

Hive creates plenty of buzz at high-tech Hub

BY CHUCK HOWITT, RECORD STAFF

KITCHENER — Christie Digital unveiled its 3-D immersive environment at the Communitech Hub on Friday, touting it as the “crown jewel” of the company’s contribution to the digital media centre in downtown Kitchener.

The unit, powered by 12 high-definition stereoscopic projectors “that display vast amounts of data in a totally immersive setting,” is formally called the Hive, short for Hub Interactive Visualization Environment.

Comparing it to the holodeck on Star Trek, Bob Rushby, chief technology officer at Christie, said 17 powerful processors built into the Hive can “process tonnes of data in real time.”

Normally this kind of technology would only be available to wealthy companies and research institutions, he said. By donating it to the Hub, a facility in the Tannery building devoted to the commercialization of digital media technology, startups and early-stage companies can test and develop their products and applications more effectively, he said.

Rushby used the example of a shipbuilding company. If the company makes a mistake on a welding process while building the ship, it might not be noticed for weeks. But with Christie’s 3-D environment it can simulate welding processes in a virtual world to anticipate mistakes before they happen, he said.

Other applications for the 3-D technology include medical research, scientific study, oil and gas exploration and computer-aided design projects in automotive and architectural fields, Christie said.

The Hive resembles a three-sided room with visuals projected on the floor, side and rear walls. The visuals displayed on Friday consisted of a blue sports car with gull-wing doors sitting in a large open square, surrounded by buildings.

By donning 3-D glasses equipped with small antennas, the user can walk around three sides of the car and even look inside the vehicle.

Christie has sold similar 3-D units to Weill Cornell Medical College in New York City and the Louisiana Immersive Technologies Enterprise in Lafayette, La.

Rushby would not disclose the cost of the Hive, noting it was “purpose-built” for the Hub using equipment and expertise donated by Christie. Installation began in the spring.

The project was a multi-level effort at Christie involving the Kitchener company’s mechanical, audiovisual and applications engineering staffs, said Charles Fraresso, senior project manager for the Hive.

Some of the installation cost was covered by \$280,000 in funding from FedDev Ontario, Ottawa’s economic development agency for southern Ontario.

Other Christie equipment in the Hub includes 3-D projectors and video processors to create a wraparound effect in the event centre, “micro tiles” at the reception area for digital signage, and a multi-computer cluster developed with HP Canada to drive and deliver images to all the screens.

Kitchener-Waterloo MP Peter Braid said the Hive and Communitech Hub make him “really excited” about the future of the local technology sector.

Communitech estimates the Hub will hatch 100 new companies over the next five years and trigger “exponential growth in existing companies,” Braid said.

Kitchener Mayor Carl Zehr said the Hive and the Hub are an excellent example of collaboration among government and the local technology community. “I’ve known few projects that have had as many partnerships.”

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Peter Lee, Record staff
Charles Fraresso, senior project manager with Christie Digital Systems, demonstrates the 3-D visual technology in the Hive to Kitchener-Waterloo MP Peter Braid.