(intel®)

Small Business Innovation

A city government wishes to evaluate the construction of a theater next to a park.

A toymaker wants to analyze the details of a toy that only exists on paper.

An advertising agency needs help to launch a campaign for an electric car that has not yet been built.

How can they visualize all of this?

By using augmented reality to create a live view of a real-world environment whose elements are enhanced by computer-generated input. This service can show the municipality's representatives how the park looks today and add the new theater beside it in 3D. The toymaker can put the virtual toy in a child's hands. The advertising agency can visualize the car in any city.

Companies like TechnoAR have the resources which help others turn their visions and new ideas for the future into reality.

TechnoAR, based in Colombia, is dedicated to creating business solutions through software development and augmented reality (AR). It is a pioneer in the use of AR as a marketing promotion tool.

TechnoAR's clients come from a range of industries like education, tourism, and gastronomy. With the capacity to generate data and add three dimensional elements to the physical world, TechnoAR's services can benefit a wide range of industries.

Since the company was founded a year ago, the three founders of TechnoAR have been actively engaged in growing their business. They constantly research new advances in technology with the objective of optimizing and improving their services. They count on their vast experience with server administration, databases and network administration.

Recently, TechnoAR was selected as a winner of the "Everything is possible with the Intel® Xeon® Processor E3" contest, a promotion from Intel Corporation that gave small businesses the opportunity to grow their business by adding a new server.

CHALLENGES

One challenge that TechnoAR faced as a new company was that it had no IT infrastructure, only the portable computing devices already owned by the company's founders. TechnoAR's growth was limited by its existing hardware platforms, and the company lacked the resources to increase its productivity.

> With the elimination of the dedicated graphics card, less energy is used and processor efficiency is increased.

The cost of improving their infrastructure impeded the growth of their services. After receiving the prize of a new server powered by the Intel® Xeon® E3v3 processor and accompanying software, the founders took the opportunity to expand their business.

SOLUTION

The new Intel® Xeon® E3 Processor family has been developed especially for applications with intensive graphics requirements. Companies like TechnoAR can easily transmit virtual graphics, videos, music and games between storage on devices and the cloud. They can benefit from reduced energy costs in their daily operations, as compared to older server platforms.

TechnoAR also plans to use its server powered by the Intel® Xeon® E3v3 processor to add tests for database storage and administration services for their clients. The expansion of services in the multimedia market puts them on the map as service providers and innovators in Latin America.

RESULTS

Speed increase: According to TechnoAR, their new Intel Xeon Processor E3-based server delivers improved processing speed, better performance in database queries, and greater application stability. The new server is used for multimedia

encoding and decoding of high definition videos, 3D, MJPEG-2, and JPEG and MJPEG-1 graphics. It also provides TechnoAR the flexibility of giving its clients database access.

Latest Generation Encoding: The Intel Xeon Processor E3 family's integrated graphics capabilities can efficiently transcode various formats for content on demand and user-generated media. In an industry highly dependent on graphics, using the Intel® Xeon® E3v3 processor puts TechnoAR at the vanguard of multimedia services.

Optimized Transmission: TechnoAR's Intel® Xeon® E3v3 processor-based server enables the transmission of data and graphics from the data center to any device that is that connected to the same system. That includes videos created by mobile users, video conferences, television transmissions, games, etc. With the elimination of the dedicated graphics card, less energy is used and processor efficiency is increased.

Easy Implementation: It uses a level of hardware abstraction with access to external applications to provide assistance in the encoding and decoding process. The Intel software development platform is compatible with future versions and upgrades of the processor, resulting in a simple installation that supports both the Linux* and Windows* platforms.

AN AUGMENTED FUTURE

Users of mobile devices, games consoles and companies in general are demanding ever more multimedia content. By 2018, it is predicted that up to 90% of internet traffic will be multimedia content.[1] A company that is able to optimize its multimedia will position itself as a leading provider riding the demand wave for these services.

With their Intel Xeon Processor E3 family-based server, TechnoAR has an agile system that combines high speed and availability, whatever the demand. It will have greater competitiveness, stability and certainty in the market. As the system executes all of it processing in memory, TechnoAR has become highly efficient.

According to one of its founders, José Luis Ojeda: "I recommend using an Intel® Xeon® E3v3 processor-based server because of its great performance, stability, reliability and efficiency. It helps us offer a vast range of solutions at a low cost."