

## Architect Firm Streamlines Projects, Ramps up Green Collaboration

### HOK, Inc. uses Cisco TelePresence to facilitate global team participation and reduce travel costs

#### EXECUTIVE SUMMARY

##### HOK CANADA

**Locations:** Toronto, Ottawa, Calgary, Vancouver;

HOK, Inc. has 24 regional offices on 4 continents

**Number of Employees in Canada:** 200+

##### CHALLENGE

- Adhere to stringent corporate green policy
- Cut travel costs significantly
- Enable accurate and visual information exchange during meetings

##### SOLUTION

- Cisco TelePresence room integrated with "Thunder" whiteboard collaboration system
- Cisco Unified Communications
- Cisco WebEx for all client-facing employees

##### RESULTS

- TelePresence cut travel by CDN \$110,000 in first year and over \$200,000 in second year
- Face-to-face meetings with real-time whiteboard sharing enhance collaboration and maintain project accuracy and efficiency
- Unified communications enabled major reduction in long-distance charges

#### Challenge

For HOK, Inc., a global firm specializing in architecture, design, urban planning, and delivery solutions, success comes when employees can envision and deliver sustainable interiors, buildings and communities that exceed clients' expectations. Sustainable design is a core value at HOK. With more than two decades of experience in sustainability, the company incorporates measurable, sustainable outcomes into everything they do. This ranges from innovative, environmentally responsible solutions for clients to annual carbon footprint analyses of every HOK office worldwide.

Operating in Canada since 1997, HOK has four offices nationwide, with Canadian teams also working in Doha, Qatar and Dubai, UAE. More than 200 Canadian HOK staff members deliver workplace, healthcare, education, justice, government, hospitality, retail, science and technology, residential, transportation and aviation, and regional/urban planning projects.

HOK Canada headquarters was the first Leadership in Energy and Environmental Design (LEED) Commercial Interiors (CI) Gold Certified building in Ontario and the company maintains a strict green policy across all aspects of the business. To cut down on emissions from the firm's many printers, plotters and copiers, all equipment is housed in appropriately vented rooms. Natural light helps cut heating and cooling costs. Automatically controlled blinds are lowered at night to conserve heat and raised during the

day to capture sunlight, as required. The entire system is controlled over the local area network over a Cisco IP Network.

The construction of HOK's Toronto office was a critical aspect of the green effort. Stringent waste diversion and reduction, extensive reuse of materials and increased use of locally supplied materials from within 100 kilometers all made an impact. These steps became guidelines that HOK now enforces with all its partners and suppliers.

HOK saves money by printing fewer construction drawings and HOK and their clients agree to limit in-person meetings to a reasonable number. This latter policy requires an effective means of communicating face-to-face, without travel.

To help ensure a consistent vision throughout a project, from overall design concept through to project completion, architects, interior designers, landscape architects, planners, graphic designers, and space programmers work together, drawing on HOK specialists from a network of 24 global offices.

In the past, this level of collaboration required a great deal of travel. Teleconferences were difficult due to the complexity of the work, the size of the teams, and the importance of face-to-face meetings to maintain project accuracy and efficiency.

But with travel came major costs and a bigger carbon footprint than was necessary. The company had already begun to alter its thinking in several areas, including both IT and non-IT equipment purchasing policies, as well as its design and building strategies.

Danny DeLuca, vice president and national information technology manager with HOK Canada, says having a large travel budget was worrisome, especially in 2008 when the market crashed and budget reductions became the norm. "At that time if we were going to spend any money at all it had to be invested very wisely," he says.

HOK already had a whiteboard collaboration system called THUNDER Virtual Flipchart System, by PolyVision, which allows the sharing of information between people speaking on the phone or communicating using Cisco WebEx. Referred to by HOK as a "whiteboard collaboration system on steroids," THUNDER allows users to post and work in real time with many types of data, including AutoCAD, Adobe Graphics Suite, Word, Excel, and PowerPoint files. Using a stylus, a user can mark up, print out, copy or save drawings or documents. However, although users were able to discuss these changes over the phone they could not see each other, leaving too much potential for costly errors.

### Solution

The most transformative technology that HOK installed was Cisco TelePresence™, which the company integrated with THUNDER in its Toronto office to create what it calls its Advanced Collaboration Room (ACR). DeLuca says Cisco TelePresence (which now includes Tandberg's extensive portfolio of offerings following an acquisition in 2010) is in place for Vancouver, Calgary, and Ottawa sites. The mission to deploy TelePresence technology, including multipurpose and immersive endpoints, to the balance of global offices across three continents will be completed in March 2011.

HOK found Cisco TelePresence impactful in reducing in-person meetings. "It's so different from talking to someone on the phone or reading their email," says Terri Robinson, senior vice president, marketing and business development at HOK Canada. When you see someone's face, you catch those subtle nuances you always miss on the phone. You can immediately tell if the person is being serious or making a little joke. These nuances were impossible to interpret before, and it could cause misunderstandings."

**"Cisco TelePresence is a selling feature. We can show the client our collaboration will be effective. Until customers see TelePresence in action, they just don't believe someone can talk on the phone, look at a drawing and get what the tool can do. Customers want to be able to talk about issues live and in real time."**

- Terri Robinson, senior vice president, marketing and business development, HOK Canada

Robinson adds the benefit of the technology is especially obvious when HOK is working on projects with multiple contacts and teams. Currently, the firm is pursuing a major project in Ottawa, with engineers participating from Vancouver, Dallas, Toronto, and Ottawa, and with 17 different consultants globally.

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Impromptu global TelePresence meetings can be organized quickly to talk about operations, presentations, client concerns or pressing issues. Robinson recently used the room in tandem with a client pursuing a project in Montreal. To track down a location, they were able to view Google Maps together. The client was able to highlight additional information for Robinson as well as a brochure about his company in a more personal way than if he were to simply email the documents.

According to Barbara Ciesla, vice president and leader, sustainable design consulting at HOK, TelePresence is used to support HOK's global teams. TelePresence helps global teams form a trust, without ever having met in person. "As we add more people to a group using TelePresence, an instant

rapport is reached. It's amazing. When you meet people in person, you already know them, so you can move to collaborating, instead of getting to know and trust each other," says Ciesla.

In addition to TelePresence, HOK uses Cisco Unified Communications for IP telephony, voice messaging and mobile applications, all of which have led to improved customer care and flexibility for employees.

Extension Mobility enables visiting HOK staff to log into any Cisco IP Phone and appear to be working from their regular office location. With Cisco IP Communicator, laptop users can turn a laptop into a soft phone and work from home or offsite. The company has been using Cisco WebEx since 2000. The company also has Cisco wireless technology installed in all Canadian offices. The wireless network is also optimized for voice, and wireless phones are available for guests who are visiting from other HOK offices. Other guests include clients and consultants who, during longer stays are offered a wireless phone on the IP network with a dedicated number.

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## Results

Today the ACR is used every day, up to five times a day, according to DeLuca. HOK says the technology paid for itself in one year. In the first year, the firm cut travel costs by about CDN \$110,000 and more than CDN \$200,000 in the second year. Globally, the company estimates approximately 260,000 kg of CO<sub>2</sub>, or 204 flights were saved by avoiding travel between HOK offices.

### Quick Interactive Meetings

Cisco TelePresence encourages more interaction among staff in different locations, for which face-to-face conversations can be initiated simply by hitting an extension number in the ACR. This capability has raised productivity while instilling a culture of companywide cooperation.

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Companywide, the ACRs have enabled production and creative teams to work on the same Building Information Models (BIMs) simultaneously. Components of large BIM projects are divided between business units and are worked on separately over time, but collective teams gather regularly to see it all take shape together. The suite of collaboration technologies is augmenting HOK's approach of Integrated Project Delivery and rapidly optimizing processes and increasing productivity.

### New HR Efficiencies

The technology has eased human resource functions as well. DeLuca and others can now interview prospective employees in other cities, speak to staff for corrective action or conduct professional development reviews.

## The Human Touch

Recently, Cisco TelePresence was able to help an HOK employee in a special way. A US-based employee working temporarily in the Toronto office learned that his mother was experiencing health problems. The IT Services Team provided the employee with a laptop and set him up with Cisco IP Communicator so that he could call home on a regular basis with no long distance charges. On occasion, the employee was able to go into the TelePresence room while someone brought his mother to the US-based office so he could see her face-to-face. "Technology helped make an impossible situation somewhat bearable for a time," says DeLuca.

## Reduced Phone Bills

The installation of Cisco Unified Communications with its IP communications capabilities, along with Cisco WebEx for conferencing, has resulted in a significant reduction in long distance charges and an increase in employees' eagerness to pick up the phone and communicate with colleagues in other offices by dialling a four digit extension. "People want to connect, even for no reason at all. It's the human element," says DeLuca. A feature called Least Cost Routing offers additional savings. For example, an employee from the HOK Toronto Office can make a long distance call to a non-HOK destination in San Francisco and that call will automatically be routed through the IP network to HOK San Francisco. The call is then generated locally without long distance fees.

Following a major IPT upgrade performed in February 2011, Cisco Unified Personal Communicator will be deployed to most notebooks by end of calendar Q2, which will enable TelePresence participation from a laptop.

### PRODUCT LIST

- Cisco TelePresence (CTS 1000, C20)
- Cisco Unified Communications
- Cisco WebEx
- Cisco Unified IP Phone
- Cisco Unity® Voicemail
- Cisco IP Communicator & CUPC

### FOR MORE INFORMATION

For more information about HOK, visit:  
<http://www.hok.com>

For more information about Cisco, visit:  
<http://www.cisco.com>

For more information about Cisco TelePresence, visit: <http://www.cisco.com/go/telepresence>



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