

METHODOLOGY

# Mobile Matrix

SEPTEMBER 2018

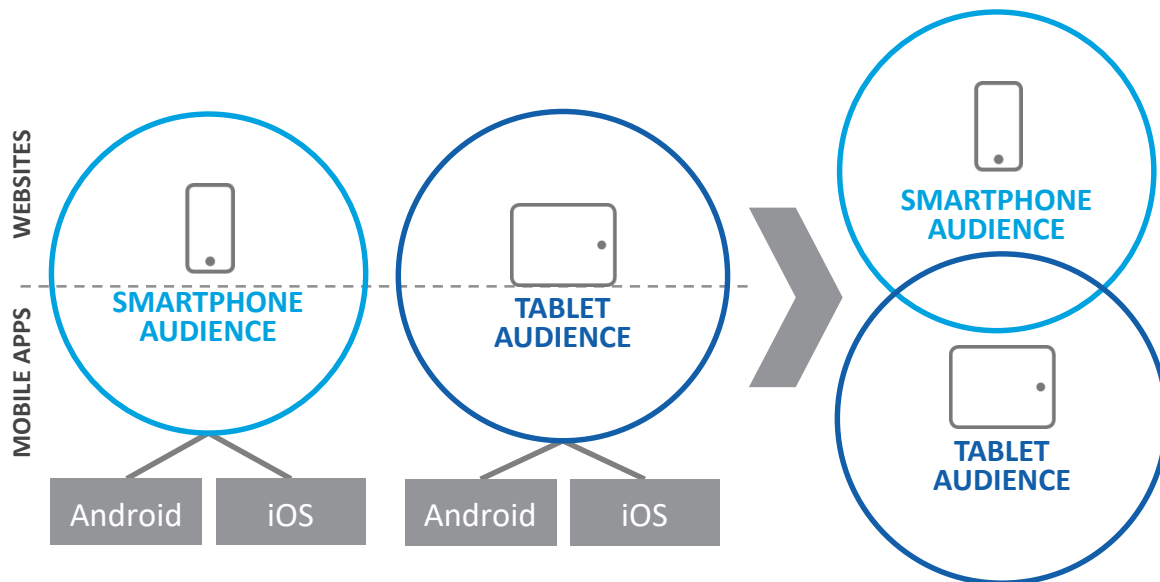
# What does Mobile Metrix Measure?

Mobile Metrix measures the **UK population** connecting to the Internet at least once a month from one of the following mobile devices:

## Smartphone or Tablet

- Any location
- **Android or iOS**
- Web visitation and app usage
- Main users of a phone or tablet device (single user per device)
- Aged 13+ audience for tagged entities; 18+ for both tagged and non-tagged entities

# Mobile Matrix Reports on De-Duplicated Audiences Across Mobile Platforms using a Modelling Technique



# comScore Unified Digital Measurement Methodology: the Integration of Tag and Panel Data

## PERSON MEASUREMENT

PASSIVE PERSON-CENTRIC



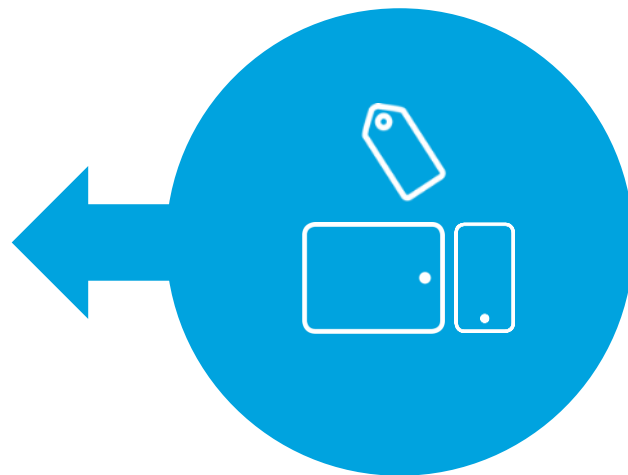
### PANEL

Demographic data for tagged sites and apps;  
projections for websites and apps without a tag

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## DEVICE MEASUREMENT

SITE/APP-CENTRIC



### CENSUS PAGES TAGS, SDKs

Census (tag) data provides accurate volumes of  
the traffic for tagged sites (including content  
distribution channels) and mobile apps

# Focus on Census Measurement

## PERSON MEASUREMENT

PASSIVE PERSON-CENTRIC

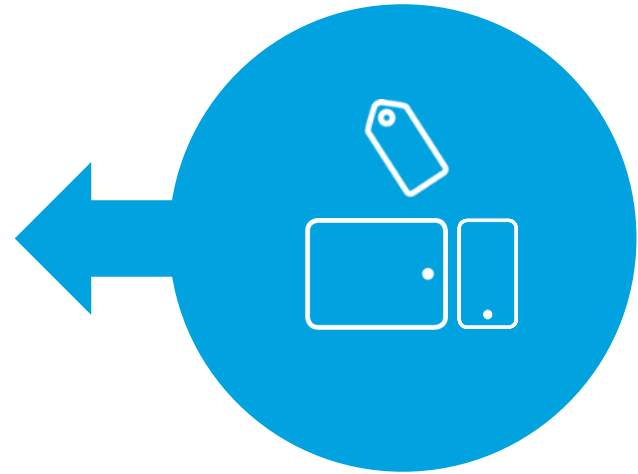


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# Census Data: Site/App-Centric Measurement Collected via Tags and SDKs



- A tag/SDK is a short code that is placed on a website or in a mobile app and is used to track an 'event' (e.g. page view, mobile app call, etc.)
- Census data reports on complete traffic for tagged content visited from all devices
- Some media provide census-like feeds delivering the same information as census (e.g. 3<sup>rd</sup> party content distribution platforms – Apple News, Flipboard)

Tagging is **necessary for third party platform** audience measurement (FBIA, Google AMP)

Tagging is **necessary for Android Tablet** audience measurement

Tagging brings benefits for accuracy:

- **Introduces** increased granularity and stability for smaller media entities
- **Assures** that all activity is credited
- **Allows** reporting of audiences for entities that do not meet panel Minimum Reporting Standards\*

# Census Data: Device Platforms Reported in Mobile Metrix



What devices are captured in Mobile Metrix audience data?

DEVICE PLATFORM	CAPTURED BY CENSUS DATA	INCLUDED IN MOBILE METRIX AUDIENCE DATA
Android Phone	✓	✓
iPhone	✓	✓
iPad	✓	✓
Android Tablet	✓	✓
Other mobile OS & devices	✓	✗

# Focus on Panel Measurement

## PERSON MEASUREMENT

PASSIVE PERSON-CENTRIC



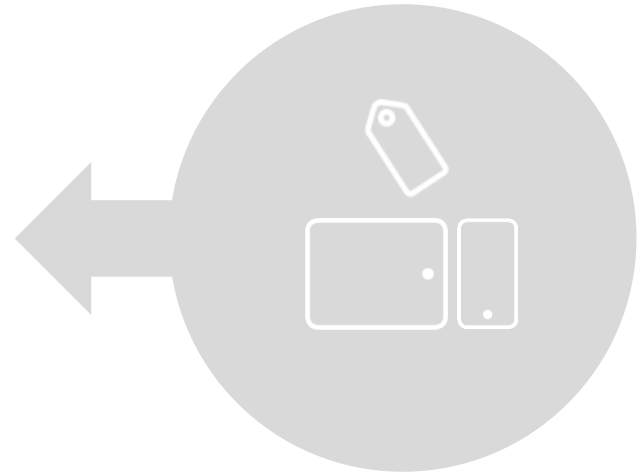
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## DEVICE MEASUREMENT

SITE/APP-CENTRIC



### CENSUS PAGES TAGS, SDKs

Census (tag) data provides accurate volumes  
of the traffic for tagged sites (incl. content  
distribution channels) and mobile apps



# comScore Mobile Panels in the UK



- Mobile panels are subsets of UK internet users that installed comScore meters on their mobile devices which track their online behaviour
- Panels are nationally representative and weighted to the universe estimates based on the MobiLens study
- Sample sizes per device (Q3/2018):
  - **Total Mobile (all combined) ~ 13k persons**
    - Android phone ~ 5.6k persons, age 18+ years
    - iPhone ~ 4.8k persons, age 18+ years
    - iPad ~ 2.6k persons, age 18+ years

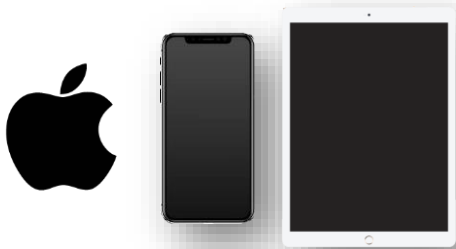
## Panel details:

- **Mobile devices**
  - An assumption of one user per device is applied (the main user concept)
- **Sample is weighted to be fully balanced**
  - Demographically weighted targets provided by the enumeration study (MobiLens\*)
  - MobiLens is weighted based on targets obtained from PAMCo survey
- **Android Tablet panel is not maintained in the UK**
  - Android Tablet audiences are reported on the basis of census data only\*\*

# Mobile Panel: Measurement of Websites (URLs) and Apps



## iPhones/iPads



Connected usage for both web and apps

## Android Phones



Connected usage for web;  
In Focus usage for apps

METERS RETRIEVE TRAFFIC IN REAL TIME

comScore

- Due to iOS and Android operating system constraints there are minor differences in panel measurement between iOS and Android
- Android Tablet panel isn't maintained in the UK and thus Android Tablet audiences are reported only for tagged sites and apps

# Quality Assurance Processes

## Invalid Traffic Filtration: Both General and Sophisticated IVT is filtered out

- Bots
- Adware & Browser Hijacks
- Ad Injectors
- Domain Laundering
- Data Centre Traffic

URLs not requested by users are filtered out (*e.g. pop-ups, pop-unders, redirects, ad banners*)

## Data integrity controls applied to both census and panel data:

- Data collection hourly monitoring, daily processing checks, data variance controls, monthly data quality assurance processes

# APPENDIX

# Universe under measurement reported in Mobile Metrix data

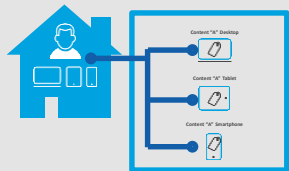
UK online users connecting to the Internet from mobile devices at least once a month

Platform	Persons 6-12	Persons 13-17	Persons 18+
<b>Smartphone</b> (All locations)	Not included	Included (tagged content only)	Included (Android and iOS; tagged + non-tagged)
<b>Tablet</b> (All locations)	Not included	Included (tagged content only)	Included (iOS: tagged + non-tagged; Android: tagged only)
<b>Total Mobile</b> (Smartphone & Tablet)	Not included	Included (tagged content only)	Included (tagged + non-tagged; Android Tablets: tagged only)

# Enumeration source: MobiLens study

- comScore proprietary online survey
- Nationally representative sample of UK mobile subscribers aged 13+
  - Sample quotas based on UK national census data for age and gender; geographic region balance is monitored during the fielding period
  - PAMCo (<http://pamco.co.uk/>) is the source of universe estimates and weighting targets for the Great Britain portion of the MobiLens study
  - ICM Omnibus data is the source of weighting targets for Northern Ireland
- 5,000 respondents monthly
  - Mobile universe estimates calculated as 3-month averages

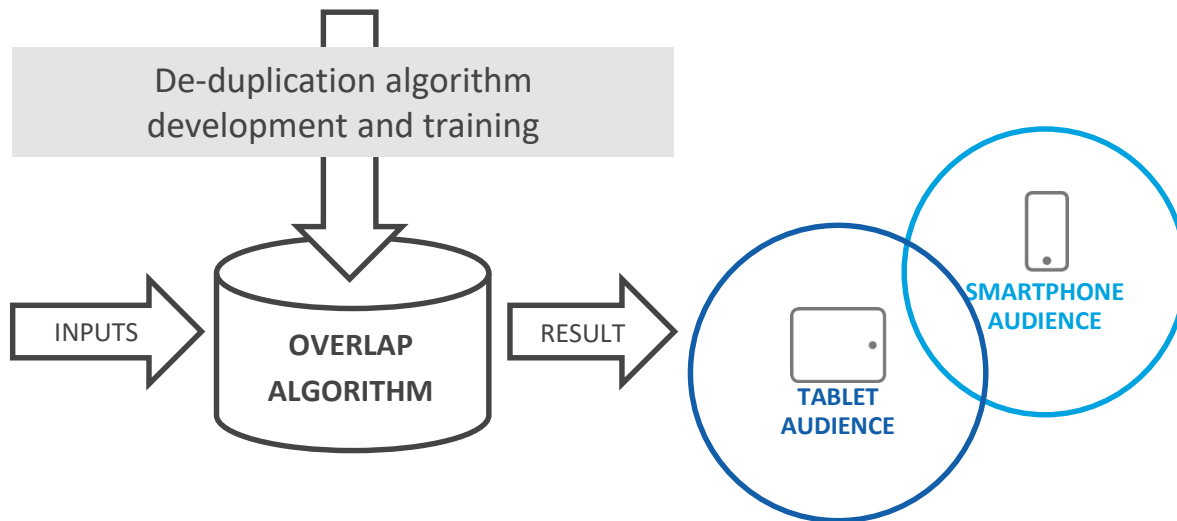
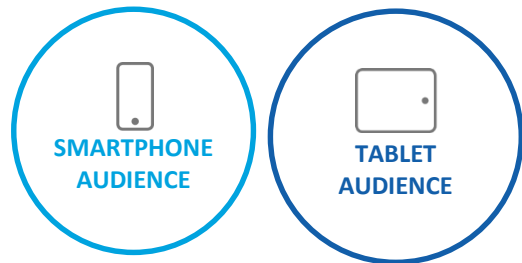
# Digital Audience De-Duplication: Overlap Algorithm Informed by Single Source Data



## Single source dataset based on subset of country tag census data

Provides cross-device behaviour observations at an individual person level

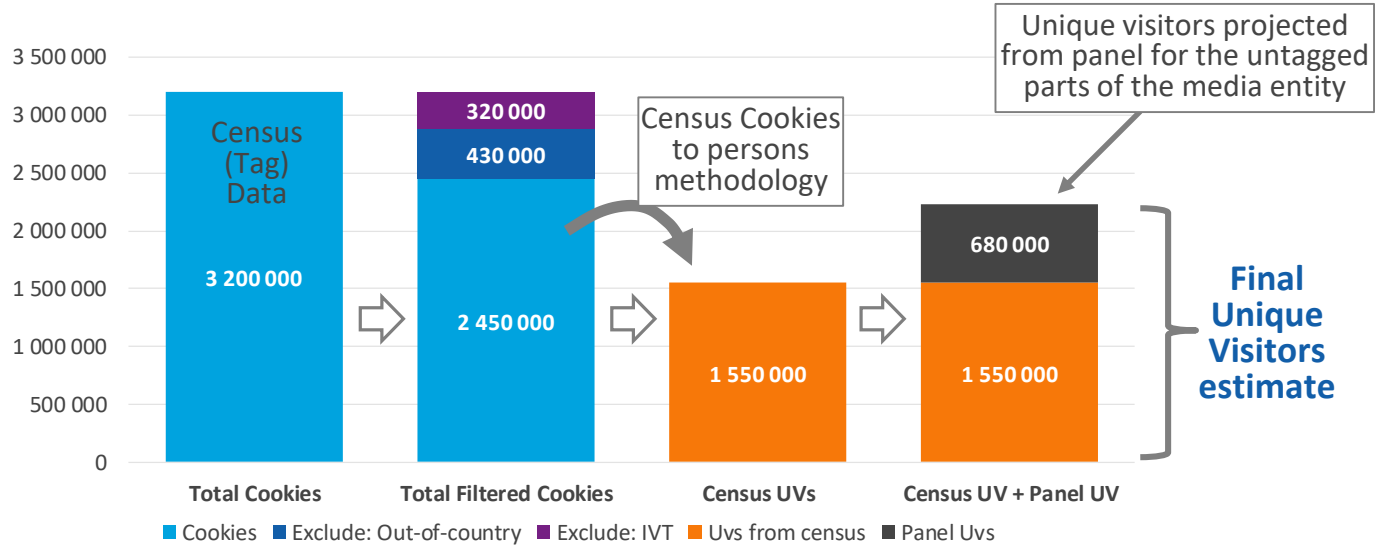
### Entity Audience Results per Platform



# Integration of Census (Tag) and Panel Data: Unified Digital Measurement Methodology

## Mobile Unique Visitors

(calculated per device and OS platform separately)







# Thank you!