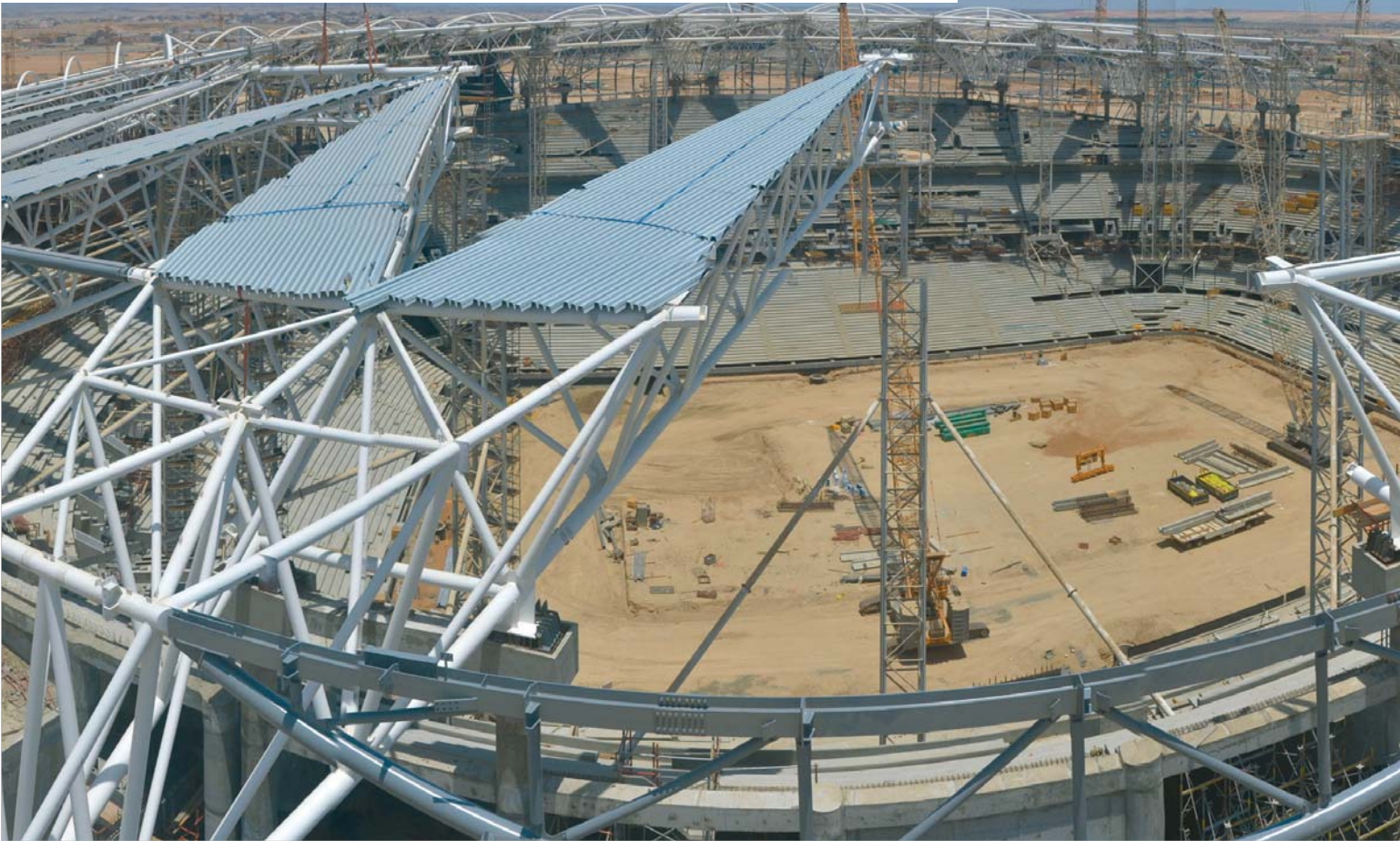


# PERFECT SIGHT, ON SITE

Brian Cury, founder and CEO of EarthCam, speaks to PMV about construction camera technology, and considers how this exciting field is likely to progress over the coming years



In association with affiliates TiME and TiME Qatar, the final conference of this year's Turner Innovation Series has been held in Dubai. This was the last in a series of three conferences organised by Turner to explore Building Information Modelling (BIM).

Experts speaking on the final day of the series offered their opinions on a range of BIM-related subjects, including waste management, facilities management, and sustainability. Brian Cury, CEO and founder of EarthCam, helped to bring proceedings to a close with an eye-opening technical demonstration of construction camera technology.

## MONITOR, DOCUMENT AND PROMOTE

During his presentation, Cury outlined the main benefits to be gained from having high-definition devices professionally installed at construction sites. Such technology allows users to view jobsite activity via live-streamed video links, or to capture megapixel photographs that can be used for documentation and marketing purposes. As Cury explained, construction camera technology enables construction professionals to monitor, document and promote their projects.

A growing number of project managers across the Middle East are beginning to make

use of high-definition, on-site cameras because of the wide-ranging benefits offered by the devices. Firstly, users are able to monitor sites from remote locations, cutting down on travel costs and reducing carbon emissions. The technology also negates the need for multiple parties to meet at the same physical location in order to discuss a project's progress. Secondly, by accurately documenting the construction process from beginning to end – with panoramic photographs consisting of up to one billion pixels – the technology enables project leaders to avoid potential disputes over when particular tasks were completed.

**EarthCam** offers space, air, and ground imaging from 3,000,000ft elevation to 3in interior detail



**1996**  
**EARTHCAM WAS**  
**ESTABLISHED IN**  
**THE UNITED STATES**  
**BY CEO BRIAN**  
**CURY**

However, perhaps the most appealing – and visually arresting – features of construction camera technology are the promotional applications offered by high-quality panoramic photographs and time-lapse videos.

“This is one of the biggest reasons why people want to use webcams on their projects,” Cury told his audience. “They want to be able to promote their work. Nowadays, a company’s Google rating is extremely important, and nothing increases your Google rating better than a live camera feed from your project site to your website.”



■ Cury delivers his final speech of the series in Dubai, UAE.

#### LONG-TERM VISION

Immediately after the final presentation of the conference, PMV was given an opportunity to question Cury on a one-to-one basis. Despite coming straight off the back of an exhausting tour of the Middle East – with presentations in Abu Dhabi, Doha, and Dubai – the EarthCam CEO spoke enthusiastically about his company’s past, present, and future.

“EarthCam originated from a combination of interlinking ideas,” Cury began. “My background is in television and film. When I founded the company back in 1996, I did so because I was intrigued by the possibility of connecting cameras to the internet. In 1995, there were fewer than 500 cameras connected to the internet. Moreover, at that time, transmitting in this way required a satellite and tens of thousands of dollars. Even so, the broadcast potential of this emerging field fascinated me.”

It wasn’t until the turn of the century, however, that the market really began to take this technology seriously, according to Cury.

“After 9/11, people started to recognise the potential applications of webcams,” he said. “Users realised that they could save time and money by viewing things remotely, but in real time. That was when this technology ceased to be a novelty and became a serious business tool. There were clear applications within a huge number of sectors, including construction, transport, and tourism. A picture tells a thousand words, but more importantly, it doesn’t lie. It is what it is; it’s live.”

EarthCam has come a long way since 1996. The company now broadcasts millions of images daily from its global network of cameras. Did

## GIGAPIXELCAM: TECHNICAL SPECIFICATIONS

- Industrial solid-state embedded Linux OS platform with an ultra-efficient ARM9 CPU
- Fail-safe 16GB onboard backup storage
- Next-generation self-healing and auto-recovery technology
- Rugged UV and cut-resistant cable with military connectors
- Lower-profile design to increase precision throughout the camera’s full range of motion
- Compatible with both 10/100 ethernet and transmission over 4G networks
- Thermostatically regulated, corrosion-resistant black enclosure
- User-controllable pan, tilt, and zoom (PTZ), and 640x426 live-streaming video preview
- Capture and share on-demand snapshots in 16MP, 9MP, or 4MP formats
- Nikon optics for superior quality high-dynamic-range (HDR) imaging
- Additional creative effects including architectural miniature, artistic colour sketch, and cinematic black and white
- Maintenance-free wiper to ensure clear images
- Onboard diagnostic LED system
- Auto-generated widescreen panoramas in 54208x13056-pixel format



**Camera options** include solar energy and wireless transmission

# HI-DEF EARTHCAM IMAGE OF MUSHEIREB – HEART OF DOHA



■ Cury's filmic roots have shaped EarthCam as a company.

■ **“Our GigapixelCam can take 100 close-up, high-definition shots simultaneously, and crunch all of that data together...”**

Brian Cury, founder and CEO of EarthCam, Inc.

Cury always envisage that webcam technology would progress to its current level?

“If I thought that it would take as long as it has, I might not have done this,” he conceded. “Originally, we were dealing with dial-up modems and receiving an image approximately every two minutes. However, I was convinced that the internet would become faster and more prevalent in society. In turn, I was confident that webcam technology would improve.

“Fast-forward to 2013 and the technology is barely recognisable,” continued Cury. “Our GigapixelCam can take 100 close-up, high-definition shots simultaneously, and crunch all of that data together to make a single, billion-pixel panoramic photograph. What’s more, it can do all of this in a matter of minutes.”

It’s difficult not to be impressed with the rate at which technology has progressed during this relatively short period of time. Images provided by EarthCam’s high-definition megapixel cameras with 4G connectivity are a far cry from the grainy pictures that were transmitted in the mid 1990s. Just how much further does Cury think this technology can progress?

“Oh gosh; there’s so much more that can be done,” he replied. “It sounds trite to say, but this is the tip of the iceberg. Construction camera technology really is in its infancy. We’ll be able to generate higher quality images within shorter periods of time. I also think that unmanned aerial vehicles could offer exciting applications within this arena. The ability to fly a camera over a project, document it, and transmit that data remotely, could prove incredibly useful.”

In the immediate future, however, Cury is committed to creating increased value for EarthCam customers.

“I want to deliver these tools to a wider audience in a professional and customer-oriented manner,” he concluded. “Our first priority will be to grow the business. As such, EarthCam will open a number of new offices to get closer to its clients. Secondly, we will continue to innovate within fields such as the robotic camera technology. Finally, we have a new, no-frills device called Work Zone Cam. This is a simple ‘do-it-yourself’ system aimed at those looking for a low-cost way to experiment with construction camera technology.” ENR

**Regional projects** include Cleveland Clinic Abu Dhabi, UAE, and The Learning Center, Qatar