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**MRS Awards 2023**  
Activation of Analytics  
**Winner**

**Formula E**  
**Meshh**

**Spatial Analytics at  
Formula E events**

## Summary

Formula E is the only FIA sanctioned electric motor racing series in world. The sport features 16 races on 12 street circuits across the globe. The sport has an annual revenue of ca 300m euros p/a – driven by sponsors who are attracted by the 400m annual global TV viewers across in addition to the sustainability message conveyed by the sport.

This award entry will demonstrate how Meshh delivered its spatial analytics services to Formula E - at four circuits across seven racing days - and how the insights and information delivered helped Formula E make substantive changes in arrangements to improve the fan experience, deliver better ROI for brands and sponsors, and even allow the venue to improve pedestrian traffic flow at key times.

Meshh's analysis has had a significant impact on Formula E including:

1. **Supporting the successful renewal of the Allianz partnership for 2023**
2. **Driving significant growth in attendance across the 2023 season +38% year on year**
3. **Driving improvements in access/locations of grandstands in Mexico and Rome - the former seeing a +40% increase in attendance year on year**
4. **Driving change of location of the Rome Fan Village to increase engagement**

## Synopsis

Formula E is the only FIA sanctioned electric motor racing series in world. The sport features 16 races on 12 street circuits across the globe. The sport has an annual revenue of ca 300m euros p/a – driven by sponsors who are attracted by the 400m annual global TV viewers across in addition to the sustainability message conveyed by the sport.

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Meshh is a combination of hardware and software to collect and analyse data yielding precise, reliable, and consistent measurements of how individuals move around a physical space, without infringing on privacy or security. Meshh utilises sensors that measure footfall, dwell time, and other features of pedestrian/fan traffic flow and behaviour. This data is then analysed to reveal how people interact with the space, enabling correlations with brand activations, F&B sales, queues and other interactions. This permits stakeholders to make evidence-based decisions when changing layouts, timing, facilities or any other factor at a given event.

Meshh's technology is easily deployed by a single-person team in a short space of time and makes no significant demands of infrastructure. Sensors can be installed by Meshh personnel or, with the appropriate training, by the operator. Data aggregation and analysis is delivered by a dedicated team in London, UK. As well as providing post event insight, Meshh's technology can also be used in real time at events to measure spectator footfall, and has been an invaluable tool to the Formula E stakeholders.

This technology is not only groundbreaking but it is also driving decision making within businesses, particularly Formula E who have made a number of changes to their events as a result of the findings of the Meshh project. These changes will make a significant difference to the experience of fans at Formula E events and help to contribute to the growth of this new and exciting sport.

Meshh collected, analysed and interpreted the data for Formula E, providing detailed metrics presented in clear reports. Reports revealed visitor movements in time and space to show the visiting rates to the Fan Village, dwell time, and the same information for the partners activating at each race event. One of the strong advantages of the technology is the sample size of the spectators that are able to be tracked. We estimate we reach 80% of attendees via the technology (ie in Mexico we had a sample of 28,000 out of a total attendance of 32,000) which is unheard of with survey based studies.

Whilst the data from each sensor can be checked and interpreted in real-time for other applications, Formula E mainly aggregated the data from as many as 30 sensors and

analysed it using Meshh's proprietary methods and techniques. The information produced from the data was then presented to Formula E as a report for each venue, graphing and summarising the most salient and important findings according to Formula E's particular focus. Formula E has since used the data and insight to make changes to the race circuits for the 2023 season with the goal of improving the fan experience.

Across the 4 races measured in the 2022 season, the key findings were:

1. Spectators spent the longest at the London and NYC E Prix, spending 3 hours at each event. Conversely, fans only spent one hour in Rome.
2. London race attendees were mostly likely to visit on just one day of the weekend whilst New York attendees saw the highest multiday attendance (see chart 1)
3. London and New York saw the highest proportion of fans attending the Fan Village with less than 20% of fans attending in Mexico and Rome - highlighting the need to rethink the location of this area (see chart 2)
4. Engagement with sponsor activations was highest in London with 28% visiting 5+ activations during their visit - compared to 11% in Mexico.
5. Allianz sponsor activations were the most visited with the highest engagement numbers (see chart 3)
6. Fans arrived earlier in London, while arrival times were later in Rome and Mexico (driven by the concert after the race). This highlights the need to better inform fans about the different entertainment/schedule at events to try to encourage fans in these markets to arrive earlier.

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1. Supporting the successful renewal of the Allianz partnership for 2023
2. Driving significant growth in attendance across the 2023 season +38% year on year
3. Driving improvements in access/locations of grandstands in Mexico and Rome - the former seeing a +40% increase in attendance year on year
4. Driving change of location of the Rome Fan Village to increase engagement
5. Amendments in spectator flow to reduce congestion and improve spectator experience
6. Prompting a change in strategy around the placement of sponsor activations

Furthermore, it has helped drive extremely high spectator engagement results including:

1. **86% customer satisfaction (+2% ppts year on year)**
2. **91% likelihood to return (+4% ppts year on year)**
3. **75% rating FE events as good value for money (+6% ppts year on year)**
4. **Above-average scores at races where we conducted the analysis**

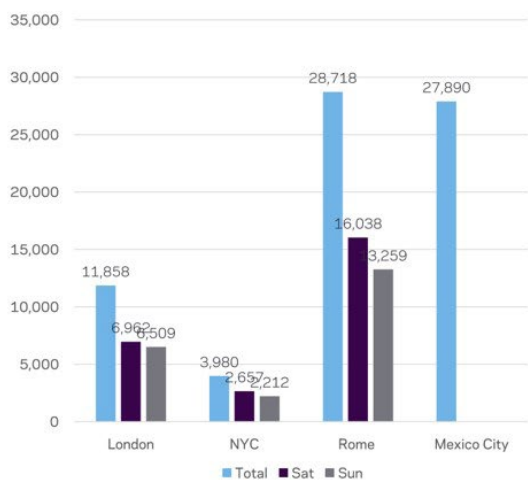
Following the successful deployment of spatial analytics at these race days, Meshh has signed a 2-year, 10 races per year, contract with Formula E to enable year-on-year comparisons across 5 locations: London, Rome, Cape Town, Berlin, and Jakarta.

We feel that this project would be worthy winners of this award. The technology is extremely innovative and is used significantly by key internal stakeholders in the Formula E operations and commercial teams - which can't be said of all data and research projects. More importantly, it is having a significant impact on the sport as it continues to attract more fans as it approaches its 10th season.

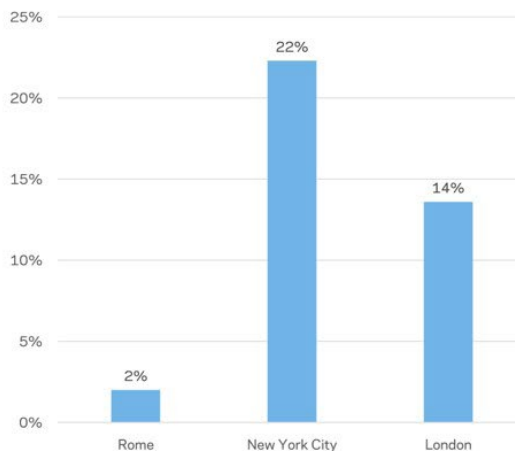
Meshh was on site between January and August to install sensors at ideal points for measuring. At each venue, over the space of one to two days, unobtrusive Meshh sensors passively tracked mobile device behaviour, collecting anonymous data from the devices to track their progress onto, around, and off the site.

The data from each sensor can be checked and interpreted in real-time for other applications, but for Formula E Meshh aggregated the data from as many as 15 sensors and analysed it using Meshh's proprietary methods and techniques. The information produced from the data was then presented to Formula E as a report for each venue, graphing and summarising the most salient and important findings according to Formula E's particular focus. Formula E has since used the data and insight to make changes to the race circuits for the 2023 season with the goal of improving the fan experience.

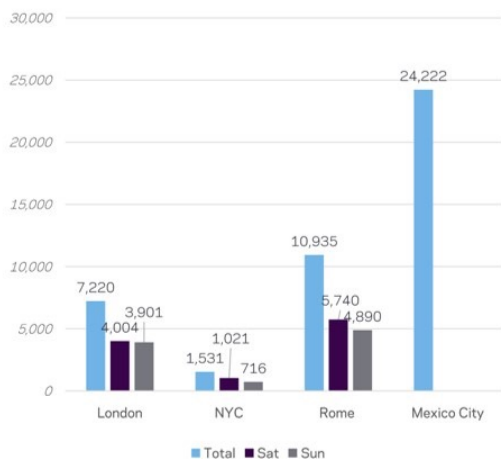
### TOTAL VISITORS CAPTURED BY DESTINATION



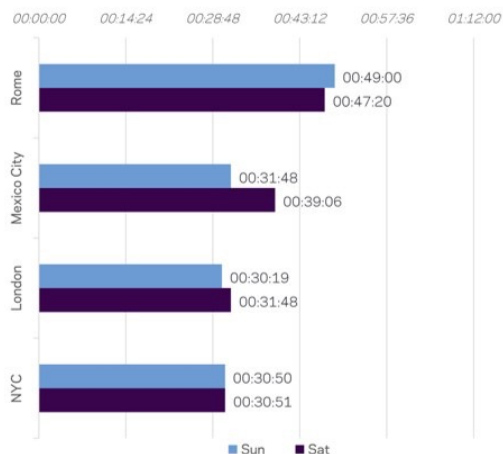
### MULTIDAY VISITORS BY DESTINATION



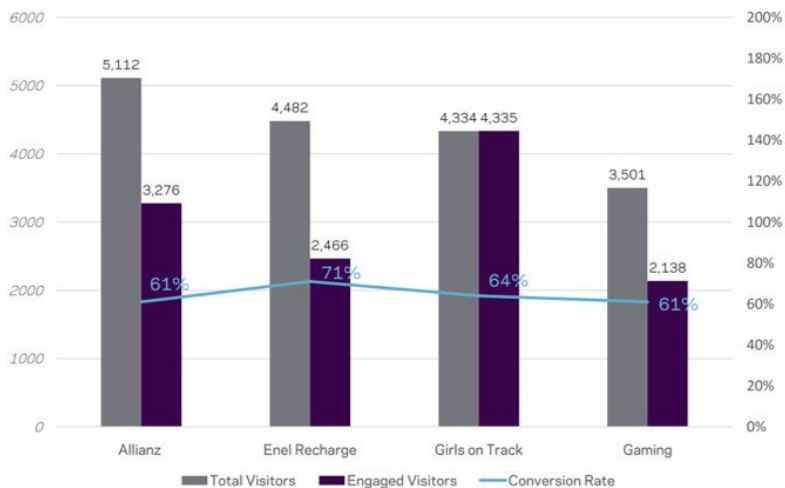
### E-VILLAGE TOTAL VISITORS



### AVERAGE DWELL TIME IN THE E-VILLAGE



### LONDON: PARTNER LEADERBOARD



### ENGAGED DWELL TIME

- Gaming (8:58)
- Girls on Track (8:51)
- Enel Recharge (8:49)
- Allianz (8:29)