

WINTERGREEN RESEARCH, INC.

**Worldwide Telepresence Market Shares, Strategies, and  
Forecasts, 2009 to 2015**

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**Telepresence Serves the Globally Integrated Enterprise**

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*Picture by Susie Eustis*

**MOUNTAINS OF OPPORTUNITY**

**WinterGreen Research, Inc.  
Lexington, Massachusetts**

[www.wintergreenresearch.com](http://www.wintergreenresearch.com)

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**CHECK OUT THESE KEY TOPICS**

**TELEPRESENCE ROBOTS**  
**TELEPRESENCE MARKET SHARES**  
**TELEPRESENCE MARKET FORECASTS**  
**TELEPRESENCE SOLUTION**  
**TELEPRESENCE MANUFACTURING**  
**TELEPRESENCE GOVERNMENT**  
**TELEPRESENCE HEALTHCARE**  
**TELEPRESENCE TELEMEDICINE**  
**TELEPRESENCE SECURITY**  
**VIDEO COLLABORATION**  
**INFOCOMMUNICATIONS**  
**TELEPRESENCE BY REGION**  
**TELEPRESENCE TCO**  
**TELEPRESENCE ROI**

**Video Advances In Technology**

**Telepresence Increases Resolution and Image Clarity**

**Telepresence Videoconferencing**  
**Telepresence Robot Camera**  
**Video Robot**  
**Autonomous Video Robot**  
**Motorized Video Robot**

***OPPORTUNITY ABOUNDS***

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## **Worldwide Telepresence Market Shares, Strategies, Forecasts, 2009-2015**

**LEXINGTON, Massachusetts (February 22, 2009) – WinterGreen Research announces that it has a new study on worldwide telepresence markets. Worldwide telepresence is poised to achieve significant growth as high definition video and audio are used for conferencing. Telepresence is available from conference rooms, executive offices, PCs, and web cam equipped robots. Economies of scale drive market growth. The return on investment (ROI) occurs within 8 months typically. Implementation of systems is anticipated to drive market growth at a breathtaking pace.**

**Telepresence is next generation high definition TV videoconferencing. Telepresence leverages high definition video and high definition audio to support collaboration across distance. People located remotely can communicate effectively because of the compelling experience provided by HD TV.**

**Telepresence systems connect people through the HD TV. They support social networking. They can be used to share experience when people are located remotely.**

**The bigger screens, the audio clarity, the visual clarity are compelling. They work together to provide a more lifelike communication experience. Collaboration is facilitated by enabling sharing of documents and power point presentations as if people were in the same room. Telepresence systems connect to a PC and send the signal to the high definition PC. When connected to a robot, the social networking systems can be used to follow a person around and say “Where did you go.” This is immediately great for interacting with children from remote places.**

**Telepresence is an emerging market segment driven by the need for geographically dispersed groups to communicate as if they are all in the same room. The telepresence solutions provide an immersive collaboration experience where remote participants are lifelike in size and voice and visual clarity.**

**Telepresence solutions are standards-based and are available in a wide array of configurations that include full eight or 16-foot high definition cinematic views, high definition sound, and eye connect technology that places the camera at eye level for more natural face-to-face interaction. The telepresence solutions are available in multiple configurations accommodating from four to 28 people.**

**At the high end, complete telepresence solutions have list prices ranging from US\$199,999 to US\$695,000. At the low end, Polycomp has software for \$155 that permits business people to communicate through the PC on a big screen HD TV to hold virtual meetings.**

**Organizations that postpone essential technology deployments do so at their peril. Technologies including telepresence and virtualization make business more efficient.**

**Emerging trends like cloud computing, offer new efficiencies and reduce the need for capital expenditure. IT productivity technologies continue to advance into the enterprise. The enterprise is positioned to manage changing market conditions. The impact of Internet-based video and telepresence in business cannot be ignored.**

**U.S. businesses spend \$179 billion a year on corporate travel. TelePresence opportunity for the business segment, represents efficiency of communication. The quantum improvement in quality is what makes it feasible for telepresence to cut into travel budgets. This, in combination with the severe worldwide economic downturn is what makes it compelling for businesses to consider using telepresence.**

**Flexibility is provided for the organization telepresence. The solution provides a two-screen or three-screen systems that fits into any existing conference room and accommodates four to six participants. The solution features broadcast quality, HD video at 30 or 60 frames per second, 46-inch HD telepresence displays, pod microphones, advanced audio processing system, and full collaboration through picture-in-picture (PIP) or an optional external display. The Teliris Express Telepresence™ solution requires no room build-out and is compatible with Teliris' collaboration options for flexibility.**

#### **TelePresence Supports Body Language As Business Language**

**Communicating across language and cultural boundaries can be challenging. Being at a meeting in person gives optimum benefits. Cisco TelePresence allows meeting “in person” with customers, vendors, and partners at the touch of a button.**

**The quality of the experience is vital. Customers and business partners expect understanding. Real understanding involves subtext and context. Telepresence leverages the fact that more than 60 percent of communications is nonverbal.**

### **Sales Calls Need Real People In Person**

**One of the things telepresence does not solve is that in a sales call it is harder to say no to a real sales person than to an image fo that person on a device. Thus sales calls generally need to be made in person. But there are many aspects of a sales call that can be managed using telepresence.**

**Information from experts, and communication of basic information on a power point can often be done remotely. Lots of details can be ironed out remotely. Relationships depend on communication and continuity.**

### **WowWee Telepresence Robot**

**WowWee, an Optimal Group company (NASDAQ:OPMR), is a leading designer of hi-tech consumer robotic and entertainment products. WowWee Rovio personal tele-presence robot is marketed as a home sentry device. It is a remotely controlled mobile web cam. It works off a PC computer with a broadband wireless Internet connection at the location where Rovio is to be used. The robot can then be controlled by any remote internet-enabled device.**

**The Rovio sends back both audio and TV-resolution video streamed in MPEG4 format. It has a two-way speaker/microphone setup that allows the remote user to "talk" with entities on the robot-end of the arrangement. It can also take snapshots and find its own way back to its recharging base. The robot is priced at \$300.**

**The ROVIO allows creating up to 10 'paths' or sequences, and playing them back on command. Each path can contain several actions, like driving a route, changing the camera elevation, or taking and emailing a photo. This permits definition of regular surveillance tasks the robot can perform. The difference between a surveillance robot and a fixed camera is significant. The robot can be send to investigate a situation that is questionable.**

**Security robots are likely to be very useful for police and fire work. Tthey can be deployed almost instantly and go to investigate where it is not safe for a person to go.**

**The ROVIO mobility platform consists of three powered wheels. The wheel design enables movement in any direction - forward, back, shift left or right, rotate slightly or 180 degrees, or spin in a circle. There is a button control.**

The motion panel is logical and simple to use. The Rovio icon joystick can be dragged in any direction. Large white arrows make it move forward, back, or move laterally left or right, as long as the user holds them down. The blue arrows at the top rotate Rovio slightly clockwise or counter-clockwise. Blue dots around the outside quickly rotate the robot to a preset angle.

The economic downturn is having a negative effect on prices. Large deals in video conferencing are taking longer to close, with customers requiring multiple levels of approval. Checks with resellers show that the months of January 2009, December 2008, and November 2008 were progressively slower, with sales down from October 2008.

But, the markets continue to grow. The first benefit is cost. Supporters say telepresence can drive savings right to the bottom line by reducing travel expenses. Client retention is a benefit, as telepresence allows companies to create a stronger bond with their clients. They are able to meet more frequently with their clients spread around the globe, and telepresence offers a richer dialogue and greater collaboration than phone calls and e-mails. The same is true for interactions with partners, with distributors, supply chain companies, and resellers. Everyone benefits from a richer, more sophisticated level of collaboration.

ROI can build a business value case. For pharmaceutical research and development if telepresence takes three months out of the development cycle for a new drug, there is significant increased revenue to a company. The cost-cutting power of telepresence is making it an attractive strategic investment that can be documented in an ROI analysis.

The American Electronics Association released a report as part of Earth Day that makes a strong case for telecommuting. The study found that if all employees in the U.S. whose positions allowed it worked from home two days a week, the demand for gasoline would drop by 1.35 billion gallons. Travel reduction is not just about airplanes, but about commuting as well. Conferencing and collaboration could play a major role.

According to Susan Eustis, lead author of the study, "When teams can have access to video network technology, it is like the Internet. More work gets done. Productivity increases by quantum amounts. The ability of a team to reach out to another group doing similar work, or which is part of a supply chain, or which has complementary design capability is not something that can happen without telepresence. Telepresence enables communication that would not happen otherwise."

Markets for telepresence equipment at \$764.8 million in 2008 are anticipated to reach \$4.7 billion by 2015, growing in response to demand for a more efficient mode of communication. Economies of scale leverage the high definition video and audio components, making telepresence possible.

## Telepresence Companies Profiled

### Telepresence Market Leaders

Polycom  
Cisco  
Teliris  
Hewlett Packard  
Tandberg  
Optimal Group / WowWee

### Telepresence Market Participants

#### Telepresence Company Profiles

Aethra  
Avistar  
CinemaWorks  
D-Link  
eBay  
Emblaze-VCON  
HaiVision Systems  
Huawei  
IBM  
Kedacom Technologies  
LifeSize  
NEC  
Nortel  
Radvision  
LifeSize and AETHRA  
SightSpeed  
Sony  
Tata  
Telanetix  
Vidyo  
VTEL Products  
ZTE

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### REPORT METHODOLOGY

THIS IS THE 404TH REPORT IN A SERIES OF MARKET RESEARCH REPORTS THAT PROVIDE FORECASTS IN COMMUNICATIONS, TELECOMMUNICATIONS, THE INTERNET, COMPUTER, SOFTWARE, TELEPHONE EQUIPMENT, HEALTH EQUIPMENT, AND ENERGY. THE PROJECT LEADERS TAKE DIRECT RESPONSIBILITY FOR WRITING AND PREPARING EACH REPORT. THEY HAVE SIGNIFICANT EXPERIENCE PREPARING INDUSTRY STUDIES. FORECASTS ARE BASED ON PRIMARY RESEARCH AND PROPRIETARY DATA BASES. FORECASTS REFLECT ANALYSIS OF THE MARKET TRENDS IN THE SEGMENT AND RELATED SEGMENTS. UNIT AND DOLLAR SHIPMENTS ARE ANALYZED THROUGH CONSIDERATION OF DOLLAR VOLUME OF EACH MARKET PARTICIPANT IN THE SEGMENT. INSTALLED BASE ANALYSIS AND UNIT ANALYSIS IS BASED ON INTERVIEWS AND AN INFORMATION SEARCH. MARKET SHARE ANALYSIS INCLUDES CONVERSATIONS WITH KEY CUSTOMERS OF PRODUCTS, INDUSTRY SEGMENT LEADERS, MARKETING DIRECTORS, DISTRIBUTORS, LEADING MARKET PARTICIPANTS, OPINION LEADERS, AND COMPANIES SEEKING TO DEVELOP MEASURABLE MARKET SHARE. OVER 200 IN DEPTH INTERVIEWS ARE CONDUCTED FOR EACH REPORT WITH A BROAD RANGE OF KEY PARTICIPANTS AND INDUSTRY LEADERS IN THE MARKET SEGMENT. WE ESTABLISH ACCURATE MARKET FORECASTS BASED ON ECONOMIC AND MARKET CONDITIONS AS A BASE. USE INPUT/OUTPUT RATIOS, FLOW CHARTS, AND OTHER ECONOMIC METHODS TO QUANTIFY DATA. USE IN-HOUSE ANALYSTS WHO MEET STRINGENT QUALITY STANDARDS. INTERVIEWING KEY INDUSTRY PARTICIPANTS, EXPERTS AND END-USERS IS A CENTRAL PART OF THE STUDY. OUR RESEARCH INCLUDES ACCESS TO LARGE PROPRIETARY DATABASES. LITERATURE SEARCH INCLUDES ANALYSIS OF TRADE PUBLICATIONS, GOVERNMENT REPORTS, AND CORPORATE LITERATURE.

FINDINGS AND CONCLUSIONS OF THIS REPORT ARE BASED ON INFORMATION GATHERED FROM INDUSTRY SOURCES, INCLUDING MANUFACTURERS, DISTRIBUTORS, PARTNERS, OPINION LEADERS, AND USERS. INTERVIEW DATA WAS COMBINED WITH INFORMATION GATHERED THROUGH AN EXTENSIVE REVIEW OF INTERNET AND PRINTED SOURCES SUCH AS TRADE PUBLICATIONS, TRADE ASSOCIATIONS, COMPANY LITERATURE, AND ONLINE DATABASES. THE PROJECTIONS CONTAINED IN THIS REPORT ARE CHECKED FROM TOP DOWN AND BOTTOM UP ANALYSIS TO BE SURE THERE IS CONGRUENCE FROM THAT PERSPECTIVE.

THE BASE YEAR FOR ANALYSIS AND PROJECTION IS 2008. WITH 2008 AND SEVERAL YEARS PRIOR TO THAT AS A BASELINE, MARKET PROJECTIONS WERE DEVELOPED FOR 2009 THROUGH 2015. THESE PROJECTIONS ARE BASED ON A COMBINATION OF A CONSENSUS AMONG THE PRIMARY CONTACTS COMBINED WITH UNDERSTANDING OF THE KEY MARKET DRIVERS AND THEIR IMPACT FROM A HISTORICAL AND ANALYTICAL PERSPECTIVE. THE ANALYTICAL METHODOLOGIES USED TO GENERATE THE MARKET ESTIMATES ARE BASED ON PENETRATION ANALYSES, SIMILAR MARKET ANALYSES, AND DELTA CALCULATIONS TO SUPPLEMENT INDEPENDENT AND DEPENDENT VARIABLE ANALYSIS.

**YOU MUST HAVE THIS STUDY**

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## **ABOUT THE COMPANY**

**WINTERGREEN RESEARCH**, RESEARCH STRATEGY IDENTIFIES MARKET TRENDS THROUGH READING MARKET MATERIALS AND INTERVIEWING OPINION LEADERS. **WINTERGREEN RESEARCH TEAM** WORKS TO GATHER PRIMARY INFORMATION FROM COMPANY INTERVIEWS, INDUSTRY MATERIALS, AND COMPANY DOCUMENTS TO WRITE MARKET RESEARCH STUDIES FROM AN INDEPENDENT PERSPECTIVE. THE ABILITY, TO THINK ABOUT MARKET TRENDS IS ENHANCED BY DOING IT OVER AND OVER FOR MANY DIFFERENT MARKETS. THAT IS WHAT **WINTERGREEN RESEARCH** IS ALL ABOUT: READING AND THINKING IS AN ESSENTIAL ASPECT OF COMPETITIVE ANALYSIS. TALKING TO OPINION LEADERS IS AN ESSENTIAL ASPECT OF PRODUCING GOOD, RELIABLE, INDEPENDENT DATA.

BY READING THE ELECTRONIC EQUIVALENT OF 40 FEET OF PAPER, **WINTERGREEN RESEARCH** SENIOR ANALYSTS CAN LEARN A LOT MORE ABOUT MARKETS. IDENTIFICATION OF MARKET TRENDS IS A HIGH PRIORITY AT **WINTERGREEN RESEARCH**. AS WITH THE VALUE PROPOSITION FOR COMPETITIVE ANALYSIS COMING FROM GETTING PRIMARY INPUT FROM A RANGE OF INDUSTRY PARTICIPANTS AND OBSERVERS.

**WINTERGREEN RESEARCH**, FOUNDED IN 1985, PROVIDES STRATEGIC MARKET ASSESSMENTS IN TELECOMMUNICATIONS, COMMUNICATIONS EQUIPMENT, HEALTH CARE, INTERNET AND ADVANCED COMPUTER TECHNOLOGY. INDUSTRY REPORTS FOCUS ON OPPORTUNITIES THAT EXPAND EXISTING MARKETS OR DEVELOP MAJOR NEW MARKETS. THE REPORTS ASSESS NEW PRODUCT AND SERVICE POSITIONING STRATEGIES, NEW AND EVOLVING TECHNOLOGIES, AND TECHNOLOGICAL IMPACT ON PRODUCTS, SERVICES, AND MARKETS. MARKET SHARES ARE PROVIDED. LEADING MARKET PARTICIPANTS ARE PROFILED, AND THEIR MARKETING STRATEGIES, ACQUISITIONS, AND STRATEGIC ALLIANCES ARE DISCUSSED. THE PRINCIPALS OF **WINTERGREEN RESEARCH** HAVE BEEN INVOLVED IN ANALYSIS AND FORECASTING OF INTERNATIONAL BUSINESS OPPORTUNITIES IN TELECOMMUNICATIONS AND ADVANCED COMPUTER TECHNOLOGY MARKETS FOR OVER 30 YEARS.

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**ABOUT THE PRINCIPAL AUTHORS**

**ELLEN T. CURTISS**, TECHNICAL DIRECTOR, CO-FOUNDER OF WINTERGREEN RESEARCH, CONDUCTS STRATEGIC AND MARKET ASSESSMENTS IN TECHNOLOGY-BASED INDUSTRIES. PREVIOUSLY SHE WAS A MEMBER OF THE STAFF OF ARTHUR D. LITTLE, INC., FOR 23 YEARS, MOST RECENTLY AS VICE PRESIDENT OF ARTHUR D. LITTLE DECISION RESOURCES, SPECIALIZING IN STRATEGIC PLANNING AND MARKET DEVELOPMENT SERVICES. SHE IS A GRADUATE OF BOSTON UNIVERSITY AND THE PROGRAM FOR MANAGEMENT DEVELOPMENT AT HARVARD GRADUATE SCHOOL OF BUSINESS ADMINISTRATION. SHE IS THE AUTHOR OF RECENT STUDIES ON WORLDWIDE TELECOMMUNICATIONS MARKETS, THE TOP TEN INTERNET EQUIPMENT COMPANIES, THE TOP TEN CONTRACT MANUFACTURING COMPANIES, AND THE TOP TEN TELECOMMUNICATIONS MARKET ANALYSIS AND FORECASTS.

**SUSAN EUSTIS, PRESIDENT**, CO-FOUNDER OF WINTERGREEN RESEARCH, HAS DONE RESEARCH IN COMMUNICATIONS AND COMPUTER MARKETS AND APPLICATIONS. SHE HOLDS SEVERAL PATENTS IN MICROCOMPUTING AND PARALLEL PROCESSING. SHE HAS THE ORIGINAL PATENTS IN ELECTRONIC VOTING MACHINES. SHE HAS NEW PATENT APPLICATIONS IN FORMAT VARYING, MULTIPROCESSING, AND ELECTRONIC VOTING. SHE IS THE AUTHOR OF RECENT STUDIES OF THE SERVICES ORIENTED ARCHITECTURE, CONTENT MANAGEMENT, MID SIZE BUSINESS MIDDLEWARE, WORLDWIDE ENERGY MARKETS, SOLAR UTILITY MARKETS, SOLAR TECHNOLOGY MARKETS, THIN FILM BATTERY MARKETS, WEBCAM MARKETS, REGIONAL BELL OPERATING COMPANIES<sup>1</sup> MARKETING STRATEGIES, INTERNET EQUIPMENT, BIOMETRICS, A STUDY OF INTERNET EQUIPMENT, WORLDWIDE TELECOMMUNICATIONS EQUIPMENT, TOP TEN TELECOMMUNICATIONS, DIGITAL LOOP CARRIER, WEB HOSTING, WEB SERVICES, NANOTECHNOLOGY, AND APPLICATION INTEGRATION MARKETS. MS. EUSTIS IS A GRADUATE OF BARNARD COLLEGE.

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