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**DCMS
Engagement
Numbers**

DCMS are exploring different methods for measuring participation and attendance

Our expertise in data science and machine learning ensures rigorous analysis of approaches across two work strands.

Strand 1

Comparative Framework for Measurement Methods

Phase A: Breadth

Identifying and analysing a longlist of data sources and methods to help DCMS understand the full landscape of approaches.

Phase B: Depth

In-depth analysis of the methods shortlisted in the Breadth phase. This will determine the most viable methods to be used in further experimentation.

Strand 2

Experimentation and Application

Phase C: Design and Set-up

Working with DCMS to define the experiment design, to ensure that our results are rigorously tested.

Phase D: Test and Reporting

By comparing each method against different events, we can identify which data sources and methods are most viable for different types of events.

The project at a glance...

The process was guided by a series of research questions underpinning the project:

Research Questions

1. Can robust attendance estimates be calculated for each method, and for what types of events or activities?
2. Beyond the attendance estimates, what further detail can the methods describe about users, including demographics and participation?
3. For each method, an assessment of the following:
 - a. Accuracy
 - b. Biases
 - c. Ethics
 - d. Deliverability
 - e. Cost
4. What issues and challenges that could arise during data collection for each method (e.g. sampling biases)?

Solutions

1. Stakeholder consultations and analysis of 70+ data sources
2. Testing the prioritised data sources as a result - social media, aerial photography, activity & mobile app data were established as sources to prioritise
3. Identification, training and experimentation with potential modelling approaches, focused on addressing limitations
4. Cross-validation with traditional social research methodology, such as surveys
5. Collaborative approach to applying methodology to real-world scenarios with DCMS
6. Reporting including in-depth case studies, roadmap for method adoption and technical upskilling

About Verian

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