HP Halo Telepresence Solution drives efficiency, environmental savings

While it may seem as though one person's reduced travel wouldn't have a huge impact on the environment, the cumulative effect of many individuals choosing to use Halo telepresence over travel could have a profound impact in reducing air travel demand and therefore CO_2 emissions.

HP customer case study: HP solution sets new standard for virtual meetings, reducing the need for travel while facilitating worldwide collaboration

Industry:
Telepresence

Objective:
Enable meaningful distance collaboration for product development, manufacturing and marketing.

Approach:
HP Halo Telepresence solution brings together employees from around the world for virtual meetings, dramatically reducing the need for travel.

IT improvements:
- Lifelike virtual meeting experience
- Real-time, high-quality voice, video and data links.

Business benefits:
- Effective collaboration among geographically separated teams and individuals
- Reduced need for business travel, with financial and environmental benefits
- Improved productivity.

Environmental concerns are increasingly driving corporate and customer decision-making. Recognizing the consequences of inaction for the planet as well as for their own long-term viability, businesses are proactively seeking alternative ways of doing business that are more environmentally responsible.

Often, people assume that being "green" means added cost, and possibly making a sacrifice in effectiveness or quality. But what if a business could increase both its efficiency and its environmental stewardship?

HP products and services are helping businesses do both. HP's Halo Telepresence Solutions are one such offering. HP Halo has the potential to dramatically reduce business travel for one-on-one and small group meetings — producing substantial cost savings and helping to significantly reduce the carbon footprint for those who choose Halo over business travel.

What is Halo?
HP Halo is a virtual meeting tool that gives users a "tele-immersive" experience. It goes beyond phone and video conferencing to create a lifelike encounter so natural that many users report forgetting whether they met a colleague in person or over Halo.

"HP Halo is a response to business globalization," says Steve Jewell-Larsen, Director of Manufacturing for HP Halo Telepresence Solutions. Today's multinational corporations literally do business around the clock and around the world. Senior managers spend countless hours traveling the globe — at a major cost in dollars and lost productivity, and with a major impact on the environment.

Halo can eliminate the need for much of that travel. A survey of frequent Halo users from several business groups within HP indicates they have reduced travel within their departments by roughly 43 percent. One of these frequent Halo users, HP's top human resources executive Marcela Perez de Alonso, uses Halo to conduct preliminary job interviews. She estimates its use has shaved more than $300,000 a year from her department's travel costs, while also saving wear and tear on traveling executives and job candidates. As more and more executives take this approach, the impact will likely be seen in a much more profound way: a better environment through fewer CO_2 emissions. While it may seem as though one person's reduced travel wouldn't have a huge impact on the environment, the cumulative effect of many individuals choosing to use Halo telepresence over travel could have a profound impact in reducing air travel demand and therefore CO_2 emissions.

Environmental impact: dramatic CO_2 reductions
Just what is the environmental impact that can be realized through Halo? Consider this: flying one person from New York to London and back generates over 3000 pounds of carbon dioxide.[1] Eliminating that 3000 pounds of CO_2 is the equivalent of taking more than 90 cars off US roads for one day.[2] Put another way, it would take 1,222 mature trees (1.7 acres) an entire year to absorb that amount of CO_2 via photosynthesis.[3]

Using the London to New York example, if one multinational company used Halo to eliminate 200 round trips between those cities in one year, that company would prevent 615,000 pounds of carbon emissions from entering the environment, equivalent to keeping 18,000 cars off U.S. roads for a day. That's significant, but the real value is apparent when one extrapolates and looks at the larger picture. If 100

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[1] Calculated using HP Corporate and Brand Marketing Carbon Calculator Assumptions:
- Air Travel: 0.447 pounds CO_2 per passenger air mile. This is an average for short haul and long haul flights.
- Electricity: Varies by region based on how electricity is generated. Average for US is 1.27 pounds CO_2/kWhr. Average for Europe is 0.386 kg CO_2/kWhr. Average for Latin America is 0.189 kg CO_2/kWhr. Average for Canada is 0.224 kg CO_2/kWhr. Average for Asia Pacific is 0.710 kg CO_2/kWhr.
- RT Flight from NY to London is 6,888 miles. RT flight from London to Tokyo is 11,986 miles.

[2] Reference from EPA website, www.epa.gov/climatechange/emissions/ind_calculator.html. The average US car emits 12,100 pounds CO_2 in a year. This equates to 33 pounds CO_2 per day.

[3] Based on a 25-year-old forest of Northeast Maple, Beech and Birch, which absorb 1,760 pounds CO_2 per acre per year. Average of 700 trees per acre (2.52 pounds CO_2/tree/year).
http://www.tufts.edu/tie/tci/sequestration.htm

Customer solution at a glance

Primary application
Telepresence/distance collaboration

Primary hardware
• HP Halo Collaboration Studio

HP Services
• 24x7 coverage HP concierge support
• Maintenance, technology updates

If one multinational company used Halo to eliminate 200 round trips between London and New York in one year, that company would prevent 615,000 pounds of carbon emissions from entering the environment, equivalent to keeping 18,000 cars off U.S. roads for a day. If 100 global companies each eliminated 200 similar round trips… (it) is equivalent to taking 1.9 million cars off the road for one day.

Alternatively, 24 million mature trees (35,000 acres) would need a full year to offset that amount of CO_2 via photosynthesis.

global companies each eliminated 200 similar round trips, the environmental impact is truly impressive. Removing 61.6 million pounds of CO_2 from the atmosphere is equivalent to taking 1.9 million cars off the road for one day. Alternatively, 24 million mature trees (35,000 acres) would need a full year to offset that amount of CO_2 via photosynthesis.

HP uses Halo to connect employee groups around the world who design and manufacture products with the environment in mind. Among those frequent Halo users surveyed within HP:

- 59 percent report meetings with three or more participants
- 37 percent say their average meeting involves three or more locations (connecting multiple locations at one time via Halo Multipoint technology)
- 23 percent use Halo to conduct international meetings

How does this kind of Halo usage impact the environment? A team responsible for transferring manufacturing responsibility for an HP product from Oregon to Singapore cut an estimated 44 international employee trips from the project. In that example alone, eliminating those trips utilizing Halo prevented 145 metric tons of carbon emissions from being released into the environment. It would have taken 127,000 mature trees (or 181 acres) a full year to offset that amount of emissions via photosynthesis.
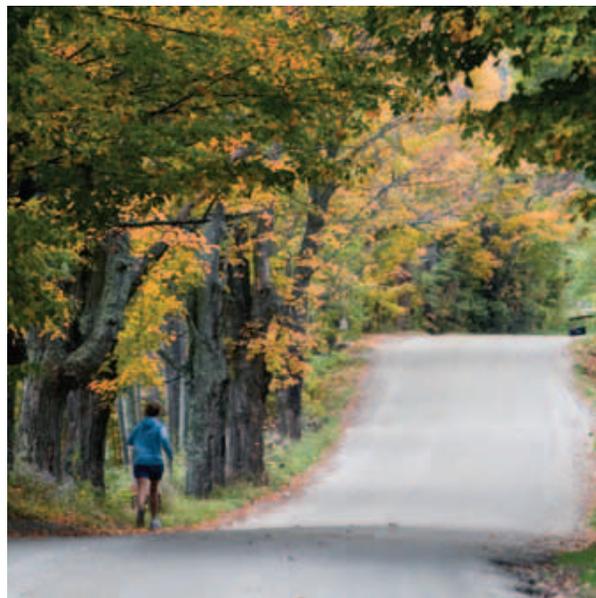
Outside of HP, a study completed by the European Telecommunications Network Operators Association (ETNO) and WWF concluded that if 20 percent of business travel in the European Union were replaced by telepresence solutions, 25 million tons of CO_2 would be saved annually by 2010 – and that's just in the EU!

Halo is designed with energy efficiency in mind
Plasma displays used in Halo Telepresence Solutions go into standby mode, and lighting automatically shuts off, when the room is not in use. Together, these design features result in a 40 percent reduction in energy when the room is in standby mode compared to normal operating mode.

A typical Halo studio uses 2.43 kilowatts of electricity per hour over a 24-hour period (assuming 8 hours of use and 16 hours in standby mode). Total consumption is 58 kilowatt-hours per day of electricity. One round trip flight for three passengers from London to Tokyo generates the same level of CO_2 emissions as a Halo Studio located in Europe for an entire year.[1] (And a single multi-point Halo meeting could easily eliminate the need for those three round trips.)

HP: a commitment to environmental responsibility
Halo is just one example of HP's comprehensive Design for the Environment Strategy that touches every aspect of its business. The company develops practical solutions that make it easy for customers to go "green"

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— including products for desktops to data centers, and for individuals to the entire enterprise.

In fact, HP has committed itself to reducing energy consumption in the company's operations and products to 20 percent below 2005 levels by 2010. Halo is one tool for achieving that goal.

HP's initiatives for environmental design include efforts focused on innovation, industry leadership and company stewardship:

Innovation – engineering products and services for energy efficiency from the start

- Energy-saving intelligence built into HP technology, products and services
- Product advancements and consulting designed to help customers run their businesses and IT more efficiently
- Materials innovations that reduce waste and environmental impact throughout product lifecycles

Industry Leadership – exerting its influence in the technology industry and beyond

- Leadership in efforts to increase environmental and social standards in tech and beyond
- Raising environmental and social standards throughout the industry's largest supply chain
- Active support for strategic climate change initiatives

Company stewardship – developing practical solutions and strategies to save money and reduce environmental impact

- Dramatic reductions in its own carbon footprint and waste generation
- Expert use of its own innovations — including products like HP Halo — to reduce energy use company-wide
- Promotion of a work culture in which every employee can contribute ideas to promote corporate responsibility

For more information on how HP Halo can benefit your business and reduce your environmental impact, contact your local HP representative or visit us at: http://www.hp.com/halo.

To learn more, visit www.hp.com

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