Demystifying Converged TV Measurement: Four Building Blocks

CIMM Webinar: 12.1.21

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Jon Watts | Incoming Managing Director
Alan Wolk | Co-Founder, Lead Analyst, TVREV
1. Welcome: Jane Clarke
2. Webinar Overview: Jon Watts
4. CIMM’s approach to the *Building Blocks for Converged TV Measurement*: Jane Clarke
5. Q&A
WEBINAR OBJECTIVE

Unpack Converged TV measurement:

• What is Converged TV?

• What are the different types of converged TV measurements for content & ads: planning & optimization tools, audience measurement & ad campaign impact measurement?

• How and why will Converged TV measurement change soon?
Converged TV is:

• “Premium” content distributed across multiple platforms, from linear to VOD to digital video and CTV streaming apps

• Monetization models include subscription (SVOD), as well as all forms of ad support from linear to addressable, typically using data (DDL: data-driven linear) or fully addressable
Converged TV measurement will change – even if it’s from Nielsen.

- Addressable TV requires ad spot level measurement, which requires second-by-second data; current C3 metric averages all ad minutes in a program.
- Large granular datasets are needed to plan, buy and evaluate advanced audiences – as the market is moving away from age/gender guarantees.
Industry needs to understand which companies are combining all the components for converged TV “currency-grade” audience measurement:

• There is a landscape of companies in the converged TV ecosystem, but only a few are combining all the building blocks for all forms of TV and streaming.
CIMM is creating a *Guide to Converged TV Measurement Providers* to clarify the differences between companies.

- Introduction explaining landscape of the Converged TV ecosystem
- RFI for Audience Measurement companies
- Comparison charts and in-depth profiles for Audience Measurement vendors
STATUS

The project has just launched and will be completed by CIMM’s Annual
Converged TV Measurement & Data Summit on 2/16-17/2022. To date:

• Converged TV Audience Measurement companies have been identified
• RFI’s are being sent soon
The RFI will cover questions such as:

- Data Sources
- Cross-Platform Capabilities
- Timeliness
- Person-Level Data
- Unique Capabilities
Converged TV measurement is a rapidly-developing area, as companies continue to expand and adapt methodologies.

- Guide will be updated as needed.
- Guide will be available at no charge from the CIMM website, once it’s completed and has been reviewed by CIMM members.
Affiliate of ARF: Neutral R&D coalition of cross-platform video ecosystem to innovate:

- Methods to measure and compare cross-platform audiences objectively
- Bring more granular measurement to TV for planning, buying & attribution
- Support future real time trading platforms for cross-platform premium video
CIMM’S INDUSTRY ROLE

Community for transparency, confidence & best practices in Converged TV Measurement

• Opportunity for all players in converged TV/video tech and data ecosystem to have objective discussions

• Create Whitepapers & Studies, such as:

  Best Practices in Combining Smart TV and STB Data
  Guide to TV Attribution Providers
  Identity Resolution Providers Report
CONVERGED TV MEASUREMENT ROADMAP

Plan & Optimize
- Understand cross media behavior by audience segments

Audience Measurement
- Unduplicated reach & frequency
- Comparable metrics

Evaluate Impact
- Measure impact KPIs & attribution

Optimization, Activation & Attribution Platforms For Cross-Platform TV/Video in Real Time
**DEFINITIONS**

**Audience Measurement:** net count of deduplicated ad impressions or “reach” & average frequency for demo or advanced audiences; often used as “currency;” refined by verification metrics

**Planning & Optimization:** Variety of data types and tools used to create target audiences and optimize them mid-campaign.

**Attribution:** Individual & HH level measurement to estimate contribution to specific KPIs for each converged TV impression in consumer journey; measuring incrementality is a best practice.
Key difference between providers of audience measurement vs. attribution is the presence of data science models to combine the four **Building Blocks** with the goal of deduplicating reach & estimating frequency.

- Method to project to entire population
- Model(s) to account for incomplete data
1. **TV “census-like” data:** Standardized real time Smart TV (ACR) and/or STB scaled content/ad tuning data, federated for national representativity

2. **Digital census data:** Standardized real time streaming app/digital video content/ad data

3. **Method to Assign Persons & Adjust Missing Data:** Cross-platform panel (or linked TV/digital panel) or other model for demos, VPVH (co-viewing), OTA viewing and other data biases/gaps

4. **ID Resolution:** for households and individuals

PLUS DATA SCIENCE!
CIMM’s 2020 “Best Practices in Combining Smart TV & STB Data,” explains strengths & weaknesses of each; best practice is to combine:

- STB data has deterministic HH relationship; Smart TV data is linked via less stable IP addresses. Each OEM & MVPD has geo & demo biases in their footprints.
- Smart TV data can provide live, VOD, DVR & CTV tuning in real time; but can’t ID streaming “source”
- STB data represents more TVs per HH than single available ACR provider; but Pay TV homes in decline
- ACR data more future-forward; accuracy improves when federated with data science; but would be better with more providers.
These household counts represent the number of homes from **each individual source** with active viewing during a 30-day period.

### Monthly Active Records

**Households (000)**

Source: Data providers, unless otherwise indicated

<table>
<thead>
<tr>
<th>Source</th>
<th>MVPDs</th>
<th>OEMs/Smart TV ACR Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comcast</td>
<td>17,800&lt;sup&gt;A&lt;/sup&gt;</td>
<td>19,000</td>
</tr>
<tr>
<td>Charter Communications</td>
<td>12,900&lt;sup&gt;B&lt;/sup&gt;</td>
<td>18,000&lt;sup&gt;D&lt;/sup&gt;</td>
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<td>dish</td>
<td>11,000</td>
<td>20,000&lt;sup&gt;E&lt;/sup&gt;</td>
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<td>DIRECTV</td>
<td>11,000</td>
<td>27,000</td>
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<tr>
<td>fios</td>
<td>4,000</td>
<td>450&lt;sup&gt;F&lt;/sup&gt;</td>
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<tr>
<td>LG Ads</td>
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<td>VIZIO</td>
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<tr>
<td>Roku TV</td>
<td>SAMSUNG</td>
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<tr>
<td>Samba TV</td>
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A Pre-Meditated Media, Janus Strategy & Insights estimates based on public domain sources
B STB only; this does not include app data
C Represents multiple 2<sup>nd</sup> and 3<sup>rd</sup> tier MVPDs
D Vizio Nationally Representative Panel (NRP) data set is 3.5 mm homes
E Pre-Meditated Media, Janus Strategy & Insights estimates
F Estimates reflect 2020
G Samba nationally representative data set is 4 mm homes

*Not reflective of all OEMs/MVPDs*
These household counts represent the gross number of homes from **multiple sources**, prior to commingling Set Top Box and Smart TV ACR data, with active viewing during a 30-day period.

**Monthly Active Records – Third Party Integrators**

**Households (000)**

Source: Data providers, unless otherwise indicated

- **FourthWall Media**: 5,500
- **Tivo**: 5,000
- **LG Ads**: 19,000
- **iSpot.tv**: 22,000
- **Samba.tv**: 11,800
- **videoamp**: 14,400
- **Nielsen**: 24,000
- **Comscore**: 6,000
- **Samba nationally representative data set is 4 mm homes**
- **F Estimates reflect 2020**
2) DIGITAL CENSUS DATA

Complex flow of ad & content exposure data in digital video & app ecosystem.*

<table>
<thead>
<tr>
<th><strong>Sell-Side Ad Servers</strong></th>
<th><strong>Buy-Side Ad Servers</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freewheel (A Comcast Company)</td>
<td>Innovad</td>
</tr>
<tr>
<td>hulu</td>
<td>flashtalking &quot;&quot;</td>
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<tr>
<td>Google Ad Manager</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Video DSPs/SSPs</strong></th>
<th><strong>Content/Ad Analytics</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>xandr</td>
<td>Conviva</td>
</tr>
<tr>
<td>Magnite</td>
<td>Adobe</td>
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<td></td>
<td>Google Analytics</td>
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</tbody>
</table>

* Not all inclusive
Digital census data is captured in different ways, so most data aren’t standardized:

- Ad servers capture “point in time” measurement with pixels & tags
- Adobe captures “heartbeats,” which are implemented differently
- Conviva has standardized continuous second-by-second measurement
Areas for measurement standardization include:

- Uniform impression qualifier across all forms of TV and streaming (ranges from 1 second to 5 minutes now)
- Uniform common metrics, such as Video Starts, Video Completes & Duration
- Ad-IDs to standardize Ad names
3) ASSIGNING PERSONS & DATA GAPS

Methods needed to assign people to machine tuning data & to model data gaps such as Over-the-Air (OTA) viewing.

Panels:

- Nielsen
- HyphaMetrics
- TVISION INSIGHTS

Proprietary Models:

- comscore
Panels can’t be the centerpiece of future audience measurement solutions but are important for calibration.

• Media usage is too fragmented for panels to capture

• Large TV and digital datasets are the centerpiece of new solutions; panels used for “persons assignment, co-viewing & adjusting missing data.”
ISSUES WITH PANELS

TV panels aren’t "truth sets," but inputs:

- High non-response rates (70% norm), especially among minority populations
- Low compliance with persons “check-in,” especially in large HH: need passive check-in methods
- Expensive: How big do “calibration” panels need to be?
4) IDENTITY RESOLUTION

Solutions for IDR are the glue to link content & ad exposures across all forms of Converged TV and other media. They are typically based on HH or device resolution to underlying PII.

Commercial/Industry ID Graphs:
- OpenID
- TransUnion
- acxiom
- experian
- EPSILON
- neustar
- LiveRamp
- infutor
- THROTTLE
- BLOCKGRAPH
- MERKLE
- Unified iD 2.0

Proprietary ID Graphs:
- comscore
- Nielsen
- SAMBA TV
- INNOVAD
- CONVIVA
Given the variety of IDR providers, key issues are:

- How to standardize ID solutions (or at least make them interoperable) in order to connect datasets using different ID-graphs?
- Need transparency in models to account for missing device IDs & IP addresses.
- Privacy regulation poses ID challenges in the digital ecosystem, but STB data is HH-based and Smart TV data uses IP address. Does HH ID resolution resolve privacy issues?
A growing number of companies are assembling all the building blocks for converged TV audience measurement, including deduplicating reach; some as input into attribution measurement.

These companies will be featured in CIMM’s *Guide to Converged TV Measurement Providers*.

**Audience Measurement for Content and/or Ads:**

- Nielsen
- comscore
- videoamp
- iSpot.tv
- 6IX
- ZERO
- 5IVE
- TVSquared
- MOAT
Additional companies are assembling all the building blocks, but primarily for **Converged TV or Multi-Touch Attribution**, *without a reach model.*

* list is not inclusive
Media companies and agencies are testing providers to understand differences on:

- Speed of reporting & depth of coverage
- Ability to link device/person/HH event level data for deduplication
- Ability to analyze advanced audiences
- Rigor of model for persons assignment and co-viewing
- Quality of ad & content identification
CHANGING CARS WHILE MOVING
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