Thank you for reading the Boston Globe. Know someone who might want to subscribe as well? Click here.

Business

The Boston Blobe

Latest iRobot creation will bring the boss to you

Telepresence robot includes technology from Cisco Systems

By Michael B. Farrell | GLOBE STAFF JUNE 10, 2013

Now, it will be even harder to escape the boss.

The Bedford robot maker iRobot Corp. will launch its latest product on Monday: a 5-foot, 5-inch autonomous machine with a video monitor that will allow executives to remotely beam themselves into an office or to a factory floor from just about anywhere and interact with employees in real time.

The Ava 500, which iRobot will unveil at the InfoComm technology conference in Florida, is a so-called telepresence robot that has a 21.5-inch screen for a "head" — a bit like Skype on a rolling pedestal.

The person controlling Ava from a remote location can communicate directly over the screen, interacting with people at their offices, in meetings, even in the hallway.

And if iRobot and other robot makers are successful at selling these kinds of office machines, workers could soon be taking orders from a new kind of onedimensional robot boss.

"You can't be in two places at once. But with a robot,



PAT GREENHOUSE/GLOBE STAFF

Colin Angle, CEO of iRobot, with the Ava 500. Youssef Saleh, an iRobot vice president, is seen on sure you can," said Michael Gennert, head of robotics engineering at Worcester Polytechnic Institute, who has been tracking the evolution of business robots.

Now, he said, busy managers "don't have to go through the joys of travel to get somewhere."

Of course, Ava isn't just for the boss; it can be used in many circumstances for employees at different locations to communicate with each other. the display screen, which is a Cisco product.

'It's a market that we believe will be very big in time but will take awhile for people to understand the benefits.'

"

For now, Ava can be activated remotely only with an

iPad, and then directed to a location within the site where it has been placed. Ava's software will have mapped out that location so that it can find its own way to an employee's desk or meeting room. Since it doesn't have arms, Ava can't knock on doors or push an elevator button — but that might be coming next, said Colin Angle, iRobot's chief executive. Nor can it go up or down stairs.

The company, best known for its Roomba vacuum cleaners, has been working to develop telepresence robots for about 12 years. But the networking technology needed to make these robots work well enough for large businesses has just recently become widely available.

IRobot has teamed up with Cisco Systems Inc. to power the video conference components of Ava to enable business-grade communications. "It definitely changes what it means to be somewhere," Angle said. "It's a different approach to telecommuting."

The company took great pains to avoid any creep-out factor that can be associated with robots that look too human, Angle said. Ava is neither so tall that it would appear intimidating nor so short the person controlling it would "feel like the midget looking up at the world."

Sensors prevent Ava from getting too up-close and personal with the people it's interacting with and ensure that Ava does not bump into people as it navigates around cubicles and down hallways.

This kind of telepresence robotics technology is still costly — Ava will cost about \$2,500 a month for a business to operate. Similar robots are already showing up in hospitals to allow specialists in remote locations to treat patients. At least a half-dozen companies, including iRobot, produce these kinds of robots, which can cost as much as \$16,000.

"It's a market that we believe will be very big in time but will take awhile for people to understand the benefits," said Ned Semonite, vice president of marketing and product management for VGo Communications Inc., a Nashua robotics company that makes a telepresence robot, the VGo. Several hundred of the company's robots, priced about \$6,000, are in use. Semonite uses his company's 4-foot-tall VGo while traveling to check in with his colleagues back at the office and keeps one of the robots at his home to chat remotely with his family.

"I can be there when my wife is making dinner," he said.

While robots may become commonplace in the office of the future, that future is a long way off, said Frank Tobe, publisher of The Robot Report.

"Right now, they provide useful remote presence for techies and disabled and the harried," Tobe said.

And though they may conjure up sci-fi images of robots taking over the world, or Big Brother always keeping an eye on workers, Tobe said these robots are more about making teleconferencing much more mobile.

"I don't view it as the stuff of Hollywood, with negative connotations," said Dave Evans, the chief futurist for Cisco, which is working with iRobot on its Ava products.

"It's all about extending our reach."

Michael B. Farrell can be reached at michael.farrell@globe.com.

© 2013 THE NEW YORK TIMES COMPANY