KnowledgeLake

WHITE PAPER

# The Future of Information Management

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## INTRODUCTION

It might seem like the message on a broken record, but organizations today are truly experiencing unprecedented pressures to be agile, to innovate, and to adopt technologies that will help them remain competitive.

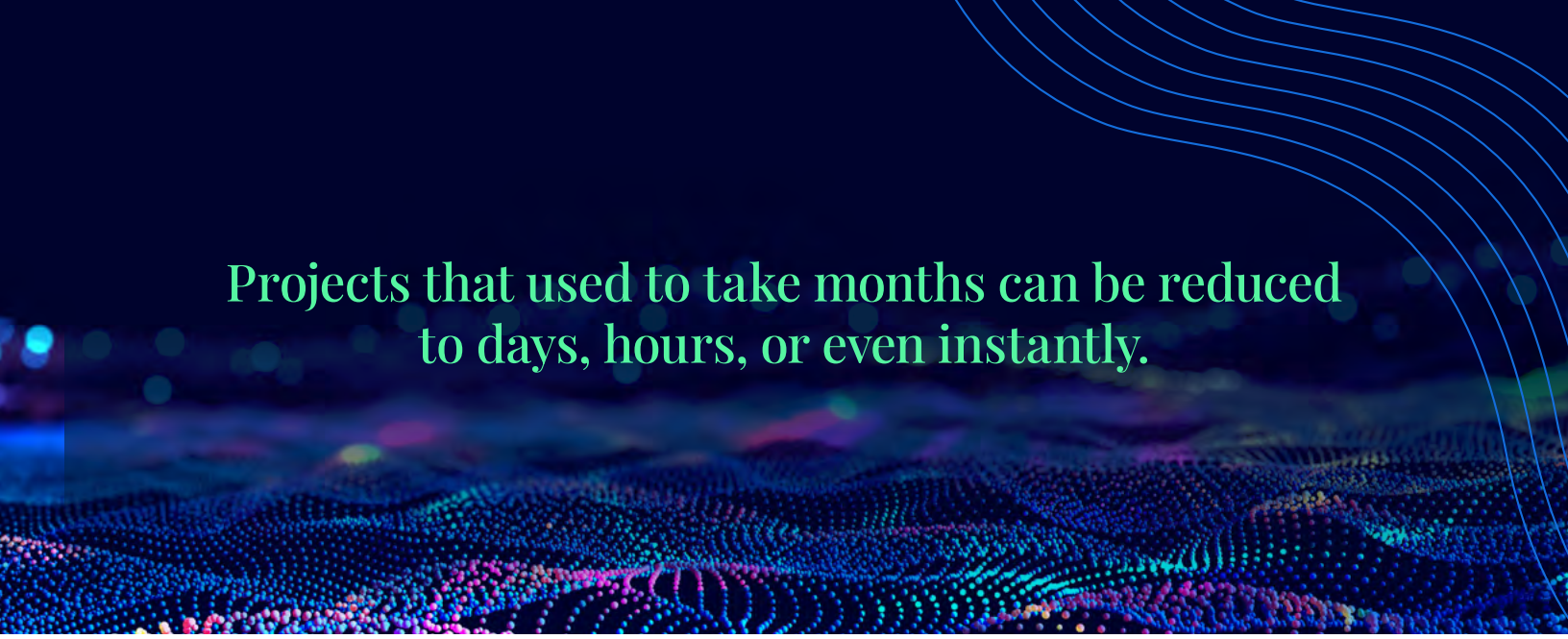
From cloud computing, to artificial intelligence, to digital transformation, to the democratization of technology, the pace of change is daunting, and accelerating. The C-Suite must understand the potential business impacts of all this change, and make smart investments that will capitalize on new opportunities.

The challenges are how to best enable interoperability among a host of systems and devices, between data hosted in the cloud and on-premise, and among workers on-site and working remotely.

These challenges are impacting how organizations practice document processing and information management. They need to embrace new ways of creating, storing, accessing and acting on documents and data in such a way that they can make intelligent use of both. Driven largely by the growing popularity of generative AI, the stakes to get it right are huge.

One of the fastest and easiest ways to derive benefits from generative AI securely is through document processing, and the task can be done without exposing an organization's own data. An 'Intuitive AI' platform enables organizations to benefit from the value of its own data, kept secure, and enhanced with the capabilities of generative AI tools such as ChatGPT.

Prime examples of where Intuitive AI is a good fit for document processing include accounts payable invoices, loan origination forms, and transcript evaluation for student acceptance and enrollment.




## The impacts of the democratization of technology

The democratization of technology is leading to several important trends in document and information management. These include expanding tech stacks, a pressing need for automation, and the emergence of Intuitive AI, which is driven by generative AI.

Accenture researchers and other analysts have described the democracy digitization of technology as an environment where software is becoming more accessible to workers outside of IT. And in the process, workforces are becoming more technically literate.

In this new environment, organizations are encountering more low-code and no-code applications, more affordable software overall, and more user-friendly interfaces.

With regard to no-code and low-code programming, it used to be that every project required developers and engineers to write a certain amount of code. Even with narrow AI projects, the ability to train a machine learning model or a neural network on a very specific discrete data set could at some point require a data scientist.

Now, an organization can simply tell these applications the types of information needed or problems needing solving using natural language. The AI platform will do the work instantly. Projects that used to take months can be reduced to days, hours, or even instantly.

Generative AI essentially turns programming into natural language. An IT professional may still be programming the technology to complete a certain task, but they are doing so using words instead of code.

This obviously has major implications for document and information management. When you work in an organization you get bills, you buy things, others send you bills, and you have to pay them. Being able to extract all of this information without having to train the system at all is a major evolution in document management.

AI has the ability to access these line items and describe what we bought quickly and effectively. It can process and summarize every flavor, in every shape, that every vendor in the world wants to send us.

Because of these benefits, the vendor landscape has really changed in the last three years. There are a large number of AI and automation document management processing tools now available in the market, and that is driving down costs so that every organization should be able to afford the investment.

On the flip side, organizations are also seeing an increased need for information security and data privacy protections, due to the growing number of systems they rely on and the expanding tech stacks they must maintain.

Where Generative AI and Intuitive AI differ is in how a document would be managed or processed within an organization's systems. Generative AI by itself would bring the functionality of a tool such as ChatGPT into the organization's platform to enable open-door use, analysis and manipulation of documents. With Intuitive AI, document analysis and manipulation is done closed-door, keeping the data secure.

## Expanding technology stacks and systems growth trends

With the rapid growth of remote work, disparate systems and BYOD devices, there is little surprise that the typical technology stack at any organization is expanding. This fact is significantly impacting information management practices.

In the KnowledgeLake State of the Industry Report for 2023, organizations were asked how many different IRM systems or repositories they currently use. Survey results found that most organizations use at least seven, but many use between seven to 10 systems. For historical context, the numbers were 3 to 4 systems in 2013 and 6 systems in 2018.

These results reflect approximately 100% growth every five years in the number of systems that organizations are using. Granted, having several systems isn't necessarily a bad thing. With cloud computing, software-as-a-system, and software-as-a-service, the capital expenses of running multiple systems can be dramatically reduced. But then, this also increases the challenge of seamless interoperability.

When information tools don't connect well to other lines of business applications within the enterprise, the result is often information chaos. Instead of all these devices solving data accessibility and governance issues, they create new problems. Users subsequently can't properly access the information that they need. They may actually work harder just to get their jobs done.

To overcome these challenges, IT staff need to carefully evaluate any new systems or devices that come online for need and appropriateness, and to ensure interoperability with the wider information system. This process should be done in partnership with information management leaders, IT leaders, and line of business leaders.

The other significant finding from the 2023 study is how many applications that organizations are using to store and access data, and how they integrate with other IRM systems. The results revealed that - across the board - key systems such as CRM, project management tools, and collaboration software are not integrated into document management systems, enterprise content management systems, or record management systems.


## The need for automation

Another major trend in document and information management is the high demand for automation capabilities. This is driven by the need to process data and documents faster and more efficiently.

With more systems and expended tech stacks, and really high expectations from customers, organizations are pushing for seamless automation of important workflows. Many also need to enhance existing automation functions.

The KnowledgeLake survey asked respondents to rate the level of automation of core business processes within their organization. Survey results revealed that while many organizations are still making progress with automating of core business processes, they're not entirely happy with the results.

To use automation effectively, an organization must be able to unlock its data so that it answers multiple queries up front. These include identifying what various documents are, what department they belong to, what customer they belong to, how much they're for invoices, and if each is signed or not.

Basically, in order to drive workflow and automation, the organization must understand what something is before it can route where it goes. The advantage here with generative AI is that large language models don't require training in the process. These tools just work out of the box.

Still, automation levels and results vary somewhat depending on the business process area. KnowledgeLake survey respondents said that AI-based automation results were above average in such areas as supply chain records management and legal contract management respondents.

But a third of respondents felt that automation results were below average in areas such as the digital mailroom, employee onboarding, and file management. Obviously, there is still some work to be done when it comes to the automation ecosystem.

There may also be misconceptions about the affordability of AI-based automation. With the democratization of technology, the cost of automation has significantly decreased over the last five years or so.

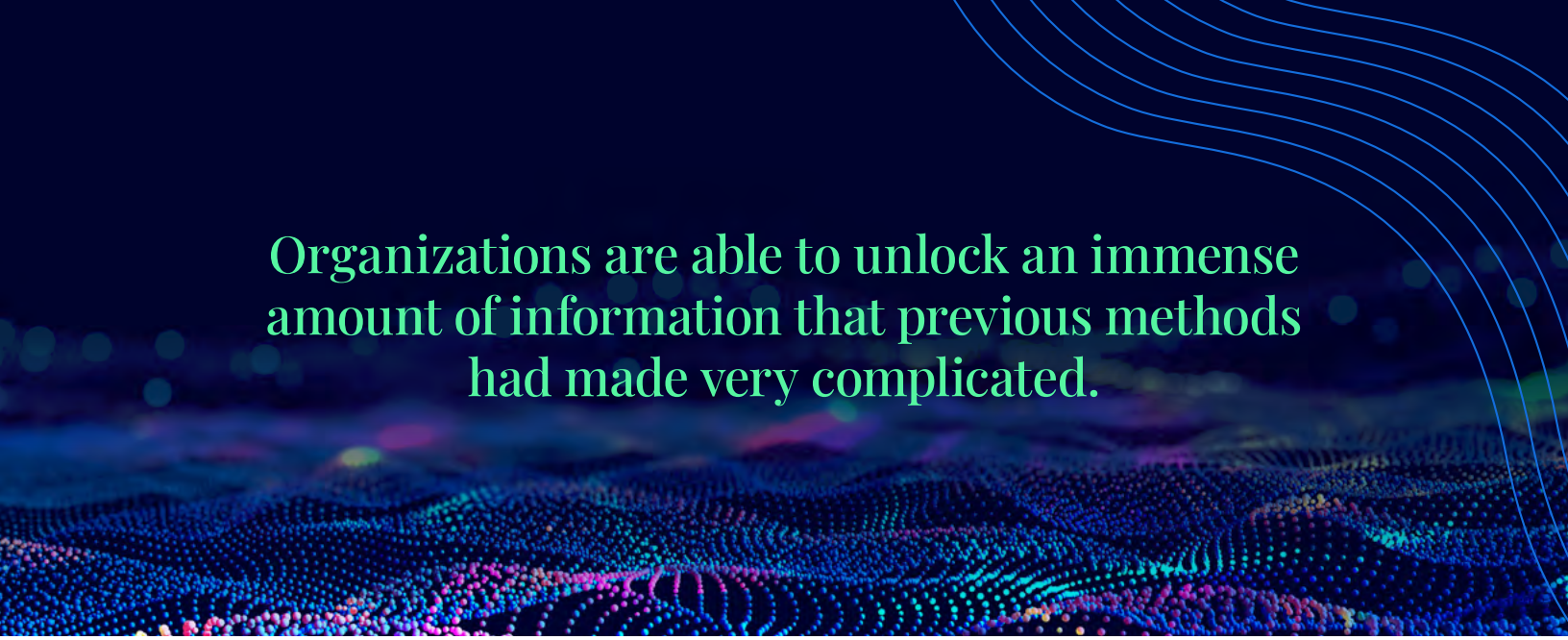
## The emergence of Intuitive IT

The full potential benefits of AI can't be understated. But AI is only as good as the data that it works with. Organizations need accessible, secure and trust-worthy data to improve business processes, and with that, the bottom line. And they need documents created with this data that are reliable, easy to access and use, and produce actionable information.

Among organizations that have not yet widely adopted AI technologies, in the last six months or so there has been considerable activity in developing plans for adoption, and thinking very formally about what an AI-driven document management might look like in their enterprise.

Among organizations that have taken the plunge, in addition to the integration with existing software, they are increasingly finding real world applications for AI. Many organizations have been using AI for internal reviews and approvals for sales proposals and contracts. These processes are being further optimized with Intuitive AI, which is helping to enhance search categorization and more.

Intuitive AI is an approachable model that is powered by generative AI, but doesn't require training. What is interesting about the integration of Intuitive AI into existing systems is that it's not a binary choice. Since these organizations were already narrowly using AI tools to attack these tasks, they can easily put Intuitive AI on top of it because they have an existing, reliable, and accurate data set to build on.



## Organizations are able to unlock an immense amount of information that previous methods had made very complicated.

The result is that the industry has been reshaped by Intuitive AI and large language models in a couple of really interesting ways. First is the democratization of technology, as noted previously. More importantly, what Intuitive AI has provided is the ability to have Day Zero document understanding, with no training required. Intuitive AI has dramatically reduced the upfront burden of setting these systems up to almost zero seconds.

Organizations are able to unlock an immense amount of information that previous methods had made very complicated. Using a large language model, users can 'ask' a document if it is signed, or if a contract has an auto renewal clause.

With the growth of software-as-a-service, and annual contracts that automatically renew unless you tell them in advance that you don't want to renew it, vendors are putting these features into auto-renewal clauses.

Going forward, more organizations will recognize the benefits of incorporating Intuitive AI into their document and information management practices. They will seek greater access to information without the need for laborious and time consuming processes such as applying or managing taxonomy.

Job definitions and roles will change within information management, just like in other fields. There will be a strong need for AI developers, regulators and users to embrace a shared responsibility for AI. They will share the responsibility for ensuring that Intuitive AI efforts protect user data that it produces accurate, responsible results.

Finally, organizations are demanding accurate and transparent AI. That is a must-have to help reduce the governance and compliance risk and liabilities that organizations worry about.

## Adaptive Intelligent document processing

A significant need for many organizations is the ability to perform adaptive intelligent document processing (IDP). In its simplest form, the significant difference between regular IDP and adaptive IDP lies in their ability to learn and adapt. Regular IDP is static. In contrast, Adaptive IDP quickly learns from mistakes while allowing businesses to add new content types and fields for different document types as needed – making it more flexible.

Every organization has lots of unstructured data, especially from a variety of documents they create, process and store. Adaptive IDP enables an organization to transform unstructured documents into structured information faster and more effectively.

Many sources of unstructured data originate outside of an organization. Examples include a vendor sending a quote, a contract, or an invoice to a customer. Others include an insurance company receiving a claim or a financial services company such as a bank or credit union receiving a loan application.

Because an organization often doesn't have control over much of the data input into some documents, it affects how an organization reacts to it, processes it, automates it, and builds workflows around it. Workflows enable an organization to build shortcuts around basic tasks, or to flag certain types of data for special treatment.

Many of these documents are corporate records that have to be kept. There are federal and state laws, industry regulations and compliance audits affecting many of these documents. There needs to be an organized way of managing documents in a way that quickly provides content that a user seeks.

This is important because one of the most overlooked aspects of AI when it comes to adaptive IDP is around data analysis.

## Conclusion

As organizations ponder whether AI investments are right for their document and data management practices, they will want tools that offer the greatest return and with the least downsides. Generative AI tools can offer a wealth of content management capabilities. But they may not offer the level of data security or of customization that an organization needs.

Intuitive AI enables an organization to benefit from the value of its own data, kept secure, and enhanced with the capabilities of Generative AI tools such as ChatGPT. Document analysis and manipulation is done closed-door, as it were, keeping the data secure.

Many professionals view their documents and the way that they store them as a digital filing cabinet. But out-of-sight, out-of-mind is the strategy of fools. Organizations need to act on their data. They need tools that organize and enable access to data intelligently – that is, to categorize data according to how it can best impact business processes and practices and drive decision-making.

Organizations that recognize this are more likely to build business strategies around data analytics capabilities. They will gain benefits in agility, speed, efficiency, scalability, and most importantly – innovation. They will gain competitive advantage, be able to grow and thrive in challenging market conditions, and make smarter business decisions.


### DAVID WELDON

David Weldon is a research analyst and business writer with an extensive background in the field of information technology. He has contributed to over 100 publications and websites, including CMSWire, Computerworld, TechTarget, and CIO Magazine. In addition, he has held top editorial positions at several leading media outlets, serving as Editor-in-Chief of Information Management and Senior Editor of FierceCIO. In addition to his career in journalism, David worked as an analyst for Aberdeen Strategy & Research.