Your webinar will begin shortly

WFA — World Federation of Advertisers

Cross-Media Measurement:
A technical proposal

7th May 2020

Introductions

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WFA

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Questions welcome

Welcome to our association members

And corporate members...

Background – Media Charter 3.0

Zero tolerance to **ad fraud** (with compensation for any breach)

Strict **brand safety** protection

Minimum **viewability** thresholds

Transparency throughout the supply-chain

Third party verification and measurement as a basic

Removal of '**walled garden**' issues

Improving standards with **data transparency**

Improved **user experience**

WFA World Federation of Advertisers

Global Media Charter

Advertisers' principles for partnership in the digital media advertising ecosystem

Co-Created with WFA corporate members and the following national advertiser associations:

AANA ac ANA ANA Newzand ADVERTISERS ISBA OWM UBA UDA

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Source: www.wfanet.org/mediacharter

Industry aligned framework seeks to set the parameters for cross-media measurement solutions

GOVERNANCE

TECHNOLOGICAL INFRASTRUCTURE

PRIVACY

STANDARDS & METRICS

An Industry Framework

Establishing principles for a new approach to
Cross-Media Measurement

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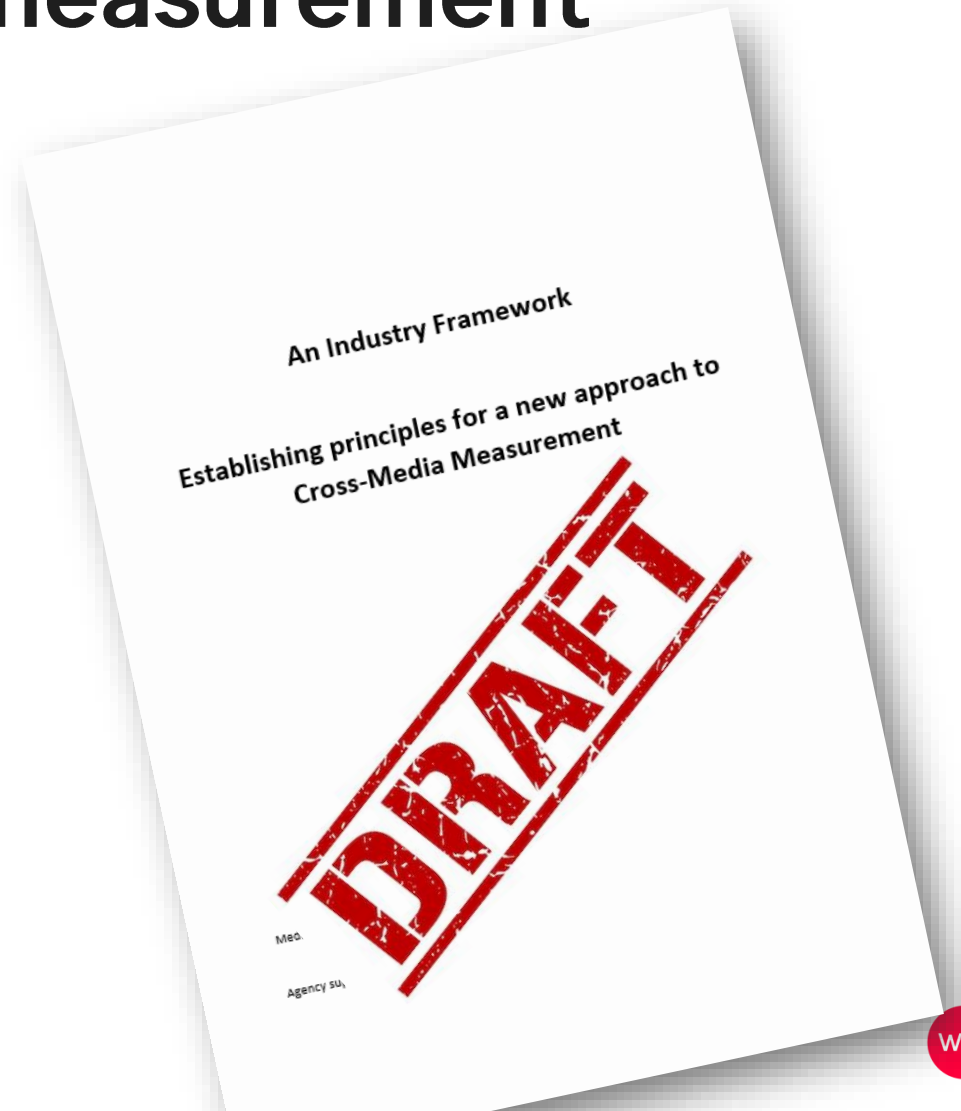
Today's desired outcomes

1. Review advertiser needs and industry principles that have informed design

2. Review proposed technical blueprint

3. Align on WFA open comment and peer review process

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Some FAQs

Who developed this and how will it be reviewed?

The WFA has requested that digital platforms collaborate on a technical design proposal as a starting point for industry discussion. The WFA is now hosting a peer review process for additional industry input.

Why is this a global effort?

A consistent global approach will help ensure that the infrastructure can be built at scale, reduce the cost and burden of development, and provide a level of consistency across markets for advertisers.
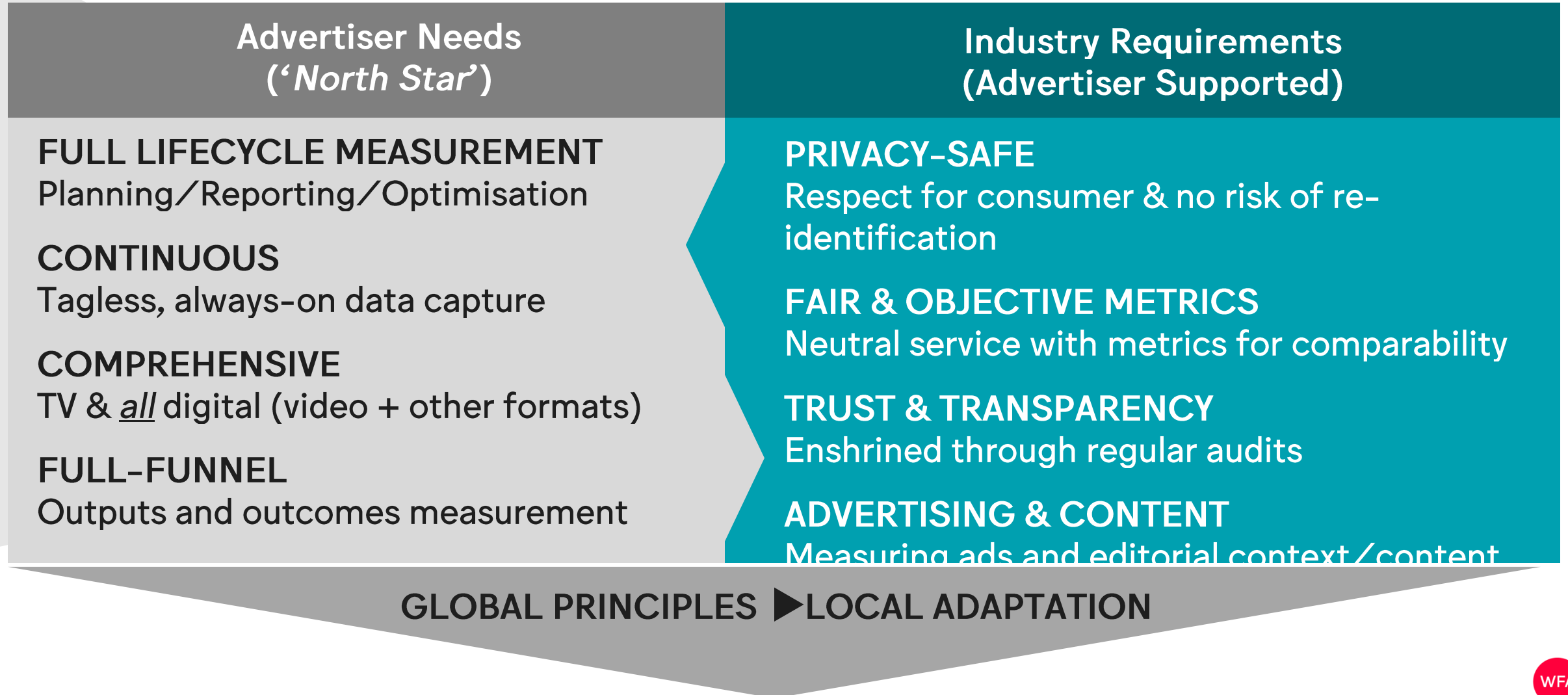
What role will local stakeholders play in this process?

The infrastructure in this proposal is not a complete solution – if interested in using this proposal locally, advertiser–led bodies will still need to refine the blueprint in order to meet specific market needs.

Does WFA endorse this proposal?

While WFA and members facilitated the production of the proposal (it was needed), we do not endorse it (yet). We welcome it and encourage the industry to scrutinise it. At the end of the peer review process we look forward to seeing a version which can form the basis for implementation in the US (via ANA) and UK (via ISBA) and then beyond.

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High-level guiding principles...

Advertiser Needs ('*North Star*')	Industry Requirements (Advertiser Supported)
FULL LIFECYCLE MEASUREMENT Planning/Reporting/Optimisation	**PRIVACY-SAFE** Respect for consumer & no risk of re-identification
CONTINUOUS Tagless, always-on data capture	**FAIR & OBJECTIVE METRICS** Neutral service with metrics for comparability
COMPREHENSIVE TV & *all* digital (video + other formats)	**TRUST & TRANSPARENCY** Enshrined through regular audits
FULL-FUNNEL Outputs and outcomes measurement	**ADVERTISING & CONTENT** Measuring ads and editorial context/content

GLOBAL PRINCIPLES ▶LOCAL ADAPTATION

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The infrastructure in this proposal…

- focuses on meeting advertiser requirements (the Advertiser 'North Star').

- supports various panels and methodologies to accommodate for local market preferences and needs.

- works for digital and linear channels (with further input and review required from industry experts).

- prioritizes reach and frequency use cases, with a path to outcomes measurement (e.g., MTA) over time, based on stack ranked advertiser priorities

- enables outputs that are (1) compatible with existing tools and processes in the industry; and (2) available to multiple research vendors, agencies, and advertisers

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Detailed Advertiser Needs: Ranked & Phased

		Requirement	Description
Foundational Feature Set	1	Continuous/Always-on	Tagless implementation; begins from advertiser opt-in; forecasting based on available data
	2	Detailed & specific data granularity (e.g. for viewability)	Sufficiently granular data to comply with relevant industry standards, report across all relevant metrics etc while respecting privacy principles
	3	Basic segments	Creative, geo, device, placement, campaign, age, gender, format, HHI
	4	Output metrics	Deduplicated reach, frequency, impressions, watch time (absolute, %, distribution)
Phase 1: Deliver R/F Use Cases	5	R/F reporting	Reports updated at least weekly; 12 month lookback; exportable data (via API & CSV)
	6	R/F forecasting & management	12 months forecast; can be based on historical data to start (inventory data from publishers added as available); includes **daily** scenario planning across channels to optimize r/f (this is the mechanism to manage frequency) *note: freq mgmt is not a centralized targeting approach*
Phase 2: Deliver Outcomes Use Cases & Advanced Feature Set	7	System integration	Data API that connects to existing systems (i.e. agency tools, other tools like Datorama)
	8	First party data	Custom segments based on advertiser data (reporting is top priority, forecasting secondary) - Priority 1: Reporting; Priority 2: Forecasting
	9	Outcomes measurement	All Effectiveness measures (brand/sales lift are top priority; conversions, MMM, MTA secondary)
	10	Segments - advanced	Psychographic, behavioral audiences based on common third party definitions
	11	On-demand analytics	Ability to query database (considerations: data availability, latency, UI) for advanced analytics
	12	Global view	Single UI to access multiple markets R/F reports, forecasts etc

Key Technical Design Principles: Privacy, Transparency, Trust

Detailed Privacy Principles

- Ensure users' data is not re-identifiable with contractual as well as technical privacy guarantees

- For panelists, data providers can request explicit consent to share data

- Provide users with transparency and control over data collection and usage

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Open Source Principle

The solution must provide a high quality reference implementation for this technical blueprint that includes technical papers describing the methods, test results on the accuracy of the methods, and open source software that implements the methods. This will support independent third party implementation.

Rationale: To provide clear criteria on whether technical components are privacy-centric or not.

Rationale: To ensure all approaches are transparent and build trust.

Proposed Technical Blueprint

Panel Data	Census Data	Private Measurement	System Outputs
Census Calibration	**Virtual People ID Model**	**Private R&F Estimator**	**Reporting API**
			Planning API
			Dashboards
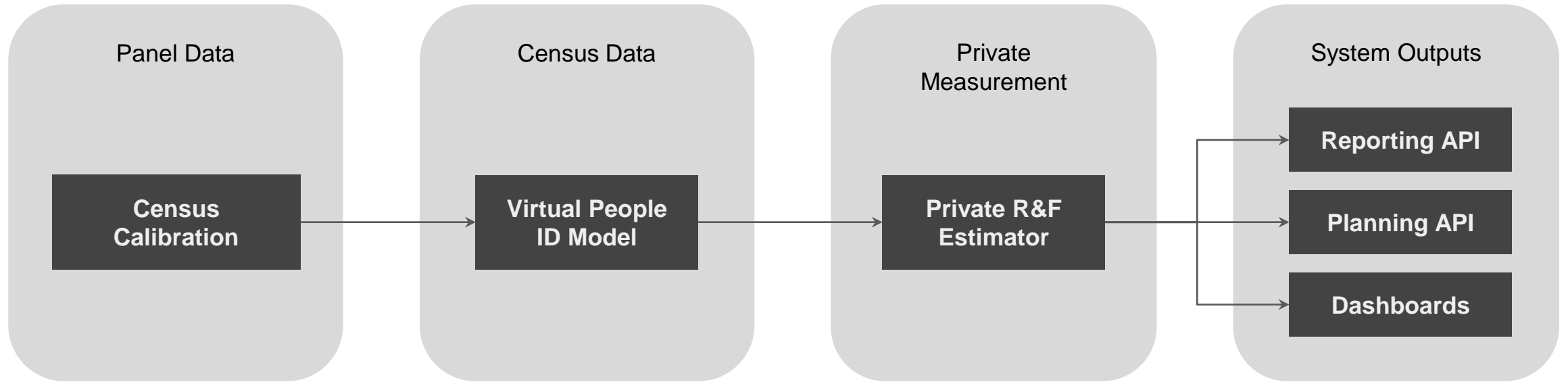
A A framework that combines panel data from different sources and varying granularity to create source-of-truth dataset, calibrated to census estimates
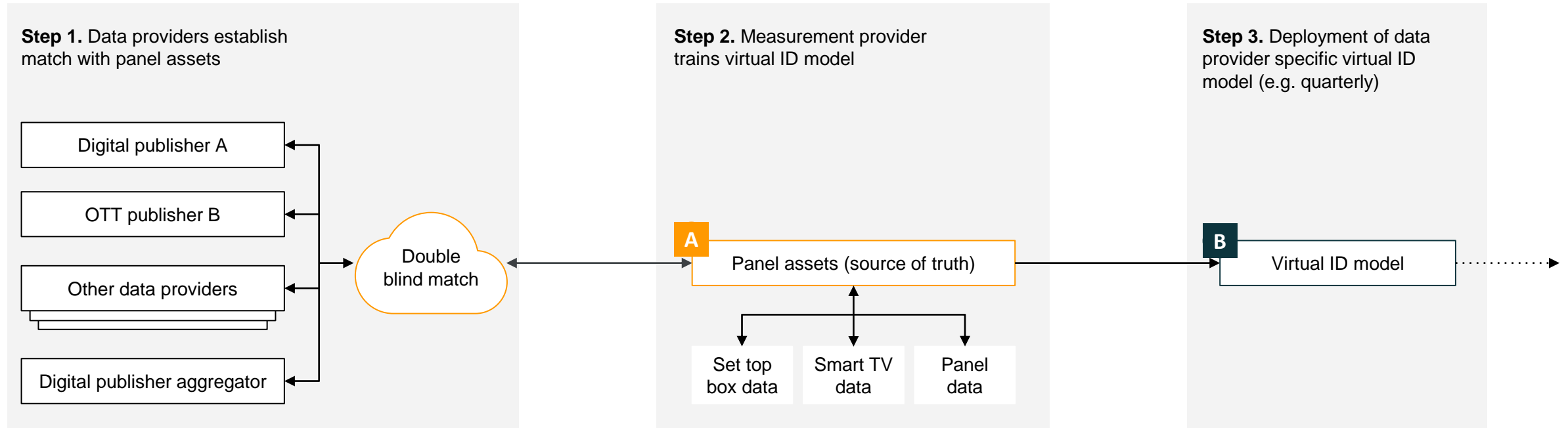
B A privacy-focused identification framework to label impression data consistently across participating data providers

C A privacy-focused algorithm that enables accurate measurement without requiring data providers to share out re-identifiable user data

D A set of pre-defined APIs and dashboards that provide output metrics to enable new products or integrate into existing tools

Technical Blueprint: Setup Phase

With (A) double blind matching of panelist data and (B) a virtual people ID model

Step 1. Data providers establish match with panel assets

Digital publisher A

OTT publisher B

Other data providers

Digital publisher aggregator

Double blind match

Step 2. Measurement provider trains virtual ID model

A

Panel assets (source of truth)

Set top box data

Smart TV data

Panel data

Step 3. Deployment of data provider specific virtual ID model (e.g. quarterly)

B

Virtual ID model

Technical Blueprint: Live Measurement Phase

With (C) new sketches and private reach and frequency estimator and (D) API & dashboards as outputs

Step 4. Data Providers run virtual ID model over log data daily

Digital publisher

Virtual ID model → Impression logs with quality control → Run VID model → Private sketches

TV measurement

TV panel assets → Run VID model (HH to person) → Private sketches

Digital publisher aggregator

TBD → Run VID model → Private sketches

Step 5. Reach and frequency estimator determines x-media reach and frequency

C Private reach and frequency estimator

Step 6. Reporting APIs provide campaign metrics and forecasts

APIs and Dashboards

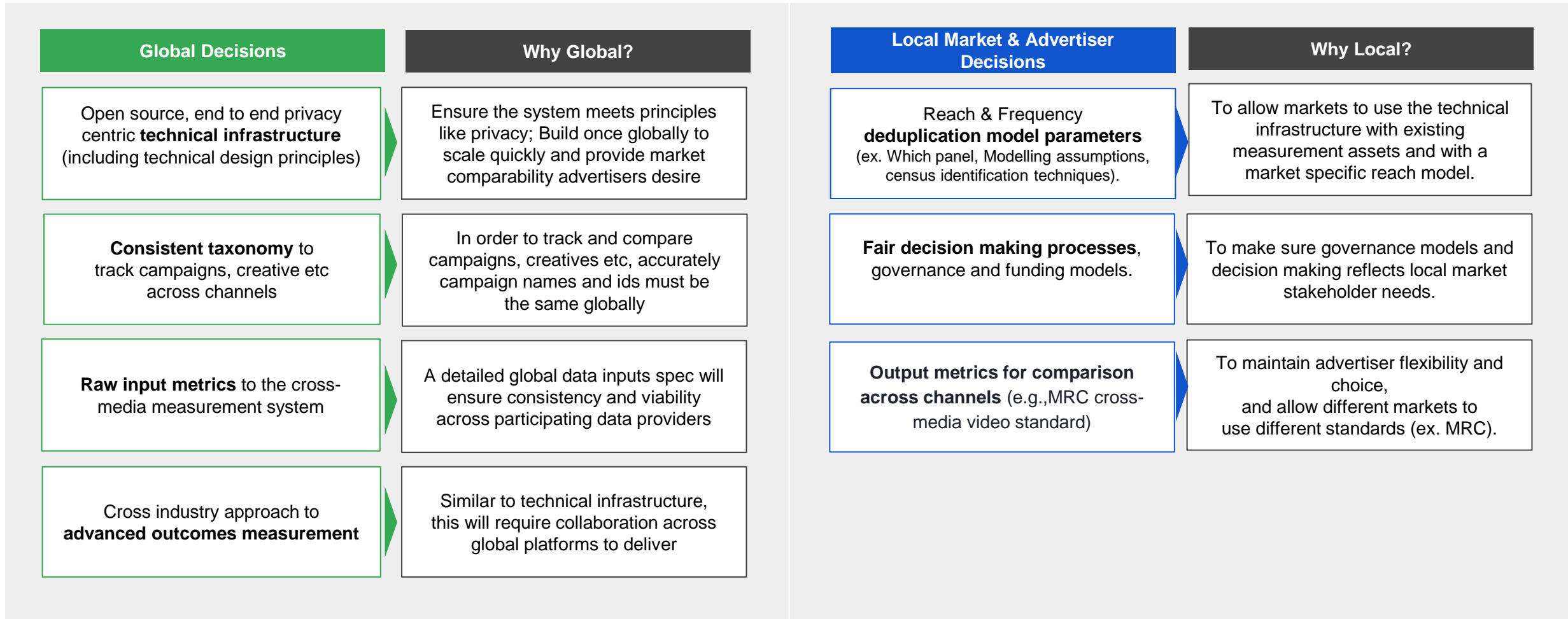**D** Reach and frequency (plan and report)

Technical Blueprint: Validation Framework

WFA cross-media technical working group is collaborating with MRC on establishing a validation framework to evaluate blueprint's key components.

- Relative error (estimated R&F vs. real R&F)
- Evaluation parameters
    - Number of data providers
    - Digital/TV publisher size
    - Cardinality ratio & Overlap ratio
    - Privacy guarantee (epsilon)
- Evaluation scenarios
    - Prospecting vs Retargeting
    - Sequential/correlated campaigns
    - Varying frequency distributions

The group is working towards finalizing this framework and publish simulation results for feedback and review.

Global vs. Local Market Considerations

Global Decisions	Why Global?	Local Market & Advertiser Decisions	Why Local?
Open source, end to end privacy centric **technical infrastructure** (including technical design principles)	Ensure the system meets principles like privacy; Build once globally to scale quickly and provide market comparability advertisers desire	Reach & Frequency **deduplication model parameters** (ex. Which panel, Modelling assumptions, census identification techniques).	To allow markets to use the technical infrastructure with existing measurement assets and with a market specific reach model.
Consistent taxonomy to track campaigns, creative etc across channels	In order to track and compare campaigns, creatives etc, accurately campaign names and ids must be the same globally	**Fair decision making processes**, governance and funding models.	To make sure governance models and decision making reflects local market stakeholder needs.
Raw input metrics to the cross-media measurement system	A detailed global data inputs spec will ensure consistency and viability across participating data providers	**Output metrics for comparison across channels** (e.g.,MRC cross-media video standard)	To maintain advertiser flexibility and choice, and allow different markets to use different standards (ex. MRC).
Cross industry approach to **advanced outcomes measurement**	Similar to technical infrastructure, this will require collaboration across global platforms to deliver		

Non-exhaustive list

Key take-outs

1. **Genuinely cross media - linear and digital** Existing systems use panel-based measurement, calibrated by census data. This design recommends using census-based measurement, calibrated by a panel. The main benefit of this approach is that every impression in the census counts, and is calibrated towards the panel, while still retaining all the demographic-rich data from each Data Provider.

2. **Low barriers to entry** *(Tagless decentralized processing)***.** This design proposes a new decentralized processing framework that 1) reduces barriers to entry for data participants; 2) ensures that no re-identifiable data leaves census data providers' environments (except consented panelist data); 3) Does not rely on a single party for reliable measurement outputs (i.e. no single central point of failure); and 4) provides continuous measurement for advertisers

3. **Privacy by design.** Proposed framework helps the measurement system provide technical privacy guarantees for its participants' data, rather than just contractual guarantees.

4. **Globally consistent inputs and outputs.** The system allows global and local players to provide and use consistent inputs/outputs across markets. This could enable advertisers to make comparisons across markets, and other end users to build globally consistent tools, processes etc.

5. **Future-proof and scalable.** The modular design of the system allows for additional data providers, infrastructure and upgrades to be developed more easily. This means the system will not become redundant as ad formats, ID frameworks, use cases, privacy landscape etc. evolve.

Next Steps

WFA Open Comment & Peer Feedback Process

- The proposed technical blueprint is a first step to defining an industry solution - industry and peer feedback is a critical next step
- WFA is kicking off an open comment period & formal peer feedback process which we encourage you all to participate in ultimately leading to an industry supported proposal
- Submit feedback to dedicated WFA email address (crossmedia@wfanet.org)

Technical Working Group to Continue to Refine Blueprint

- Address all feedback, including a series of virtual workshops to address open design questions

Publication of WFA Framework & Technical Blueprint in July

- Including the hand-off of the proposal to ISBA Project Origin and the ANA to lead initial local pilot implementation efforts

Ongoing Global Workstreams

- Including, taxonomy and metrics standardization
- Technical work to develop advanced features and use cases for future phases (ex. outcomes)

Next steps

WFA Open Comment & Peer Feedback Process

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