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COMMON MYTHS ABOUT ARCHIVING LEGACY HEALTHCARE SYSTEMS

A White Paper for Hospital Technology Leadership

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MS&CO establish a clear plan for managing older legacy data before the conversion process begins

Who should read this white paper?

Compliance Officers looking to ensure HIPAA compliance and reduce an organization's overall risk profile.

CFOs looking for a cost-effective path to eliminating expensive software license fees.

CIOs who are frustrated by the challenges of maintaining antiquated technology.

HIM Directors wanting simple, consolidated access to all legacy medical records.

Overview

Does your organization have problematic legacy systems that need to be retired?

As a healthcare leader in these unprecedented times, do you feel like your time, budget and resources are already spread too thin? If so, it's possible that archiving your legacy systems is not at the top of your ever-growing list of priorities. Maybe you've concluded that a data archiving project is too costly and cumbersome to tackle right now. Or perhaps you feel that delaying the project another year isn't that big of a risk to take.

In this paper, we uncover the three most common myths about the archiving of healthcare data and explore why hospitals continue to be tied to their legacy systems. We'll offer insights on why data archiving is critical to healthcare organizations to ensure compliance and mitigate risk. Finally, we will reveal how CIOs and other hospital leaders can benefit from breakthrough technologies that make the process easier, faster and more cost-effective than traditional archiving methods.

In a recent HIMSS Cybersecurity Survey, 69% of healthcare organizations indicated that they had at least some legacy systems in place.¹

There is no harm in postponing legacy system archiving.

According to *Health IT Outcomes*, healthcare organizations globally are running up to 300 legacy applications behind the scenes despite their strategy for the EMR to be the primary method of accessing clinical content.² Industry best practice suggests the records on these systems should be archived, but the available solutions have often been too difficult and costly to implement. Predictably, this often leads organizations to take no action.

Many hospitals do not prioritize retirement of legacy systems due to:

- **Lack of expertise**
- **Limited time**
- **Budget constraints**
- **Overextended staff**
- **Insufficient third-party solutions**

Organizations often fail to act, believing that maintaining current systems is a viable alternative to working through the challenges of migrating records to an archiving platform.

The truth:

Legacy system failure is a major threat.

Outdated systems present liabilities with potentially devastating consequences to organizations, providers, and patients.

These risks include:

- **Violation of patient data retention laws and HIPAA violations**
- **Healthcare data breaches**
- **Reputational damage**
- **Financial impacts**
- **Lost productivity**

The longer these aging systems remain in place, the more significant the risks and operational inefficiencies can become. The truth is, replacing legacy systems is foundational to strengthening business, protecting patients, and ensuring profitability.

According to Gartner, "Without procedures in place to select the application decommissioning process, I&O (infrastructure & operations) teams are often forced to retain the replaced applications and manage its aging application stack and infrastructure. The associated technical debt creates a drag on the organization, limiting the agility of I&O teams, creating financial, security, operational and business risks for the overall organization and restricting access to data."³

MYTH 1

There is no harm in postponing legacy system archiving.

and/or establish a clear plan for managing older legacy data before the conversion process begins.

Initial steps you can take now:

- Understand the inherent dangers of outdated systems.
- Identify systems in your portfolio that are most vulnerable
- Investigate the latest offerings available on the market.
- Outline a plan to begin reducing your register of legacy systems.

It is too costly, disruptive or time-consuming.

Archiving approaches for traditional legacy systems rely heavily on a data manipulation process known as ETL (extract, transform, load). The idea is to transform the data to a common format for easy access, but the reality is that ETL can be complex and resource intensive. Using these methods, leaders are forced to make a difficult choice: task heavily burdened internal resources or bring in outside help and overextend the budget.

Staffing limitations, cost constraints, and the sheer volume of legacy systems in need of archiving can place healthcare leaders in a seemingly no-win situation. But keeping legacy systems in the application portfolio will continue to drain valuable resources that could be better spent on new technologies to improve patient care.

According to [KLAS Research](#), 85% of organizations that have archived and retired legacy systems report positive financial results.⁴

The truth:

Archiving doesn't have to be slow and costly.

It is possible to archive legacy systems with modern solutions that remove the barriers of conventional methods.

As these evolving technologies become readily available, traditional archiving is giving way to a new order of data management that looks less like warehoused backups and more like strategic archiving with:

- **Cloud-based repositories**
- **Simple clinical workflow integration**
- **Built-in indexing, querying and reporting**
- **Unfettered data access**
- **Reduced ETL requirements**
- **Freedom from manual, upfront mapping**

Maintaining legacy systems is an unnecessarily expensive proposition and a critical reason to investigate forward-thinking archiving solutions. With the right partner, you can implement a responsible plan – one that delivers secure, easily accessible healthcare information at a fraction of the cost of doing nothing.

It is too costly, disruptive or time-consuming.

HS-DO establish a clear plan for managing older legacy data before the conversion process begins

Legacy System Archiving

DOs:

- DO be careful not to subscribe to a “this is what we’ve always done” mentality.
- DO understand that old vs. new archiving solutions yield entirely different results.
- DO determine project implementation timing, processes and team requirements upfront.

DON'Ts:

- DON'T migrate your data into another proprietary platform.
- DON'T forget to consider how your archiving solution integrates with your current EMR.
- DON'T adopt a “don’t fix what isn’t broken” mindset.

Our risk exposure is minimal.

Healthcare organizations often take great care in deploying information security policies and controls that ensure all of their data, and most especially protected health information (PHI), is durable and secure. What many executives may not understand is how difficult it can be to adhere to these policies when it comes to legacy systems.

In addition, many organizations have run older mainframes or AS/400 systems for many years, sometimes decades. Why be concerned about these systems that have been working reliably for so long?

The truth:

Aging legacy systems are a significant compliance and security risk.

By their very nature, legacy systems are not built using the latest security tools and techniques. It can be very difficult to introduce state-of-the-art encryption, logging mechanisms and sandboxed environments into code that is decades old. In addition, these systems may not even function on the latest versions of operating systems, preventing needed upgrades to underlying infrastructure that ensure compliance with OS vendor security minimums. Where updates are still provided by the original application vendor, they often require costly license upgrades or maintenance contracts.

No senior executive wants to face the ramifications and scrutiny that accompany a significant data exposure event. Healthcare organizations impacted in this way are almost certain to make news headlines.

According to a Ponemon Institute report, sponsored by IBM, the average cost of a breach in the healthcare industry was nearly \$6.5 million.⁵

Our risk exposure is minimal.

Operating systems that have been unsupported for five, ten, or more years – decades in some cases – greatly increases a healthcare organization's risk of being compromised," said Rod Piechowski, senior director of health information systems at HIMSS.¹

In addition to data security risks, loss of access to data can be an issue, especially in significantly aged systems. First, the physical hardware in these systems are at risk of failure, especially traditional data storage mechanisms due to their mechanical nature. Of a similar significance, the users and administrators of these platforms can be near the end of their careers. Replacing this experience in antiquated systems can be nearly impossible, and having the data available on a drive is of little use if no one can access it.

From clinical to IT to marketing departments, legacy applications may expose hospitals to enterprise-wide consequences, such as:

- **Damaged reputation**
- **Violation of regulatory requirements**
- **Patient mistrust**
- **Lost loyalty**
- **Lawsuits, litigations and financial penalties**
- **Increased insurance and legal costs**

Summary

It is a mistake to believe that the risks of maintaining legacy healthcare systems are of little concern.

And with recent innovations in archiving technologies, it is also a mistake to still believe that the process of retiring old systems is too difficult to undertake. Now, healthcare systems can save significant time and money, reduce organization-wide risk, and virtually eliminate disruptions to internal teams during implementation.

Healthcare organizations can establish a clear plan for managing older legacy data before the conversion process begins.

An ideal archiving partner can help your healthcare organization:

- **Educate key stakeholders** of the importance of legacy system archiving.
- **Identify security risks** associated with hosting unsupported legacy systems within the IT infrastructure.
- **Create a defined pathway** for retiring a complete legacy system portfolio.
- **Expand access to medical records**, improving the provider and patient experience.
- **Stay compliant** with state and federal regulatory laws and HIPAA requirements.
- **Allow IT teams to stay focused** on day-to-day operations.
- **Reduce IT maintenance budgets** through cost-effective product offerings and innovative

Verisma offers a new and better way to archive legacy healthcare systems.

Olah™, Data Archiving from Verisma is a cloud-based enterprise archiving platform that allows organizations to retire and archive systems with less time, cost and resources than the traditional ETL based approach. Verisma's archiving process provides the flexibility healthcare organizations need to meet risk-reduction objectives and consistently complete projects on time and on budget. With Olah™, Data Archiving, entire legacy databases, documents and waveforms are transferred to a secure and controlled archive. All archived systems are merged into a simple, easy to search viewer that can be seamlessly integrated with any leading EHR. The complete original databases are available in Olah™, Data Archiving, giving providers the opportunity to leverage years of valuable data to optimize insights for benchmarking, business planning and more.

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About Olah™, Data Archiving

Verisma's Olah™, Data Archiving platform secures and provides legacy clinical and financial data for more than 350 healthcare organizations across the country.

Olah™, Data Archiving is a new and better way to archive legacy healthcare systems. Olah™, Data Archiving allows organizations to retire and archive systems with less time, costs and resources, and provides flexibility to manage the process and meet organizational objectives, timeline and budget. It also enables providers to leverage years of valuable healthcare and data and optimize insights for benchmarking, research, business planning and more.

With Olah™, Data Archiving, Verisma is making healthcare archiving affordable, faster, and more secure.