# 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

# OTHER TECHNOLOGIES

**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