



Will Kreth,
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Advanced Supply-Chain



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Structured, Linked, Curated
(SLC)

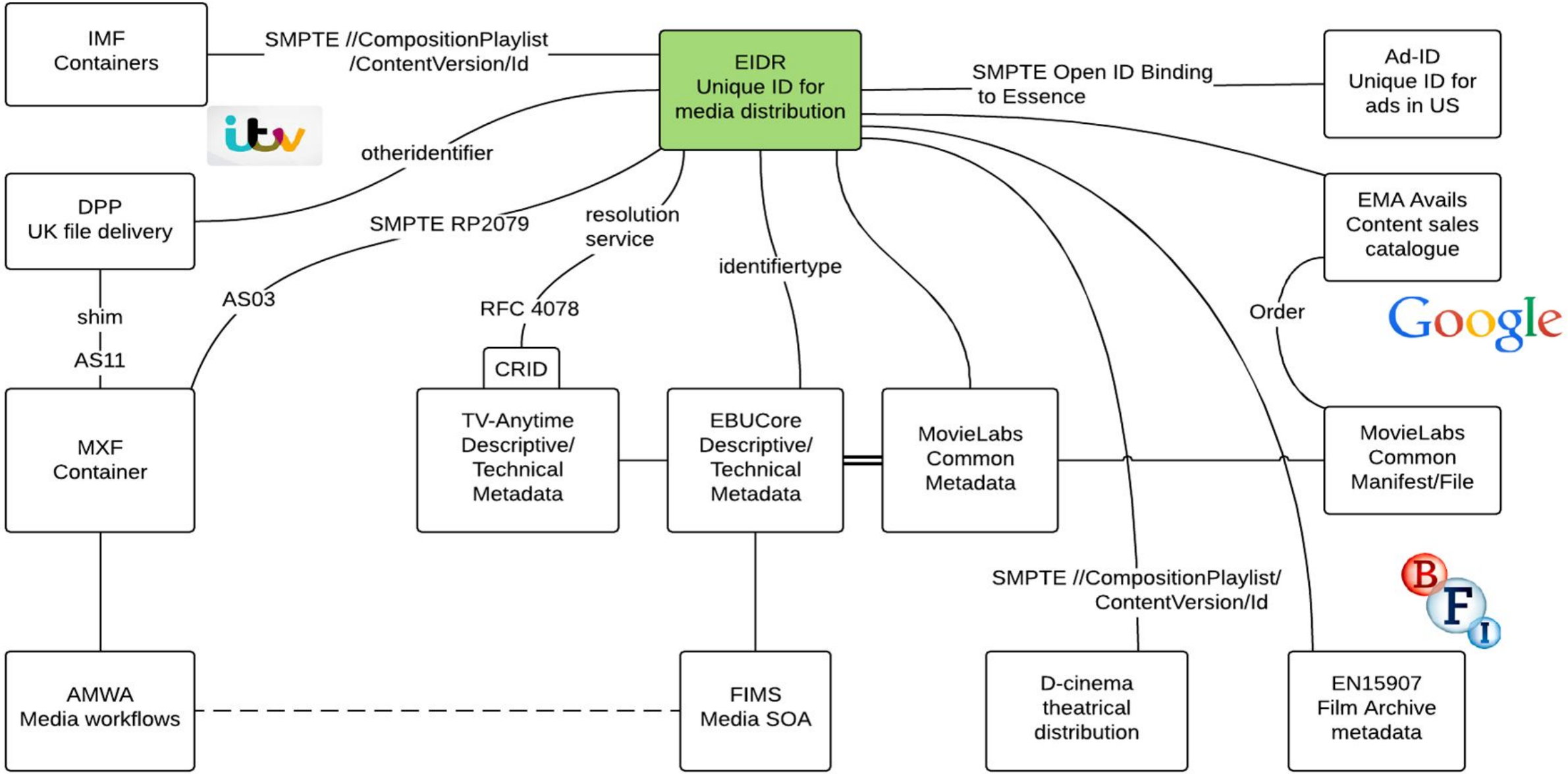
Supply Chain Initiatives

- **IMF for Broadcast**
 - With further implications for Digital Cinema and In-Flight Entertainment
- **TAXI Complete - SMPTE's OBID & OBID-TLC standards**
- **EMA Avails (for Digital Retail)**
 - With further implications for Broadcast
- **EIDR's Industry Adoption - Recent Milestones**

But first, a metaphor!

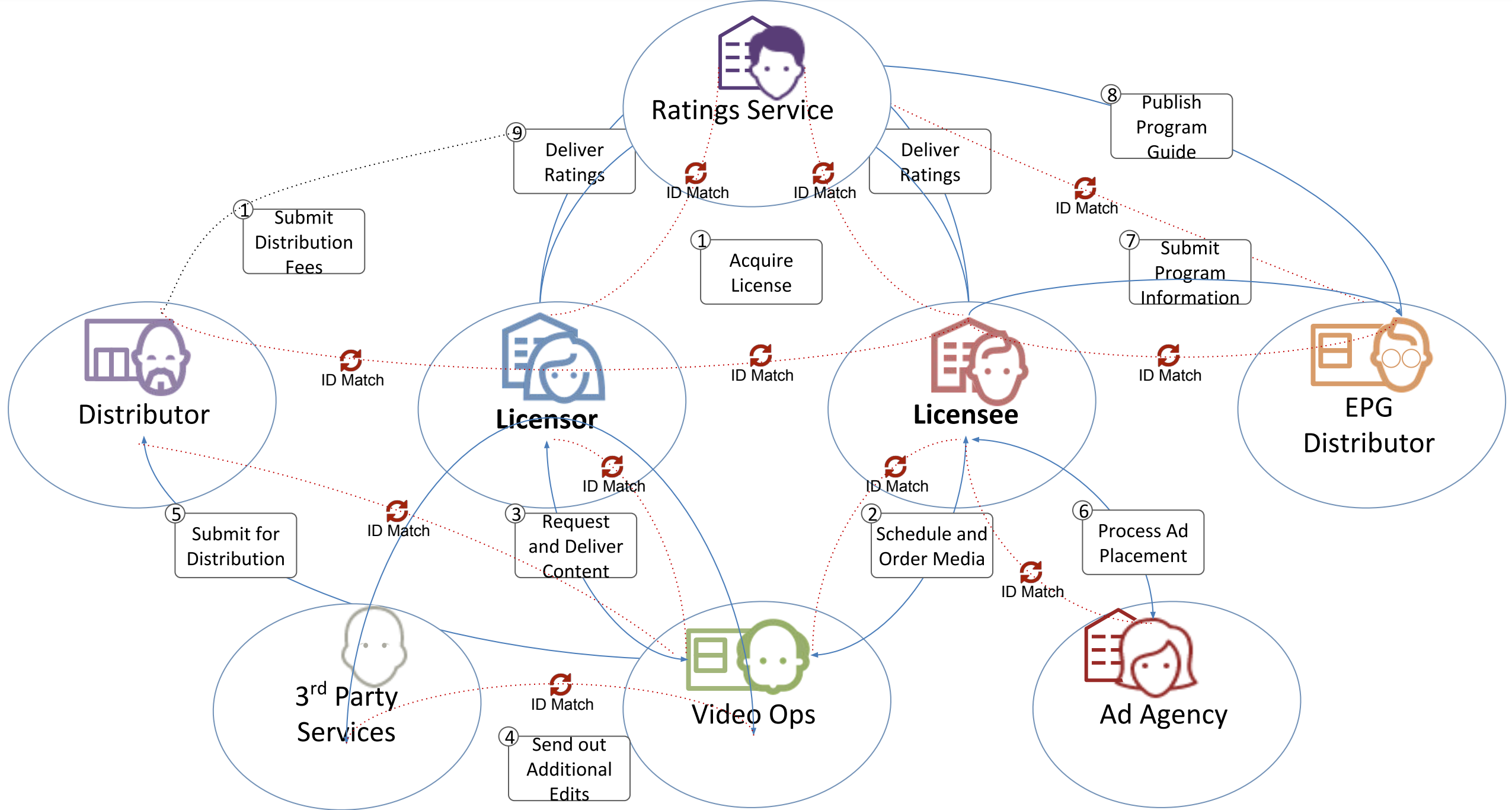


EIDR Unique ID for media distribution



Open, persistent, and globally unique EIDR IDs are the glue - the connective tissue between all of these.

Today: The Negative Network Effect



IMF for Broadcast

The future for Broadcast, Online,
Digital Cinema, and In-Flight
Entertainment



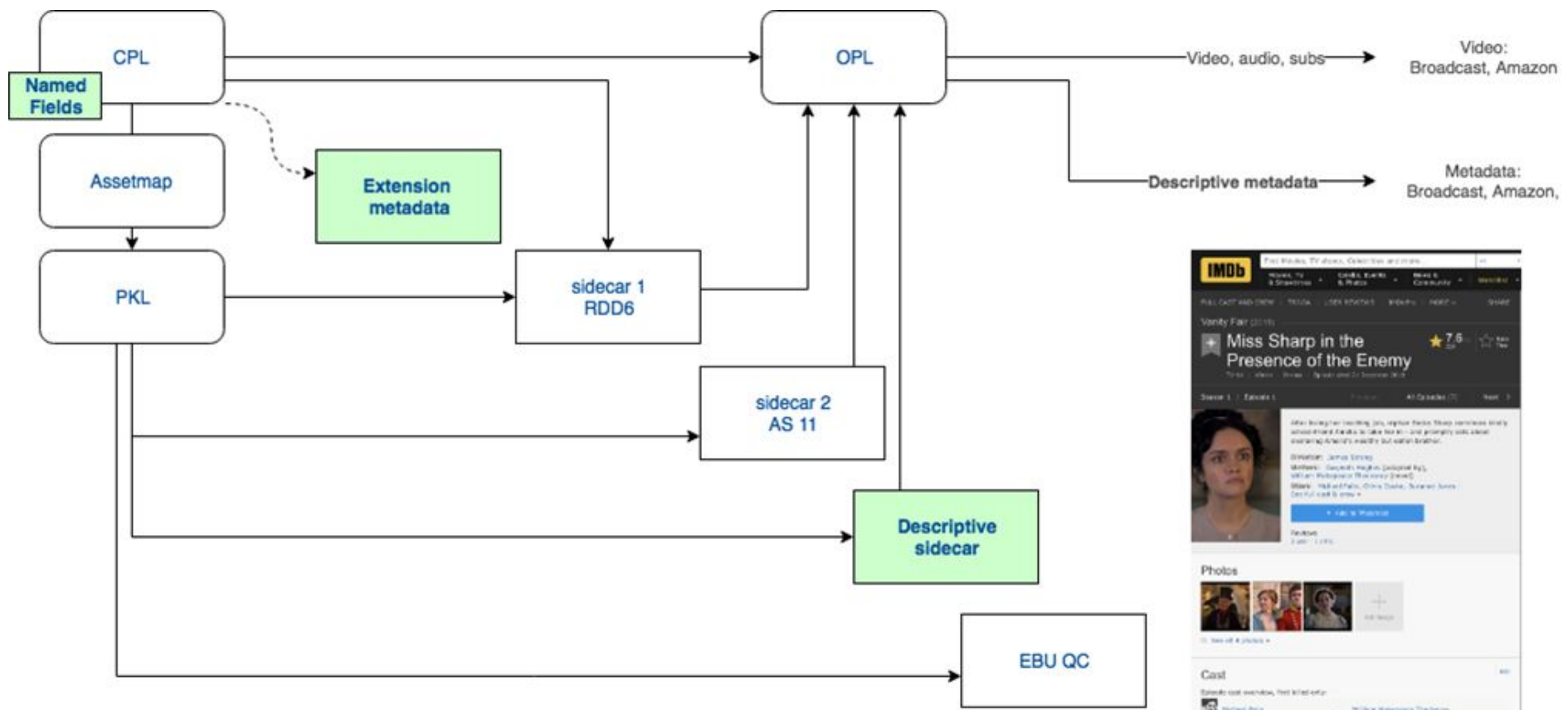
OPERATIONAL GUIDELINES
SUPPLEMENT
**INTEROPERABLE
MASTER FORMAT –
BROADCAST & ONLINE**



IMF for Broadcast

- Developed by the Digital Production Partnership (DPP) and North American Broadcasters Association (NABA)
- Extends Interoperable Master Format (IMF) to support broadcast workflows and ProRes
- Standardized as SMPTE TSP-2121 Application DPP

EIDR DPP - IMF for Broadcast & Online



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- Video 350 Gb
- Audio 8 Gb
- Subtitles 0.01 Gb
- Descriptive & Images 0.5 Gb

- PARENT #1** Series | Vanity Fair | 10.5240/AD87-CB36-25F6-EFAF-45CD-Z
 Referent Type: Series Structural Type: Abstraction Publication Status: valid Release Date: 2018
- PARENT #2** Season | Vanity Fair: Season 1 | 10.5240/278F-1FF2-B112-8DC5-AC4C-Q
 Referent Type: Season Structural Type: Abstraction Publication Status: valid Release Date: 2018
- CURRENT** Episode | Vanity Fair: Season 1: Episode 1 | 10.5240/A757-FB1D-46E3-44C6-1571-J
 Referent Type: TV Structural Type: Abstraction Publication Status: valid Release Date: 2018

Extending DPP's IMF Efforts

- Equally applicable for broadcast and online supply chains
- Also (still) applicable to digital cinema workflows
- Currently being adapted for in-flight entertainment

TAXI Complete

SMPTE OBID/OBID-TLC



CIMM TAXI / SMPTE OBID

- **CIMM** (Coalition for Innovative Media Measurement)
 - TAXI: Trackable Asset Cross-Platform Identification
- **SMPTE** (Society of Motion Picture & Television Engineers)
 - OBID: Open Binding of IDs (ST 2112-10)
 - EIDR Content IDs for programs
 - Ad-IDs for commercials
 - OBID-TLC: OBID-Time Labels to Content (ST 2112-20)
 - EIDR Video Service IDs for delivery channels

Participating Organizations

KANTAR MEDIA



Ad-ID



CIMM Members



Ars

A+E NETWORKS

ANA



iab.

iab. TECH LAB

Google

groupm

IPG MEDIABRANDS



Omnicom MediaGroup



scrippsnetworks interactive

TimeWarner



VIACOM



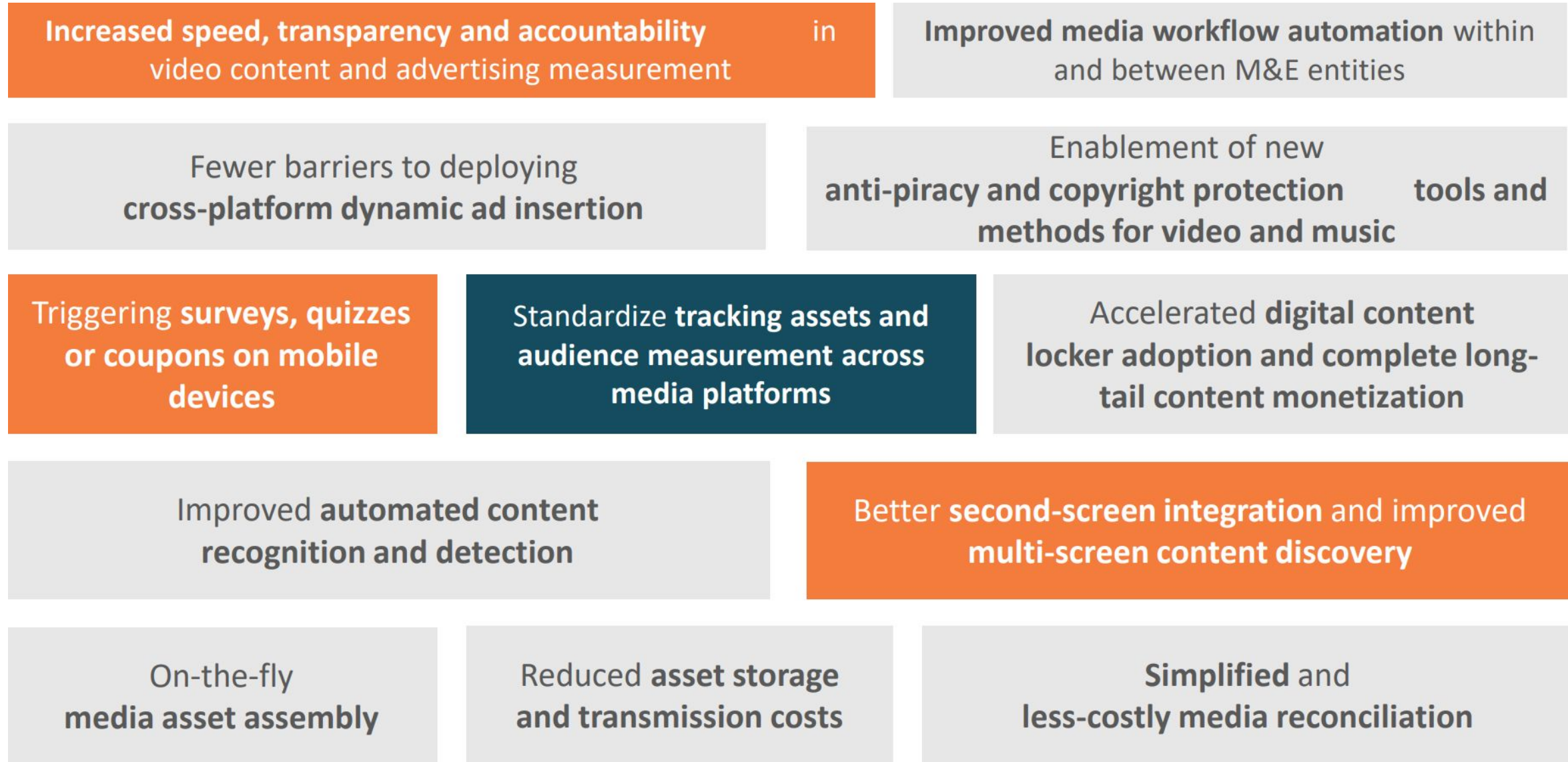
The Walt Disney Company

Layering OBID Watermarks

- For the same piece of content...
 - Producers can add an EIDR Abstraction ID
 - Distributors can add their EIDR Edit ID
 - Broadcasters/Retailers can add their EIDR Manifestation ID plus EIDR Video Service ID
- All four EIDR IDs can be detected at playout
- Detection at device-level or acoustically
- Acoustic detection verified for ATSC 3.0

EIDR What is Possible with TAXI/OBID?

An open standard for ID-to-asset binding can enable a wide variety of capabilities:



EMA Avails

Digital Retail Today,
Broadcast Tomorrow



EMA Avails, Working Today

- . Standardized spreadsheet and XML metadata
- . Drives automation of TVOD in the digital supply chain
 - Major digital retailer reports 93% of its movies arrive with EIDR IDs (100% from 5 of 6 US major studios)
 - Resulting in 42% reduction in manual tasks and 46% reduction in cycle time
- . Essential to any multi-platform distribution strategy
- . EIDR ID adoption increasing annually

EIDR EMA Avails, Expanding Tomorrow

- Ubiquitous IDs enable **Universal Search** across platforms and providers
- EIDR IDs in Avails allows EIDR IDs in reporting
 - (royalties/residuals use-cases now in development)
- Content acquisition optimization gains for digital retail can apply directly to Broadcast
 - Avails and ID standardization lead to improved efficiencies and reduced costs (including error remediation)

Who supports the EMA Avails Standard?

Content Providers



Retailers

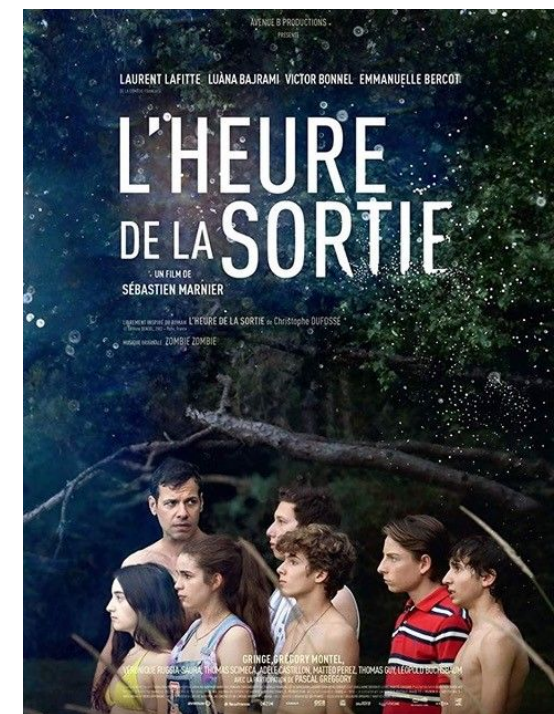
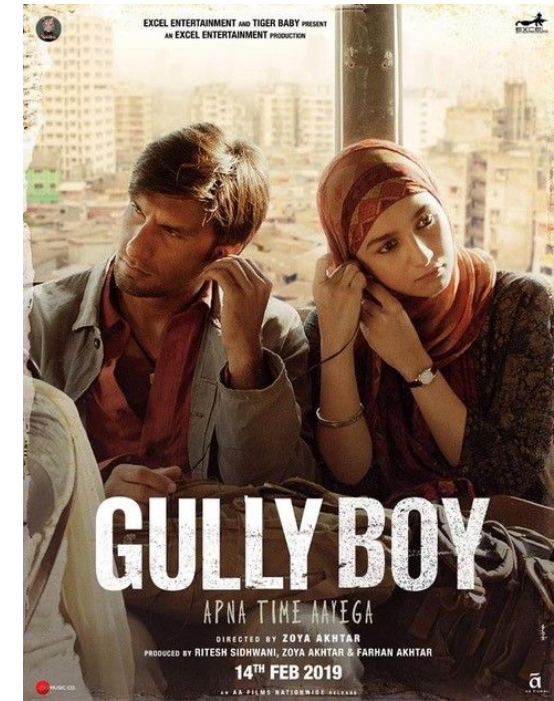
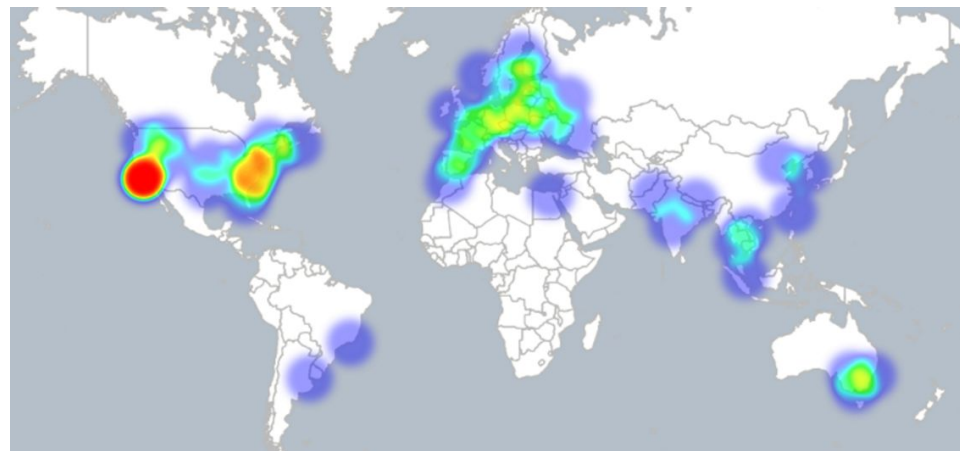
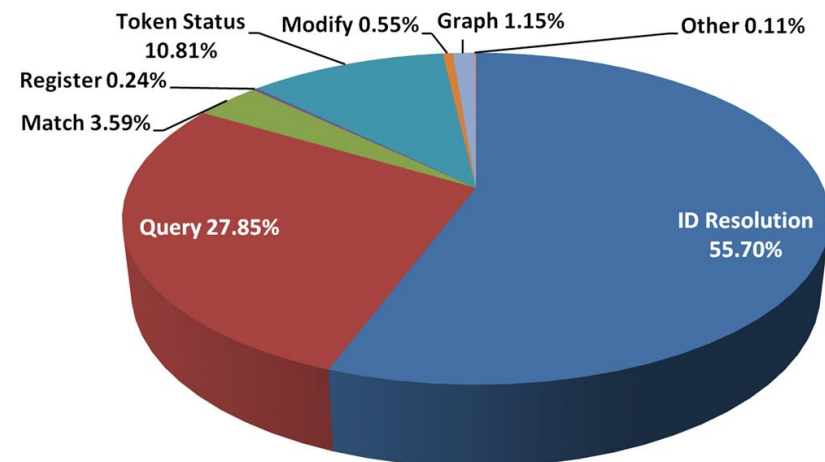


Measuring Industry Adoption

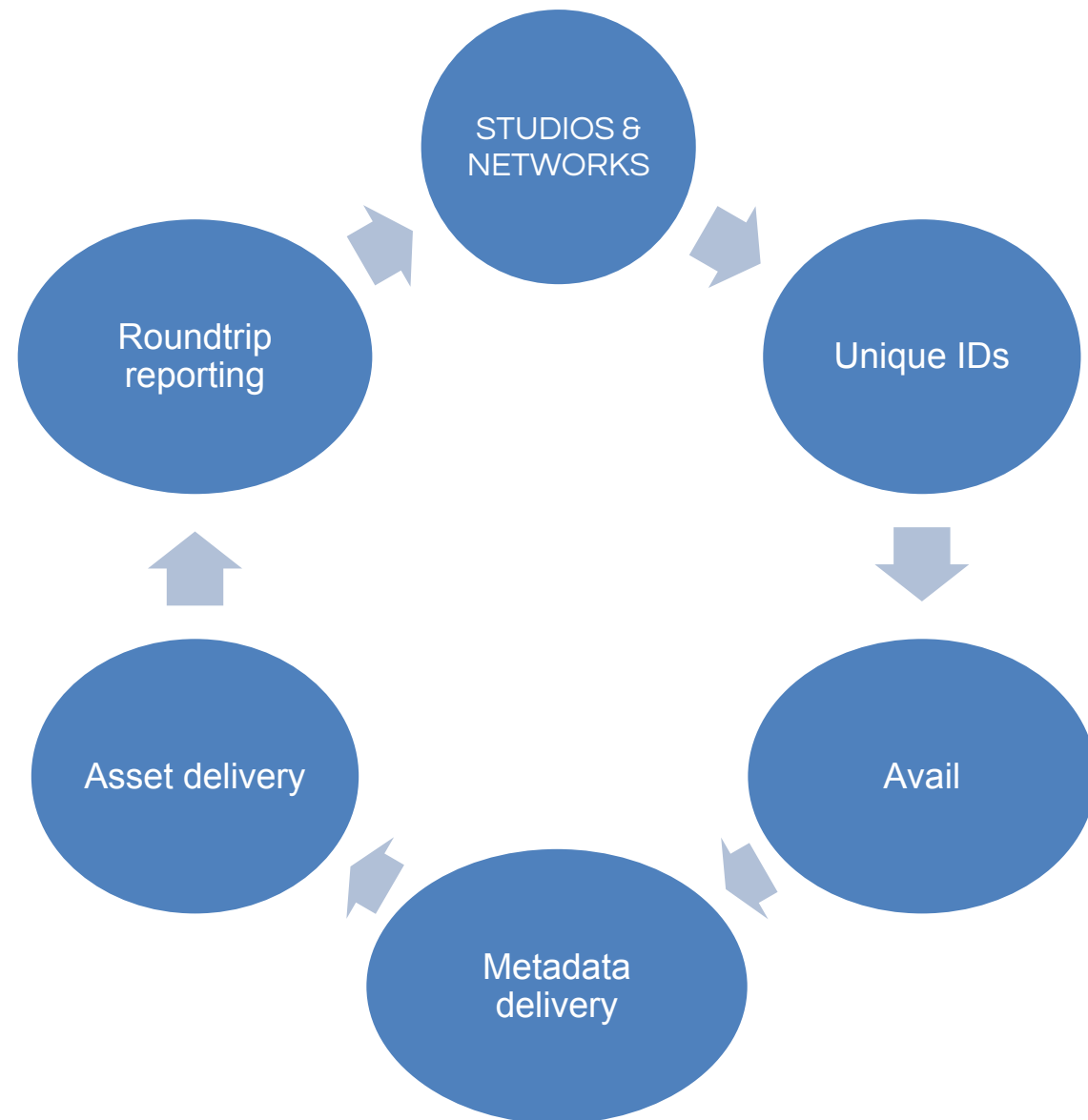
EIDR Milestones

Measuring Industry Adoption

- 2 million Registry records (Dec. 2018)
- 4 million Alternate Identifiers (Jan. 2019)
- 215 million Registry API calls (2018)
 - 120 million EIDR ID resolutions
 - 60 million query pages returned
 - 8 million match/register calls



2019 – Next-Gen Supply Chain for Next-Gen Content



- Combined efforts of studios, retailers, service providers, standards bodies, industry advocacy groups
- Supported by DEG, EMA, EIDR, MovieLabs, SMPTE, DPP
- Covering global platforms and regional partners
- Long-term vision
- Near-term key results that deliver value this year

We all win when we keep the fire burning!



EIDR: Providing Structured, Linked, Curated Identification

Useful Today, Increasingly
Valuable Tomorrow



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