



**ATLANTA, GA**  
**OCTOBER 11-14**

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# UNLEASH THE POWER OF LIMITLESS CONNECTIVITY



**2021 Fall  
Technical Forum**  
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## Video Services

# Transitioning Advertising to IP Video

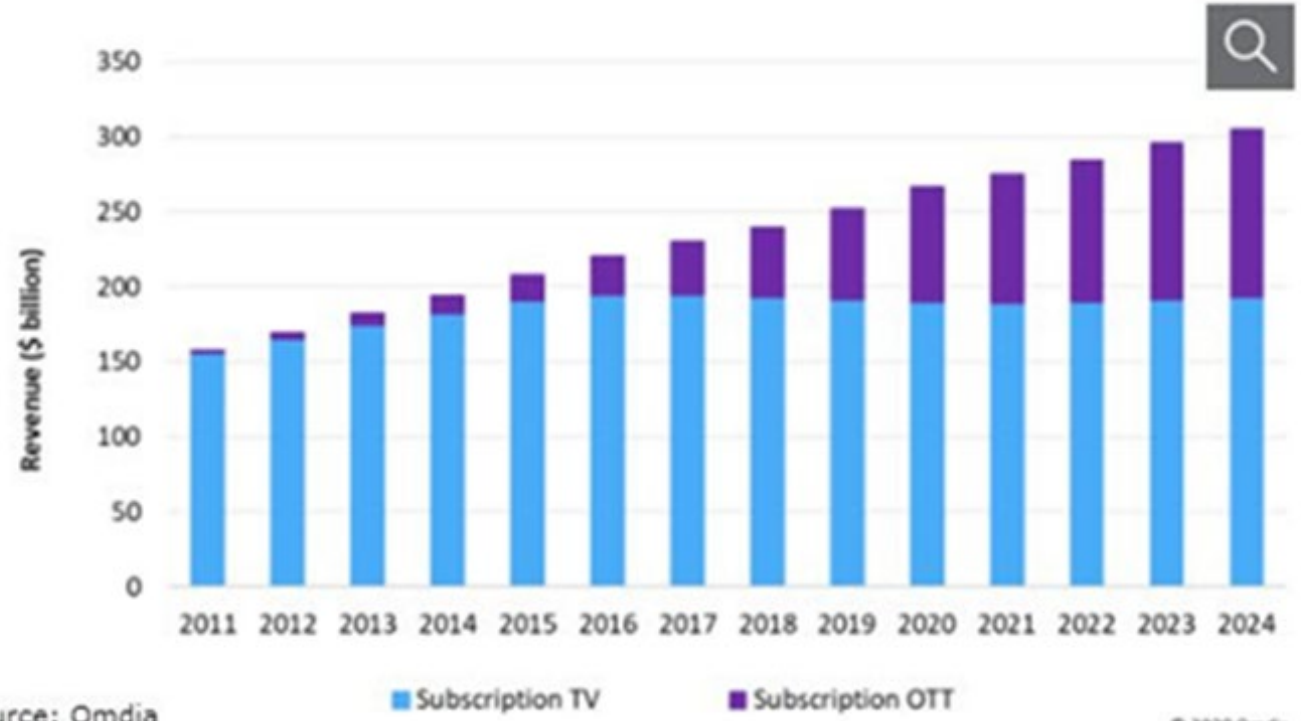
**Jim Owens**

Sr. Director, Video Advertising Solutions Product Management  
CommScope

- Growth of IP Video
- Legacy QAM STB Advertising vs. IP/ABR Advertising
- QAM and IP Advertising Technology
- Challenges of the Current Siloed Model
- Business Goals for the Transition to IP
- Transition Strategies

## QAM Video is Shifting to IP

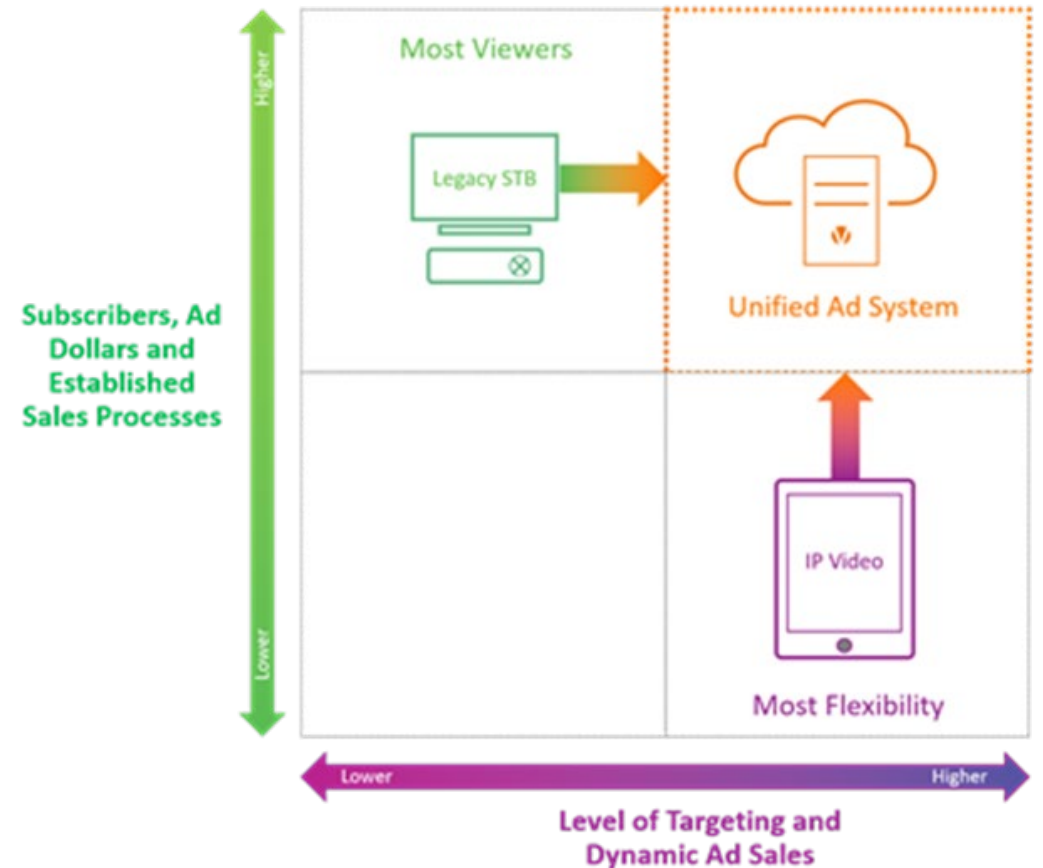
- Technology widely accepted—76% of consumers have OTT service
- Support for multiple devices types
- Enables addressable advertising



## QAM Video is Shifting to IP

- QAM- Bulk of cable viewers, ad dollars and established processes
- IP – Most flexibility and ability to target
- Goal: the best of both worlds

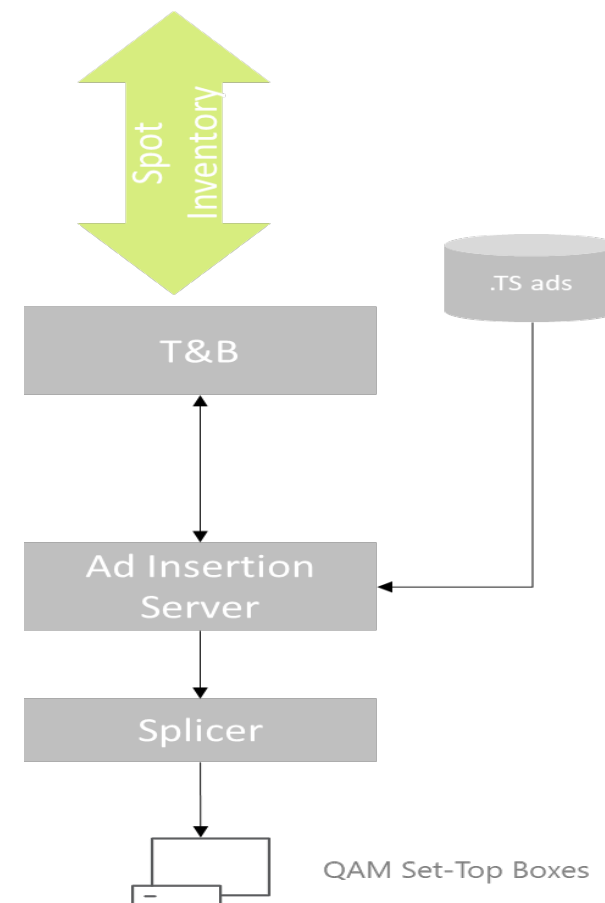
### QAM vs. IP Advertising



## QAM Ad-Tech Stack (Network-based Insertion)

- Schedule-based ads
- MPEG-2 Transport Stream content and ads
- Leverages in-band SCTE 35 markers
- Targeting limited to regional ad zones
- Static process, ads locked in 24 hours in advance

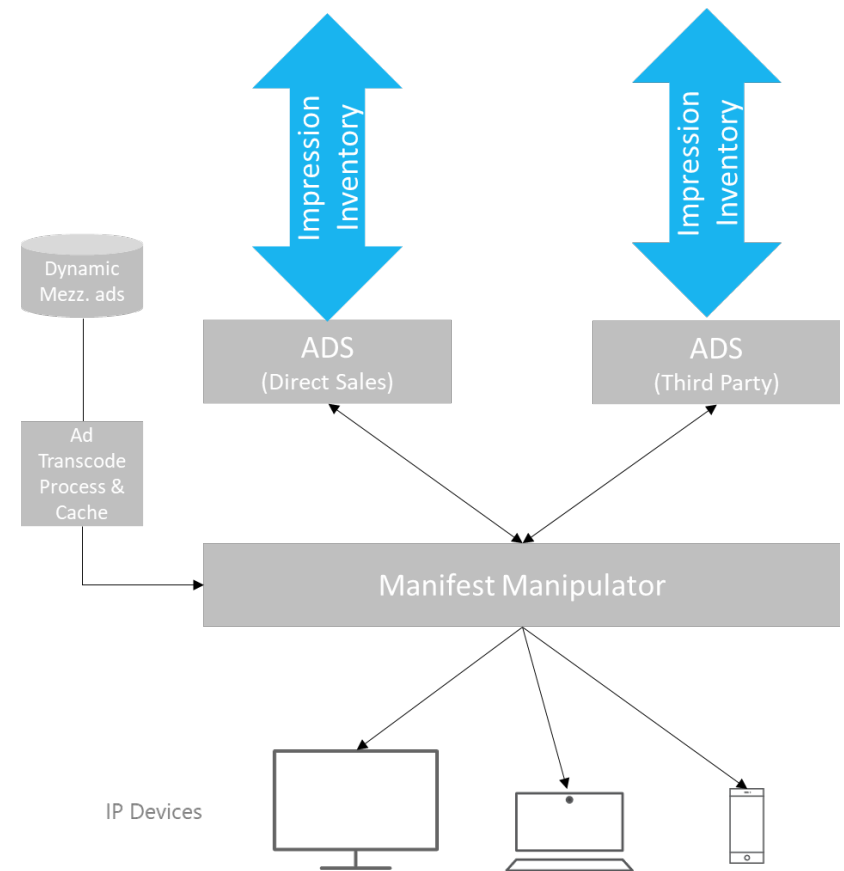
### QAM Ad-Tech Stack



# IP Ad-Tech Stack (Server-Side Ad Insertion)

- Segments in an ABR video stream are identified by a manifest
- Manifest Manipulator can insert/replace ads by modifying manifest
- Using VAST or SCTE-130, Manifest Manipulator passes metadata and requests decision from Ad Decision Service (ADS)
- Unicast nature of ABR enables addressable ads
- Dynamic decisions made at time of ad break

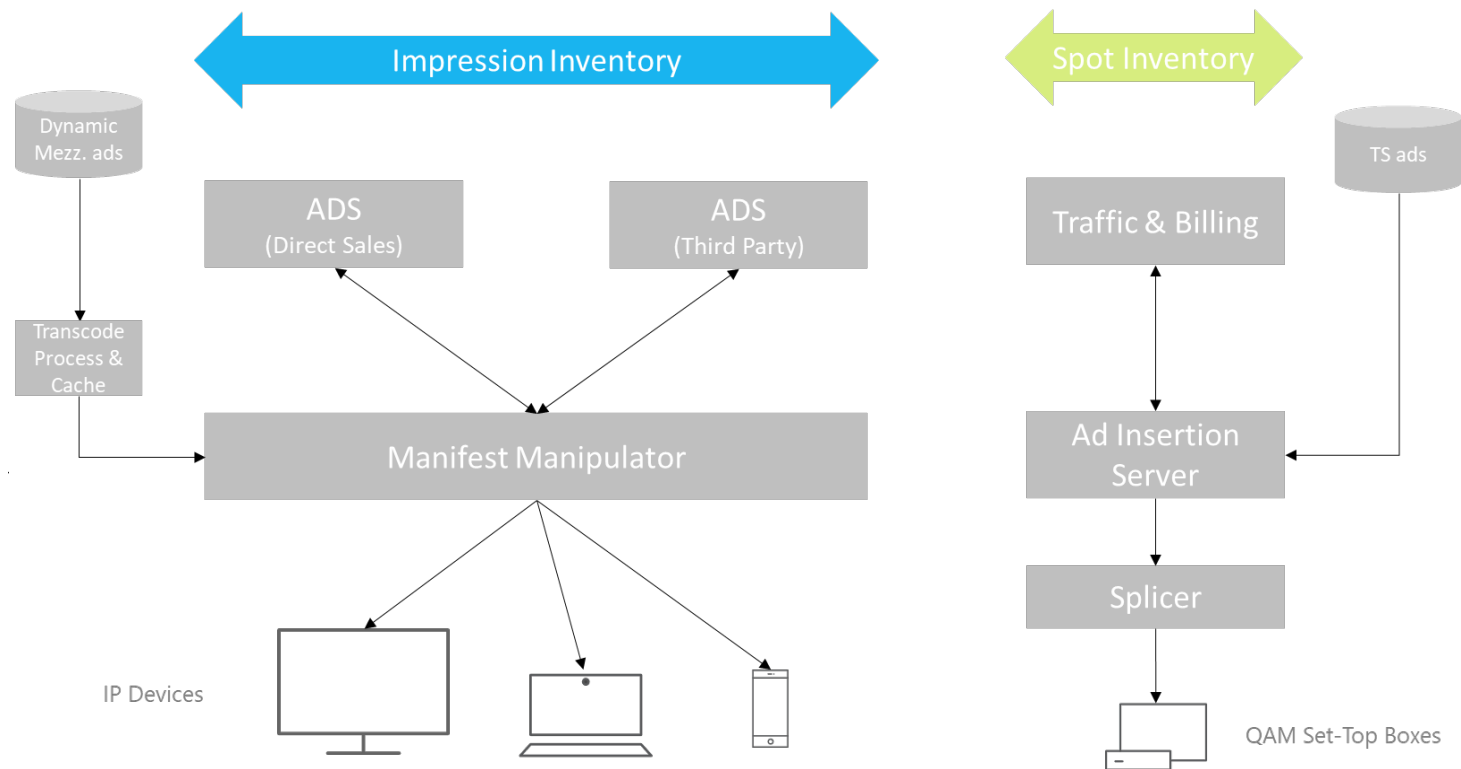
## IP Ad-Tech Stack



# Challenges of Siloed Model

- Today most systems are run in parallel silos
- Results in separate systems for:
  - Ad decisions
  - Ad insertion
  - Content preparation (ads and entertainment)

## Ad-Tech Siloed Model





## Defend the Current QAM Advertising Business

- Don't break business process that work
- Maintain ad revenue
- Extend ad zone-based sales to IP devices (IP parity)

## Maximize Revenue

- Monetize unsold inventory
- Allow mix of scheduled and dynamic Ads
- Expand ads to more channels
- Improve QAM targeting capabilities
- Enable campaigns that cross QAM and IP



## Improve Operational Efficiency

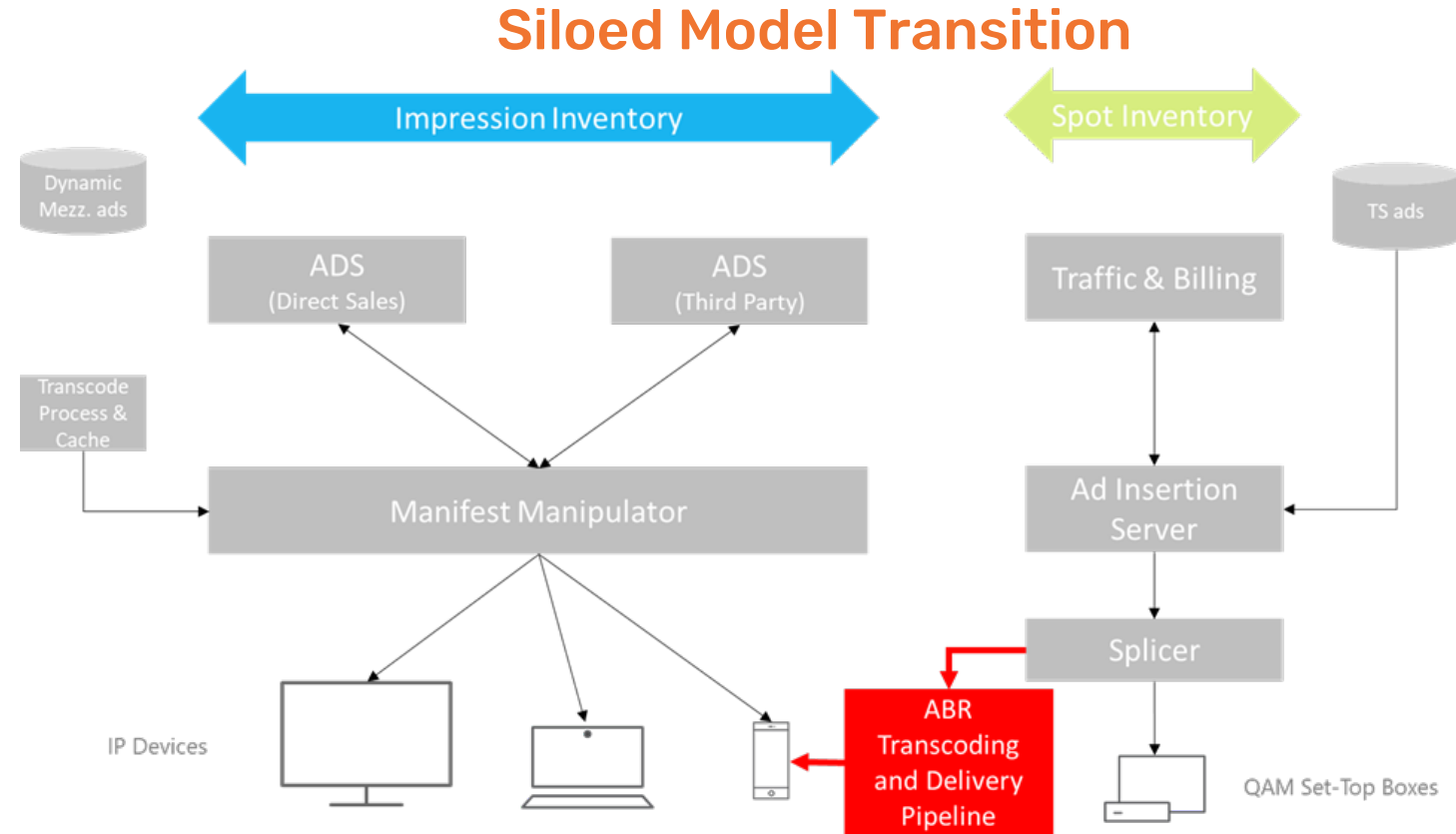
- Unify ad decisions
- Unify entertainment and & preparation workflows
- Unify ad Insertion systems
- Transition to virtualized solutions

## Enable New Business Models

- Insert ads on behalf of content providers
  - Leverage network to enable addressable ads on national ad avails
- Enable programmatic sales through third parties
  - Supplement in-house ad sales

## Siloed Model Strategy

- Progress can be made without fundamentally changing architecture
- Enable IP parity by transcoding/packaging output of existing splicers
- Replicates ad zones in IP
- Relatively costly for large numbers of ad zones
- Requires little change to existing ad insertion systems

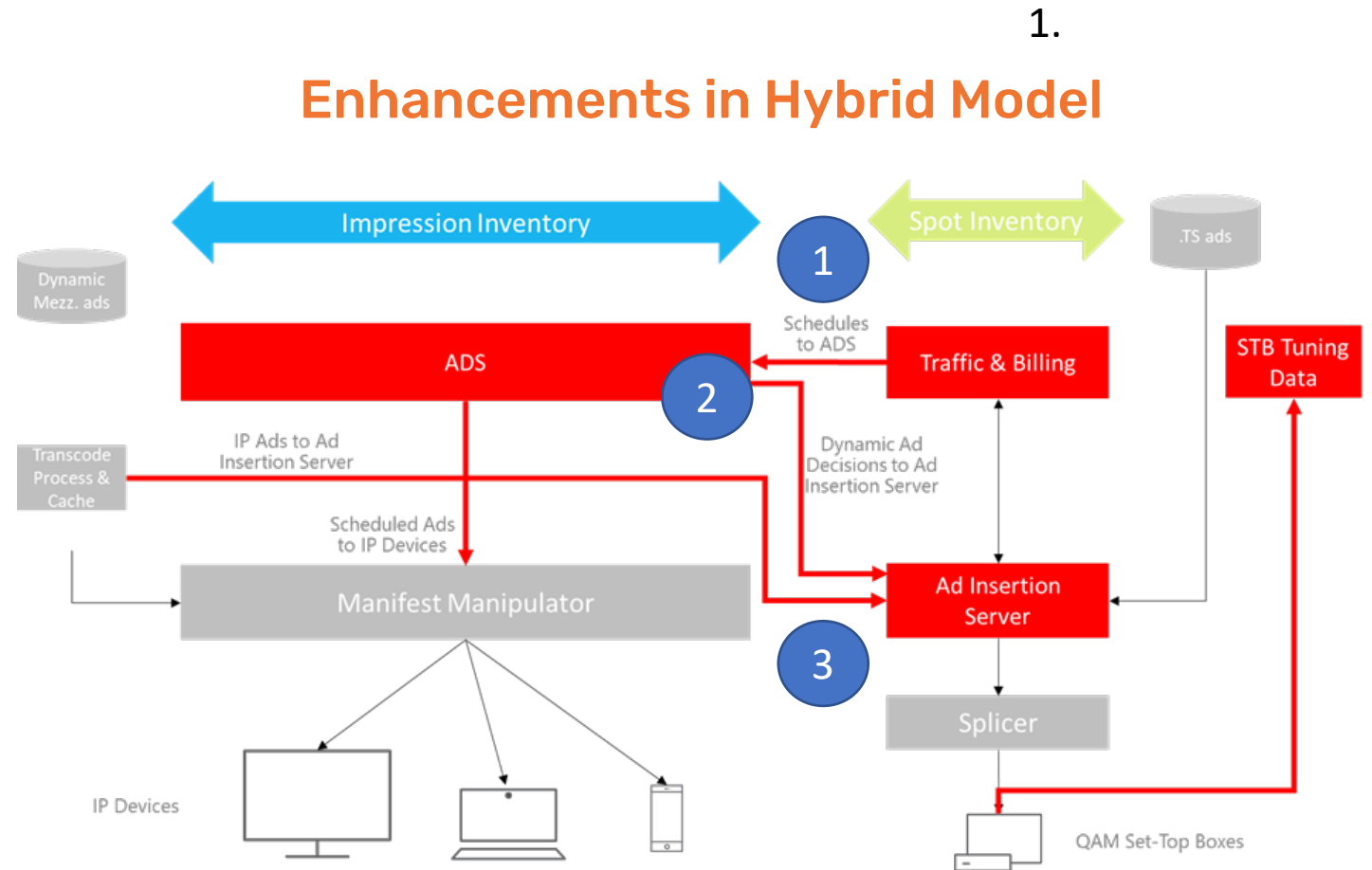


## Hybrid Model

Maintain both systems but make improvements to legacy system

1. Achieve IP Parity by Importing Schedules into the ADS
  - Deliver scheduled ads to IP devices using IP system
2. Add dynamic decision support to legacy ad servers
  - Sell previously unsold inventory
  - Scheduled and dynamic ads
3. Add Support for IP ads to existing ad servers
  - Start to unify ad preparation

### Enhancements in Hybrid Model



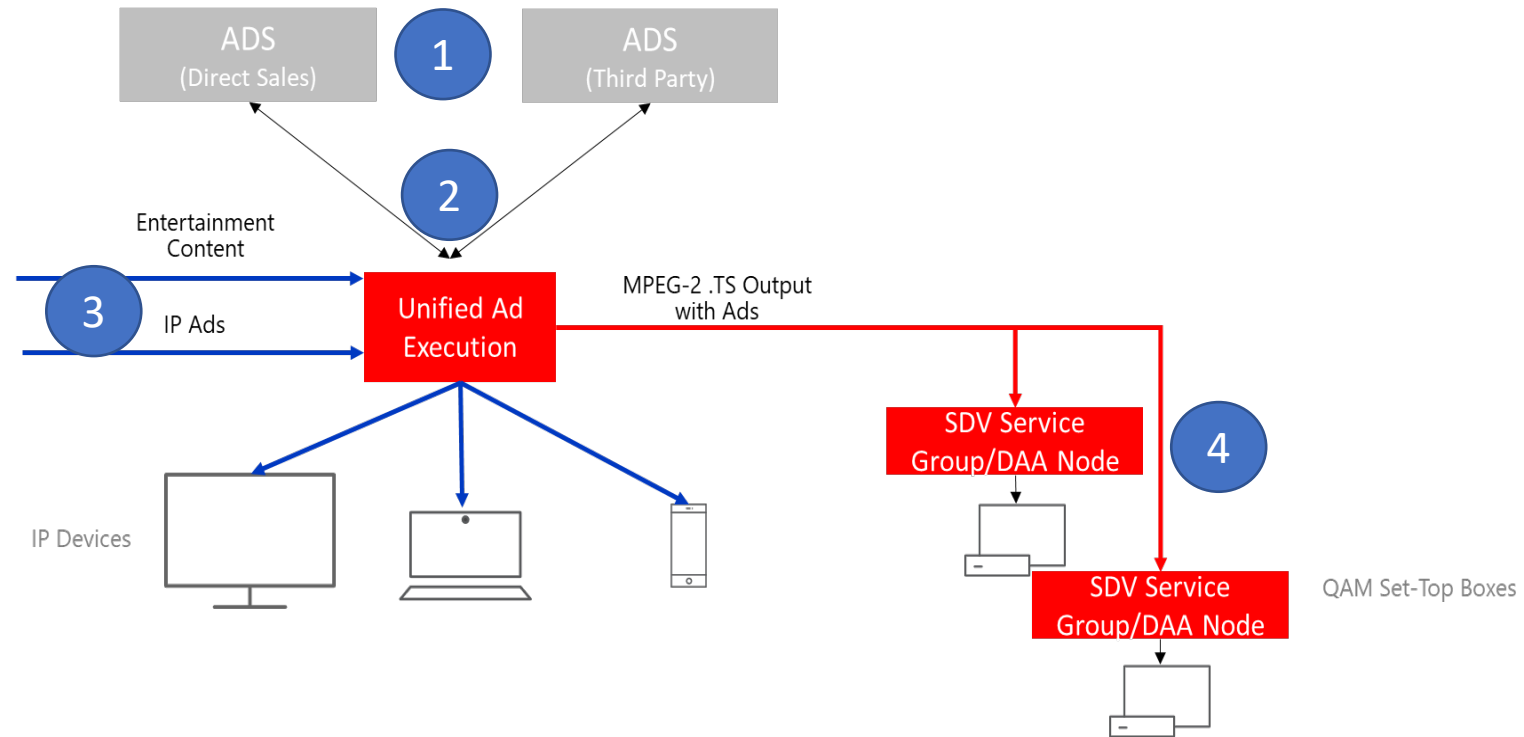
## Unified Model

Consolidated system that supports both QAM and IP Devices

1. Unify ad decisions on ADS(s)
2. Unify ad Insertion on Manifest Manipulation
3. Unify Ad and content preparation on IP content
4. Enhanced targeting of QAM ad insertion leveraging DAA/SDV

### Unified Model Enhancements

1.



## Summary of Stages and Business Goals Addressed

|   | Transition Strategy                    |                                      |   |  |                               |  |                         |
|---|--|--------------------------------------|---|--|-------------------------------|--|-------------------------|
|   | <u>Silo</u>                            | <u>Hybrid</u>                        |   |  | <u>Unfied</u>                 |  | <u>All IP</u>           |
|   | IP Parity - Xcode Ad Inserted Channels | IP Parity - ADS/Schedule Integration | Add Dynamic ADS Support to Legacy Ad Server | Add Support for IP Ads to Legacy Ad Server | Unified Ad Insertion Platform | Target QAM by SDV Service Groups/DAA Nodes | IP Advertising Platform |
| <b><u>Business Goals</u></b>                      |  |                                      |   |  |                               |  |                         |
| <b>Defend Value of Current Business</b>           |  |                                      |   |  | X                             |  | n/a                     |
| Extended QAM Advertising to IP Devices            | X                                      | X                                    |   |  |                               |  |                         |
| <b>Maximize Revenue</b>                           |  |                                      |   |  |                               |  |                         |
| Improve Legacy Targeting Capabilities             |  |                                      |   |  |                               | X  | n/a                     |
| Extend Advertising to More Channels               |  |                                      | X   |  | X                             |  | X                       |
| Leverage Unsold Advertising                       |  |                                      | X   |  | X                             |  | X                       |
| Enable Mix of Scheduled and Dynamic Ads           |  |                                      |   |  |                               |  | X                       |
| Enable Campaigns Across Both Footprints           |  |                                      | X   |  | X                             |  | n/a                     |
| <b>Operational Efficiency</b>                     |  |                                      |   |  |                               |  |                         |
| Unify Decisions                                   |  |                                      | X   |  | X                             |  | X                       |
| Unify Content Prep                                |  |                                      |   | X  | X                             |  | X                       |
| Unify Ad Insertion                                |  |                                      |   |  | X                             |  | X                       |
| Transition to Virtualized Solutions               |  |                                      |   |  | X                             |  | X                       |
| <b>Enable New Business Models</b>                 |  |                                      |   |  |                               |  |                         |
| Insert Ads on Behalf of Content Providers         |  |                                      | X   |  | X                             |  | X                       |
| Enable Programmatic Advertising via Third Parties |  |                                      | X   |  | X                             |  | X                       |





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# Thank You!

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