



The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

LOCATION:
New York, NY, US

ORGANIZATION:
VGo

YEAR:
2011

ORGANIZATION URL:
<http://www.vgocom.com>

STATUS:
Laureate

PROJECT NAME:
VGo Robotic Telepresence

CATEGORY:
Innovation

PROJECT OVERVIEW

VGo Communications was founded in 2007 by experienced successful veterans of visual communications and robotics industries who understood the benefits of being able to replicate oneself in a desired location while physically being in another. Videoconferencing and high end telepresence solutions are doing that successfully today but are constrained to a conference room or office. Remote employees, executives, doctors, students and others could be more productive if they could independently move around as if they were there in person. Solutions were available in the market but were extremely expensive, complex, and often threatening to those around them due to their size, weight and form factor. Leveraging the recent trends of widespread wireless high speed networks, lower specialized component costs and the universal acceptance of video as a communications medium enabled the engineers at VGo create a solution that is affordable, simple to install and operate, and pleasing to look at which is important in order to be accepted as a new technology that is so highly visible in the environment where it is used. Most people have never seen a robot approaching them (seemingly on its own). For some it can be very disconcerting. By all accounts, the company has succeeded on every level. Another major objective was to give the remote individual complete independence from the people who were in the location where they wanted to visit. With a video call, participants are dependent on the people on each side of the call. People have to be in both locations for it to work. Someone must make sure everything is ready, manage the connection, position the cameras, adjust volumes etc. Even with Skype on a laptop – someone must be responsible for carrying it around and providing the proper view. With VGo, an individual's presence is established in a distant facility such that they can interact and perform their job in ways not previously possible. Now a person can see, hear, be seen, be heard and move around in any remote site – just as if they were there. People have 100% control of their remote "self" – they go where they want, when they want whether or not people may or may not be present. Primary applications include healthcare, monitoring and remote management. Businesses will increase productivity of remote and

travelling employees. Healthcare providers can deliver lower cost services and improved quality of care. Small company owners who are often driving business development, can check on their operations and manage at a distance.

SOCIETAL BENEFITS

VGo increases human productivity while reducing carbon footprints. VGo improves quality of life by enabling individuals whose jobs require travel to decrease time away from families and loved ones. VGo delivers a new way for people to stay in touch which is a step closer to in-person social interaction.

PROJECT BENEFIT EXAMPLE

VGo's are benefiting a wide range of organizations today. Enterprise, education and healthcare organizations have been the primary early adopters. One of the more articulate VGo users is a homebound high school student in Knox City Texas. Lyndon Baty had a kidney transplant a few years ago. In the summer of 2010, his body began to reject the kidney and his immune system has been severely compromised. Lyndon will eventually be a candidate for another kidney but in the meantime he cannot attend school due to risk of infection. This fall he was scheduled to start high school as a freshman but instead he remained home and was home schooled by his parents. He missed his friends and his parents found that home schooling was difficult. A VGo reseller, SKC, who provides Texas schools with videoconferencing, introduced VGo to the school district in December. The VGo was delivered to the school during the Christmas holidays and additional wireless access points were installed. On January 4, 2011, from his desk in his home, Lyndon attended high school for the first time. School faculty, staff and students were all supportive. Lyndon could see, hear, talk and move around just as if he were there. Except for having to ask someone to open a door, Lyndon is completely independent – no one needs to “tend” to him. The biggest problem Lyndon faced was navigating through a school building that he had never really seen. Thanks to a fire drill map he soon overcame that small obstacle. He raises his hand in class by turning on a set of lights. He can also capture whiteboard and paper content by using VGo to take a high-resolution snapshot that is immediately transferred back to him and stored on his desktop PC for reference later. Lyndon now attends four morning classes a day. Before VGo, his parents were worried about depression given the lack of interaction with other kids and the heavy burden of having a life threatening health condition. Since VGo, his parents have seen a remarkable change in Lyndon's demeanor as social interaction has re-entered his life. Lyndon said, “It's absolutely amazing, you know? I never thought that with this, when I'm sick, that I would ever have any interaction, much less this kind. I feel like I'm right there, just right there at the school doing everything that they are. It is just like I am there in the classroom.” “This is the best thing that's happened to me since my kidney transplant” Lyndon's story has recently received nationwide media attention which has spread awareness of VGo and its benefits to special educators in other school districts as well as parents who are advocating for their children. We expect more and more students to be attending class via VGo in the near future.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

It might be helpful to understand a little more about how VGo works. VGo utilizes standard ubiquitous Wi-Fi and broadband networks for its remote



operation, allowing users to leverage their existing IT environment. Remote users can use their PCs - wired or wireless - via the included VGo PC App, a specialized downloaded application that transfers their presence to the VGo and brings the remote location to them. VGo's underlying technology is very sophisticated – but to the user, it's very simple. Vgo is continually connected to a purpose built cloud-computing network that keeps track of its availability and initiates active presence upon request by a remote user. VGo connects to the network using WiFi. The remote user selects where they want to go from a list of available Vgos on their VGo PC App running on their internet-connected PC. The VGo PC App enables a user to see and hear everything at the distant location as well as drive around. The VGo PC App also transmits the remote user's image and voice to establish their active presence in that distant location. VGo is uniquely integrated with a camera, microphones, and video display - all on a light-weight, motorized, stylish, remote-controlled platform. Vgo is optimized at 4 feet tall so it works equally well when interacting with people who are sitting or standing. And of course you can look anywhere – up, down, all around. You can move delicately around tight spaces, slowly pan around the room or join a colleague walking down the hall. Vgo is battery powered and can run up to a full day between charges. When it's time to recharge – just click the "Dock" button and VGo automatically positions itself on its charging dock (included). VGo is designed for indoor environments. You can go wherever WiFi is present within in building. It can easily be carried up or down stairs, or you can have one or more Vgo's on each floor where a remote person needs to conduct work. VGo can be shared by a set of people or dedicated to a single person using standard web accounts and permission settings maintained by you, or by someone in your organization or by your reseller - just as applications such as shared printing, email, and instant messaging are managed today. VGo is affordable. Organizations of all sizes can take advantage of VGo's benefits. Users can be driving around remote locations for under \$6,000 plus an annual service contract.