ERICSSON

Case story

The Green Planet AR Experience captivates audiences in London, powered by EE

This is the story of a pioneering extended reality venture undertaken by a consortium of partners involving EE, coming together to lay a platform for future innovation and ambition for 5G standalone. Through the joint efforts of the consortium, a truly immersive 5G showcase for consumers has been achieved for the first time in the UK, demonstrating how 5G technology can be used to create new experiences.

This is also an illustration of how communications service providers (CSPs) can explore future commercial opportunities that come with delivering immersive experiences – initially in smaller venues and local events, with the potential of scaling up to wider audiences and broader offerings.

Highlights

Imagine being able to bring the world's most astonishing and picturesque natural environments to central London. As part of a consortium of partners, EE has helped to create a digital immersive experience to achieve exactly that, with the help of Ericsson as its network partner.

Using 5G-powered augmented reality, visitors are taken into a beautifully rendered digital rainforest in real time, teeming with tropical trees, plants, and wildlife. The experience presents a fascinating virtual journey for adults and children alike, giving them the opportunity to witness augmented reality plant and animal life in central London. The journey takes them through six digitally enhanced worlds – including rainforests, freshwater and saltwater worlds, with changing seasons and desert landscapes, culminating in the human story and how we can all affect positive change.

The Green Planet AR Experience, powered by EE is a showcase of what can be done with the latest technological advancements in 5G. It was made possible by the low latency and high bandwidth of a 5G standalone private network, combined with the high-end graphics, edge computing, and augmented reality applications of different consortium partners.

The challenge

Creating a ground-breaking consumer experience powered by EE's 5G network was critical to the thinking behind the project. Using 5G standalone as the platform for all partners to come together and successfully build one of the UK's most innovative 5G use cases, the experience is an example of a project testing how 5G technology can be used by a wide range of sectors, including the creative industries.

Bringing together such a diverse group of partners for the first time onto a large scale 5G project was a challenge like no other. However, being able to demonstrate how the wider eco-system can come together as one project team and deliver a cutting-edge technology experience was a major motivation.

With the mission of using technology to help halt biodiversity loss, sustainability has also been considered a key part of the production. All materials were selected to create a set that could be reused and recycled after the experience closes.

How to capture new 5G business opportunities

To lay the foundation for future innovation and commercial success of 5G use cases at scale is an undertaking that requires collaboration and learning, together with partners and other key stakeholders. How to become a pioneer and game changer, properly exploring the promise of new technology and 5G standalone, is largely unchartered territory.

Being a first mover on 5G standalone connectivity allows EE to take a step forward in exploring exciting opportunities for future collaboration around new and innovative 5G services, such as cloud gaming, AR/VR entertainment, immersive communications, and private network solutions to meet the growing demands of consumers and enterprise customers.

How technology provided the solution

The use case is enabled by a low latency 5G standalone private network, serving as the critical and ultra-reliable mobile backbone. Building on this robust infrastructure, a high-capacity edge computing facility manages the heavy graphical processing.

On the top is an augmented reality application, making the natural world come to life through the visitors´ smartphones. The combined solution enables people to enjoy a seamless virtual journey as they move around the venue.

The result

The experience has proven to be a huge success, showcasing the unique capabilities of 5G standalone and Edge Computing to render beautiful AR graphics in real time – capabilities that will power the next generation of media experiences and consumer applications to come.

Initial batches of tickets were snapped up in a matter of hours as word of the installation spread. The high interest and approval in experience was corroborated by independent researchers at StoryFutures who surveyed the participants and recorded a 96% approval rating, establishing an all-time high for any immersive experience they have surveyed in the UK.

The remarkable level of interest demonstrates the demand that these services can enjoy from consumers, and the value for CSPs to start thinking about such initiatives in terms of their next campaign.

A clear foundation set for a 5G future

The experience has set a benchmark on how to demonstrate the value of 5G standalone to different consumer segments, as well as wider ecosystem partners. Only through embracing the creativity and technology of all partners and the unique characteristics of 5G can an AR/VR future become a realistic ambition. The low latency, high reliability and high bandwidth capabilities of 5G standalone can put the next generation of mobile applications and services into the hands of consumers and bring to life truly high-quality end-user mobile experiences that will be the foundation of our digital future.

An example of a successful collaboration is established

Collaboration is key to take innovative 5G use cases to market, meaning CSPs should involve partners in their efforts to explore and develop new appealing consumer services. Partners such as, content owners, venue owners, app developers, technology suppliers, and integrators are all essential to demonstrate new services. As proven by the EE extended reality case, when all these players come together under a joint goal, there is great potential for new and innovative use cases to come to life.

Statements

"This pioneering project demonstrates the amazing new experiences the latest innovation in network technology can create. Using the capability of Edge Computing and a standalone 5G network developed in partnership with Ericsson, we're able to inspire greater responsibility towards our planet at a time it's never been more important. The Green Planet AR Experience powered by EE 5G is an important stage of our standalone and Edge Compute journeys, as EE continues to deliver industry-leading innovation to power the best experiences."

Greg McCall,
MD of Networks, BT Group

"We're thrilled to combine Ericsson's technology leadership with EE's drive for innovation to deliver The Green Planet AR Experience. It shows how 5G, and especially 5G standalone, can be used to create new immersive experiences for consumers that can help to transform our society and build a better understanding of our planet. It is an excellent demonstration of how technology can be used as a platform for a more connected and sustainable future."

Katherine Ainley,
CEO, Ericsson UK & Ireland