UK Mapping Festival Uses Augmented Reality to Peer into the Future

During the upcoming UK Mapping Festival Conference and Exhibition, which will be held at the ILEC Centre in London on 4-6 September, Aligned Assets will showcase their augmented reality capability through an app designed to enhance the visitor's experience of the Festival both in present time and into the future.

Initiated by Aligned Assets' presentation on augmented reality at GeoData 2018, Geo Information Group's MD, Seppe Cassetari, invited the software innovator to develop an AR app specifically for the UK Mapping Festival. The app, which will be available for Android and Apple smartphones from 20 August, will, prior to the Festival, allow users to zoom in and pan around a 3D model of the exhibition hall in augmented reality, and with a tap on the screen, view a futuristic version of the model, complete with eco-animations. During the Festival, visitors will also be able to participate in an augmented reality treasure hunt by pointing their smartphones around the exhibition space and collecting the eco-animations that appear. In addition, users will be able to view conference timetables and click on various AR images in order to view exhibitors' websites.

While this app has been developed in order to inject some hi-tech fun into the Festival, Aligned Assets has, meanwhile, positioned itself at the forefront of cutting edge 3D technology through its augmented reality product. Symphony AR was primarily designed for the use of the Emergency Services and Local Authorities to translate a plethora of risk, geospatial and social demographic information, in an easy-to-process visual format.

This practical application of gaming technology provides Emergency Services with fast and efficient processing capabilities for the purpose of coordinating resources onsite. By providing accurate, real-time data in a visual, 3D context, emergency crews can assess the scene quicker, make better informed decisions and therefore improve the safeguarding of staff and the public. This visual description of the location would include augmented reality markers highlighting risks, 3D layouts of buildings and 2D maps of the wider scene.

Smart technology is also becoming increasingly relevant for Local Authorities. The application's visual capabilities can be used to benefit all departments from highlighting potential risks for social workers on home visits, to overlaying tourist attraction markers in towns or depicting speciﬁc planning information such as Tree Preservation Orders.

Although much of this information is already available through IT systems, the accuracy of its translation relies heavily on human interpretation and communication. The Symphony AR app acts as a common reference point whereby all staff can communicate using the same consistent information. With one click, staff can gain further insight about locations and spatial boundaries, while 3D models of complex buildings can be viewed from any angle, with the ability to zoom into specific areas.

Augmented reality presents significant opportunities for the Public Sector in terms of enabling more accurate, efficient and consistent communication of complex information across multiple departments. In particular, this is because Public Sector address data systems, such as Local Land & Property Gazetteer (LLPG) and Ordnance Survey AddressBase (used by the Emergency Services), tag a location identifier, known as the UPRN (Unique Property Reference Number) to every address.

For Local Authorities, any geospatial or risk information can be recorded against the UPRN, which can be used to provide an accurate description and history of an address that can be shared across multiple divisions - such as council tax, planning, environmental health, and social welfare. Augmented reality presents an opportunity for staff and the public to access relevant information in a visual manner. In addition to enhancing efficiency and reducing risk, it can also be utilised to provide the public with a range of enhanced services, such as depicting tourist attractions, GPs, or even Food Standards Ratings for restaurants on maps.

Similarly, the Emergency Services can overlay risk or socio-demographic information on top of their AddressBase data using the UPRN, which can subsequently be visualised using AR. This includes types of information such as risk information associated to a particular property, chemical storage sites, the location of dangerous dogs, as well as the location of vulnerable residents in a residential block.

Using Aligned Assets' Symphony Location Manager, Local Authorities and Emergency Services can load and configure the data they want to be shown in augmented reality themselves. In doing so, they can display their own spatial data in AR without the need of specialist software developers. Furthermore, by configuring a link to LLPG or AddressBase, that data can then be formatted for display as AR markers.

Aligned Assets MD, Andy Hird, told us, 'The future for augmented reality within the Public Sector is not only a natural step, but one which

has been greatly facilitated due to the significant groundwork laid down by both the UPRN and the associated geographic location against each property. Whatever data your organisation holds, it's likely it relates to a location and that means you could be displaying that information in an augmented fashion to help deliver tangible benefits to staff and your customers. In 2013, it was projected that augmented reality would reach 1 billion people by 2020*. With AR set to be that mainstream, we should all be looking to embrace it.'

If you're planning to attend the UK Mapping Festival, be sure to download the Symphony AR app featuring the UK Mapping Festival in Google Play or the Apple Store to experience it for yourself.

If you'd like to find out more about the Symphony AR app and Symphony Location Manager, call Aligned Assets on 01483 717950 to organise a demo, or go to www.aligned-assets.co.uk

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References

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