Elastic Media Supply Chain

Eric Carson – Dalet Digital Media Systems
First, Let’s Define Cloud

On-Premise
- Applications
- Data
- Middleware
- OS
- Virtualization
- Compute
- Storage
- Networking

IaaS
- Applications
- Data
- Middleware
- OS
- Virtualization
- Compute
- Storage
- Networking

You manage

PaaS
- Applications
- Data
- Middleware
- OS
- Virtualization
- Compute
- Storage
- Networking

You choose
Vendor manages

SaaS
- Applications
- Data
- Middleware
- OS
- Virtualization
- Compute
- Storage
- Networking

Vendor manages

Vendor manages
Media Supply Chain

Elasticity & Cost Rules

Workflow Designer

Usage & Cost Reporting

Contribution

Contribution

Contribution

Upload Portal

Transcode If Required

Metadata-AI Collection

Packaging, QC, Approval

Output Locations

Elasticity & Cost Rules
Workflow Designer
Usage & Cost Reporting

Contribution
Contribution
Contribution

Upload Portal

Transcode If Required

Metadata-AI Collection

Packaging, QC, Approval

Output Locations
The Value of Cloud-Based Workflows

- **Security**
  - Enforced security
  - Your content secured
  - Your system safe
  - SaaS auto-update

- **Scalability**
  - Scalable System
  - More content, higher quality, more processing
  - Adapt to Peak Demand

- **Financial**
  - Flexible Investment Profiles
  - Reserve or pay as you go
  - PaaS marketplace billing
  - Cost optimization
  - IaaS - no datacenter build-out or maintenance

- **Agility**
  - Agile/POC Approach
  - Adapt to New Technologies
  - Changing Consumption Patterns

- **Ubiquitous**
  - Mobility
  - Access tools and media from anywhere

- **Collaboration**

- **Power**

- **Value**

- **Safer**

- **Agile**

- **Seamless**
What Makes These Solutions Shine?

Trend Analysis

Financial Reporting

Predictive Analytics
Hybrid Cloud-Based Workflows & Implementations

Eric Carson – Dalet Digital Media Systems
Hybrid Media Workflows

What Works Today?
Use Case #1
Share Content and Manage Approval Workflows
Start at the Edges

Ingest & Approval
Content Upload, QC Review, Approval, Submission

Smart Start
(Manual, Data-driven, API)

Orchestration Engine

Connectors

Systems
MAM, DAM, PAM, CMS Automation, Traffic System

Metadata Enrichment
Speech to text Cognitive Services

Media Services
Media Processing, AQC File Transfer, HSM

Distribution Locations
Migrating Content Ingest to Cloud

Asset Management System

- Content Upload Portal
- Review and Validation tools
- Collaborative tools (chat, clipbins, etc)

High Res on-premise to capitalize on existing investments

High Resolution Storage

Extension of MAM or a separate instance in Public Cloud Use multiple AZs
Find
Locate what you need by indexing user and cognitive data

Mobile and Web Access
Access content from anywhere, streamed directly from S3

Collaborate & share
Share content with colleagues, wherever they are, using chat and collaborative tools

Connect
Make content accessible beyond current system silos
Cloud Architecture
Hosting the proxy and approval tools in the cloud

Collaborative Work across the World
Using a mobile or HTML5 client, users now have access to content and tools literally from anywhere. Even in the Amazon.

Mobile Access
Use a Mobile App or HTML5 page, so that users can review content while commuting in Tokyo Metro

One System for Multiple Sites
The same infrastructure can be used to connect users working from remote sites.

Empowered users
“I can now review and editorially approve content from my tablet, mobile, or Web client without having to be at my desk. This is so much time that I save”
Use Case #2
Disaster Recovery in the Cloud
Business Continuity

- Planned Maintenance
- Power or Network failure
- Cyber threats
- Natural Disasters

Temporary Systems

- Training
- Staging
- Experimenting
- Event Coverage
DR Site “At Rest”

**Production Site**
- Users
- Core & Media Servers
- Media bucket

**DB Site**
- MS SQL

02

Scaling up

**Production Site**
- Users
- Core & Media Servers
- Media bucket

**DB Site**
- MS SQL

03

Connecting Users

**Production Site**
- Users
- Core & Media Servers
- Media buckets

**DB Site**
- MS SQL

04

DR In Production

**Production Site**
- Users
- Core & Media Servers
- Media buckets

**DB Site**
- MS SQL

AWS

**Ingest to S3**

**Production Site**
- Users
- Core & Media Servers
- Media buckets

**DB Site**
- MS SQL
**4 KEY VALUES FOR CLOUD-BASED BUSINESS CONTINUITY**

1. **Down-to-zero capital investment**
2. **No need for a physical installation**
3. **Significant savings well over 50% on the infrastructure**
4. **Replication schemes can be adapted for your business & DR preferences**
Use Case #3
Media Supply Chain with Burst Capability
On-Premise Supply Chain

Incoming Content

Transcode Decision

Transcode to House Format

Full Resolution Shared Storage

Proxy Creation

QC Vendor #1

QC Vendor #2

QC Results

Email on Auto QC Fail

Manual QC Decision

QC PASS – Upload file to Distribution

Distribution

QC Fail
Elastic Utilization

Your utilization of your system
Elastic Utilization

90% of capacity remain on-premise, burst to Cloud

On premise requirements without Cloud IaaS
Hybrid Supply Chain with Cloud Burst

1. Elasticity Control
2. Transcode Queue Level
3. Transcode to House Format
4. S3 Bucket
5. Elasticity Control
6. Transcode until Queue is Full
7. Full Resolution
8. Shared Storage
9. QC Vendor #1
10. QC Vendor #2
11. Proxy Creation
12. QC Results
13. Email on Auto QC Fail
14. QC PASS – Upload file to Distribution
15. Manual QC Decision
16. Distribution
17. Manual QC Decision
18. Transcode to House Format
19. S3 Bucket
20. QC PASS – Upload file to Distribution
Native Cloud Supply Chain

On-Premise
Connected to AWS via DirectConnect

Incoming Content

Rule-Based Transcode Decision

Transcode to House Format AMI VM

Full Resolution Shared Storage

QC Vendor #1 AMI VM

QC Vendor #2 AMI VM

Proxy Creation AMI VM

Auto QC Fail – Email Notify

Job Status Aggregation

QC Status

QC PASS – Copy file to Distribution

QC FAIL – request full resolution file

Copy/Move Engine

Distribution

QC FAIL

 QC PASS

Native Cloud Supply Chain
Thank You