

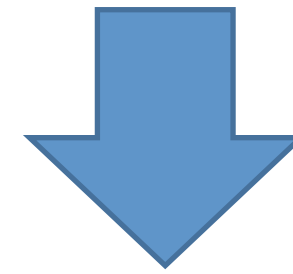
EMA Digital Supply Chain Initiatives

Sean Bersell/*EMA*

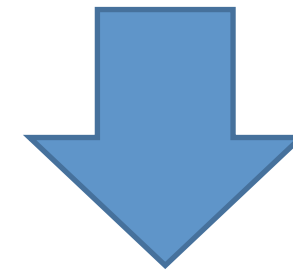


Digital Supply Chain Initiatives

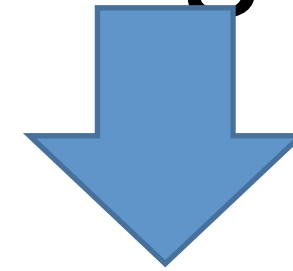
Digital Supply Chain Committee



Friction Points



Workgroups



Standards, Specifications, Best Practices



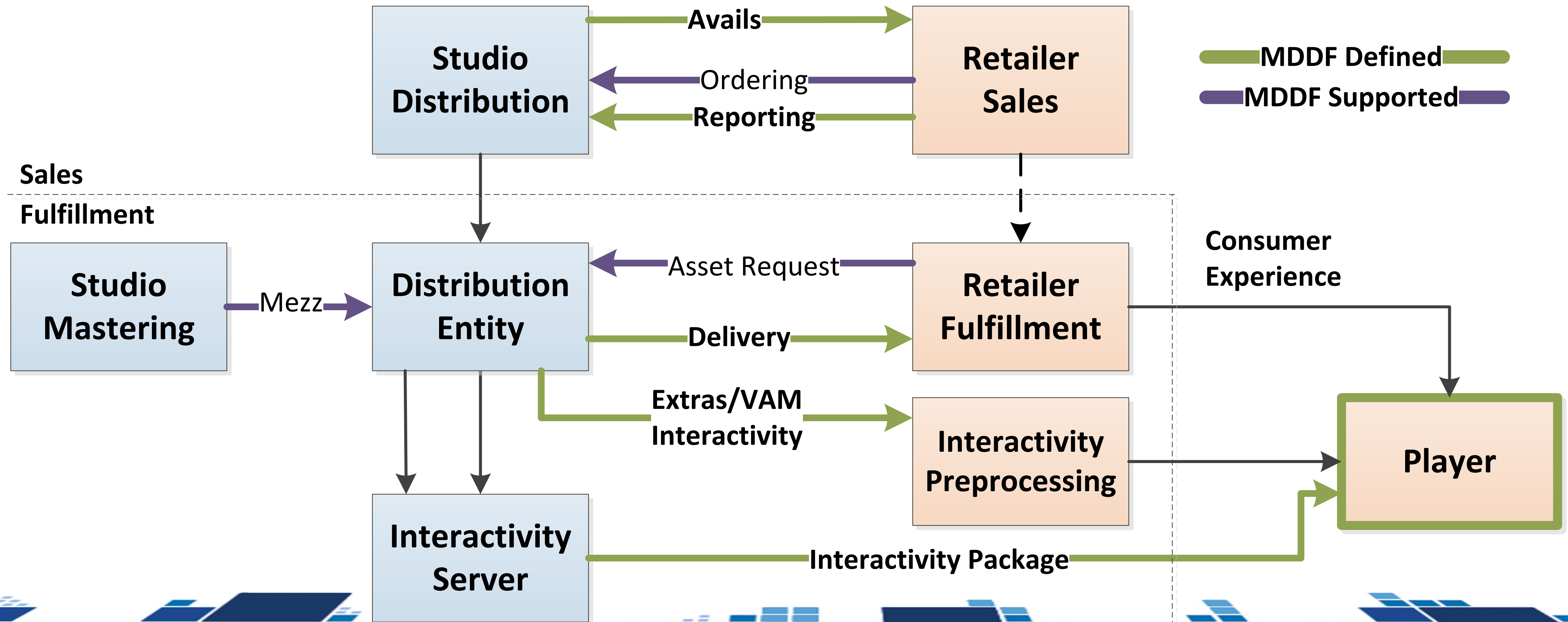


Digital Supply Chain Initiatives

- Metadata
- Content Availability Metadata (“Avails”)
- Entertainment Identifier Registry (EIDR)
- Media Manifest Specifications
- Mezzanine File Specifications
- Ratings
- Transactional Reporting
- Quality Control Nomenclature Standardization
- Closed Captioning Best Practices
- Image File Specifications and Best Practices



Data Distribution Framework



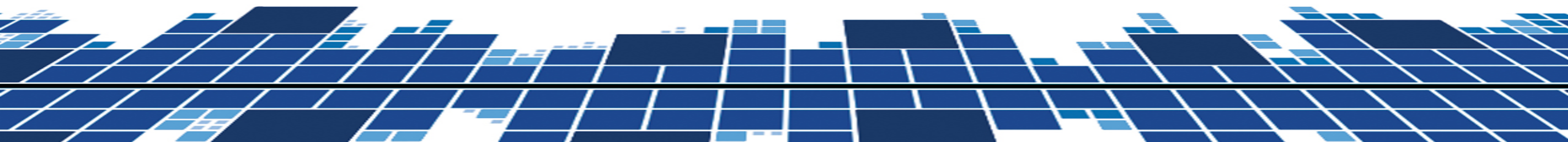
EMA Avails & Ratings

Jason Peña/*Google Play*





- Avails Workgroup Update
- Ratings Workgroup Update



Avails Workgroup Update

Mission

- Standardize the communication of avails from content providers to digital retailers, and thus eliminate inconsistency and inaccuracy in avails information.

Accomplishments

- Released EMA Avails 1.7 (Excel) and 2.2 (XML) (<http://www.movelabs.com/md/avails/>)
 - New fields/terms, deprecated fields/terms, label changes, newly required, best practices, new support for Avails XML
 - Support for bundles, entitlements IDs, emerging technologies...and more
- Released 1.7 Validator (<http://www.movelabs.com/md/avails/validator/>)
- Released Java library to translate between Excel and XML (<https://github.com/MovieLabs/availslib>)

Goals for 2017

- Define EMA Avails 1.6 to 1.7 translator
- Define Adoption Roadmap

Next Steps

- Joint Working Group scheduled for May 8th in NYC @ HBO



Ratings Workgroup Update

Mission

- Identify the rating system and values for each territory
- Define best practices for territories with no formal rating system
- Investigate the feasibility of establishing a common repository for ratings by title in each territory

Accomplishments

- Released Ratings 2.3 (<http://www.movielabs.com/md/ratings/v2.3/html/Summary.html>)

Goals for 2017

- Establish process for reviewing the ratings systems and values on a quarterly basis
- Identify best practices for handling territories with no rating system or multiple viable systems
- Establish a framework for content owners to obtain ratings, potentially through 3rd party

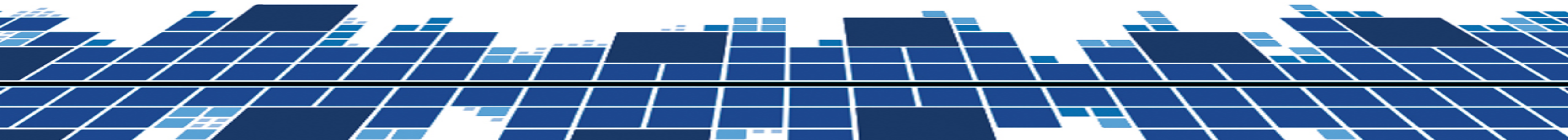
Next Steps

- Next Meeting Tuesday, January 17



Metadata and Media Manifest

Craig Seidel/*MovieLabs*



Spec Updates

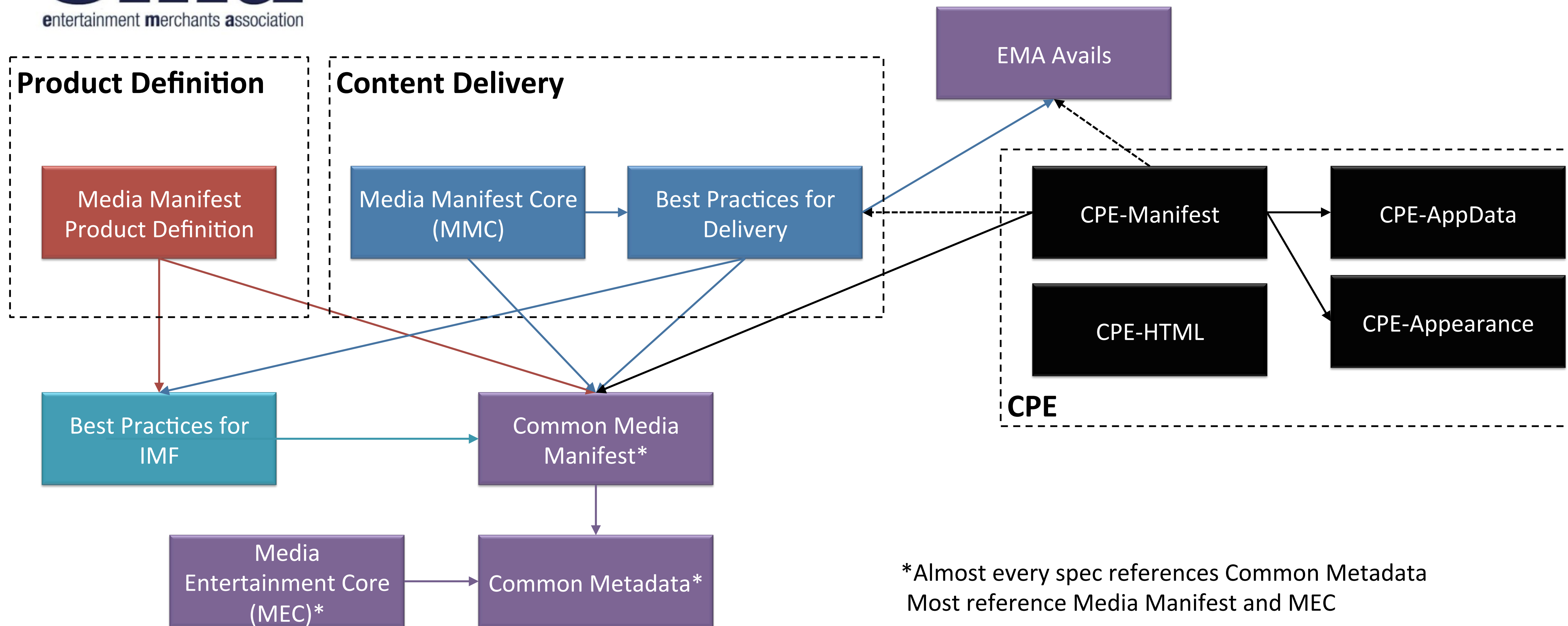
- Features, improvements and fixes, such as:
 - VR/AR/MR/360 video, audio
 - Improved app and image descriptions
 - Supply and Interactivity-driven improvements
- Periodic update (every 12-18 months)



Specs Published

- Core Specs
 - Common Metadata V2.5
 - Media Manifest V1.6
- Metadata
 - Media Entertainment Core (MEC) V2.5
 - Ratings V2.3
- Delivery
 - Media Manifest Core (MMC) based on MM 1.6
- Interactivity
 - Cross-Platform Extras (CPE) Manifest based on MM 1.6
 - CPE Application Data, v1.0
 - CPE Style, v1.0

Specs Relationships



Common Metadata & MEC v2.5

- Backwards compatible!
- VR/AR/MR (VARM) and 360 video and audio (e.g., Ambisonics)
- Better Application description (e.g., required accessories)
- Better image description (e.g., purpose)
- Video capture (e.g., animation)
- Better alternate/commentary track description
- Data to support supply chains
- Clarifications and corrections





Media Manifest v1.6

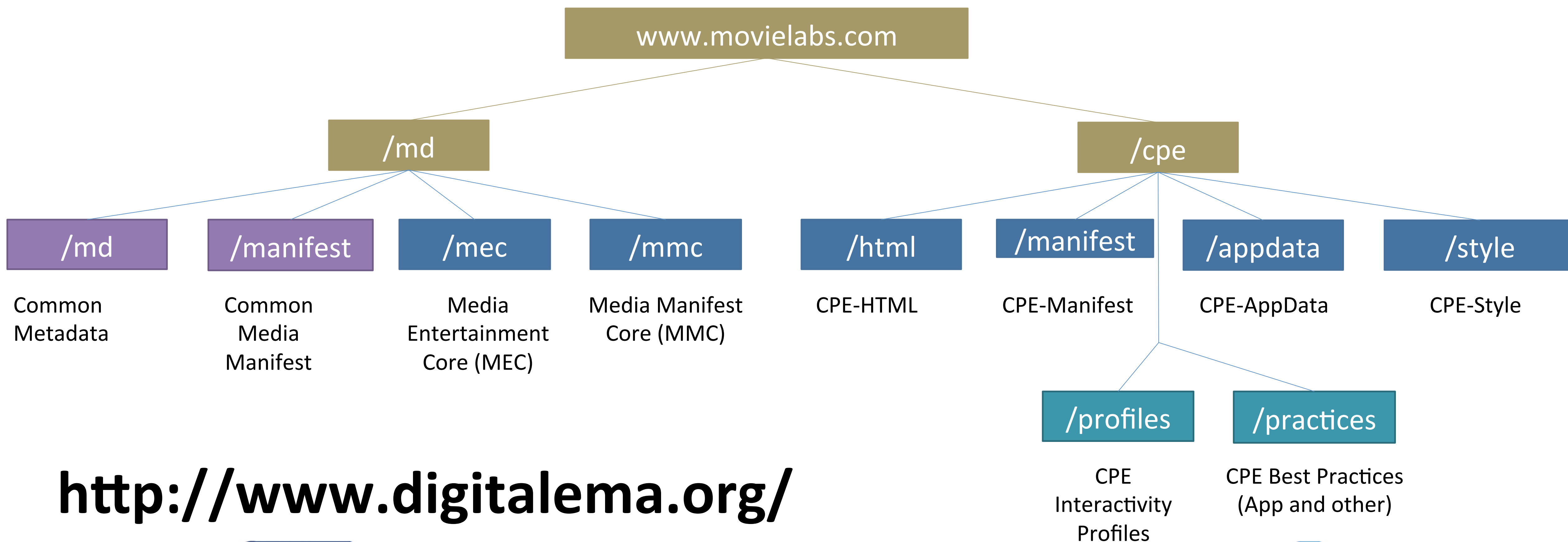
- Backwards compatible!
- Media Manifest
 - Incorporates Common Metadata 2.5 changes
 - Additional support for VARM/360 video/audio
 - Better support for: preorder, image delivery, text objects
 - And more...
- MMC (delivery) and CPE-Manifest inherit Media Manifest improvements
 - Same schema
 - Includes Validator

Cross-Platform Extras

- CPE Manifest takes advantage of CM 2.5 and MM 1.6
- Validator tool and library provided
- CPE Style and CPE Application Data published
- Check out
 - Comcast Enhanced Extras
 - Suicide Squad on Vudu app
 - WB Movies All Access app



Where to find...

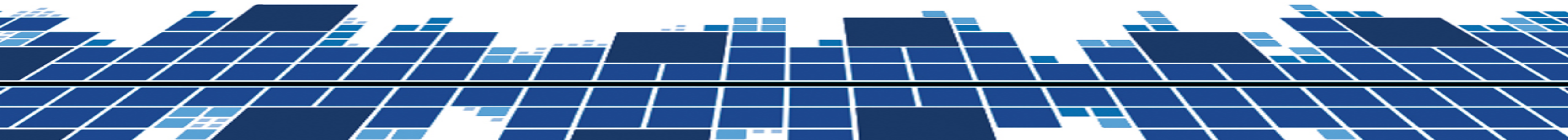


<http://www.digitalema.org/>



EIDR

Kip Welch/*MovieLabs*



EIDR Update – Digital EMA Forum

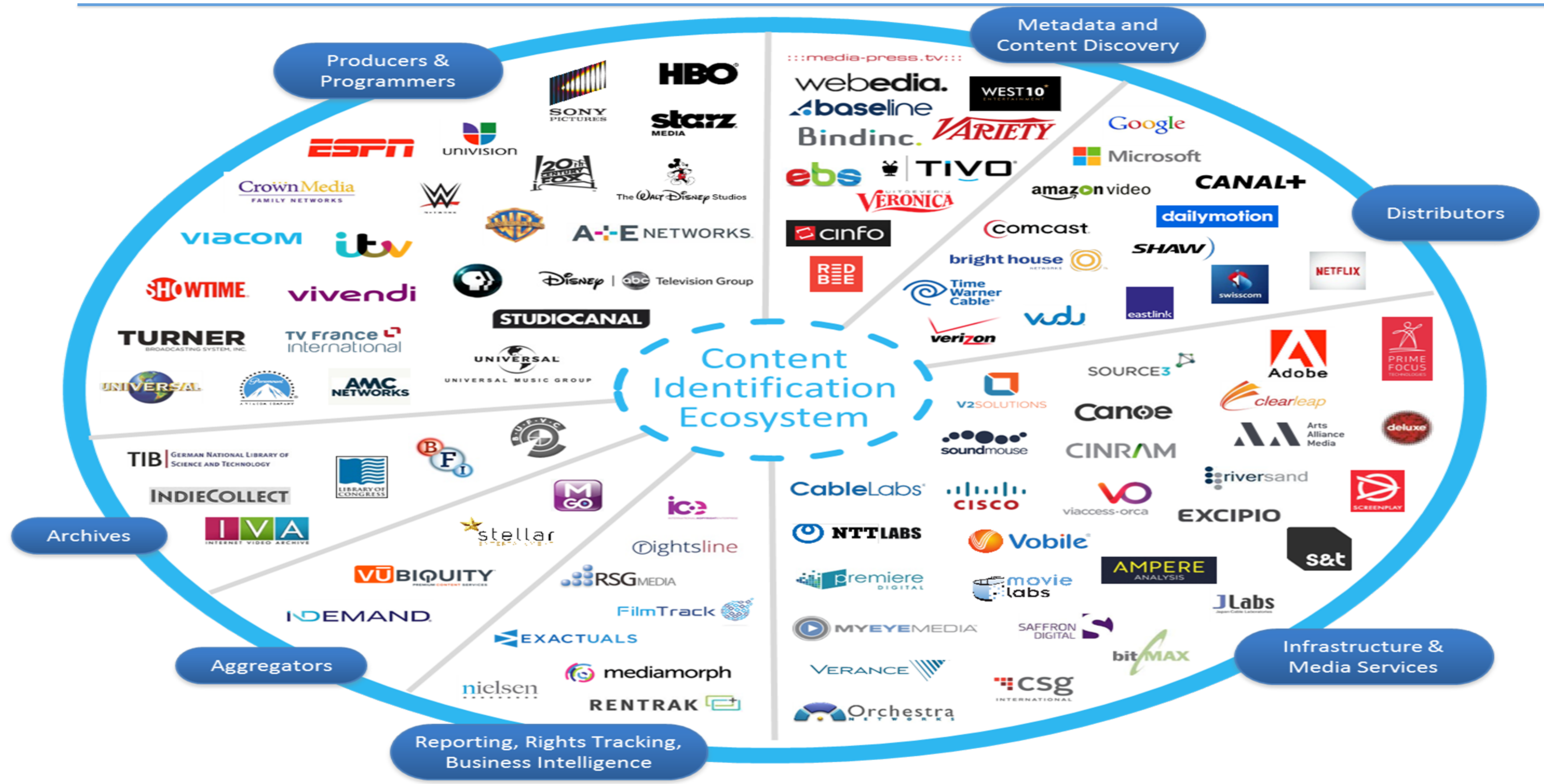


- Registry – 1.1 million records
- Membership
 - Europe now 20% of membership
 - Japan and China in discussions
- Use Cases in Place
 - Digital Supply Chain: Google Round Trip from Avails to Financial Reporting
 - MVPD/Broadcast: EIDR Video Service ID showing up in SCTE 35 message
- Use Cases in Development
 - Measurement
 - Business Intelligence



Don Dulchinos – ddulchinos@eidr.org

Membership Ecosystem





DEG Tech & Ops Committee Priorities

Mark Sgriccia/*Lionsgate*

Christopher Stefanidis/*Disney*



DEG Prioritized Initiatives

RANK	TOPIC	PRIORITY
1	EMA Avail Spec - Movies	
2	EMA Avail Spec - TV	
3	Localization	
4	EIDR	
5	Common Metadata/MEC	
6	Common Media Manifest	
7	Ratings	
8	EMA Repository	
9	Reporting Standardization & Adoption	
10	Mezzanine File Specification/IMF	
11	SVOD	
12	Artwork/ Image File Standardization	
13	3rd Party Data Aggregator/Storefront Management	
14	Cross-Platform Extras	
15	QC Nomenclature	

Strong correlation w/ EMA



Weak correlation w/ EMA