How to succeed at Information Governance in the cloud

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Box
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The Leadership Perspective
### Government agencies are facing new challenges

<table>
<thead>
<tr>
<th>Government CIO priorities</th>
<th>Notable trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Cost and Complexity</td>
<td>Federal and State/Local agencies’ IT spend is over $180B/year – Federal agencies spend 10x vs private sector per employee</td>
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<tr>
<td>Modernize Legacy Systems</td>
<td>70-80% of agency IT budgets are tied to maintaining legacy systems</td>
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<tr>
<td>Security and Privacy of data</td>
<td>Average total cost of a data break is $6.03M, or $278 per lost or stolen record, a 12% increase year over year</td>
</tr>
<tr>
<td>Improve workforce and citizen experiences through digital services</td>
<td>Only 47% employees believe their organizations provide resources to take advantage of digital trends</td>
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### Changing Mission parameters

- Scope of global challenges is growing
- Agency business processes require closer coordination with citizens, stakeholders, and public sector
- Citizens expect direct, personalized, real-time engagement with government from anywhere
Technology driven mission outcomes

- Technology is moving from the back-office to direct mission enablement
- Mission areas directly investing in technology platforms, often conflicting with central CIO strategy
- CIO's role changing from operator to advisor and broker

Resource Limitations

- Agency IT budgets are changing in unpredictable ways (Fed vs. States)
- Business value of IT is often not understood by decision makers
- Top tech talent is increasingly hard to attract, recruit and retain
Accelerating technology trends

- Half-life of technology solutions now around 2 years

- Cloud, AR/VR, Mobility, AI, Block-chain, Drone innovation happening faster than ever

- Government technology insertion, experimentation and procurement processes struggle to keep up

The Digital Experience Perspective
### Key trends in government digital transformation

<table>
<thead>
<tr>
<th>Digital transformation areas</th>
<th>Notable trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>“internet of Me”</td>
<td>66% of government IT leaders say that a personalized citizen experience is a top 3 priority for them</td>
</tr>
<tr>
<td>Focusing on outcomes not outputs through digital services</td>
<td>84% of government leaders agree that organizations will shift to selling outcomes not products with IoT and connected services</td>
</tr>
<tr>
<td>Platform Revolution</td>
<td>60% of government leaders indicate they are investing in and leveraging Platform-as-a-Service (PaaS)</td>
</tr>
<tr>
<td>Intelligent Enterprise</td>
<td>59% of government leaders agree that managing data remains a huge hurdle</td>
</tr>
<tr>
<td>Workforce Re-imagined</td>
<td>74% of leaders agree that new skills are needed in Public Service, and people and AI need to co-exist and support each other</td>
</tr>
</tbody>
</table>
Modern Apps Are Being Built in a New Way

Micro-Services

Cloud Platform

The Information Perspective
Key trends in unstructured data and content

- Unstructured data challenges
  - The Cambrian explosion
  - Unstructured data is majority of total data held by Agency
  - Fragmented platforms to manage unstructured content
  - Exponentially worsening risk posture
  - Nature of “content” changing

- Notable trends
  - Year on Year growth in unstructured data and content growing exponentially
  - 80%+ of data managed by Agency is unstructured content
  - Unstructured content resides within 30-50 different content siloes and platforms in an average organizations
  - 80%+ of breaches occur due to improper security, or compromise of a content silo or file
  - Instead of back-office docs, real time, multi-dimensional, intelligent content enabling mission delivery

Content challenges have been solved in a fragmented way

- Simple
  - File shares, email and physical media
  - Store stuff

- Complex
  - Enterprise file sync and share
  - Access and share my stuff
  - Enterprise content management
  - Manage Agency/Department/Team stuff
  - Line-of-business apps and custom development
  - Stuff related to business apps

- NetApp, EMC, Dropbox, Google Drive, OneDrive, SharePoint, OpenText, Microsoft Azure, Salesforce
As a result, the way most enterprises work is fractured and often insecure.

The Information Governance Challenge
For many enterprises, technology doesn’t drive innovation. It hampers it.

Users:
- Poor user experience with little/no mobile support
- Manual business processes are inefficient and error prone

IT:
- Maintaining fragmented, costly technologies
- Inability to easily ensure security, governance and compliance

Business:
- Need to innovate and speed up processes
- Connect the extended enterprise

In 60% of organizations, half or more of employees are reliant on collaboration/ECM/workflow systems to do their jobs.

59% cite compliance and risk as the largest driver for ECM system strategies.

Only 35% consider their ECM system to be easily searchable.

#1 reason for ECM deployment failures is user adoption.

Source: AIIM
Content is everywhere

Is dynamic and ever-changing

And is under increased scrutiny

79% of workloads are run in the cloud

But there is a cloud governance gap
Of companies agree lack of governance puts their organization at risk - AIIM

Of organizations have effective information governance rules or policies - Information Coalition

Documents leaked in the first half of 2017 - Gemalto

Ease of use is a requirement for users and should be for admins too. So . . .

Enable secure collaboration with people you don’t manage on devices you don’t own

Identify, protect, and defensibly discover the right content

Maintain document retention and disposition schedules to stay compliant

How can I enable my users to access, share, collaborate, and manage sensitive content in the cloud, in a secure and compliant way – without impacting their (or my) ability to get work done?
How do I better manage my corporate (compliance) risk in a way that doesn’t impact the experience of my users?

The Box Cloud Content Management approach
If you can start with ECM from scratch...

Enable collaboration & processes across the extended enterprise

Be secure & compliant for every industry & geography

Integrate with the apps we already work in

Designed for the needs of end users, developers and IT

This is Cloud Content Management

Enable collaboration & processes across the extended enterprise

Be secure & compliant for every industry & geography

Integrate with the apps we already work in

Designed for the needs of end users, developers and IT
Cloud Content Management from Box

One Cloud Content Platform for the enterprise

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<tr>
<th>Box Apps</th>
<th>Partner Ecosystem</th>
<th>Custom Apps</th>
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<tr>
<td><img src="box.png" alt="Box Logo" /></td>
<td><img src="partner-logos.png" alt="Adobe, Google, Office 365, Kofax" /></td>
<td><img src="partner-logos.png" alt="Partner Logos" /></td>
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- **Files**: Manage files and documents centrally.
- **Capture**: Capture content from various sources.

**Dimensions**:
- **Metadata**: Organize data with structured and flexible metadata.
- **Retention**: Manage the lifecycle of content.
- **Workflow**: Automate processes and workflows.
- **Search**: Find content quickly and easily.
- **Collaboration**: Work together on documents and projects.
- **Security**: Protect data with advanced security features.
- **Policies**: Define and enforce policies for content management.

**Platforms**:
- **Box Platform**: A comprehensive platform for content management.
Simplify how you govern information

The Box Governance solution

- Meet your legal, regulatory, compliance, and security requirements for cloud content
- Reduce the costs and complexity associated with information governance
- Connect cloud content to your existing information governance ecosystem

Retention Management

Ensure proper retention, deletion, and archival of business content

Defensible Discovery

Simplify legal processes, reduce litigation costs, defensibly discover content

Security Classification

Automatically protect sensitive content with metadata-driven, intelligent policies
Retention Management
Reduce risk of fines and falling out of compliance across the globe

GDPR
- European citizen data
- When no longer needed

EEOC/FLSA
- Current personnel records: 1 year
- Payroll records: 3 years

SOX
- Financially relevant records: 7 years
- SOX control evidence: 7 years

FINRA
- Sec 17a-4 records: 6 years

Risk
- Fines up to 4% of global revenue
- EEOC issued $428M in fines in 2016
- FLSA fines up to $10K/incident
- Up to 20 years in prison for executives
- Fines up to $5M
- $176M fines levied by FINRA in 2016 (most ever)

Defensible Discovery
Lower risks and costs associated with legal action

Identify - Preserve - Collect
- Find content relevant to litigation
- Audit and hold content for specific time periods or in an ongoing manner

Review – Process - Analyze
- Export content to eDiscovery tool
- Review with legal council

Production - Presentation
- Ensure all content relevant to litigation is findable and usable in court of law

Risk
- $18K/GB for content undergoing legal review
- 42% of companies say legal hold process involves manual search, which could cost $250-$500/hour
- Data spoilation may result in millions of dollars of fines and pre-trial evidentiary sanctions per Federal Rules of Civil Procedure 37(e) & 26(b)
Security Classification
Increase productivity, mitigate risks and costs of data leakage

Classify
Set the right security policies on content to keep them secure

Secure
Ensure sensitive content is only accessed by the right people and organizations

Risk
58% of senior managers have emailed sensitive content to the wrong person

Risk
Average cost of a data breach in the United States is $7.3M

Comprehensive Governance Platform

Box Governance APIs
Box content and collaboration
Box Admin Console
### The Recentralized Storage/Content Architecture

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<th>Leverage Cloud Scale</th>
<th>Increased Compliance</th>
<th>Unlock new business value</th>
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<tr>
<td>Unlimited Storage and scalability</td>
<td>Real time e-Discovery, Retention</td>
<td>Artificial intelligence and ML</td>
</tr>
<tr>
<td>Automated backups/DR/Patching</td>
<td>Persistent encryption and IRM/IdM</td>
<td>Power new biz. processes</td>
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<tr>
<td>10x cost efficiency</td>
<td>Auto-versioning, AV, Quarantine</td>
<td>Digital stakeholder engagement</td>
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<tr>
<td>Always available</td>
<td>Transaction level auditing</td>
<td>Open API based extensions</td>
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### The future of Information Rights Management

**Artificial Intelligence and Machine Learning**
Traditionally, the more information you have the harder it is to work with
I have to listen to hours of calls daily to ensure high quality customer service.
- Customer service

I have tens of thousands of images. How can I find the picture of our new product line for my website?
- PR team

I have to manually enter details about thousands of contracts in metadata, keeping me from getting my job done.
- Legal department

Machine learning is the only way to solve this at scale
Intelligent technologies

IBM Watson
Microsoft Azure
Google Cloud Platform

- Image recognition
- Entity analysis
- Topic extraction
- Concept detection
- Sentiment analysis

- Video indexing
- Intelligent Security
- Person detection
- Text summarization

-...

Intelligent Security
Intelligent technologies

IBM Watson
Microsoft Azure
Google Cloud Platform

Video indexing
Intelligent Security
Person detection
Text summarization

Skills Framework
Intelligent technologies

IBM Watson
Microsoft Azure
Google Cloud Platform

Video indexing
Intelligent Security
Person detection
Text summarization

Skills Framework
INTELLIGENCE

Box Skills Kit

Toolset that allows customers and third-party developers to build custom Skills for Box. Custom Skills allow businesses to make intelligence work for their unique content and business processes.
Why Artificial Intelligence/ML is the future

- Make Dumb content smart
  - Image Recognition
  - Video Transcription
  - Identify risks
  - Trigger events/workflows

- Scale human capabilities
  - Auto-classify and prioritize cases
  - Integrate with Natural Language
  - Real time intelligent search
  - AI/ML based content discovery

- Research and Risk Management
  - Auto-set access rights
  - Identify anomalies/outliers
  - Auto-classify for retention
  - Extract relevant metadata

Thank you!