

Cloud Migration @ FX Networks & KQED

Glen Sakata
gsakata@dalet.com
HPA Tech Con 2020

Visionaries step up when intimate knowledge, problem solving, and open minds are urgently needed

A Shared Paradigm Shift



Logistics

- Physical vs. Virtual
- Temporary vs. Permanent
- Public vs. Private Cloud

Opportunity

- Timing
- Realignment
- Rethink
- Refresh

Objectives

- Baseline
- Intra-org
- Inter-org
- Ongoing innovation

Execution

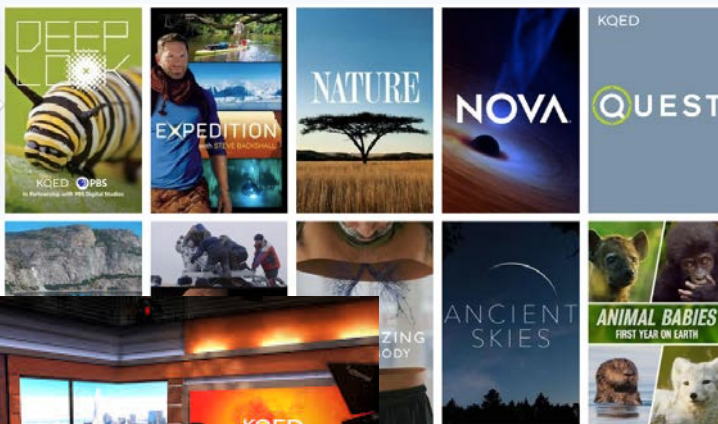
- Commercial Flexibility
- Constant Evolution
- Business Variables



Disney FX Networks
Los Angeles, CA

From on prem to public cloud

Featured Shows >



KQED

From on prem to private cloud

The FXN Challenges



Assets stored and managed
across legacy platforms

Limited, disparate Metadata

High touch, manual processes

Security requirements

Bound to local, on prem
resources

Lack of Access & Scalability

How to migrate the network's program and promo inventories, increase accessibility, build an extensible metadata model for future enrichment and increased security in a hyper-scale cloud environment

The KQED Challenges



Digital but Tape-based
Workflows

Minimal Metadata

Manual processes = last
minute, error prone

High operations and
distribution cost

Suboptimal on prem resource
utilization

Lack of Company-wide Access

How to manage a major technology refresh and two physical moves with the least amount of disruption and maximum benefits

FXN Migration Project Objectives



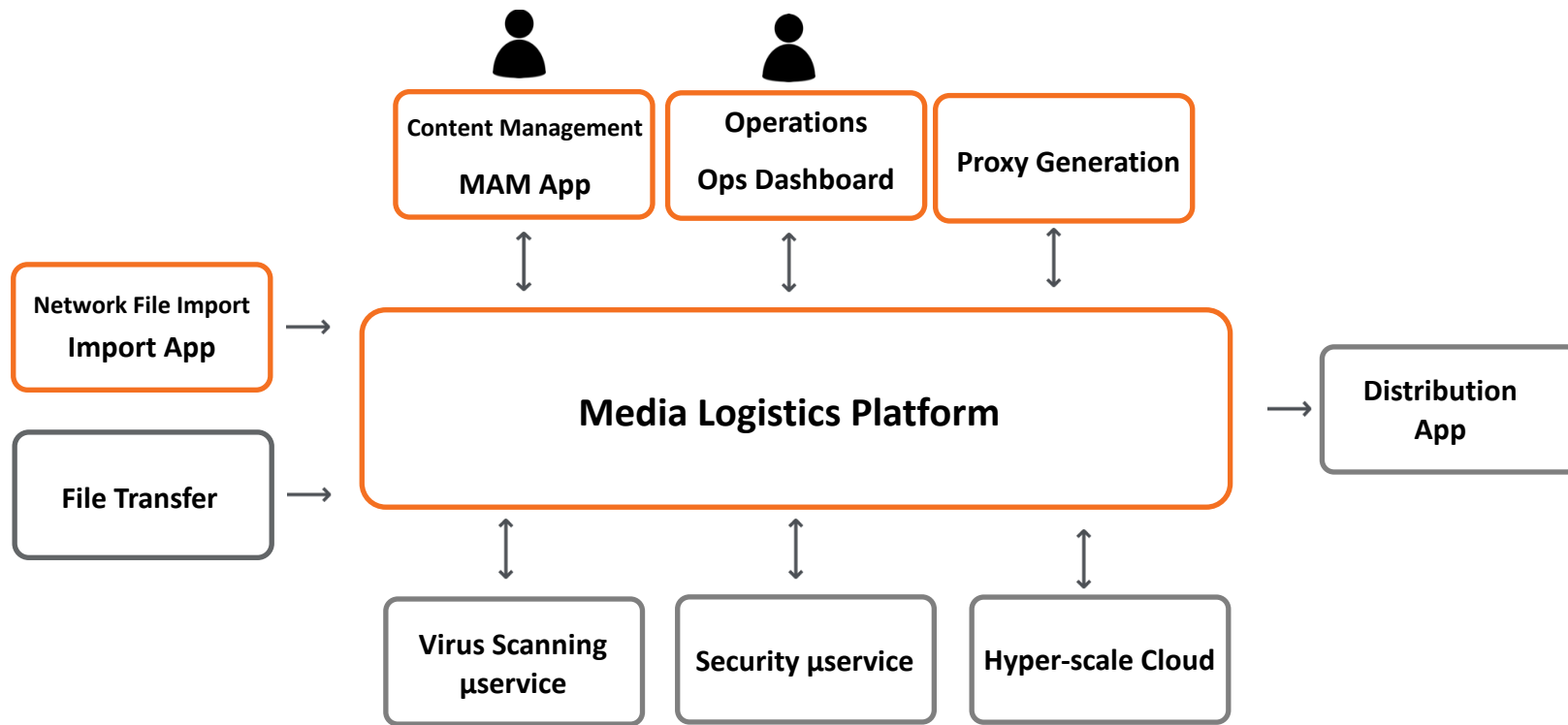
- *Flexible metadata design* per asset type
- *Automated* archival policy and archive operations management
- Flexibility to *tune archival policies* by Business users to adapt to Business needs
- *Single Source of Truth* for archive, downstream distribution, edit / studio distribution
- *Cloud native deployment* leveraging high resiliency, availability and scaling capability
- Well-defined *access and visibility* models using combination of user roles, user groups and workspaces
- Ancillary file management and seamless integration within highly stringent FX *security policies*

KQED BPM Project Objectives



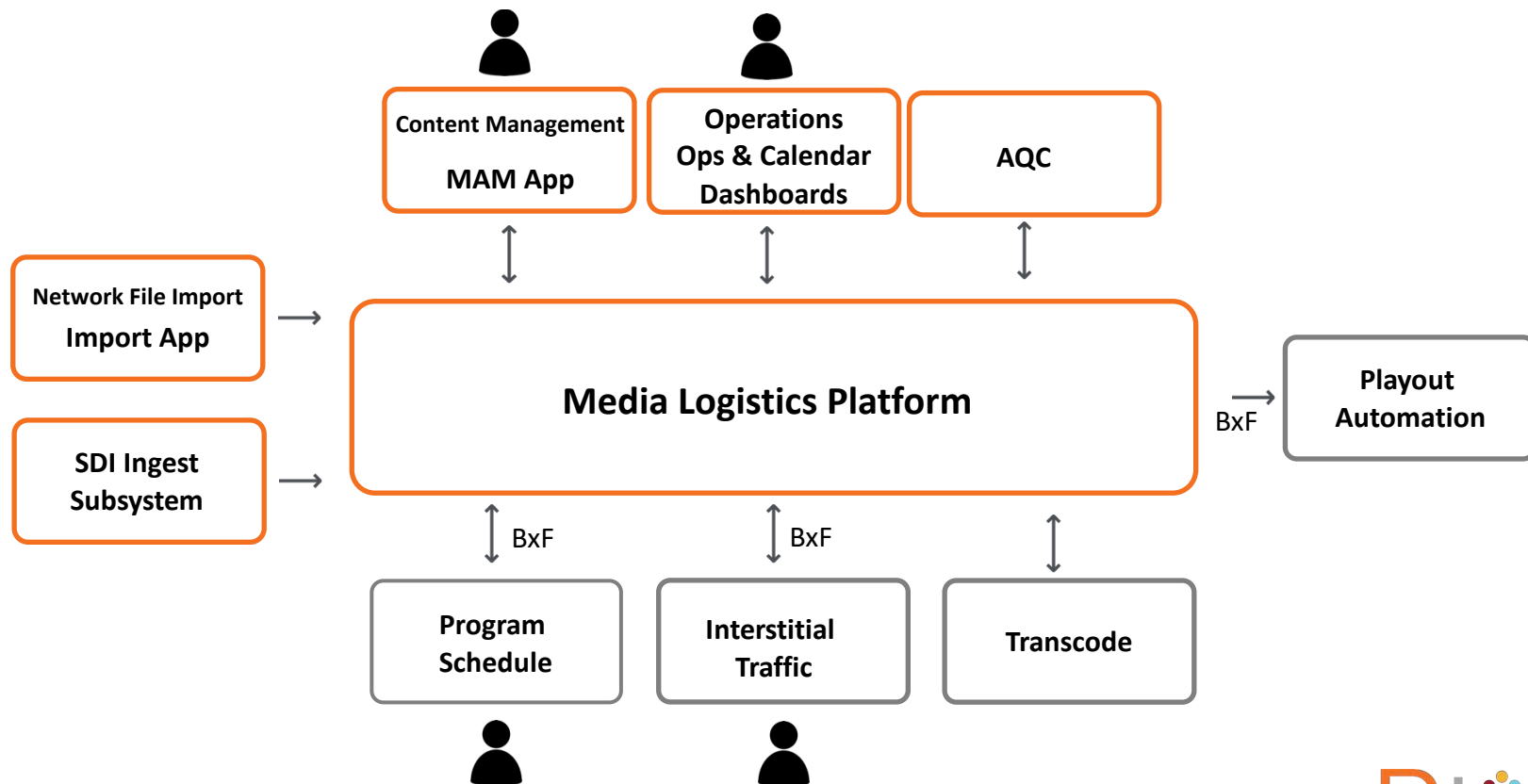
- *Multiple metadata schemas* per asset type
- *Automated* scheduling, traffic and automation reconciliation
- Flexibility to *tune ingest/import workflows* based on delivery exceptions
- *Single Source of Truth* for ingest, archive, downstream distribution
- *Multiple location technology deployment* leveraging high resiliency, availability with operational flexibility
- Well-defined *access and visibility* models using combination of user roles, departmental groups and physical logistics
- Express workflows quickly adaptable based on *business dynamics*

Solution Architecture - Simplified

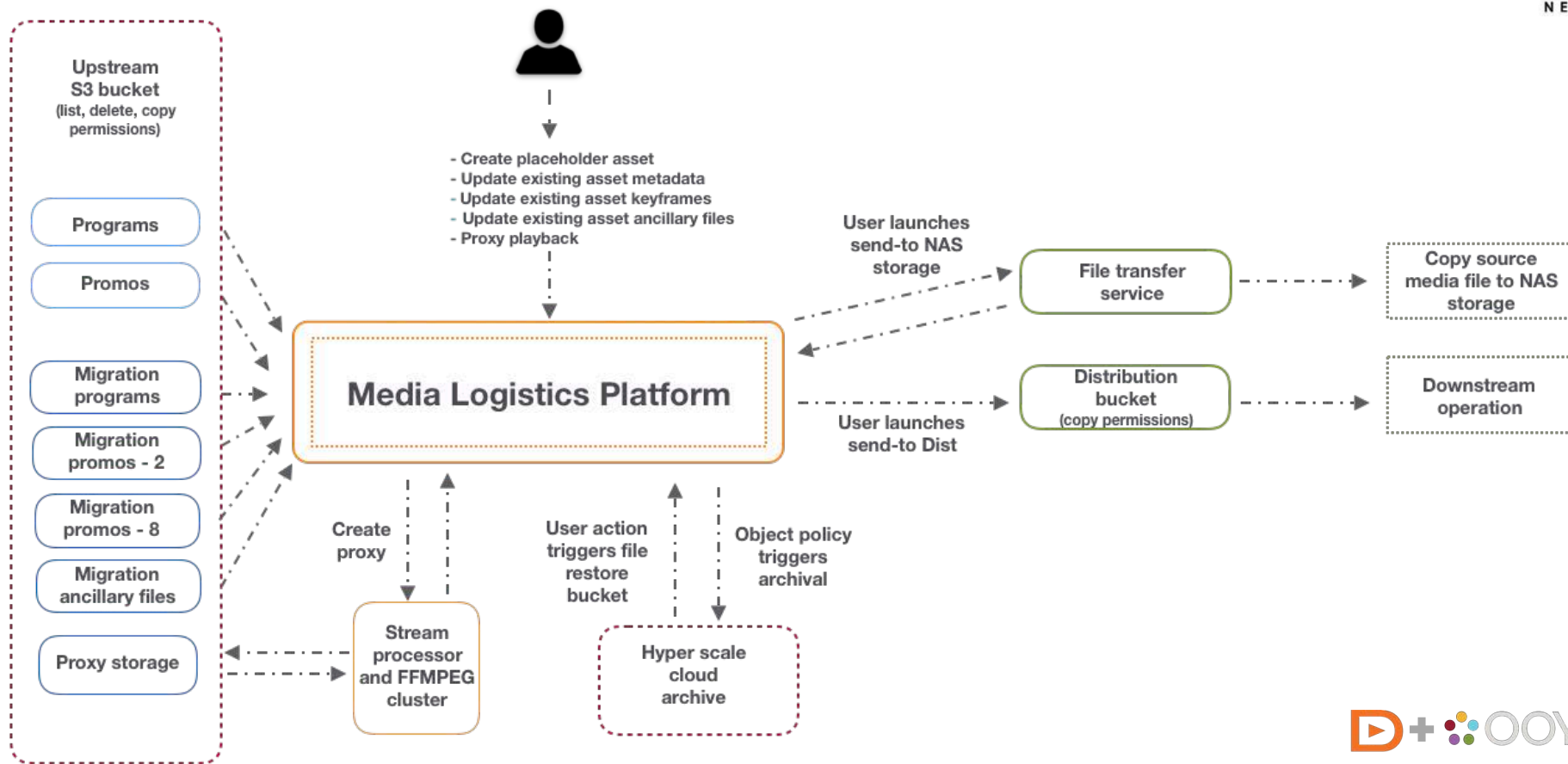


Solution Architecture - Simplified

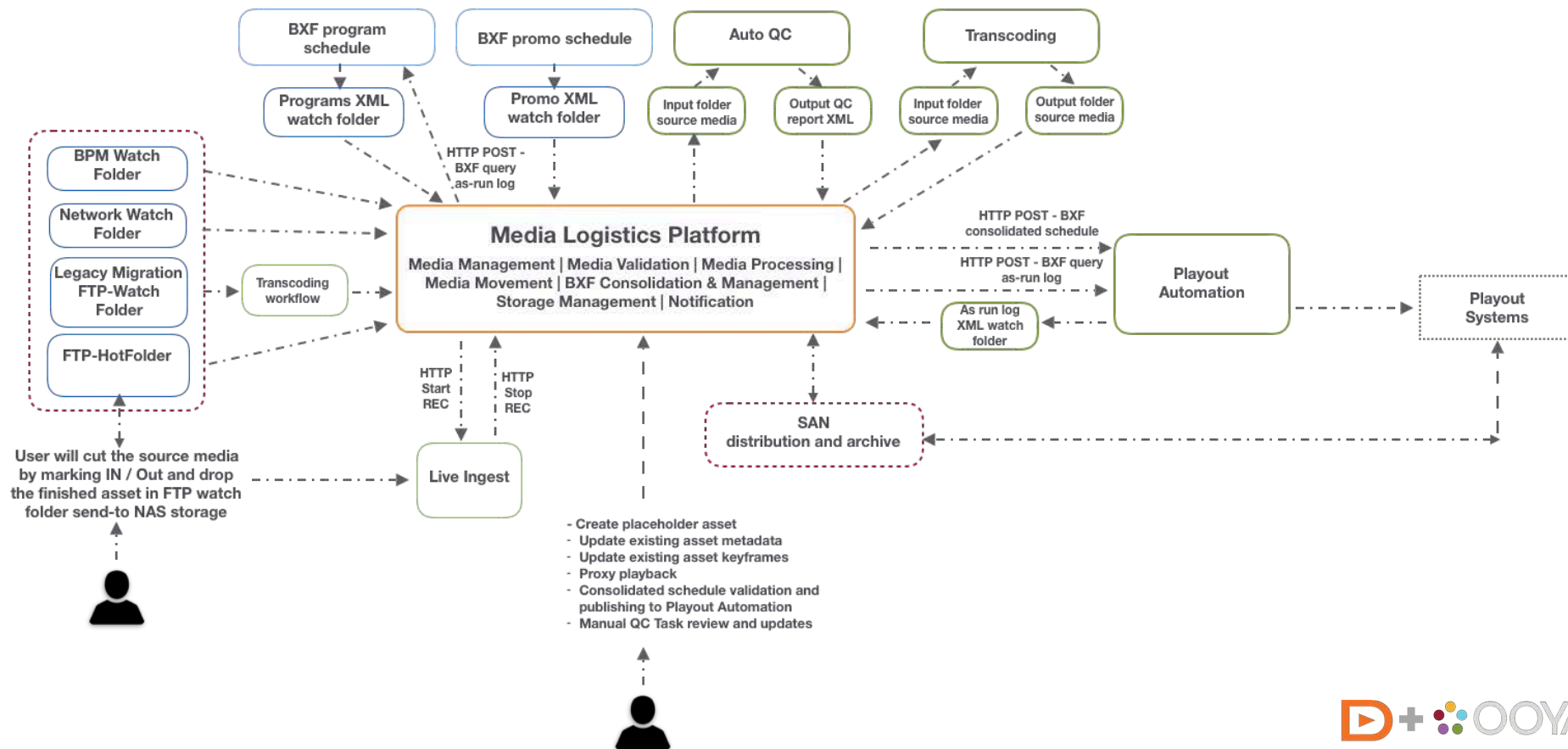
KQED



Solution Architecture - Abstract



Solution Architecture - Abstract



FXN Solution – Value Delivered



- **Bulk Asset Migration** – migrated 70K promos and 10K program/feature assets in bulk lift (~26K workflows per month) and counting
- **Proxy Creation/Search** – all assets have frame accurate proxies with CC and 5.1 downmix for browser review
- **Extensible Metadata** – currently 6 schemas with 75+ metadata fields, fully searchable. Can expand exponentially with temporal md from future AI enrichment
- **Automated Processes** – collaborative workflow designs to aggregate, enrich, distribute and fast track assets across the Disney enterprise.

The FXN Migration project created a fully searchable, proxy driven, highly extensible data warehouse built on a hyper-scale cloud environment

KQED Solution – Value Delivered



- **Business Process Management** - normalizing schedules and logs across two scheduling/traffic systems and linear playout automation using SMPTE BXF
- **Unified Search** - fully indexed and searchable content library
- **Automated Processes** – collaborative workflow design with 12 metadata schemas, 55K workflows per month, 27K assets. Includes express workflows.
- **Technology Abstraction** – manage and monitor infrastructure remotely

Implemented a highly automated master control with station-wide access to their content library, providing a scalable platform to interconnect linear, on demand and digital teams wherever they are located

Vision 2030 Principles



1. Direct Cloud Production

2. Apps → Media

4. Archives/Libraries using Cloud Competencies

3. Propagate & Distribute Publishing

5. Digital Asset Preservation Access/Edit

6. Broad User Permissions & Access

7. Highly Secure & Adaptive Environment(s)

8. All Elements are Managed by a SSoT

9. Non-Destructive WF using Common I/Fs, Formats, Metadata

10. WFs Originate & Evolve using RTE

Vision 2030 Principles Applied



1. Direct Cloud Production

4. Archives/Libraries using Cloud Competencies

5. Digital Asset Preservation Access/Edit

7. Highly Secure & Adaptive Environment(s)

9. Non-Destructive WF using Common I/Fs, Formats, Metadata

2. Apps → Media

3. Propagate & Distribute Publishing

6. Broad User Permissions & Access

8. All Elements are Managed by a SSoT

10. WFs Originate & Evolve using RTE

Cloud Migration @ FX Networks & KQED

Glen Sakata
gsakata@dalet.com
HPA Tech Con 2020