



Using Cloud to Improve Your Data Governance

MARKET TRENDS REPORT



Introduction

Digital transformation has never been more urgent for federal agencies. Unfortunately, data's complexity is holding agencies back from delivering 21st century services to constituents.

According to Gartner, the volume of data that organizations manage will grow 800% over the next five years, with 80% of this information being unstructured. Structured data is information that is organized using pre-defined models such as databases. Unstructured data, meanwhile, is information such as drone footage, maps and video content that isn't placed in these preexisting formats.

Federal agencies, however, can't keep up with either kind of data – and both often appear in forms that federal IT systems aren't capable of handling, such as rich media, imagery, video and other complex formats. It's a situation that leaves many government employees in the dark about how to best access and govern their existing data agencywide.

Fortunately, cloud computing can help agencies make sense of both their structured and unstructured data. Subsequently, cloud is critical for digital transformation as it's a process that centers on information collaboration and management. Whether it's healthcare records at the Health and Human Services Department (HHS) or statistics about military veterans at the Veterans Affairs Department (VA), content management in the cloud can speed up any digital transformation.

GovLoop partnered with Box, a cloud content management solutions provider, on this report about how cloud can improve agencies' unstructured data access and governance. The following pages share cloud's potential to improve agencies' access to mission-critical data so that they serve citizens better. It also details best practices to improve data governance. For additional insights, we interviewed Sonny Hashmi, Managing Director, Global Public Sector at Box.

BY THE NUMBERS

Cloud and Security Today

1%

of digital data across both the public and private sectors had been analyzed in 2016 despite 90% of this information being generated between 2014 and 2015.

Source: [McKinsey](#)

\$3 billion

was the Justice Department's (DOJ) total spending on IT investments in fiscal year 2019.

Source: [ITDashboard.gov](#)

“Unlocking untapped potential within federal data will help grow the economy, increase efficiency in government and better address complex problems using data-driven approaches. To stay competitive globally, it is imperative that we make data more usable and accessible.”

– [Federal CIO Suzette Kent](#) in June 2019

\$1.9 billion

Federal data center consolidation generated \$1.9 billion in savings and cost avoidances in 2019.

Source: [ITDashboard.gov](#)

80%

Nearly 80% of enterprises have very little visibility into what's happening across their unstructured data, let alone how to manage it.

Source: [Gartner](#)

2.63 petabytes

Federal agencies stored an estimated average of 2.63 petabytes in 2015, with each petabyte containing 1 million gigabytes.

Source: [Informatica](#)

THE CHALLENGE

A Flood of Unstructured Data

The federal government is adrift on an ocean of data that's continually swelling. Think of the number of criminal justice cases DOJ must manage, for example, or health records for veterans at the VA. Unfortunately, legacy IT systems weren't created to keep agencies afloat on seas containing so much unstructured data.

"In today's world, agencies should assume that the amount of information that they consume will continue to grow exponentially," said Sonny Hashmi, Managing Director, Global Public Sector at Box. **"As the volume of unstructured data grows, it's harder to get analytics and intelligence from it. Traditional IT models don't work in this world."**

Legacy IT struggles with unstructured data, as it was designed to store data cataloged in specific structures such as databases. As more data emerges, the cost of maintaining and upgrading these machines for handling information rises dramatically. Even worse, unstructured data isn't placed in preexisting formats such as spreadsheets. Subsequently, with these poor systems, employees struggle with managing and analyzing this data to make informed decisions.

For example, manual processes require more time and energy as the amount of data involving them multiplies. Take paper records – as more information needs physical documentation, more people work longer creating paperwork.

"There's no way to scale human effort to meet the amount of data that's being collected," Hashmi said. "And if you can't create workflows around that data, you're not getting value from that data."

Ultimately, both structured and unstructured data challenges agencies as both types of data increase the stress on legacy IT. Subsequently, agencies must balance their tight budgets with accessing the best data for serving citizens.

"How do you store your data, secure it and back it all up?" Hashmi asked. "The cost is becoming exorbitant in many agencies because of legacy IT."

THE SOLUTION

A Cloud Content Management Approach

Government agencies are facing ever-increasing challenges to store, access and back up their data. But they can't just flip a switch to find new ways to tackle this data overload. Change like that takes new tools, processes and thinking.

Agencies need to transform the way they work. But with regulations, security concerns and diminishing resources, that's easier said than done.

That's where a secure cloud content management platform can help. Cloud content management is the combination of centralized, cloud-native content services with advanced security and governance.

Cloud can save agencies from the legacy IT weighing them down in today's ocean of data. Its elastic capabilities can support agencies' structured and unstructured data alike.

"No other IT model can scale like cloud does," Hashmi said. "The level of computing and security models that is also required just isn't possible with traditional architecture."

Cloud content management is an easy and secure way for different departments and teams to work together. With cloud content management, manual processes become digital and automated. Employees no longer must spend hours hunting for information, and productivity soars. Collaboration across the entire enterprise becomes seamless, and the latest machine learning technologies help maximize the value of every piece of content. This means no more siloed content, and no more searching for information.

"Cloud content management allows organizations to manage data in a cloud-first way, get intelligence from it, and help systems and people to work together with that data," said Hashmi. **"It gives agencies modern records management and governance without legacy issues."**

BEST PRACTICES

Managing Your Data in the Cloud

✔ Learn the Data Landscape

Agencies should examine what data their workforces collect to create better strategies for managing it. Organizations that grasp the difference between their structured and unstructured information can determine where pain points exist and the best remedies for them. For starters, drone data might be stored differently than video data, meaning employees must recognize both formats to use them most efficiently.

“You can easily make sense of structured data because it’s usually in formats like HR system databases,” Hashmi said. “Unstructured data typically looks like datasets, documents, video files. It’s harder to make sense of and get analytics from, but it’s more pervasive.”

✔ Start Small With Data Cleanup

The vast amount of data agencies encounter can intimidate employees because of this information’s size and scope. Hashmi recommends that agencies initially apply cloud-based analytics to a small part of their data. It’s a strategy that produces quick wins with minimal investments in finances, labor and time.

“Agencies don’t have to solve everything in one go,” Hashmi said. “If you begin somewhere with a specific business need for better information access, that’s a good place to start. There’s immediate business value to show.”

✔ Ally With Automation

Automation can become a valuable ally to agencies on concerns including compliance, record-keeping and security. Consider financial records – automation can immediately store these materials for as long as required by an agency’s regulations. As a result, employees focus more energy on mission-critical tasks rather than following documentation rules.

With the maturity of machine learning, agencies can also leverage easy-to-deploy capabilities to get intelligence from their unstructured data sets, leading to automation of business processes and augmenting human decision-making. Machine learning features computer algorithms performing tasks without explicit instructions.

✔ Add AI, RPA and Machine Learning

Federal agencies are additionally investing in artificial intelligence (AI), robotic process automation (RPA) and related disciplines. AI involves machines mimicking human cognitive functions such as problem solving, while RPA uses programmed bots to rapidly complete simple tasks on users’ systems.

These capabilities will only grow more prevalent and sophisticated, and they can be vastly improved by leveraging cloud-based platforms for managing unstructured data at scale.

“Data needs to be available where it’s needed,” Hashmi said. “The only way forward is a platform that allows for leveraging AI and machine learning to make smart business decisions based on this data.”

✔ Clear Data for Collaboration

Data brings agencies closer together as it can flow nearly anywhere. It’s information that can travel across internal and external networks, across countries on cloud or even between mobile devices.

This reality makes cloud-based collaboration essential for agencies and the world around them. Internally, some agencies have multiple components each needing quick, easy and reliable access to data from the others. For proof, consider DOJ, an agency with 57 components. Externally, agencies produce data that citizens, educators, private businesses and other governments rely on. DOJ also fits this mold when outside partners such as U.S. Attorneys’ offices pair with the agency on criminal investigations.

“Data is actually driving business processes,” Hashmi said. “This information can be exposed and made available to the right people at the right moment, while maintaining the privacy, integrity and security of the information according to federal standards and guidelines. Collaboration is extremely important in this environment because you’ll have stakeholders both inside and outside the agency with a valid need to access, understand and act upon information.”



CASE STUDY

Justice Department

DOJ upholds America's laws, making the agency's work essential for citizens. Unfortunately, unstructured data is complicating this mission. Criminal justice cases are complex, and DOJ has more data to manage as it digitizes.

Initially, DOJ used legacy IT for its Law Enforcement Information Sharing Environment (LEISP). LEISP enables DOJ to manage and share case files across all 57 of the agency's components and scores of U.S. Attorneys' offices. The system also provides stakeholders outside DOJ such as U.S. courts and opposing counsels with the same access.

DOJ's legacy IT, however, is increasingly costly and cumbersome to maintain and secure as the agency's data

grows. DOJ leaders eventually decided that modernizing LEISP would solve all these challenges simultaneously.

Ultimately, DOJ chose Box to provide a new, cloud-based platform for LEISP. This platform tightened DOJ's control over the agency's data access and governance. More importantly, this system also enabled the intimate collaboration DOJ needed with its internal and external partners.

LEISP now helps about 7,000 U.S. attorneys, field agents and other relevant parties cooperate effectively on thousands of cases. By adopting a unified cloud platform for its data, DOJ now upholds justice with tens of thousands of external collaborators daily.

HOW BOX HELPS

Box can provide agencies with control over their structured and unstructured data via its platform Box for Government. This secure platform helps agencies perform more efficiently by connecting both public servants and citizens to their information. It's a solution that can also help agencies manage their sensitive content on any device while complying with privacy and security regulations. Box for Government additionally enables collaboration across agencies in a user-friendly environment.

Box's platform can help agencies manage their data in a cloud-first fashion, producing better intelligence. This platform also improves collaboration by helping organizations and systems work together on their data.

Box's definition of the data lifecycle includes creating, collecting, structuring, managing, automating, working on and disposing of data. The company's platform handles each of these elements simultaneously; government employees are then free to focus on improving the customer experience (CX) they deliver.

"We let agencies handle the entire data lifecycle in one platform," Hashmi said. "No other content management solution has looked at this problem holistically."

Learn more here: [Box for Government](#)

Conclusion

Today is the day for federal agencies to start reimagining how they operate in the digital world. Only the right cloud platform, however, can store both structured and unstructured data well. By unifying all their data in one place, an agency's content becomes a strategic asset that employees can use for faster, more intelligent data-driven decisions.

The technologies of the future, meanwhile, thrive on cloud. Working together, tools such as AI, RPA and machine learning help government workers by lightening their manual workloads.

Unified, cloud-based content management platforms ultimately help agencies leave their legacy IT for greener pastures. It's a landscape with thriving data access, governance and collaboration wherever agencies work in the world.



ABOUT BOX

Box brings disparate parties together across the public sector to collaborate more effectively, to share data and to secure sensitive information. With over 54,000 businesses and more than 37 million users on the Box platform, Box is the standard for cloud-based teamwork and high-security content management. Box serves government agencies by enabling controlled access to critical content on any device, improving process efficiency and reducing operational costs. Box leads cloud solutions in security, reporting and audits. User access is managed effectively with robust admin controls. Integrations for third-party mobile device management and dataloss prevention are built right into Box. Enterprise-caliber security features safeguard the most sensitive data while maintaining regulatory compliance, making Box a trusted service.

Learn more here: box.com/industries/government



ABOUT GOVLOOP

GovLoop's mission is to "connect government to improve government." We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 300,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

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