

Understanding the Risks of **Legacy ECM**

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Executive Summary

For **senior enterprise architects and CIOs** concerned that their business needs have outgrown their legacy information systems' ability to deliver tangible business value. This paper highlights the costs and risks of remaining on those systems, reasons to consider more modern alternatives, and key considerations to keep in mind.

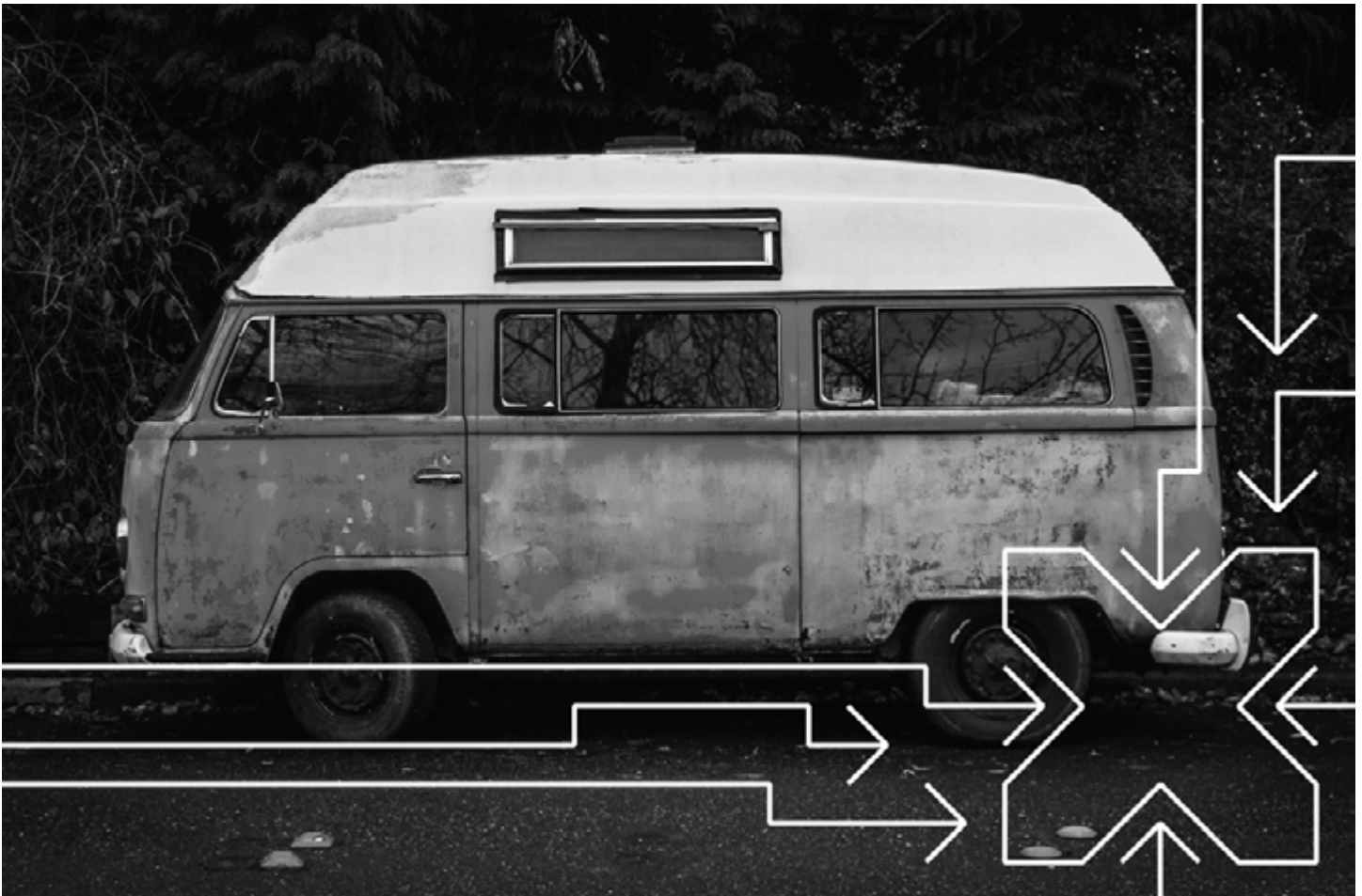
It answers two critical questions:

01

Are legacy information systems viable for the long run given changing consumer preferences?

02

Has competitive pressure pushed legacy information systems beyond their breaking point?



In the Beginning

First, there was COLD. Then Document Imaging. Next came Document Management, Enterprise Content Management, and Intelligent Information Management. Those who have been around long enough have lived through these iterations of a technology whose roots lay in the reduction of clerical staff, the elimination of paper, the recovery of office space, and the establishment of a digital backup copy for critical business records.

The vendor names remain familiar. The faces are the same. Some vendors have managed to stick around over the years, while many more have disappeared almost as quickly as they came on to the scene. Regardless, the tools and technology to maintain digital information are now ubiquitous within organizations with most having not one, but multiple repositories to house mission-critical business assets.

The Problem with Legacy Systems

So what? Who cares? Remember when Gartner proclaimed that ECM was dead? Today, ECM is just a commodity, right? Nothing more than table-stakes so that organizations can find the information they have digitized and checked off a compliance box.

But to quote Hamlet, “Ay, there’s the rub.” It is this very sense of commoditization, and the notion that organization has been there, done that, which has led most into a deep abyss, struggling to make legacy information systems perform and adapt to the dynamics of today’s digital business models.

The problem with these legacy systems is that they were never designed to quickly adapt to changing business dynamics. Never intended to be extensible beyond their core capabilities. Never built with today’s complex integration requirements in mind.

What they were designed to do was simple – securely store a digital copy of a business record, and index it so that it can be located and retrieved at a later date as part of a business process or in response to an ad-hoc request.

In their day, legacy information systems were beautiful in their simplicity. Business records were either scanned or captured electronically, then converted to something like a multi-page TIFF, or JPEG, or PDF, and then dumped into an electronic version of a paper file cabinet. In order to be able to retrieve it again, a very minimal amount of information or “metadata” was assigned to it.

Organizations would spend time considering how they would normally search for that document in a paper-based world and they replicated it electronically. They would identify things like Customer Number, Policy Number, Account Number, Customer Name & Address. Perhaps a few other variables would be identified and stored as well such as Received Date, Scan Date, Index Date, Processed Date. A few other bits of information might be captured such as Contact Source to indicate the information arrived via eMail, Fax, In-Bound Mail, Web-Form, etc.

But the idea was to keep the information as minimal as possible—just the bare essentials needed to search and retrieve the information. Any other information related to that digital documents belonged somewhere else, perhaps in a line-of-business application. **So, today not only do organizations have digital files scattered across the enterprise, they are realizing that the data related to them are scattered as well.**



Little Has Changed

Since their inception, legacy information systems have evolved very little from their original premise of store and retrieve. Today, this lack of innovation has become problematic. Yes, there has been the occasional new function or feature released over the years. And yes, the overall ecosystem has grown to include things like Capture, Records Management, Business Process Management, and Corporate Correspondence to name a few. **But the core of all that is ECM– the repository–and its associated data has remained unchanged since day one.** Also unchanged is the fundamental value proposition: put something here; slap a little metadata around it, and have the piece-of-mind that it can be retrieved later. That's pretty much it, and it's been the same since the early 1980's when managing digital information was pretty much the custom domain of companies like Plexus, Wang, and TRW.

These systems proliferated and remain common today. They continue to do the job they were originally designed to do, albeit crudely and at great expense. But, organizations are coming to the realization that **they are building critical business applications on a crumbling foundation of content and data** that is not sophisticated or agile enough to adapt at today's speed of digital business. But what is the actual problem with these legacy systems and why should organizations be concerned?

Concern for Legacy Information Systems

There is no shortage of reasons to be concerned with the ability of legacy information systems to meet the challenges of today organizations. Here are some that come immediately to mind:

- All functionality is encased in a single code base, making testing and enhancing the systems difficult at best.
- The manner in which new functionality is tied to major releases means organizations are in a constant state of churn.
- Their monolithic structure makes them inflexible and highly complex.
- Integration to third-party systems is problematic.
- They require dedicated resources with specialized skill sets to maintain the system.
- Maintenance contracts with the vendor are usually very expensive.
- Their complexity and lack of flexibility mean they often require high levels of customization.
- Establishing and maintaining security protocols is challenging across product releases.
- They often do not scale effectively or inexpensively.

Why Modernize Now?

Some would argue that despite their shortcomings, legacy information systems continue to get the job done. They limp along; they are expensive to modify and maintain, and they struggle to continue to deliver real business value. But with millions invested in infrastructure, software, business applications, and development and maintenance resources, **the thought of engaging in a large migration effort is enough to make even the worst investment look good by comparison.** So why modernize, and more importantly, why the sense of urgency?

The reason is that the job organizations need their information systems to do, has fundamentally changed. **Organizations are being threatened from all sides from traditional and non-traditional competition** and the need for speed and agility to respond to the threat is simply unavailable with legacy information systems.

First, Big Tech (Google, Amazon, Apple, Facebook) has raised the bar for all industries when it comes to ease of use and delivering a superior information-rich customer experience. In the words of **Steve Jobs: “You’ve got to start with the customer experience and work back to the technology, not the other way around.”** And, Walker Information Inc., predicts that customer experience will overtake price and product as the key brand differentiator by 2020. All organizations are now faced with the question, why are they not as easy to do business with as Amazon?

Then, there is the speed and digital agility of Fintechs who excel at rapidly delivering easy to use applications. They produce a highly personalized customer experience, with a holistic “360-degree” view of the customer. Fintechs deliver relevant information, available 24X7X365, connected across all devices, and a seamless customer interaction. Unhampered by legacy baggage, and free to reinvent business models, **these organizations leverage the latest technologies to deliver real-time or near real-time decisions** that capture and delight customers before they can be enticed elsewhere.

These organizations have tapped into changing customer preferences and behaviors. They understand that today digital customers have high expectations and little tolerance when those expectations go unmet. They are hyper-focused on the customer and deliver their interactions in a channel-agnostic way and understand the customer wants convenience and choices.

Today’s **customers do not want transactions, they want experiences.** They want to do business with organizations that address their personal needs and their financial goals. It is within this broader lens that it becomes painfully clear that the **complexity and inflexibility of legacy information systems is a direct impediment to innovation.** The reason organizations must invest in modernization efforts is that legacy technology and legacy thinking can no longer keep up with the speed of today’s digital organizations or meet the threat from more agile competitors.

Modern Problems Need Modern Solutions

The competitive threat is imminent and the sense of urgency is clear. To remain relevant, competitive, and prosper in this new age of digital challengers, **organizations must move away from legacy information systems** in favor of a more robust combination of modern architecture and modern capabilities. But what must organizations consider when planning their modernization strategy?

Modernization Considerations

When modernizing legacy information systems, organizations should consider the following traits of leading-edge solutions:

- Solutions that can manage data and content together
- Component architectures that scale independently
- Built natively for the cloud, not simply ported to the cloud
- Deliver new functions and features automatically without major releases
- Lend themselves towards configuration over customization
- Provide business specific AI through uniquely trained models
- Able to manage content and rich media with a single solution
- Microservices exposed through API's for fast application assembly and delivery
- Delivered as a platform, not a product



Why Nuxeo?

Nuxeo incorporates all the elements of modern-day architecture. A services-based platform exposing hundreds of content, data, and workflow API's, all delivered on a highly scalable component-based cloud-native architecture. Let Nuxeo show you how to deliver tomorrows applications today, faster than you thought imaginable. At Nuxeo, we are revolutionizing the way organizations look at content and data together!

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