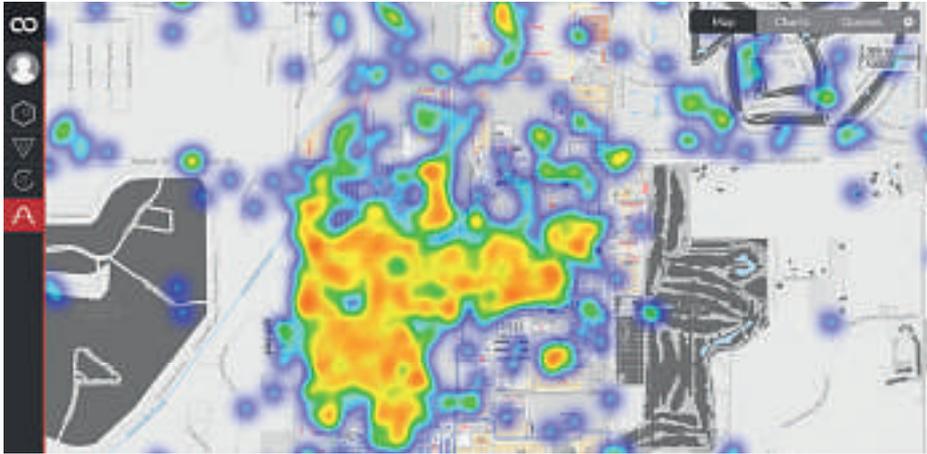


MUSIC TO OUR EARS

SPIKES IN THE USE OF FESTIVAL APPS ARE ALLOWING FOR BRAND NEW, DETAILED DATASETS TO EMERGE, HARNESSSED THROUGH THE USE OF GEOSPATIAL TECHNOLOGY.

JESSIE ATKINSON AND MARK MAYDON EXPLAIN HOW





A heatmap on the 'Colocator' dashboard showing the distribution of event attendees over a festival site. The Insight module includes a scrub bar so the live movement of a heat map can be viewed over a six-hour period

Interweaving the digital with the physical is part and parcel of the sensory experience of today's music festival, and being connected is central to many people's event enjoyment.

No wonder then that last year, promoters reported enormous spikes in festival app downloads.

More than just a boon for delivering information quickly, widespread use of festival apps also means that rich new datasets are emerging, and with them, companies to help promoters harness their power. Geospatial technology now feeds into the world of live events, making new insights available to the festival organiser and helping to change the events of the future.

Increasingly, the official event app serves a dual purpose: providing a personalised digital guide that elevates the experience for the festival-goer while seamlessly acting as a low-cost geospatial data collection vehicle for the organiser.

The behaviour of event-goers has never come into clearer focus than with the advent of geospatial heat-mapping and analysis. Real-time footfall analytics can now run seamlessly in the background of event apps to relay information that can translate into improved customer experience, new ways of enhancing commercial revenues, and shaping the planning of future events. App-provider Second Screen has incorporated Crowd

HOW IT WORKS

Location tracking technology such as Colocator obtains positional fixes from mobile phones running an app. In an outdoor environment, this will normally predominately use GPS. Advanced systems will call upon other data sources – even inertial data such as step counts – and dynamically vary the frequency of these updates dependent on the phone's location (for example, increasing the regularity of updates if the phone is approaching the event site).

This stream of raw data – typically a device ID, timestamp, latitude and longitude – is then processed into metrics such as visits (to defined polygonal regions), dwell times and transit times. If this processing happens in real time, audience segments can be built on the fly for geo-targeted messaging using simple or complex time-location rules – for example, all the devices that arrived on-site after 10am today or are returning visitors to a certain sponsor activation. This same data is also used for footfall analytics, for monitoring and measuring the interaction with the event environment, visualised through heat maps, dashboards and charts.

Supporting Organisations:



Knowledge Partner:



Supporting Media:



Official Airline:



Held in:

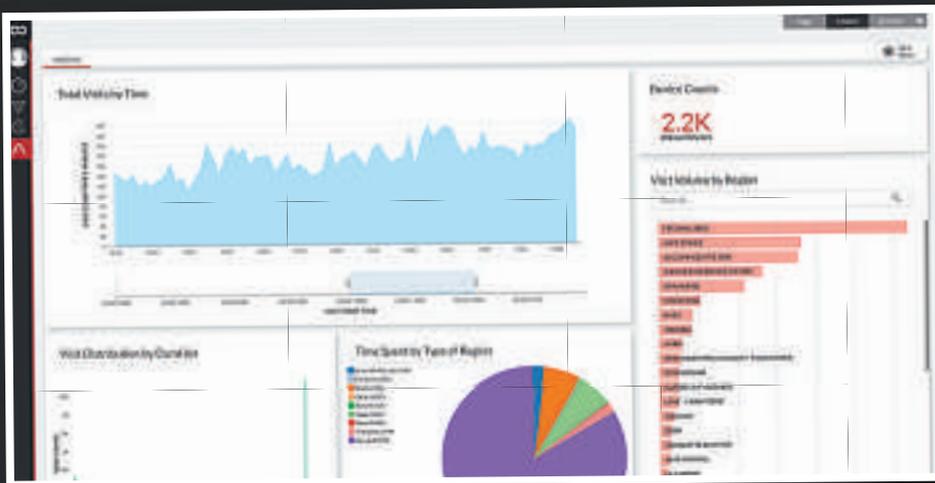


Supported by:



Organised by:





A chart and graph section of the 'Colocator' dashboard showing visitor behaviour based on the geospatial analysis of more than 2,000 devices that have the event app installed and their location opted-in

Connected's Colocator technology – which provides the location tracking code – across all its clients' event apps. The collaboration is proving successful in better servicing a new breed of live music promoter.

Simply put, if the app users consent to location tracking – an 'opt-in' many are happy to tick in exchange for free use of a valuable app – then the Colocator code is activated and the movement of the individual at that event can be anonymously recorded. This is then aggregated with data from all similar app installs, such as those from previous events by the same organisers. Colocator tech works within the remit of each individual live event app and collects data the more events by the same organiser it is used at. Through a series of visualisations and other analytics tools, presented through heat maps, graphs and dashboards, the technology can then be used to inform logistical, safety, booking and other commercial decisions. Built on publicly-available APIs, this console enables the data to be ingested into other systems and platforms.

By aggregating the location data sourced from festival-goers running the official app, the behaviour of the crowd can be brought to life through real-time heat-mapping and dashboards. This provides additional situational awareness for a festival's operations and crowd safety teams that complements established techniques such as CCTV and on-the-ground stewards. A better picture

of where the queues are or of levels of use of facilities – for example, how popular a certain sponsor activation is proving – are also newly clear to the promoter.

This level of insight has previously required expensive and burdensome installation of on-site hardware – beyond the budget of most festivals – or the use of post-event surveys which, depending on how and when they are carried out, generates data of variable validity. Now, the service is available in a neat app package, inclusive of everything else you and your festival community would expect.

Future planning

Traffic management isn't the only benefit of seeing the movement of an event in colourful real-time: as all this data is collected for safekeeping after an event is over, promoters can then use it to understand more accurately the commercial movements of their customers. Now, organisers will be able to know with greater certainty whether the wildcard booking they made on the main stage had crowds flocking – or only a trickle of visitors. They can observe as certain areas of the festival remain unloved, and send out targeted push notifications to aid discovery amongst their patrons or endeavour to make them more physically discoverable at the next event. With data like this, the festival-organisers of tomorrow will be able to tailor their events to better fit what their

attendees want, making them more likely to buy a ticket for the next one and making their experience more bespoke while they're there.

The real-time nature of the geospatial data and accompanying tools means action can be taken during the event, when changes can be made for maximum impact. If a certain bar is proving very popular and the queues becoming irksome, but less well signposted ones are much less busy, organisers can now seek to load balance – for example, through real-time push message notifications suggesting a certain audience segment try the alternatives. These and any other geo-targeted notifications can be fired from the back-end of 'Colocator', which is hooked up to the specific live event app it is currently tracking.

Organisers can also help patrons with the joy of discovery via recommendations: "If you've visited X, we think you should check out Y." All this and more can be achieved using the 'Colocator' Engage module, which provides a sophisticated content management system for geo-targeted push notifications.

Footfall analytics derived from monitoring festival-goer app users also serve multiple purposes after the event. For example, organisers can attach numbers to crowd estimates: now they have robust quantitative data. For sponsorship managers, this data provides key metrics for commercial partner activations, providing indicators such as visits, repeat visits and dwell times, and just how busy the headline sponsor's on-site presence is at any given time, both relatively and absolutely.

Using insight from data like this, commercially minded festival organisers are increasingly looking to tailor their events to better fit what their attendees want, and focusing on personalising through experience management, all of which should translate into stronger ticket sales for the next festival. And with more and more festival-attendees downloading official apps associated with events they are attending, so much data awaits.

Jessie Atkinson is marketing executive at Second Screen (www.secondscreenldn.com).

Mark Maydon is director at Crowd Connected (www.crowdconnected.com)



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