JT-NM: ENABLING THE BUSINESS BENEFITS
THE BUSINESS CHALLENGE

- Acquire content from a wide range of sources
- Create versions for a wide range of consumers and devices
- Deliver content through a wide range of distribution channels

THE GOAL – to Monetize Content Quickly, Efficiently, Cost Effectively
THE ENABLING FRAMEWORK

Reference Architecture v1.0 created by the JT-NM

- Sets out an agreed framework and strategic approach on which technology solutions can be based
- Comprises a list of best practices, recommendations, and frameworks
- CRITICAL COMPONENTS - Identity, Timing, Flows & Grains, Common Models

Reference Architecture available at http://jt-nm.org/RA-1.0
TECHNOLOGIES FOR DELIVERY

Shown here and around the show

- Current developments associated with IP-based infrastructures, based around open stands and specifications
- SMPTE ST2110 qualified products
- Reference installations
- Building on SMPTE ST2110, AES-67, and AMWA NMOS developments
TECHNOLOGIES FOR DELIVERY

Also demonstrated here:

**JT-NM Tech stack** based on end user requirements set out by the EBU
- A set of Specifications to increase security and to ease installation and maintenance

**New NMOS developments**
- Specifications IS-07 Event & Tally and IS-08 Audio Channel Mapping
- Best current practices BCP-002 High Level Grouping and BCP-003 API Security
TECHNOLOGIES FOR DELIVERY

Future discussion and activity

- Looking beyond current implementations of IP-based architectures, the JT-NM Road Map considers future technologies “Dematerialized Facilities” (shown in green on graphic)

- These promise
  - to offer greater business agility and technical flexibility
  - without the need for traditional investment in specialised media devices.
WHAT ARE “DEMATERIALIZED FACILITIES”?

Two main sub-categories

1) **Cloud-fit** – Suitable for use in a cloud-based environment

- On Demand – scalable, elastic, measurable
- Security from the outset – Internet best-of-breed
- Generic cloud infrastructure – ubiquitous/resilient/public APIs
- Multi-cloud – private/public/multi-cloud vendor
WHAT ARE “DEMATERIALIZED FACILITIES”?

Two main sub-categories

2) Non-media specific IT

- Self-describing APIs – well documented, fully functional
- Software-only
- Virtualizable – runs on virtual machines
- Security – best current practices
- COTS Hardware – entirely COTS or COTS w/specialized boards
- Layered & open architecture – follows current best practices
Critical components of JT-NM Reference Architecture also supports other distribution technologies from a unified “media factory”

- OTT delivery
- ATSC 3.0
- 5G
- Radio Broadcasting