Demystifying Converged TV Measurement:
Four Building Blocks

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TODAY'S AGENDA

1. **Welcome:**
   Jane Clarke

2. **Webinar Overview:**
   Jon Watts

3. Plan for CIMM's *Guide to Converged TV Measurement Providers*:
   Alan Wolk

4. CIMM's approach to the *Building Blocks for Converged TV Measurement*:
   Jane Clarke

5. Q&A

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?

WHAT IS CONVERGED TV?

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 for all forms of TV and streaming.

NEW CIMM GUIDE

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

QUESTIONS IN THE RFI

The RFI will cover questions such as:

- Data Sources

- Cross-Platform Capabilities

- Timeliness

- Person-Level Data

- Unique Capabilities

GUIDE UPDATED AS NEEDED

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.

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CIMM'S MISSION

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

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SEQUENT Partners

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TransUnion

TVB

tvsquared

UNIVISION COMMUNICATIONS INC

VAB

VIACOMCBS

videoamp

VIZIO

The Walt Disney Company

WARNER MEDIA

xandr

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 → **Audience Measurement** → **Evaluate Impact**

- Understand cross media behavior by audience segments

- Unduplicated reach & frequency
- Comparable metrics

- Measure impact KPIs & attribution

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

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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.

DEFINITIONS

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

Audience Measurement Building Blocks

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
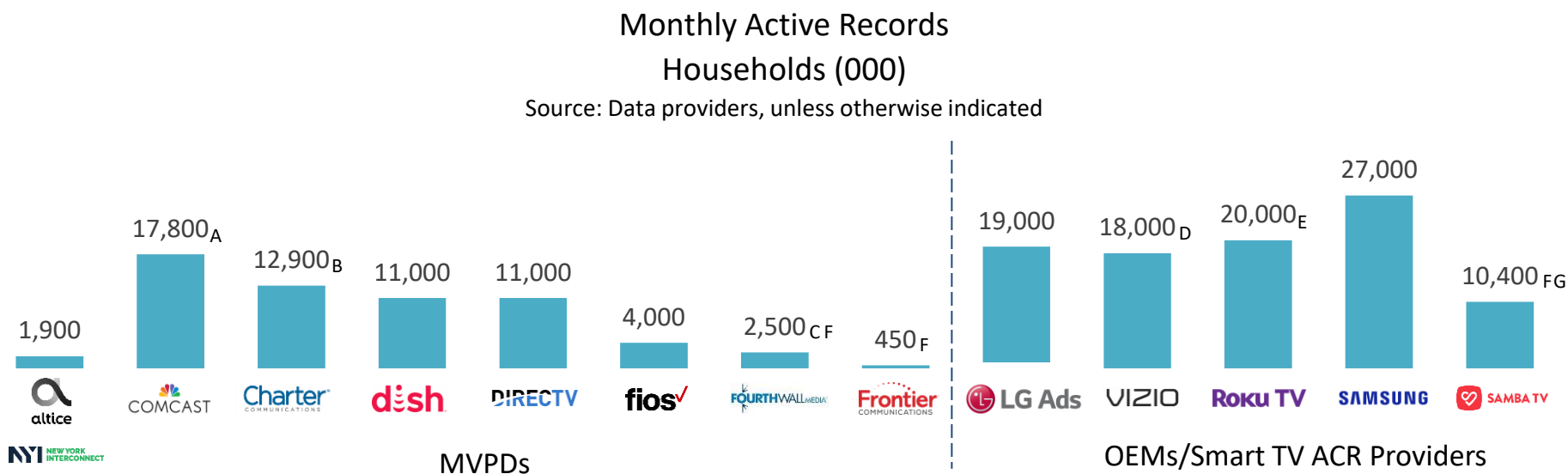
PLUS DATA SCIENCE!

1) Scaled STB & Smart TV Data

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.

Reporting Household Count Overview* MVPDs & OEMs

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

MVPDs:
- altice / NY New York Interconnect: 1,900
- COMCAST: 17,800 A
- Charter Communications: 12,900 B
- dish: 11,000
- DIRECTV: 11,000
- fios: 4,000
- FOURTHWALL media: 2,500 C F
- Frontier Communications: 450 F

OEMs/Smart TV ACR Providers:
- LG Ads: 19,000
- VIZIO: 18,000 D
- Roku TV: 20,000 E
- SAMSUNG: 27,000
- SAMBA TV: 10,400 FG

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 2nd and 3rd tier MVPDs
D Vizio Nationally Representative Panel (NRP) data set base is 3.5 mm homes
E Pre-Meditated Media, Janus Strategy & Insights estimates
F Estimates reflect 2020
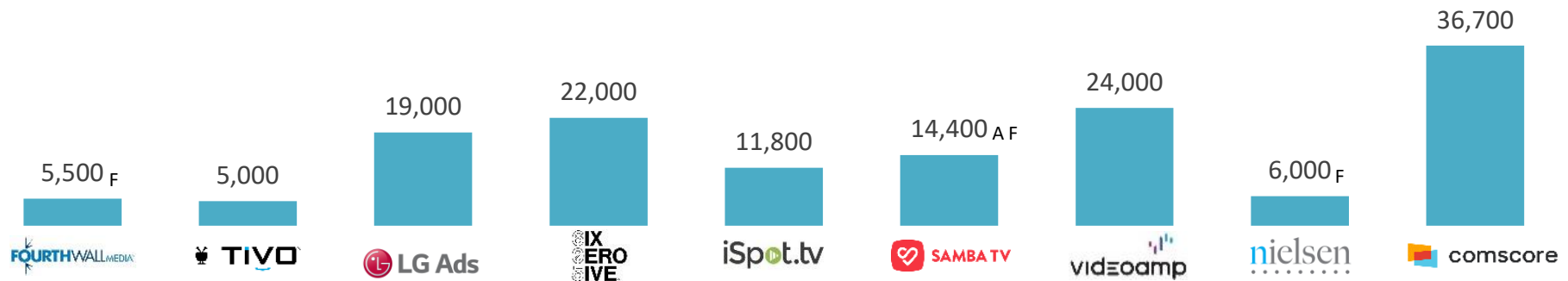G Samba nationally representative data set is 4 mm homes
*Not reflective of all OEMs/MVPDs

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Reporting Household Count Overview – Third-Party Integrators

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.

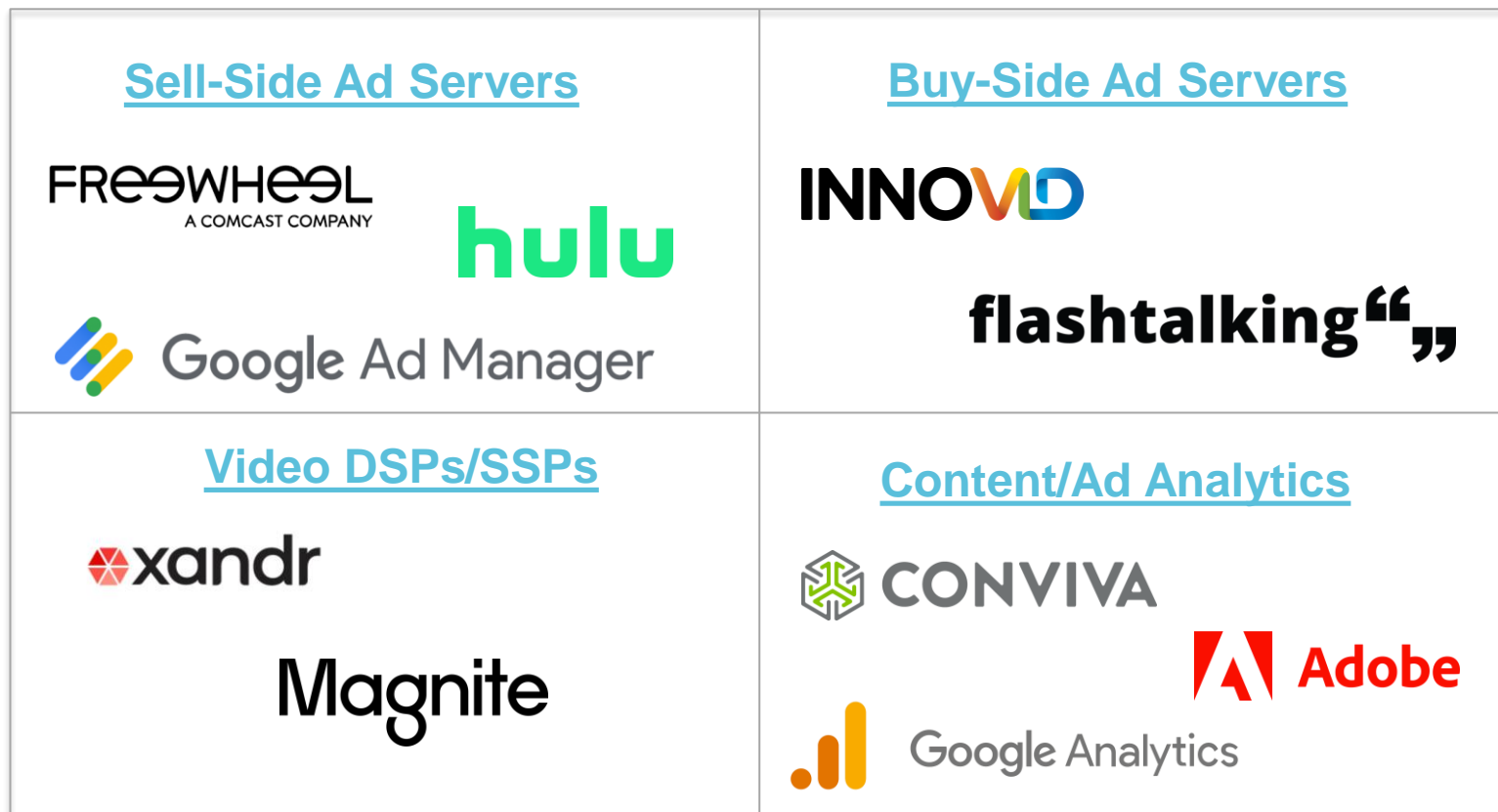### Monthly Active Records – Third Party Integrators
Households (000)
Source: Data providers, unless otherwise indicated

Provider	Value
FOURTHWALL media	5,500 F
TiVo	5,000
LG Ads	19,000
IXEROIVE	22,000
iSpot.tv	11,800
SAMBA TV	14,400 A F
videoamp	24,000
nielsen	6,000 F
comscore	36,700

A Samba nationally representative data set is 4 mm homes
F Estimates reflect 2020

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

Sell-Side Ad Servers

Buy-Side Ad Servers

Video DSPs/SSPs

Content/Ad Analytics

* Not all inclusive

STANDARDIZED METRICS NEEDED

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

INDUSTRY SOLUTIONS

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   Hypha Metrics   T》VISION INSIGHTS

Proprietary Models:

comscore

ROLE OF PANELS

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:

Proprietary ID Graphs:

IDR CHALLENGES

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?

PUTTING IT ALL TOGETHER

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:

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

TEST AND LEARN!

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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