storage Companies

- “Iron Mountain is great. In my opinion, they are the No. 1 storage company. This is because of their national footprint and their tight adherence to compliance and security guidelines.”
- “I use Iron Mountain across the country, and they have the same standards and requirements in all their facilities.”
- “They’re good at protecting documents to the nth degree.”
- “I’ve tried different companies but pulled documents from them because they’re not as compliant as Iron Mountain.”
- “We’ve looked at [Diversified](#), but they’re not as good as Iron Mountain in terms of compliance and security.”
- “NARA has a big warehouse underground in Kansas City. Their security requirements aren’t as tight and thorough as Iron Mountain’s, even though it’s a federal warehouse.”

Current Storage Trends

- “The need for physical storage space for government contract work remains as important now as before.”
- “We would like to store less, but we can’t because of government requirements regarding Medicare and Medicaid records. These requirements are specific to the healthcare industry, governed by the [Office of Inspector General](#).”
- “Pricing on standard documents has trended a little upwards over the last 10 years, but not much. Pricing on NARA documents has been higher because of the additional security and compliance requirements in document storage. Since more NARA storage has become available, the trend is starting to go back down to be more in line with standard Iron Mountain storage.”
- “Iron Mountain’s pricing in the industry is competitive. Their prices are stable or down. Iron Mountain has created more storage for different requirements. Because of this increased availability, pricing has trended down.”

Future Storage Trends

- “Over time Iron Mountain will have more data centers and less warehouses for boxes. They still want to be the No. 1 ... choice. They will want companies to use their data facilities.”

They’re on the data side and specifically on the tier-4 data side, which is even better because it’s the highest data security you can get. That’s a growing area. ... The standard storage warehouses that are seeing less business could easily be released for other business opportunities. A paper storage warehouse could become a food warehouse, for example. They can find other people to rent from them. The real estate assets are not lost that way.

Executive, Health Insurance Company

- “Iron Mountain is adjusting to their clients’ needs on the two most important things: storage and digital. In Pennsylvania, they’re working on their [underground vault](#) to reduce their energy needs so they can lower rates by using the groundwater instead of using water from cooling towers.”
- “If the federal government requirements decrease, there could be a slow trend downward [for NARA documents] of not needing as much storage. At this point, we can’t even shred documents of people who’ve been deceased for 30 or 40 years.”
- “Paper storage and data centers have different security requirements. They’re not stored in the same place.”
- “I don’t believe Iron Mountain is looking for any more real estate. They had mergers and acquisitions that have worked out well for them, allowing them to take over whole markets. When they looked for NARA storage, they wanted to have a footprint nationally, and then they did look for real estate. But that was about five years ago.”
- “In the past they’ve added storage facilities through mergers. But for NARA-compliant warehouses, since nobody had these, they had to build them, and they did. They strategically placed three [warehouses](#) across the country: Virginia, California and Illinois. They also have some NARA-compliant storage underground in Pennsylvania and Kansas City.”
- “Iron Mountain has their wings spread wide, and they’re not looking at just one thing, like paper documents, to hold them up. They’re on the data side and specifically on the tier-4 data side, which is even better because it’s the highest data security you can get. That’s a growing area.”
- “As more businesses turn to electronic and scan their older documents, you would think the amount of paper documents stored across the country would reduce, but I don’t see it because our federal requirements are different.”
- “I can imagine paper boxes, let’s say for banks, will go down from 20 boxes a month to five boxes. But then that bank will increase its data storage, and it might use the data center down the street rather than Iron Mountain’s. Iron Mountain probably needs to focus more on getting people’s data storage.”
- “The data center down the street from a business is probably cheaper than Iron Mountain because it doesn’t have the tier-4 security requirements. There are a lot of data centers out there, and people have their own servers too. There are also programs that delete files after 10 years on the servers. The trend would be that physical paper storage for Iron Mountain is going down. But NARA-required storage has been trending up for the last five to 10 years.”
- “I think more people are trending to the higher security tier-4 data centers [that Iron Mountain uses].”
- “It seems like Iron Mountain should be going out to Target and Home Depot [both affected by data security breaches] to offer their secure vaults for storage. The higher the tier rating, the more security there is for the data.”
- “The standard storage warehouses that are seeing less business could easily be released for other business opportunities. A paper storage warehouse could become a food warehouse, for example. They can find other people to rent from them. The real estate assets are not lost that way.”

4. Executive in records management at a consumer products corporation

Iron Mountain must focus on global expansion, particularly in Europe and Latin America, where demand for physical document storage still exists because of regulations on the preservation of paper documents. Spending on physical document storage has gone down significantly for this Iron Mountain customer, as for many other large companies that produce and consequently store fewer paper documents. Budgets have instead shifted to spending on IT. Still, many midsized companies are not making the transition to electronic because of cost, and require document storage from companies like Iron Mountain. The need to store paper documents will continue into the next few years, but opportunities for growth are shrinking. Because of intense U.S. industry consolidation, Iron Mountain has practically no competitors with its scope.

Iron Mountain and Other Storage Companies

- “Many facilities have been consolidated. But if a storage company is losing a major client who is moving to electronic storage, it’s hard to know if this can be compensated by smaller clients who just need storage space. The storage companies have to expand their customers.”
- “There are growth opportunities in countries where they’re not allowed to get rid of the original paper documents, particularly in Latin America and

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*Records Management Executive
Consumer Products Corporation*

Europe.”

- “Many of the foreign countries are however moving away from paper to better streamlined ecommerce. I think this is going to continue driving change in the future.”
- “This has been an established industry with no new players really. There’s been a lot of consolidation as Iron Mountain and [Recall \[Corp.\]](#) have bought up others. But I haven’t seen any that are their size that are also players in other countries with multiple jurisdictions.”
- “Nobody covers every place in the world. There’s Iron Mountain and only a few others, maybe Recall.”
- “There are also a lot of local companies still, mom-and-pops, small companies that have been there for a long time but were never big enough to buy up.”
- “Some of the storage companies started scanning documents in the 1990s, trying to grow that angle, but I can’t imagine how [Iron Mountain] might come out and say, ‘We have our own version of [EMC Corp.’s/EMC] [Documentum](#).’ I think we’re looking at a bottle that will slowly shrink over time.”

Current Storage Trends

- “The need for physical storage has gone down significantly for us.”
- “Spending for document storage and management has shifted from hard copy to electronic. You’re not eliminating the record, you’re just moving it.”
- “Spending for administration of storage and off-site storage has gone down for a number of companies. But then the budget moves over to IT for more servers and applications.”
- “In terms of hard copy, we produce a lot less than we have in the past. Changes in regulations are driving that reduction. Specifically in tax records, the requirements to preserve receipts have eased.”
- “Smaller companies that have been around for a long time, maybe with 800 people, have a very hard transition to the electronic world. They have to find applications and suites within their price range. They can’t afford to buy Documentum.”
- “Legal firms also have always found it painful to move to the next technology.”
- “You can’t beat the price of storing records off-site, as long as you don’t touch them. It’s fractions of pennies per page. But once you touch the papers, there are charges for pulling them off the shelf, travel charges, in-and-out charges, delivery.”
- “The handling charges have gone up along with the price of labor and fuel.”
- “Iron Mountain and others have attempted to enter the digital market. They’ve always done tape storage. They had a number of services. It seemed like they were expanding, but they sold one of those divisions off about 10 years ago in order to concentrate on their core functions.”
- “I believe the majority of companies that use data centers use companies like [IBM \[Corp./IBM\]](#).”
- “People confuse control with security when it comes to digital security, e-record security systems, and the cloud. Just because it’s in a building you own does not make that system more secure. It’s still vulnerable if you don’t tighten up record protection requirements.”
- “Some people have voiced concern about cloud security, but it’s very few.”

Future Storage Trends

- “Document storage companies will be around for a while. They’ll continue to try to find new places or companies that are taking longer to make the transition to electronic because of the cost involved. The question is how far in the future can they go as a business of storage. There’s writing on the wall for some of them.”
- “There’s a paradigm shift, but there will still be paper around for a long time. I don’t think that’s going away. It’s just that the value of paper records will decrease over time in most areas.”
- “There has been a big shift for many companies where paper is no longer the record of evidence. But then already 10 years ago we were supposed to be in a paperless office.”

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*Records Management Executive
Consumer Products Corporation*

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*Records Management Executive
Consumer Products Corporation*

5. Chief technology officer for a media corporation

Iron Mountain is effectively transitioning toward digital storage. Demand for its physical storage is not likely to grow, but companies that already use physical storage and are in heavily regulated industries will continue to need that space. Companies that require digital storage must evaluate a wide range of pricing and service options with cloud storage, which remains in flux, balanced against the cost of setting up in-house storage. Consolidation is expected with cloud storage companies after the industry hits critical mass, likely in two years.

Iron Mountain and Other Storage Companies

- “Pricing is always important, but so is data security. Cloud-based storage solutions are highly competitive. As an industry, cloud storage is going to grow rapidly for the short term.”
- “Iron Mountain has a great reputation. A lot of that, I think, is based on customer loyalty. Companies that use Iron Mountain stick with them. Even if prices go up a little year to year, it will probably not be enough to prompt customers to remove and relocate material.”
- “Data storage is in flux and probably will be for another year or two until the industry settles out. The cloud companies are trying to hit upon the right mix of services and pricing. Companies that need data storage are trying to decide whether it’s more cost-effective to go with a provider or set up solutions in-house. A lot of it will come down to access and the cost of storage and retrieval. There are many different pricing models that make comparison shopping essential.”
- “Iron Mountain is taking steps to match or beat other digital data storage solutions. They see the trends as well as anybody and are being proactive.”
- “Iron Mountain, [Quantum \[Corp./QTM\]](#), Dropbox, [Western Digital \[Corp./WDC\]](#), Bonded and [Conduant \[Corp.\]](#) are the big names that come to mind. They should continue to be successful. Companies like [Verbatim \[Corp.\]](#) and [Digital Storage Solutions](#) are focused more on consumer needs.”

Current Storage Trends

- “Our spend is fairly steady, neither growing nor going down.”
- “More material is being archived in the cloud and internally, so our need for storage is limited to archival material we have already stored.”
- “Virtually all of the new content we create or acquire now exists in a digital form. Older content is being digitized for us by Iron Mountain as we need it, but the original materials are extremely valuable and require physical storage space.”
- “Costs for physical storage are probably only going to increase modestly as the demand for that storage goes down.”

Future Storage Trends

- “I don’t think we’ll have a significant need for additional physical storage going forward, but we will need to maintain what we have.”
- “Spending on information management will increase with digital storage and on the retrieval side.”
- “Companies with the greatest need for physical storage are in heavily regulated industries where document storage for specific periods of time is mandatory. They will require long-term secure storage under climate-controlled conditions.”
- “Secure cloud storage systems for digital content will see the greatest demand.”
- “The technology industry historically moves toward consolidation. I don’t think secure cloud storage will be any different.”
- “Storage costs are based on volume of storage, whether it’s by the cubic foot or in terabytes. If costs do go up, it will probably be in physical storage. One thing we’ve seen with cloud storage is a wide variable in the cost of service, which is not just the storage itself but uploading and retrieval.”

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*Chief Technology Officer
Media Corporation*

6. Chief compliance officer with a healthcare corporation

This customer uses Iron Mountain storage facilities to maintain compliance with record-keeping regulations imposed by the FDA, the EPA and the Office of Inspector General. Iron Mountain can continue to grow based on the business of regulated industries. The company offers tiered pricing depending on the type of storage and security level required. If the government loosened requirements on storage of physical records, the source would transition to Iron Mountain's digital storage services, which are competitively priced. Iron Mountain is staying ahead of the shift toward digital.

Iron Mountain and Other Storage Companies

- "Pricing is important, but we need the storage to satisfy very specific requirements. Iron Mountain has been the best choice for us."
- "Iron Mountain is probably the best in storage security for documents."
- "Iron Mountain will stay abreast of industry changes. They already offer a range of digital storage options."
- "Iron Mountain was in acquisition mode for some time, but I don't think they are looking at any more deals right now. Their focus is turning to digital storage and developing their own solutions."
- "Iron Mountain should grow. They understand their industry as well as anyone and where it's going. They are best in class in terms of physical security. That's something that cloud-based storage companies won't compete with, so Iron Mountain is in a pretty secure position with physical storage. [Cintas \[Corp./CTAS\]](#) and [SourceCorp](#) are well respected for their storage services for the healthcare industry."

Current Storage Trends

- "We've seen [price] increases of about 2% to 3% annually for the last several years."
- "Our costs are higher than Iron Mountain's standard storage fees because of the extra security we are required to maintain."
- "Document storage remains as important as ever. Our industry is heavily regulated by any number of federal agencies, so the security requirements are higher and records must be held longer than for other companies."
- "The compliance division handles records management and disposition."

Future Storage Trends

- "Our costs to a large extent are tied to the regulatory environment. For now, I don't anticipate costs going down. I anticipate small increases year to year, about what we've been seeing."
- "If we could move more material into digital storage, it would be beneficial for us, but we don't have that option right now."
- "I can see most companies that need record storage moving to cloud-based storage or possibly creating in-house storage for the bigger companies that can afford it."
- "Demand for physical storage is going to go down, but there will always be a need for physical storage to hold archival material, documents that are in a delicate physical condition—things like that. But for most industries, recordkeeping is moving towards digital storage."
- "Again, we are beholden to federal regulations, so our storage requirements are not going to change dramatically unless the regulations change."
- "Medicare and Medicaid records will still fall under long-term storage regulations. I don't think that's going away."
- "Digital storage providers are growing to meet that demand. Consolidation of these companies doesn't affect us, at least not now."

7. EVP of technology for a financial services company

This company is transitioning to digital storage for newly generated records, while continuing to use Iron Mountain for physical storage of older documents. The goal is to store all records digitally going forward, while destroying older material as it becomes outdated or is no longer needed. The source is evaluating the cost of implementing in-house digital storage vs. using Iron Mountain's services. Iron Mountain can continue to grow by pursuing digital-storage customers. If demand for physical storage declines dramatically, Iron Mountain could repurpose its facilities for other uses. However, in the absence of huge increases in storage costs, legacy customers will continue to use Iron Mountain's physical storage facilities based on the cost and challenges of relocating the material.

Iron Mountain and Other Storage Companies

- “In physical storage, there are maybe a dozen companies competing. Iron Mountain is at the top. On the digital storage side, it’s more like the Wild West.”
- “It depends on which direction we go. If we bring digital storage in-house, then our business with Iron Mountain will scale back. It really will depend on the upfront cost of doing this ourselves, versus the long-term expense of outsourcing our records storage. It’s not a decision we need to make immediately.”
- “Iron Mountain has repeatedly shown they can compete price-wise. They’re also in a good position to acquire data storage companies and repurpose their storage facilities if they need to go that route.”
- “Iron Mountain is not going to lose ground in physical storage. They have top facilities and pricing in line with the market. Also, the cost of relocating physical material makes it less likely that a company would pull up stakes and move their records out of Iron Mountain. [Anacomp](#) and Cintas are leaders in digital document management.”

Current Storage Trends

- “Our spending is not increasing but shifting to digital storage as we work to reduce paper documents. We expect to see some cost savings throughout this transition.”
- “Physical storage is losing importance in favor of more convenient digital storage.”
- “Our information management department is responsible for maintaining records. We’re looking at Iron Mountain’s solutions and evaluating the cost of building up our own digital storage.”
- “Physical storage costs have gone down a little in the last few years. It depends on the level of security needed for records storage. Iron Mountain helped us cut costs by breaking records into ranked segments, whether it’s archived records or information we need to access every day.”

Future Storage Trends

- “We are always looking for efficiencies, and one way to lower the cost of record storage is going digital. Our goal is to move to digital preservation going forward while destroying outdated physical documents that are no longer needed. The cost of digital conversion of paper documents on any scale is enormous, so we will probably maintain our existing physical records in storage until they can be destroyed.”
- “In time we would like to manage all records in a digital format, to the greatest extent possible. I don’t know that we’ll ever get away completely from hard copies.”
- “Companies that have lower security needs will move to digital recordkeeping. Smaller companies will probably go with outsourced solutions in the cloud rather than build out in-house records storage, which is very expensive.”
- “Most record storage will exist in cloud-based systems that the owner of the records can access at will.”
- “Pricing is a very good question and one that hasn’t been completely answered just yet. It’s looking like the cost will be based on data volume and access to it. If you need to retrieve, alter and store information frequently, that would cost more on top of data storage.”
- “Digital storage is still in growth mode. There will eventually be consolidation, but right now there are a lot of companies trying to get in the door.”
- “We are mainly interested in our costs. If consolidation of data storage companies results in lower costs to the end user of their services, then I’m all for it.”

The cost of digital conversion of paper documents on any scale is enormous, so we will probably maintain our existing physical records in storage until they can be destroyed. ... It’s looking like the cost will be based on data volume and access to it. If you need to retrieve, alter and store information frequently, that would cost more on top of data storage

*EVP of Technology
Financial Services Company*

8. CIO of an automotive services corporation

This customer uses Iron Mountain’s standard physical storage for low-security documents but is shifting toward digital storage and is shredding unneeded documents. Document storage as an industry is shifting rapidly toward cloud-based storage or in-house digital storage within companies that require low to moderate security. Iron Mountain’s advantage has long been warehousing of physical documents to save companies’ own real estate space. Iron Mountain is adapting to the digital world and can continue to grow its business by offering digital storage, scanning and security services priced competitively with the market.

Iron Mountain and Other Storage Companies

- “Iron Mountain is competitive for our needs. They are more expensive at higher security tiers, but we don’t need that level of service.”
- “Pricing is very important. We also look at reliability, service and support.”
- “Iron Mountain is probably the best in that industry.”
- “Iron Mountain will move more toward digital storage. I think they will continue to grow on the strength of their brand. They are trusted.”
- “The benefits of consolidation all depend on who’s acquiring. Iron Mountain can do deals to pick up storage companies just for the customer base that comes with them.”

Current Storage Trends

- “Our costs are going down. We’ve streamlined our records-capture processes and are shifting to digital storage as much as we can. We still print paper contracts for our customers at the point-of-sale, but signatures are electronic and an exact duplicate of that paper record is stored in our database. We migrate those and other documents periodically to Iron Mountain’s storage system.”
- “Cutting down on huge volumes of paper records is the driving force toward digital storage. Cost savings is an added benefit. We expect to see at least 5% annual savings on record storage and hopefully closer to 7% to 8%.”
- “Physical storage is a lot less important than a decade ago. We’re not dealing with high-security documents so much as the problem of needing sheer space to house them.”
- “Our digital storage costs are very basic. We don’t need frequent retrieval, just a safe place to store the information.”
- “We’re able to cut costs about 5% with digital storage, maybe more depending on our usage.”

Future Storage Trends

- “We are looking at ways to drive down costs. It’s less expensive at this point to warehouse digital records with Iron Mountain than for us to do it ourselves.”
- “If we need a record of a document, the goal is to store it in a digital format and do away with paper as much as possible.”
- “Storage in the cloud is where everyone in our industry is headed. I can see the need others will continue to have for physical storage, like the government and industries regulated by the government, but the move is towards digital storage.”
- “The cost is still floating around. There are storage companies that charge for the space being used on hard drives, tape or whatever. And there are also charges for uploading and downloading, plus scanning hard copies for digital storage. Some of these companies have lots of extra charges.”
- “I’m seeing more data storage companies jumping into the market than any real consolidation.”

Cutting down on huge volumes of paper records is the driving force toward digital storage. Cost savings is an added benefit. We expect to see at least 5% annual savings on record storage and hopefully closer to 7% to 8%.”

CIO, Automotive Services Corporation

9. Senior records manager for an education organization

Iron Mountain probably will not be affected by changes in document storage needs for the next eight to 10 years. Instead, it will compensate for lost storage income through box retrieval, paper shredding fees and other costs. This source is reducing spending on paper and backup tape storage with Iron Mountain. He estimates his company will recoup the fees associated with removal in 18 months by not paying as much for monthly storage. Also, some organizations will need to continue using Iron Mountain’s record storage facilities. Iron Mountain has strong client relationships and works with customers to help them save money. It is diverse enough to continue as a large and capable leader that is likely to keep up with changes in the industry.

Iron Mountain and Other Storage Companies

- “Going forward, our spending on physical storage will be reduced. Having said that, Iron Mountain also does our shred services. It gives them recyclable product to sell.”
- “We use Iron Mountain for our backup tape storage, physical storage, and we also use their services for some scan jobs that are too large for us.”

- “Iron Mountain has so much going on. They have so many different pieces to their organization. In the long run this paper reduction we’re undertaking, and other companies too, is not going to impact them for a quite a while. They charge for pulling things off their shelf and destroying them. And it’s not that cheap. The cost of putting it on to their shelves, per box per month, is relatively small. But to pull them off is expensive. If we were spending 26¢ a month per box, to take the box off the shelf and destroy would cost \$6.50.”
- “[Iron Mountain is] going to be pretty healthy for a while still because the cost to remove far outweighs the cost to keep. It probably won’t impact them for eight to 10 years down the road.”
- “Iron Mountain is aware that when we implement our plan it will impact them. We know it’s on their radar, but their job is to provide safe and secure service and they’re continuing to do that. Whether we have a small account or large one, they’ve always been good about helping us save money.”
- “We may spend a lot to remove our storage, and it may take 18 months to recoup our costs. I don’t think it will impact them immediately. Maybe down the road when more people start to do it because the electronic resources are cheaper.”
- “They’re diverse enough that the impact on them may not be that big. Once our boxes leave, I’m sure that just opens more space for others. They fill up their facilities. I don’t see them being affected on storage any time soon.”
- “Iron Mountain is preparing themselves for the changes in technology with the services they’re providing. There are still a lot of people out there who are going to stick with paper. I think they’re primed to change. The question will be how they keep up with the changes. The reduction of paper is going to be noticeable, but I don’t know how much.”
- “When we open up our contracts for review and bids—and we do that periodically even though we’ve been with Iron Mountain for a while—competitors offer to pay the transfer costs. They calculate they’ll recover the costs in 24 months or so, and start making money.”
- “Cintas is one of the competitors we’ve considered, and we’ve also looked at some of the local ones. But because of the process changes, it would have disrupted our normal business too much. We stay with Iron Mountain because they’re big and they can handle all our needs.”
- “Cintas too is getting into the backup tape business, so there’s still a need for that out there.”

Current Storage Trends

- “The need for physical storage space is always going to be there in some of its elements unless you have a facility on site.”
- “There are many documents that have to be retained, and the safest place is an off-site storage facility.”
- “Tracking is an important aspect of storage. A lot of the storage services have a capability to provide detailed tracking and information.”
- “Our current structure is more digital, so we don’t send records to off-site storage. We might find a batch of records we have to keep and we don’t want to destroy them. We might send those off.”
- “Moving forward, we’ve gone mostly electronic and don’t generate a lot of paper anymore.”
- “We’re taking the same approach to stored backup tapes at Iron Mountain. We’re not transporting as many tapes anymore, and we’re looking to review and destroy as many tapes as possible this coming year, to reduce our cost and risk.”
- “In the last year we’ve gone to a disk server backup vs. backing up to tape. We don’t spend as much going to tape anymore.”
- “Most companies are like us, trying to reduce their paper storage, their backup tapes and shred. At the end of the day we’re not going to be spending as much on storage.”

Future Storage Trends

- “Moving forward we, like a lot of companies, are looking to control our risk. We don’t want to over-retain or under-retain. But we also want to control our cost.”
- “All companies are focused on risk and cost control for what they’re storing on a large scale.”
- “We’ll be looking at our inventory of physical records this fiscal year. We have a more mature records management program, and we’re looking to fully implement it next year. We will review what we have in off-site storage to reduce

Our spending on physical storage will be reduced. Having said that, Iron Mountain also does our shred services. It gives them recyclable product to sell.

Senior Records Manager
Education Organization

When we open up our contracts for review and bids... competitors offer to pay the transfer costs. They calculate they’ll recover the costs in 24 months or so.

Senior Records Manager
Education Organization

the amount of those records and destroy the ones that don't need to be retained. Hopefully that will give us an ROI. We'll be looking at reducing our storage in the end probably by 70%."

- "The reason we can have such a big reduction is that for the past five years, we've been digitizing what we have in storage with Iron Mountain. Much of what remains will be reviewed and eligible to be destroyed."
- "It's not just about saving money but about controlling risk."
- "When companies do get programs running, it's going to impact every element of their company by allowing them to manage their records better, which theoretically is a reduction of paper, backup tapes and everything that goes along with it."

2) Data Storage Competitors

Three of these four sources reported growth in their digital storage business, with each pegging the increase in the high single digits year to year. Financial companies in particular are increasingly moving their records to digital form. All sources foresee consolidation of the digital storage industry but not for at least two years. Iron Mountain is storage industry's top vendor, with its biggest advantages being its security and regulation compliance.

KEY SILO FINDINGS

Iron Mountain and Other Storage Companies

- All 4 rate Iron Mountain at the top of the industry; security and regulatory compliance were most often cited as its advantages.
- 3 said customized solutions are essential to winning business; 2 cite add-ons and services as key.

Current Storage Trends

- 3 of 4 said their digital storage business is up between 8% and 10% over last year because of more business from current customer; the other source's business is flat.
- All 4 cite intense competition, though none said pricing was falling as a result.

Future Storage Trends

- All 4 project industry consolidation in digital storage to occur in 2 or 3 years.
- All 4 note that financial companies are increasingly moving to digital storage.

1. Sales consultant for a document storage company

Digital storage demand is up 8% year to year, mainly because of customer demand for higher security storage. Competition has exploded during the same time period. Physical storage remains important for regulated industries and companies that require preservation of material, but the shift toward digital storage is growing and will not be reversed. Physical storage costs are up slightly for higher security levels. Demand for digital storage is expected to continue increasing at least 8% annually for the next two years and probably higher as competition holds down digital storage pricing. Iron Mountain and Dropbox will be the major players in digital storage solutions going forward.

Iron Mountain and Other Storage Companies

- "Competition for digital storage is extreme. That makes pricing very important. There are only so many ways to set yourself apart from your competition."
- "Iron Mountain gets excellent ratings. Their storage facilities are the best in the world. Now that they are moving more aggressively into digital storage, they will remain a powerful competitor."
- "Iron Mountain is in the same situation as other digital storage operations. How do you distinguish your offerings from every other records management company? One way is to demonstrate your security and adherence to government regulations. Iron Mountain wins on that score."

How do you distinguish your offerings from every other records management company? One way is to demonstrate your security and adherence to government regulations. Iron Mountain wins on that score.

Sales Consultant
Document Storage Company

- “Iron Mountain is nationwide, well known and respected. They’re big enough that they can compete on price and weather this changing industry.”
- “I could see Iron Mountain doing some deals to fill out their market penetration. Digital storage eliminates one drawback of physical storage, and that’s the physical proximity to your records.”
- “It will be at least two years before demand for digital storage starts to level off a bit. After that I think we’ll see some consolidation in the industry. The valuable smaller companies will be identified and absorbed by the bigger fish.”
- “Dropbox has a lot of potential. Iron Mountain will succeed in digital storage. They’ve been at this long enough to know that to thrive you’ve got to stay ahead of the technology curve.”

Current Storage Trends

- “We’re seeing an uptick in demand for secure digital storage. It’s maybe 8% better than last year. At the same time there’s been a huge increase in the number of storage solutions available for people to choose from.”
- “Our increase is coming mostly from current customers. More and more we’re moving to a paperless society, but we still need that record of a contract, annual inventories, sensitive financial information—anything you need to hang on to but don’t want to store in a file room.”
- “Companies see the value in moving records off-premises to use their space for other needs. That’s one of the things we promote when we talk to prospective customers.”
- “Physical storage is still very important to our customers. We work with a lot of hospitals and clinics that need to maintain hard copies of medical records, but the volume of material is so great they cannot justify storing it on-site.”
- “It’s diversifying on the digital side. The big names in physical storage still control that side of it.”
- “Most of the demand is coming from banks, credit card companies, healthcare companies and large retailers.”
- “Physical storage costs are trending up a little, depending on the security requirements. Higher security levels command higher pricing. Digital storage costs are steady.”

The biggest growth opportunities are in the higher security tiers for storage. There are an awful lot of cloud-storage companies that can provide standard storage at relatively low cost, but fewer that can meet security standards.

*Sales Consultant
Document Storage Company*

Future Storage Trends

- “Digital storage is growing in terms of demand, more than 5% a year. At the same time, more data management providers are stepping in to meet that demand.”
- “Short and long term, demand and spending are going to increase for digital storage. We’re projecting demand growth of at least 8% annually and probably more while there is so much competition holding down storage pricing. Our growth is coming from increased demand for higher security storage.”
- “Any business that can replace a paper document with a digital copy would do well to do so. It’s a much more efficient way to have access to that information. Companies that are either required to maintain physical records or need to preserve materials will still choose warehousing.”
- “Financial services companies generate vast amounts of sensitive data that can be stored securely in a digital format.”
- “The biggest growth opportunities are in the higher security tiers for storage. There are an awful lot of cloud-storage companies that can provide standard storage at relatively low cost, but fewer that can meet security standards.”
- “This is not a consolidating industry right now. If anything, it’s getting crowded. Established operations like Iron Mountain have staying power. Also Diversified and SourceCorp. Dropbox also has potential. I think a lot of the newer companies will either struggle or get picked off through an acquisition.”

2. Business development and marketing associate for a document storage company

Demand for digital storage is essentially flat year to year because of the influx of competitors vying for customers. Physical storage demand will decline gradually, except in heavily regulated industries such as healthcare. Iron Mountain can compete effectively in digital storage, thanks to offering the highest security and compliance. Digital storage remains in growth mode; consolidation is not expected for at least two years.

Iron Mountain and Other Storage Companies

- “I would say competition is at an all-time high, and it’s going to get harder. Pricing is vital. You can put together different storage solutions with different pricing levels tied to usage, but digital document management really comes down to two things: secure storage and ease of retrieval.”
- “Iron Mountain has a great reputation for their secure physical storage. They’re making a push toward digital storage now, and I think they will do well based on their name and reputation.”
- “Demand for Iron Mountain’s physical storage really depends on the regulatory environment. If the government loosens requirements on document storage, then it will trend toward digital. Iron Mountain will probably keep their existing customer base on the physical side for the life cycle of the documents, but that will eventually decline as the material becomes obsolete. They can still do a lot of things with their storage facilities. They obviously realize that since they restructured as a real estate investment trust [REIT].”
- “Iron Mountain can compete on price. They already do. I don’t know that they can apply premium pricing to the digital side like they’ve had for so long with their physical storage.”
- “At such time as we start to see consolidation, I would expect to see Iron Mountain doing some acquisitions.”
- “Companies that can demonstrate their security and compliance with storage regulations will see the most growth. Iron Mountain is certainly one of them.”

Iron Mountain can compete on price. They already do. I don’t know that they can apply premium pricing to the digital side like they’ve had for so long with their physical storage.

*Business Development & Marketing
Associate
Document Storage Company*

Current Storage Trends

- “Demand is pretty flat this year for digital storage. More companies are getting into cloud storage, so the market is very competitive right now.”
- “Only companies that absolutely need physical storage are going that route. There are, of course, many companies that already have substantial content in physical storage, and they will probably continue to do so until they no longer need those documents and the material can be destroyed.”
- “The healthcare industry has significant data storage requirements, but much of that involves physical storage. Also banks and financial services companies. We’re seeing the financial institutions moving more toward digital storage.”
- “Costs are about the same as last year. It’s a very competitive landscape with data storage companies trying to set themselves apart with different fee structures, different levels of management. There’s a lot of customization in the offerings to satisfy different customers and win that business.”

Future Storage Trends

- “Demand for digital storage is going to increase, but the business will be spread out among a lot more data storage companies. The benefits of digital storage are security and also freeing up space. On-site storage takes up real estate in a company that could be using that space for business-facing needs. Also, what we’re seeing right now is a lot of corporate leadership looking at the costs of digital storage in-house and looking to cut costs by working with a data management provider.”
- “Digital storage is going to dominate this industry. It’s secure, cost-effective and much easier in terms of data retrieval compared to physical storage.”
- “The main need for physical storage will come from companies that have archival material or physical content like film negatives that have value beyond the images captured on the negatives. With these materials, the concern is for preservation as much as storage. Companies bound by federal regulations on maintaining physical records will continue to need that physical space in a secure environment. Again, that’s healthcare. The federal government probably generates more documents than any other entity in the United States, so they can either expand their storage facilities or contract with data management providers. There could be some growth in that area.”
- “I don’t see [digital storage] costs going up very much in the near term. There are a lot of players vying for a slice.”
- “Cloud-based storage hasn’t peaked. Once that settles out, I think we’ll see consolidation, companies doing acquisitions that make sense for their focus. That’s probably two years off.”

3. Executive with a document management company

Demand for digital storage is up nearly 10% compared with 2013, mainly from current customers increasing their storage needs. The source expected another 10% in growth next year. Fierce competition among digital storage providers is suppressing price increases, but pricing for secure physical storage is up 3% year to year. The healthcare industry will continue to need high-tier security for record storage, while financial services companies are expected to move to digital. Consolidation among information management companies is expected in two to three years as larger companies like Iron Mountain acquire targets that have built up a desirable customer base and as smaller startups begin looking for an exit.

Iron Mountain and Other Storage Companies

- “Competition is intense. Pricing is always going to be important, but so are service and support. Records have to be maintained in a way that makes them useful to the custodian.”
- “Iron Mountain is the best in terms of facilities, security and their reputation for strict government compliance.”
- “Iron Mountain is doing a lot of interesting things. They’re ramping up digital storage with a massive sales push, but there are also higher costs associated with that. I think their physical storage business is stable, probably a zero-gain proposition. They’re not going to lose existing customers, although [customers’] capacity needs will go down over time as records reach the end of their life cycle and are marked for shredding. I can’t see regulatory agencies loosening their requirements on records keeping, so physical storage is not going away.”
- “Iron Mountain has the resources to compete with any digital records provider out there, short or long term. They’re probably the most widely recognized name in our industry.”
- “The current competitive climate and pricing will probably hold everyone back short term, but at some point capacity will catch up with demand and some of these smaller companies will be looking for an exit. We’ll see some consolidation in the next two to three years.”
- “We’re offering different levels of servicing in addition to data storage, a mix of support and storage, to grow our company. When storage and security are comparable among competitors, additional services will be the ticket to winning more customers.”

Current Storage Trends

- “Demand for our digital storage solutions is up almost 10% this year.”
- “Our growth is coming from current customers for the most part. We are working hard to bring our solutions to new customers, but there are now so many competing options that we’re taking more of a regional approach to cultivating new customers.”
- “Physical storage of sensitive material is still very important. As much as companies would probably like to scan and migrate all their records into digital storage, there are still entire industries that need that physical storage space. Health insurance companies fall under federal regulations for very specific record keeping that can last for decades in some cases.”
- “Among our current customers with standard or low security requirements, we’re seeing a big move toward off-site digital storage. When you’re leasing space by the square foot, it makes sense to maximize that space by moving out cardboard boxes of papers, scanning the material and storing it in a secure location.”
- “There’s more vendors now than a year ago. It’s not driving down storage prices, but no one seems comfortable raising them either.”
- “Banks, credit card companies and lenders are exploring digital storage solutions more than any other industry we work with.”
- “Besides security, the critical factor with digital storage is making the records easily available to the department or individual who needs them. We’ve seen studies that show U.S. managers spend as much as four weeks a year looking for misfiled documents or waiting for them to be retrieved. Digital storage makes those records useful again and saves time.”
- “Digital storage costs are about the same as last year. Physical storage for higher security material is up a little, about 3%.”

Future Storage Trends

Iron Mountain is the best in terms of facilities, security and their reputation for strict government compliance. ... Iron Mountain has the resources to compete with any digital records provider out there, short or long term. They’re probably the most widely recognized name in our industry.

*Executive
Document Management Company*

- “We definitely believe the demand for digital storage will increase steadily. Our forecast is for 10% annual growth in digital records management in 2015.”
- “Companies that do not fall under the government’s regulatory umbrella of records keeping are going to choose digital storage solutions to streamline workflows and reduce paper documents as much as they can.”
- “Companies already obligated to maintain physical copies of their records will still need storage. I don’t anticipate losing any of that business, but I also don’t know that we will gain much, if any, from other providers. The cost and hassle of moving physical records is more than the potential savings of switching to another records management company.”
- “We’re going to see increased specialization, with records management companies focused on a specific region or cluster of industries that they know how to serve.”
- “The cost issue is an interesting question because right now the sheer number of companies competing in digital records management is suppressing any price increase. There are two scenarios for rising storage costs: Either everyone moves up lockstep, or storage companies can make their case for the benefits of working with a local solution. With digital records management, theoretically the records can be stored anywhere, but we have found that companies want their records stored in the same state or region. That opens the window to pricing adjustments.”
- “We’ll eventually see consolidation among digital records management providers, but not anytime soon. Maybe in two to three years when an acquisition target has built up a customer base that would make it attractive.”

4. Senior director of a document management company

Demand is growing almost 50% faster for digital storage than for physical media storage, and competition is heating up among startups and established industry players. Physical storage is essential for the healthcare industry, which requires certified, long-term secure containment of paper documents. In fact, demand for higher security storage is on the rise. The source said nothing suggests that federal regulations on records keeping for the healthcare industry will ease up. Intense competition among digital storage providers is holding price increases at bay, but costs for physical storage are expected to increase gradually on demand as well as for the higher costs of preserving and maintaining paper records. Demand for high-security storage is also on the rise. In the digital arena, companies are concentrating on customized add-on services and customer support to boost revenues while actual digital storage fees remain flat.

Iron Mountain and Other Storage Companies

- “Competition among digital storage providers is pretty fierce. The thing is, nobody is cutting prices. The sales pitch revolves around service and customizable storage solutions. Flexibility in accommodating the customer is what’s closing a lot of sales.”
- “Iron Mountain is kind of in its own league with high-security warehousing. They have a great reputation, industry-wide. They’re constantly promoting their digital storage to capture that growing segment of the market. I don’t think anybody can peel off customers from their warehousing business.”
- “I doubt the Iron Mountain leadership will let that company fall behind. They may have to do a little catch-up on digital storage, but I can’t imagine they’ll lag behind for long.”
- “Iron Mountain is in a position to go after the largest contracts. A lot of the newer players in this industry can’t touch us or Iron Mountain on add-on service or support. Those are areas where maintaining that customer satisfaction will really come into play.”

Digital storage [demand] is growing about 50% faster than physical records storage.

*Senior Director
Document Management Company*

Current Storage Trends

- “Digital storage [demand] is growing about 50% faster than physical records storage. Our digital storage segment is on target for an 8% to 9% increase this year. Physical storage is up almost 6%.”
- “Physical storage remains an integral part of our services to the healthcare industry. We are NARA-certified, which drives our [SourceHOV](#) segment for long-term, high-security storage. Our digital solutions are experiencing growth mainly from financial services clients, and companies in the retail, manufacturing and legal sectors.”
- “Physical storage is essential for industries that must follow federal government regulations for document management. There is no reason to believe those regulations on medical records storage are going to loosen up.”

- “There are more vendors operating in the digital storage space than in recent years. It is a fast-growing industry. So the trend is toward diversification as these companies try to carve an identity that sets them apart.”
- “We are heavily invested in serving the healthcare sector. We deliver digital solutions that enable access on demand to active records, with long-term storage of physical documents that may not need regular retrieval.”
- “The personnel we work with most often are claims processors, loan officers and departmental managers working on reports. These are typically big companies with 500 or more employees.”
- “Physical storage costs at the highest security levels are up a good 8%. They had been in decline for a while, but we’re seeing a surge in demand for tier 3 and 4 security storage.”

Physical storage costs at the highest security levels are up a good 8%. They had been in decline for a while, but we’re seeing a surge in demand for tier 3 and 4 security storage.

*Senior Director
Document Management Company*

Future Storage Trends

- “Real growth is coming from digital storage. That’s going to take off for us. The increases we’re seeing in demand for warehouse storage are coming from our current client roster. There’s not a lot of new business on that end.”
- “I expect growth in physical storage will continue to come from our longtime clients. It is very difficult to sway customers from another [physical] storage provider. It’s not that we can’t compete on price; we can. It’s the expense and time involved in moving that material from one point to another.”
- “Physical storage costs will probably creep upward to keep pace with the maintenance costs. For now, the price of digital storage is heavily influenced by competitive pressure. Most document management providers in digital storage are looking at add-on charges for various services to drive their revenues.”
- “We anticipate financial services companies will increasingly go digital for their record storage needs, and we are prepared to capture that. Large retailers with their own financing operations are also investigating outsourced digital storage.”
- “At some point we’ll see mergers and acquisitions—not for another couple of years though. We would certainly look at acquiring a company if it fit our business needs.”

3) Document Storage Real Estate Professionals

All four sources said the proliferation of digitized records has led to digital data storage becoming the standard in the United States. Internationally, data storage is at an earlier stage and has a greater potential for growth. However, recordkeeping regulations vary by country. Digital leaves a smaller real estate “footprint” than physical storage. Industry leader Iron Mountain is building out data centers and adapting other facilities to meet its customers’ changing storage needs.

KEY SILO FINDINGS

Iron Mountain and Other Storage Companies

- All 4 said Iron Mountain is taking measures to adapt to the change to largely digital recordkeeping.

Current Storage Trends

- All 4 said digitized records and digital data storage are increasingly the norm.

Future Storage Trends

- All 4 said digital storage leads to a smaller real estate footprint.
- 2 said international business offers new growth opportunities.

1. Commercial real estate executive formerly with Iron Mountain

Iron Mountain can continue its growth through global expansion to the developing world where paper storage needs are much greater. In the United States, the evolution to digital has slowed Iron Mountain’s growth curve. In real estate, Iron Mountain’s strategy to acquire smaller competitors and consolidate the document storage business has resulted in the

Iron Mountain Inc.

development of large warehouses as opposed to earlier smaller facilities. The company is aware that its real estate is a huge asset. Becoming a REIT has been a long-time goal of Iron Mountain.

Iron Mountain and Other Storage Companies

- “Iron Mountain also wanted to compete with other companies on the data side, and they built out facilities for that.”

Current Storage Trends

- “Already years ago there was concern about documents becoming more electronic. There was concern about shrinkage in the business because the paper records side is such a substantial part of Iron Mountain’s business.”
- “The growth curve declined slightly, but there wasn’t necessarily a shrinkage.”

Future Storage Trends

- “The real estate side of Iron Mountain has changed over the years. The original concept was that Fortune 500 companies would like to deal with less vendors rather than more. As part of that strategy, they bought many of their competitors and became the giant they are today.”
- “Their real estate was made up of a lot of little facilities with low utilization rates, but now they’re more focused on larger-sized real estate.”
- “They now look for large distribution points for their facilities. If it’s absolutely needed, in inner cities, they have small distribution points.”
- “Developing countries require more paper storage. Any increase in demand would come from second-world countries—India, for example. That could compensate for diminishing growth in the U.S.”
- “Iron Mountain has known that their hidden gem is real estate. Becoming a REIT has been a long-time goal.”

“Their real estate was made up of a lot of little facilities with low utilization rates, but now they’re more focused on larger-sized real estate.”

“Developing countries require more paper storage. Any increase in demand would come from second-world countries—India, for example.”

*Commercial Real Estate Executive
Formerly w/ Iron Mountain*

2. Executive in commercial real estate

Iron Mountain is adapting to the storage industry trend of digitized records. It is rapidly building data centers in U.S. markets that offer low-cost energy, low taxes and plenty of fiber. Iron Mountain is leveraging its customer base and its traditional storage business, albeit in the digital world. Comparisons to other data centers might not be fair because each has a separate business type. Also, other companies like [Equinix Inc.](#) (EQIX) have been around longer. However, this executive believes Iron Mountain is moving in the right direction.

Iron Mountain and Other Storage Companies

- “Iron Mountain has a built-in customer base that they’re capturing and trying to move into the next century. There are other publicly traded data center REITs that are doing extremely well and some that have been around for five, six or seven years. The portfolios of [Digital Realty Trust \[Inc./DLR\]](#) and Equinix, for instance, are well established in the business. Iron Mountain is following them.”
- “Iron Mountain is going to grow as fast as their customers will let them grow. You can’t compare Iron Mountain’s expansion of data centers to other companies because they’re all in different businesses and don’t provide the same services. All the REITs offer different services. Equinix is a global connectivity player. [Amazon\[.com Inc./AMZN\]](#) is in the cloud business. Digital Realty Trust is in energy.”
- “I could imagine Iron Mountain, as they grow, renting space from Digital Realty Trust.”

Current Storage Trends

- “It’s absolutely certain that document storage is diminishing. But data centers are growing at a substantial rate.”
- “Iron Mountain is capitalizing on an existing market base and existing customer base and chasing the storage of information into the technology and information age. They are doing the right thing.”

“It’s absolutely certain that document storage is diminishing. But data centers are growing at a substantial rate.”

Executive, Commercial Real Estate

- “The trend in the industry is going from the long-time storage of paper to digitized records, and Iron Mountain is following this trend.”
- “They’ve made data centers part of their company. They are building facilities and colocations.”
- “They are growing across the country. They’ve built data centers in Pennsylvania, Boston, Atlanta, L.A., in the Pacific Northwest, in Texas.”
- “Iron Mountain’s data center growth is a natural progression of their very large document business. They have a significant number of customers who are using less paper and storing digitized records that used to be on paper.”
- “Iron Mountain isn’t transforming their warehouses into data centers. They’ve been in the tape storage business for a long time, so they might transform some of those facilities.”
- “They are building data centers designed to prevent natural and manmade threats and locating them centrally in the United States, and strategically, where power costs are low. They also try to find places with low taxes, where there is an abundance of fiber and low-cost power. Their structure is extremely robust to prevent all sorts of risks.”

Future Storage Trends

- “The data center industry is growing significantly, and Iron Mountain is an up-and-coming data center company. They are smart because they are leveraging the document storage market that might be slipping away from them. And they are taking their same customer base and even the same information and converting it, either by digitizing or tape storage or actually providing server space. They’re moving forward in the right way.”
- “They are aggressively trying to grow their footprint in data centers and aggressively growing contracts with new and existing customers. I think [Iron Mountain] will be a formidable player in the regional data center market because of their existing customer base.”

Iron Mountain’s data center growth is a natural progression of their very large document business. They have a significant number of customers who are using less paper and storing digitized records that used to be on paper.

Executive, Commercial Real Estate

3. Commercial real estate executive

Iron Mountain is trying to evolve its services from hard copy to digital formats. It is building real estate infrastructures that are geared toward digital storage. Such real estate takes up a smaller footprint than the traditional warehouses and has lower associated costs. However, the storage of paper documents will continue to be an income-producing asset because so many large companies prefer to continue paying for the storage of their boxes rather than allocating additional resources to sort through them. Industry consolidation has been considerable. Iron Mountain has gained its scale through its many acquisitions, which have made it more sophisticated and larger than its competitors.

Iron Mountain and Other Storage Companies

- “Iron Mountain has a critical mass of records, so they’ll always have real estate. ... Iron Mountain has a portfolio of about 650 sites in the U.S. and Canada [and] will try to consolidate facilities for optimal usage and more efficiency. A lot of companies are taking that approach.”
- “I’m not sure if the fact that they lease a lot of their real estate would give them additional flexibility. Relocation is always costly.”
- “Some of Iron Mountain’s competition is Recall, Retrievox [now called [Access](#)], [Shred-It \[International Inc.\]](#) and Cintas. However, they may not have the level of sophistication that Iron Mountain has or be as large. Over the last 15 to 20 years, Iron Mountain has made close to 200 acquisitions. They’ve become so big because they’ve acquired much of their competition, and this has given them scale.”

If it’s digital, the real estate footprint shrinks. So does the overhead, and that can make them more competitive. And the access to the documents can be instantaneous.

Commercial Real Estate Executive

Current Storage Trends

- “The [document storage] industry has gone through a lot of change, and its clients have gone through change. Records sitting in warehouses are a cash cow, an annuity. People in the client organizations who are responsible for maintaining the records and determining when records can be destroyed have left. It’s not unusual for the client

base to no longer understand what they have in storage, or if it needs to be in storage. People who've succeeded them pay the invoices of companies like Iron Mountain and others in the industry without knowing what's in the boxes. They don't have the time nor the resources to purge the documents, since purging has its costs too. It's easier to continue to pay the smaller rental rates."

- "Shredded paper gets sold, too, on the wholesale market and creates additional revenue for document storage companies. There are all sorts of touch points between a company like Iron Mountain and its clients that provide opportunities."

Future Storage Trends

- "Iron Mountain and its competitors are really trying to go digital. They are working on programs to get their client base to go digital. This will allow them to shrink their real estate footprint and, therefore, be more competitive."
- "If it's digital, the real estate footprint shrinks. So does the overhead, and that can make them more competitive. And the access to the documents can be instantaneous."
- "When companies like Iron Mountain engage new clients, they're selling hard copy storage. But they're pushing for a technology solution, which will ultimately make them more efficient."
- "Companies like Iron Mountain are developing a different real estate infrastructure inside of existing facilities, or they're building new real estate infrastructures that have a smaller footprint. These digital facilities are for storing tapes, disks or they're using servers in them. It's less labor-intensive to pull a record from a drive or access it through a portal than hiring a driver to deliver boxes."
- "The drive to a technological solution, where they're imaging records and storing images of records as opposed to maintaining hard copies, is something Iron Mountain has started to be engaged in. They have a number of underground sites throughout the country that offer extra protection and additional security on anything clients may want to store."
- "The drive toward diversification of revenue through the development of data centers is not their core business, but they have some expertise in it. I am not aware of what they might be doing in that area and the extent to which they might be pursuing it with existing or new clients."
- "The level of mechanical and electrical infrastructure required for advanced technologies for document management is nowhere near what would be required for data centers. The technological solution for data management requires a smaller footprint, is a more efficient operation and less labor-intensive, and satisfies client needs more efficiently. Data center technology is much more sophisticated and complicated."

The drive toward diversification of revenue through the development of data centers is not their core business, but they have some expertise in it.

Commercial Real Estate Executive

4. Senior real estate executive

Iron Mountain is continuing to grow through the acquisition of hard-copy document storage businesses. This has been reinforced since becoming a REIT. Competition is made up mostly of small players in markets that Iron Mountain wants to enter. The company also has opportunities for growth internationally, particularly in Latin America. Traditionally, Iron Mountain leased more of its warehouses than it owned, but the amount of real estate it has is probably the same as a result of consolidation and acquisition.

Iron Mountain and Other Storage Companies

- "Iron Mountain will always be the largest holder of physical documents in the world. That's not changing. That mindset solidified as they converted into a REIT."
- "Iron Mountain is definitely the largest. Their biggest competition are the small players ingrained in a market that they've had difficulty breaking into. Retrievox, Recall and Iron Mountain are the biggest players."
- "In the more mature markets like the United States, technology as well as the economic downturn put a dent into the consolidation of Iron Mountain's portfolio. Their footprint has shrunk on a national basis. However, because of the acquisitions of other businesses, on a net basis the number of buildings they own is probably the same."
- "I think their portfolio might begin to dwindle slowly over a long period of time. Warehouses cannot be converted into data centers. The perfect warehouse for Iron Mountain is as tall as possible to create the highest density. Real estate is leased on a horizontal basis but billed on the vertical. The denser the facility, the more profitable it is."

- “Historically, they leased 70% of their space and owned 30%. This has allowed them to shed real estate upon lease expiration.”
- “For now they’re a net buyer as they’ve converted into a REIT.”
- “The data centers are very expensive to build. They build them and then do colocations.”

Current Storage Trends

- N/A

Future Storage Trends

- “[Iron Mountain wants] to maintain their [real estate] footprint. They’re doing this by going after hard copy storage, and they do this through acquisitions. They probably acquire a new company every two months or so.”
- “Iron Mountain has created data centers from the ground up, and they’ve traded some of their facilities—some of their underground footprint—for data centers. But their primary business is hard-copy physical storage.”
- “They sold off their digital business. But they’ve been in the data center business for a long time with tape storage, though not with a huge focus. It’s a parallel and ancillary business for them.”
- “Outside of the U.S., it’s still a heavily growing business in double digits, particularly in Latin America. There’s also Europe and Asia. The question in third-world or second-world countries is how quickly paper will fall off as digital moves mainstream. Another aspect around international development is that government regulations for document preservation vary widely.”

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Senior Real Estate Executive

4) Industry Specialists

All four sources were adamant that data storage has moved well beyond recordkeeping and has evolved into a concept that our sources described as content management, information management or information governance. Managing and classifying information as it is created is important so that it may be stored for optimal location and retrieval. An effective data storage vendor offers privacy, security and smooth e-discovery in addition to reliable storage itself. Iron Mountain holds more growth opportunities outside of the United States. The company has room for improvement in transitioning to digital in the United States.

KEY SILO FINDINGS

Iron Mountain and Other Storage Companies

- Iron Mountain is attempting to adapt to the changing world of recordkeeping, but it has a lot more work to do to make a successful conversion.

Current Storage Trends

- All 4 discussed the evolution of data storage from simple records management into the current and more sophisticated function of information management.
- The proliferation of data has led to difficulties in managing, classifying and retrieving information efficiently.

Future Storage Trends

- The ideal digital storage vendor offers privacy, security and e-discovery in addition to storage library.
- 2 sources refer to international growth opportunity, and said Iron Mountain has the capacity to capture it.

1. Consultant in electronic discovery and regulations compliance

Iron Mountain is in a dramatically changing industry because of compliance and legal issues. Issues regarding the preservation and destruction of documents have forced records and legal departments to work together. Legal regulations have increased the need for consultants who work with companies, even before documents are stored. This is benefitting large consulting companies like [Deloitte](#). Cost and risk are major considerations because storing data rather than physical documents also incurs high costs.

Iron Mountain and Other Storage Companies

- “Companies like Iron Mountain help somewhat with this [preservation of documents for defensibility for litigation], but the process has to start before. The life span and information on a document need to be determined when it’s filed. There can be trouble if certain things can’t be traced. There’s a gray line today about when you need to preserve documents in litigation.”
- “A lot of this has to be done upfront in both electronic and physical documents. You have to know what you have and where it is so people can get their hands on it. Or they have to go through all the documents they’ve filed and stored to find the ones that matter.”
- “Companies end up keeping everything because they’re worried they could end up destroying something they have a responsibility to preserve.”
- “The court decision requires that when you’re sued, or could possibly be sued, you need to preserve these documents. If you don’t know where these documents are, it becomes an issue.”
- “The cost of e-discovery is very expensive. The attorneys who have to review the documents—physical or electronic—are the most expensive part. The more you can do to limit the documents, the better.”
- “The storage companies are doing their job in terms of being the place for storing. However, they don’t have the resources for the strategy upfront. That needs experts—consultants and outside counsel. The consultant develops the strategy, and full due diligence requires a legal expert.”

Current Storage Trends

- “The change is in the strategy behind document storage and the governance of it. I see less change on the technical level. Compliance is pushing a lot of the changes.”
- “The preservation of documents for defensibility for litigation is a major reason for changes in the industry. Companies have a duty to preserve certain documents. But because of the way the documents are stored, they can’t differentiate between something that could be responsive to a matter and something that’s not. They have trouble figuring out what they can delete or not delete, or destroy or not destroy.”
- “In terms of physical documents, the challenges come in with regards to defensible disposition, defensible deletion, or defensible destruction.”
- “This affects anyone in the organization who gets touched by the costs and the risks. The groups being affected by the changes are basic operations departments and business units. And the general counsel is getting pulled into those decisions. A tremendous part is real estate.”
- “It’s not just the industry that’s changing but the marketplace. Corporate clients are starting to understand this and they’re starting to internally communicate and cross-functionally address the problem.”
- “There’s starting to be a convergence between the general counsel’s office and the CIO, and there’s a lot of functional overlap between those groups.”
- “It’s changing tremendously within the corporation. Legal and IT departments were speaking different languages for years and didn’t coordinate. They’ve been forced into it now. They all need to be there ... because a lot of the documents are employee-based. It all needs to be taken into account.”
- “This has given rise to a place for big consulting companies like Deloitte.”
- “The industry is changing because the rules are constantly evolving and getting further defined. There are new rules for civil procedure.”

Future Storage Trends

- “The [number of] work consultants in this area is increasing. Firms like Deloitte are being called in to set up RIM [records and information management] projects and information governance.”
- “Going forward, it’s getting more complicated.”
- “If there’s no litigation involved, companies have a duty to hold on to records for seven years or whatever the retention period is. How to destroy that information at the end of the retention period is an important issue. And if a document is called into question in litigation, you have to make sure it’s not destroyed along with everything else.”
- “Real estate needs for physical records and data are different. Data has exploded because storage costs are cheap, and it was easy to add another drive or blade. And as that happens, more data gets drawn in and you end up with the risk of having to go through all that information. In case of a lawsuit, that can be expensive.”

Legal and IT departments were speaking different languages for years and didn’t coordinate. They’ve been forced into it now. They all need to be there ... because a lot of the documents are employee-based.

Consultant in Electronic Discovery & Regulations Compliance

2. Executive at an industry association

Iron Mountain is evolving along with the industry and developing a hybrid model that has both a paper and digital component. Although paper-based record storage is not on a steep growth curve like digital record storage, the need for paper will continue for at the least the next five to 10 years. Iron Mountain must work on growing its digital business by helping its customers determine how to sort through and store the digital information they're accumulating, and also to convert paper to digital assets and destroy the rest. International growth is likely for a large company like Iron Mountain. Further consolidation also can be expected as Iron Mountain gets into the enterprise content management business. Other companies in this area, such as IBM, [Oracle Corp.](#) (ORCL), EMC, [Lexmark International Inc.](#) (LXK) and [OpenText Corp.](#) (TSE:OTC), have been acquiring companies to fill in their product gaps.

Iron Mountain and Other Storage Companies

- “As you get out of the records management and records storage business and into the broader content management space—which is where Iron Mountain eventually wants to wind up—some of the players are IBM, Oracle, EMC, Microsoft and more niche players like Lexmark and also OpenText. All of these have been acquiring companies to fill in gaps in their product offerings. These are companies at the top of the pyramid that do a lot business with Fortune 500 companies.”
- “There are still many small and medium-sized providers that focus on markets that are more local and regional and have customers that are less complex than the top tier companies. There's a lot of consolidation among those documents/records players.”
- “Ultimately, it will come down to how they execute the transition from their existing business to the business of helping their customers manage their digital assets. Some of their success might be tied to a bit of cannibalization of the existing business. They already have a great model for generating cash with their paper storage.”

Ultimately, it will come down to how they execute the transition from their existing business to the business of helping their customers manage their digital assets.

Executive, Industry Association

Current Storage Trends

- “Electronic information is replacing paper information, and along with that process, the way you store information is also changing.”
- “When you put paper-based record growth on a curve next to digital-based record growth, digital is clearly going up very steeply and paper is somewhat flat. It is still growing though not as fast.”
- “Most organizations have to think of long-term record storage as a hybrid problem that has both a digital and a paper component.”
- “Paper records for companies that operate at scale is massive. Fortune companies have hundreds and hundreds of thousands, or even millions, of boxes of records in off-site storage. That's not going to go away. The same dynamic that led the papers to storage in the first place makes it hard to get them out of there.”

Future Storage Trends

- “For the next five to 10 years, I think it will be a hybrid world [in document storage] for organizations, with the caveat that the mix ... is changing over time.”
- “For companies like Iron Mountain, while their existing business is built on paper-based storage and paper-based record management, they will still continue to grow because there will still be paper and there will still be the installed boxes that people don't know what to do with.”
- “It's a challenge for many big companies that a lot of the storage, both digital and paper, is nothing but a glorified landfill, and they don't have any idea of what's in those repositories. It's a long-term problem the documents have to be eventually discoverable in legal proceedings and have to be identified.”
- “Companies like Iron Mountain are also trying to attack the digital side. And like for any company that has a massive cash cow but is also trying to do new things, there'll be challenges along the way as they try to balance the two. Some people might view that as threatening to the existing business.”

Different countries have different rules and regulations and their own approach to how digital and paper information is kept and stored. Ultimately, a company that's big enough to help figure that out has significant advantage over a company that tries to do that on a single country basis.

Executive, Industry Association

Iron Mountain Inc.

- “Iron Mountain is trying to work with their customers on two fronts: They are trying to help people figure out what to do going forward with the digital information they’re accumulating, and how to determine what to keep and not keep. They will argue they are the company that can help businesses with that because they already have a relationship to do it on paper. As a second part, they will also say they can help companies convert some of the paper elements to digital assets and then start a process to ultimately get rid of the papers, because they are already holding the boxes. That’s where they’re headed.”
- “Different countries have different rules and regulations and their own approach to how digital and paper information is kept and stored. Ultimately, a company that’s big enough to help figure that out has significant advantage over a company that tries to do that on a single country basis.”

3. Information and privacy specialist

Iron Mountain’s growth is constrained by a saturated market in North America, where it has acquired much of its competition. Opportunities for international growth would benefit from better familiarity with foreign cultures. This comes at a time when demand for physical document storage is stabilizing. Still, not all companies have transitioned to digital storage, and regulations in some industries require more paper-intensive records. Many companies also choose to continue paying rental for storage rather than the “hostage” fees for retrieving or sorting through boxes. Even though Iron Mountain is in the physical storage business, it sometimes integrates with [enterprise content management](#) (ECM) vendors to track storage.

Iron Mountain and Other Storage Companies

- “Iron Mountain has grown through the purchase of existing companies, and then they consolidate and decommission facilities that aren’t necessary.”
- “Two of their biggest competitors are [GRM \[Document Management\]](#) and Access [formerly known as Retrievox]. There are also a lot of local competitors, which have a smaller number of warehouses. But Iron Mountain is by far the biggest.”
- “None of the competitors are even close to Iron Mountain, which also has an international capacity. There’s no more growth left in North America. They’ve already saturated the market here. There’s a little potential in Canada.”
- “For international growth, it depends on the record keeping of the countries. However, they don’t know how to take on this international capacity because they don’t know the cultures.”
- “Information governance varies between regions.”
- “Iron Mountain had an electronic documents management system that failed, and they sold it. But there are many stable document management vendors, ECMs. Iron Mountain has a strong physical records management component, which will sometimes integrate with some of these ECM vendors. Iron Mountain is important there, though technically the ECM vendors could, on their own, put in chips to track the storage. The best-of-breed among ECMs are OpenText, Documentum, and [IBM’s] [FileNet](#). It’s a different business practice than Iron Mountain’s, not necessarily their competition. But it is a way to the future.”
- “Iron Mountain customers tend to be happy because they don’t have to do anything.”

Iron Mountain customers tend to be happy because they don’t have to do anything.

Information & Privacy Specialist

Current Storage Trends

- “Demand for physical document storage is stabilizing. There is still a bit of expected growth because new paper records are still being added to already stored records. As the industry changes, not all record managers and companies are going digital, though some still work that way and ship everything off-site. For Iron Mountain, there is also growth through acquisitions still.”
- “Companies with poor information governance practices will continue to ship their records off to Iron Mountain.”
- “The industry is going from the shift of the traditional records manager to more of an information governance approach.”
- “There’s a new breed of information professionals coming forward that specialize in privacy, security, e-discovery as well as the records library components that existed before.”
- “Document storage is coming to a point where a lot of it is in a digital environment. Already a lot of the records are digital instead of having to create them and then having to ship them off-site.”

- “There are variations between industries and their regulations, and there are also differences because of the culture of an organization.”
- “For example, pharmaceutical, life sciences, city and county clerks, anything related to government—all these are very paper-intensive. The car industry also has a lot of paper, but all this is changing.”
- “It’s more expensive to destroy paper records held by large [document storage] companies like Iron Mountain than to continue paying the storage fees. Some mid- or small-tier companies can’t afford the ‘hostage’ fees.”
- “Records are becoming both digital and hard-copy based. You can’t function with paper records anymore. You need real-time access.”

Future Storage Trends

- “I don’t think Iron Mountain can keep growing in North America anymore. For any company right now, future growth is international.”
- “Electronic records can be hacked or altered, but if appropriate security permissions are implemented, then electronic is fine. Same with paper; you can increase security levels from locking file cabinets to putting security guards in front of locked doors. Russia went back to using [typewriters and paper records](#) after the NSA scandal. In the end it all depends on the level of security that is required for the information contained within a record. For most electronic records, ECMs and their electronic permissions should be fine.”

It’s more expensive to destroy paper records held by large [document storage] companies like Iron Mountain than to continue paying the storage fees. Some mid- or small-tier companies can’t afford the ‘hostage’ fees.

Information & Privacy Specialist

4. Information governance consultant

Iron Mountain has not yet succeeded in the area of document management. This market has given rise to the growth of industry consultants and information management professionals, who are taking on this role. Physical storage volume is reducing significantly, and the only potential for growth is through consolidation and market share.

Iron Mountain and Other Storage Companies

- “I’ve worked in situations where we were trying to leverage the [relationship] with the storage vendor to assist us in the requirements for storage—to know what documents needed to be retained and to develop a process for making sure we only kept things for as long as necessary. We also wanted them to assist us in preserving containers that contained items for legal discovery.”
- “The federal rules for discovery have changed significantly in the last several years and have focused primarily on electronic discovery. In an electronic context, every contract, every version and every draft becomes eligible [to be detected in searches]. Organizations started to worry about paper copies.”
- “We also asked the vendor to assist us in the transformation of a container that has 500 pages of business records versus a file folder on a G drive that has 500 copies of business records—how to use the records retention schedule and transform it into electronic content.”
- “The storage industry has struggled to help organizations make that transformation.”
- “This has given rise to consultants for organizations looking how to deal with regulated business records.”
- “The industry as a whole has been trying to help organizations with electronic records. But the storage industry—Recall, Iron Mountain, some of the smaller regional vendors—has only had a varied degree of success in helping organizations make that big transformation. I don’t think they’ve succeeded.”
- “None of the clients I’ve engaged with as a consultant, who are customers of storage vendors, have turned to that vendor to assist them in transformation. It’s either because they’re not happy with the storage vendor or not confident in their capabilities to transform them from paper to electronic and assist them in doing it well.”
- “That doesn’t mean they don’t get that kind of business, but it’s a reason that I, as a consultant, do. My industry is full of many consulting companies who do this, and who don’t store boxes.”
- “The growth of the industry has been in assisting organizations in the challenge of managing electronic information. Records management has become information management.”

Records management has become information management.

Information Governance Consultant

- “Iron Mountain used the support and processes for paper to transform them to electronic information, but that doesn’t work.”
- “We generate a lot more electronic content than we ever did with paper, so that volume makes that kind of transformation impractical.”
- “There’s also a significant amount of fragmentation for organizations to deal with electronic records. There are many vendors offering tools to manage electronic records. That fragmentation has made it very difficult for organizations like Iron Mountain and Recall.”
- “Iron Mountain is always the company that buys local vendors, taking the local presence and turning it into an Iron Mountain presence.”
- “Iron Mountain has been successful in the transformation of paper storage of records and containers to assisting organizations in the off-site storage of tape backup media, and maybe assisting in cataloging it for the context of a record.”

Current Storage Trends

- “The physical requirements for storage, from a paper perspective, are reducing significantly.”
- “The volume is decreasing with less square footage needed than 10 years ago. But the importance of the physical media has a tendency to increase because what’s stored is what can’t be translated to an electronic document.”

Future Storage Trends

- “In 2000, an organization would produce 100 boxes, with each box being 1.5 square feet, or 150 square feet of storage. I would probably pay Iron Mountain about \$15,000 a year to keep those boxes off-site for me and to access some of them. In 2014, the same type of company will have decreased its annual storage volume by half, because as boxes age out they can be destroyed. And as companies have started storing records electronically, the new boxes have decreased. This will probably hit a flat spot at some point.”
- “The customer base is not changing for physical storage. It’s still the Fortune 1000-type companies. Anyone younger, or less mature, is doing things almost completely electronically, and never has had a relationship with Iron Mountain, Recall or other off-site storage companies. They are probably themselves taking paper and transforming it electronically, managing it themselves.”
- “I would say the potential for growth in the paper industry is nothing. It’s consolidation, efficiency, market share maybe, but not growth.”
- “The areas for growth are in back filing—those limited times when a client calls the vendor and requests a box. The vendor then offers to scan it and send it electronically and assist in transforming the paper into an electronic context. Hopefully, they can provide an information management role rather than a box management role. They offer this service, but I can’t comment on its success.”
- “Costs have not gone down. The cost of physical storage always goes up though it’s probably no more than inflation. And there’s also a heavy cost to switching. Maybe Iron Mountain doesn’t want to enable the transformation to electronic because I may never pay them again.”

Secondary Sources

The following three secondary sources discussed Iron Mountain becoming a REIT company; its acquisition of Fontis International, which will expand its cloud-based storage offerings; the physical storage market being alive and well internationally; and physical storage still experiencing increased demand because of companies’ fear of Health Insurance Portability and Accountability Act (HIPAA) and PII (personally identifiable information).

June 25 [article](#) from *The Wall Street Journal*

Iron Mountain successfully converted to a real-estate investment trust, which will allow the company to avoid some corporate taxes and move into emerging markets.

- “Storage and information management company Iron Mountain Inc. said its board has approved the company’s conversion to a real-estate investment trust, following a favorable ruling from the U.S. Internal Revenue Service.”
- “Iron Mountain had been waiting for IRS approval to convert to REIT status since July 2012. The move will be effective for the taxable year that began Jan. 1.”

- “Last year the IRS stepped up its scrutiny of some companies that were looking to avoid some corporate taxes by converting their operations into real-estate investment trusts. Iron Mountain and a number of other companies received notice from the agency that they were subject to the review.”
- “Under the new corporate structure, Iron Mountain expects per-share earnings for the year to increase to \$1.52, from its earlier view of \$1.03 to \$1.14, and annual dividends of \$400 million to \$420 million, up from \$207 million.”
- “REITs, created by Congress as a way of giving small investors access to the commercial real-estate market and helping landlords diversify their investor base, pay no corporate income tax as long as they earn the bulk of their profits from rent and distribute at least 90% of their income to shareholders as dividend payments.”
- “In addition to increasing payouts to shareholders, the structure change will allow the company to expand in emerging markets and pursue emerging business opportunities through disciplined capital allocation, Chief Executive William L. Meaney said.”

Oct. 3 Seeking Alpha [article](#)

Iron Mountain made its first purchase as a REIT company: Fontis International. This acquisition will allow customers to seamlessly have updated files as well as allow Iron Mountain to expand into the growing digital storage space. The physical side of the business is here to stay, though, because of contracts with government agencies that need physical copies and because of growth opportunities outside of the United States.

- “IRM has announced its first company purchase as a REIT, Fontis International, a cloud based subscription company.”
- “This confirms my opinion that IRM will purchase/merge itself into a ‘one-stop’ company for physical as well as electronic retention of sensitive records.”
- “It also confirms my original article’s positive assessment of the future of IRM as a REIT.”
- “On 10/2/14, Iron Mountain Inc. announced the purchase of Fontis International of Denver Colorado. Fontis International is a provider of a cloud-based subscription services for records retrieval and retention guidelines.”
- “The acquisition of Fontis International offers IRM an automated unique capability for continuously updating retention schedules, according to law/regulation, that can then be accessed and distributed in a fully-automated manner. Previously, much of this work had to be done by hand or primitive document location computer programs that told IRM where physical document(s) were *supposed* to be located. Now Fontis’ cloud-based service will allow Iron Mountain to deliver automated retention guidelines from around the world.”
- “The customers of IRM can update their retention schedule via Fontis’ online interface, then publish it to all their employees across the company. This will remove one of the customers of IRM’s biggest barriers to achieving defensible compliance.”
- “The customers of IRM can update their retention schedule via Fontis’ online interface, then publish it to all their employees across the company. This will remove one of the customers of IRM’s biggest barriers to achieving defensible compliance.”
- “First, it numbers many types of companies—like government agencies—which *must* maintain physical documents by law so its physical storage business is not going away anytime soon. This makes its physical document storage/retrieval business a cash cow that can fund the move of IRM into various areas of electronic storage/retrieval. Second, the physical document storage/retrieval industry is still *growing* in less developed parts of the world. Therefore, IRM can capitalize on its size and expertise outside of the US to continue to profitably expand its physical storage business, giving it a second source of funds to pursue the electronic mediums of storage/retrieval that will dominate the future.”

Sept. 9 SDB Magazine [article](#)

Physical storage still has a place in the industry. One experts said all cloud storage is driven by servers, disc servers and flash drives, which require storage as well.

- “Hugh Smith, president of Firelock Fireproof Media Vaults, Kutztown, Pennsylvania, says he has seen a trend in the industry of storing increasingly more media, specifically tapes, in locked containers.”
- “Firelock custom designs and manufactures fireproof, room-sized modular vaults for the fire/environmental protection of vital information assets.”
- “Smith says that as concerns grow with regulations such as the Health Insurance Portability and Accountability Act (HIPAA), media vaulting clients do not want anyone looking at their information.”

- “What’s driving this push, Smith says, ‘is more and more people are concerned about HIPAA and PII (personally identifiable information), so they don’t want people looking at those tapes because you could create a data breach.’ Tapes have become more valuable, he says, because of the liability associated with a data breach under laws such as HIPAA and the high capacity of these devices.”
- “Locked containers can reduce this risk, he says. Smith adds, ‘The biggest trend you’re seeing is media vaulting has moved from less secure to more secure because the value of the data’ has increased.”
- “The risk of a data breach is a high concern for companies, according to the “2014 Information Maturity Risk Index,” a study published by storage and information management company Iron Mountain Inc., Boston, and United Kingdom-based PwC UK.”
- “In the study, Iron Mountain and PwC evaluated the information governance programs of 1,800 companies of varying sizes in North America and Europe in four areas: strategy, people, communications and security.”
- “When asked to gauge the importance of securing and protecting information versus tapping into its ability to serve as a business asset, respondents named ‘avoiding a data breach’ (85% in North America, 76% in Europe) and ‘avoiding legal action or a fine for noncompliance’ (79% and 74 percent) as their top priorities for information management.”
- “Joe Malerba, general manager of rack remediation and solutions for Chicago-based REB Storage Systems International, a records storage solutions specialist, says media container storage is not as efficient as slot storage because efficiency is all about density.”
- “For example, some records and information management companies may have 20 media containers stored in their vaults, but these containers may contain only five tapes each, Malerba notes. Those 100 tapes would take up much less space stored in slots.”
- “Media vault operators also are not limited to storing tapes, Malerba advises. Other digital media, such as hard drives, can be stored in the vault, and considering those options is valuable, Malerba says.”
- “Another cost-effective option to consider is buying used racking systems for open slot or container storage. Malerba says although the used racking market is drying up as there is less material out there, ‘it is very, very cheap,’ he says.”
- “Some in the industry believe the cloud is killing tape storage, however, both Malerba and Smith say tape is alive and well as it is part of the cloud.”
- “Malerba says the cloud is nothing more than servers, disc servers and flash drives, and these systems require secure storage as well.”
- “As media continue to be relevant in the records management industry, racking for media vaulting will be in demand, he adds.”
- “‘There’s millions and millions of tapes out there, and they have to go on a media rack somewhere,’ Malerba says.”

As concerns grow with regulations such as the Health Insurance Portability and Accountability Act (HIPAA), media vaulting clients do not want anyone looking at their information.

SDB Magazine Article

Some in the industry believe the cloud is killing tape storage, however, both Malerba and Smith say tape is alive and well as it is part of the cloud.

SDB Magazine Article

Additional research by Eva Cahen and Steve Evans

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Iron Mountain Inc.

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