

The Perfect Storm for Telepresence & Videoconferencing

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HP Halo Collaboration Studios

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The Telepresence & Video-Conferencing Perfect Storm

Globalization

Increasing productivity

Travel concerns

- cost, safety, effectiveness

Environmental footprint & climate change

Telepresence is both a substitute and complement for travel that can enable companies to compete globally more effectively and reduce travel costs.

What is Telepresence?

Telepresence refers to a set of technologies in an environment which allow a person to feel as if they were present, to give the appearance that they were present, or to have an effect, at a location other than their true location.

Being there without going there.

Telepresence solutions use video-conferencing as well as other arts and sciences to create a multi-way communication experience that simulates an in-person interactive encounter

Differentiating Telepresence and Traditional Video Conferencing

Life Size Participants

Fluid Motion

Accurate colors

Broadcast quality video, lighting, and acoustics

Absence of visible technology

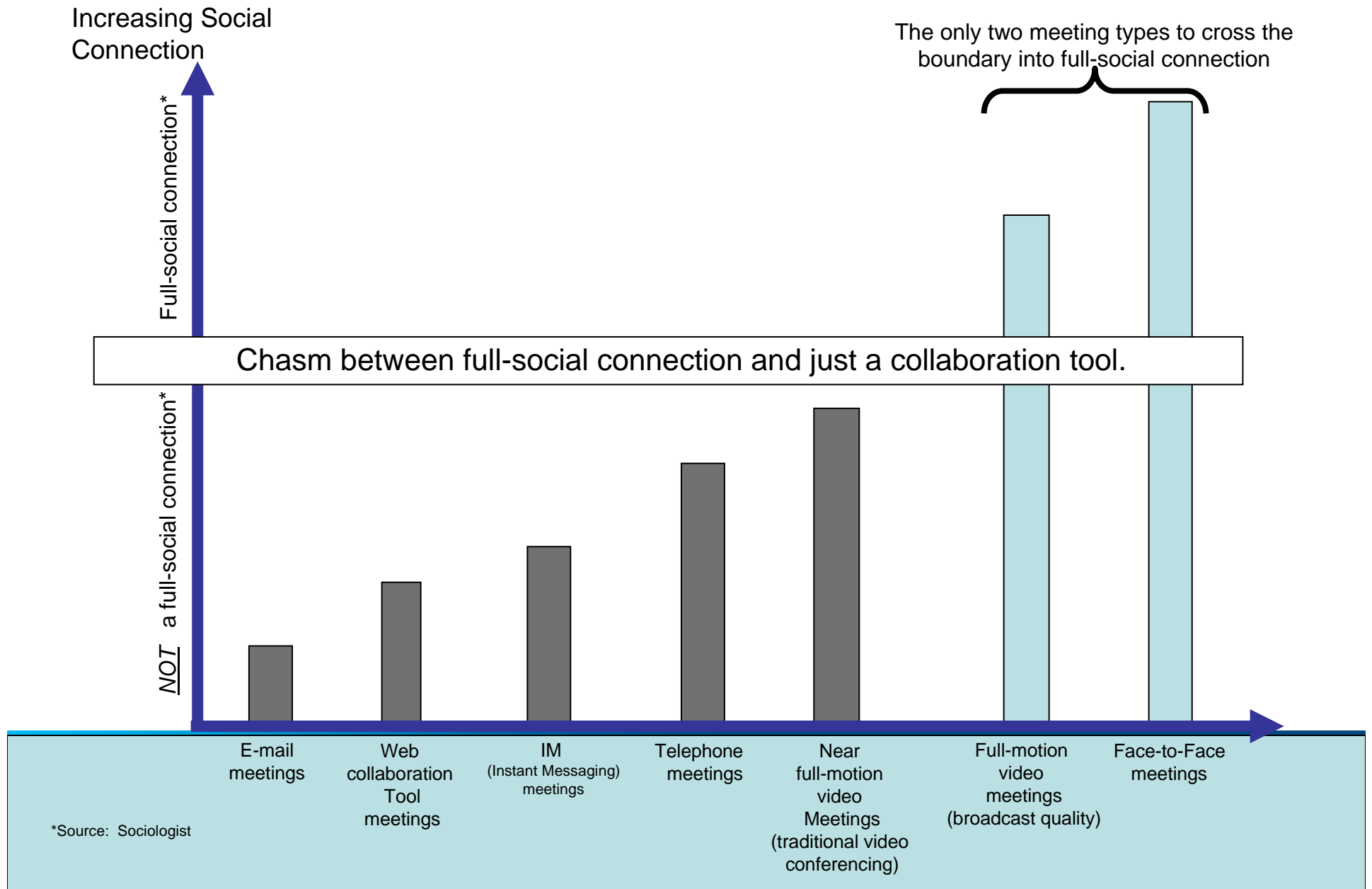
True eye contact

Immersive environments

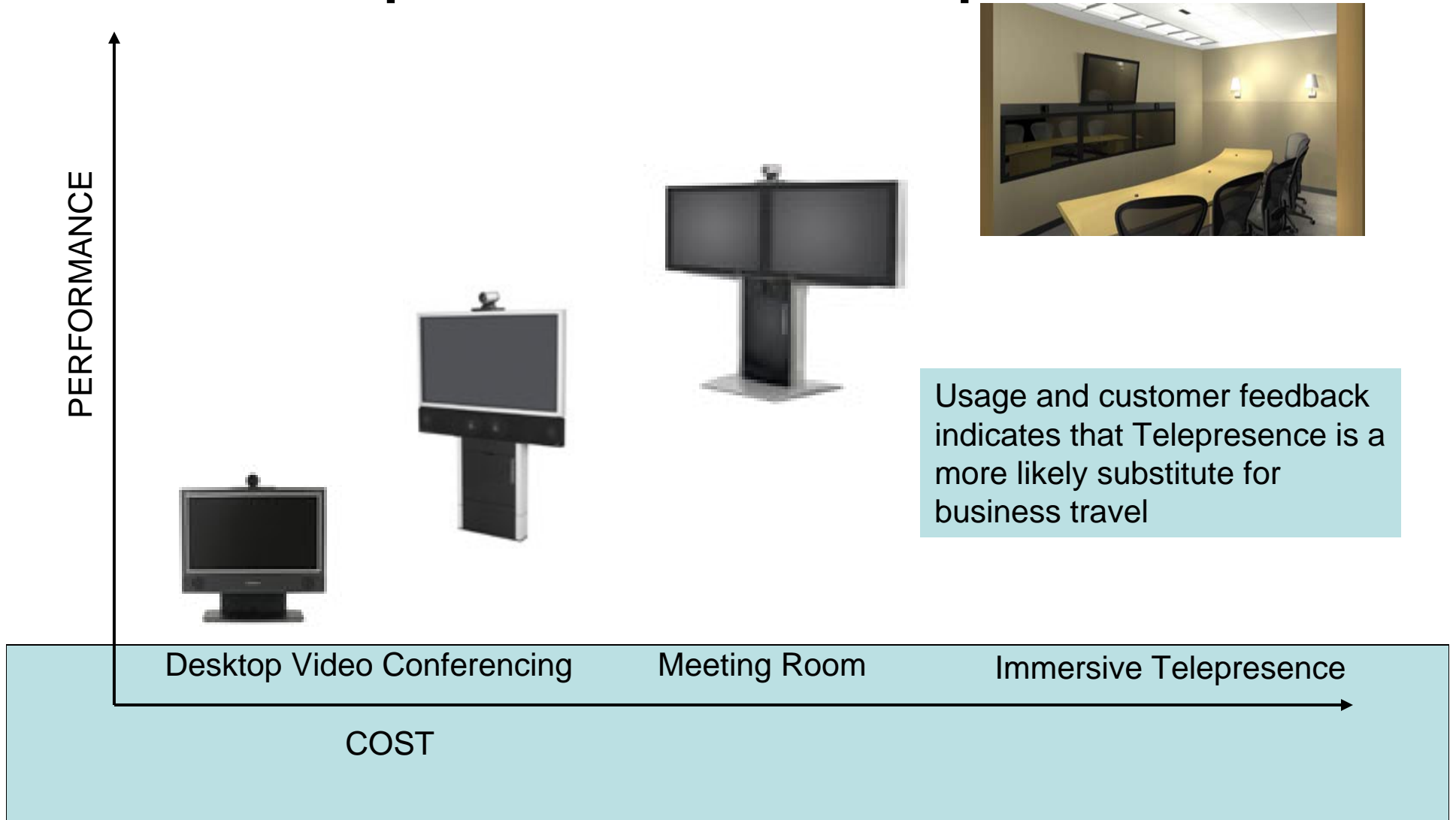
Consistent experience in different locations



Collaboration



Video-Conferencing And Telepresence Comparison



Global Business Collaboration



93% of all communications is non-verbal**

Eye to eye communication is critical

Social connection is essential part of business relationship

Face-to-Face means faster decision making

Too much time spent getting there

47% of business travelers traveling more (international expansion)*

CxOs: 2.3 days per week traveling

50% of CxOs say time with family suffers*

Telepresence Options

Basic Summary

Halo



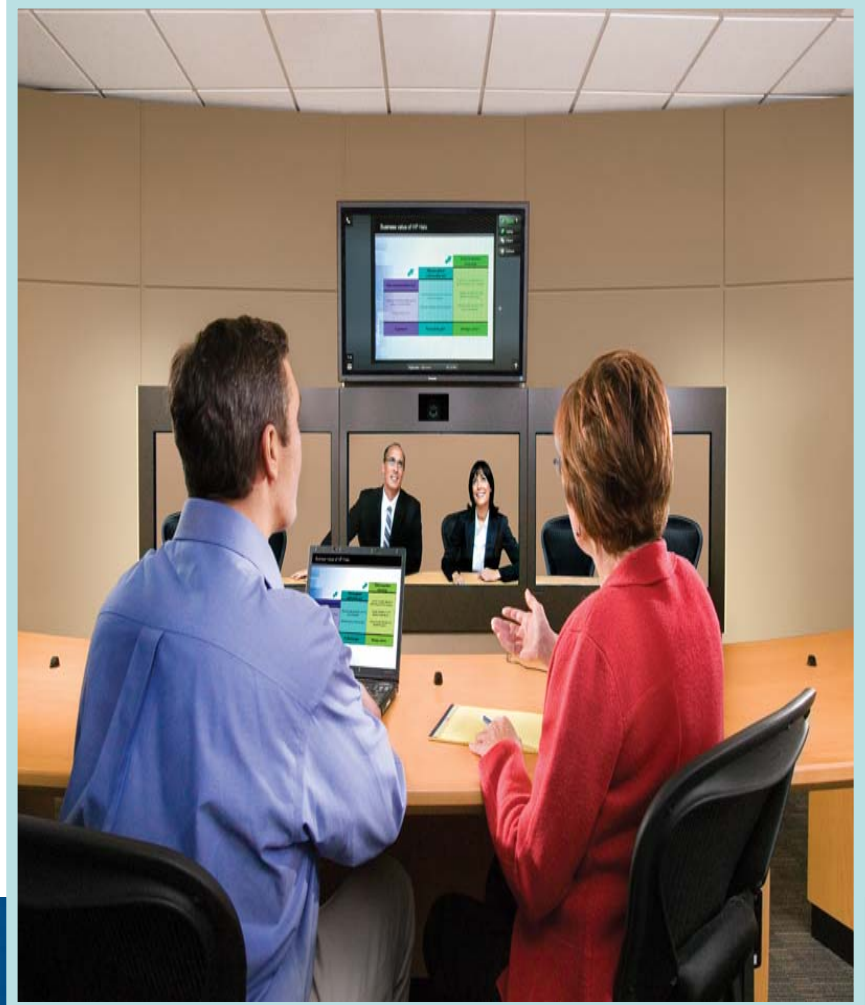
End to End
Managed
Solution

A la carte –
Typically
requires
significant
network
infrastructure
upgrades

HP Halo



HP Halo Additional Views

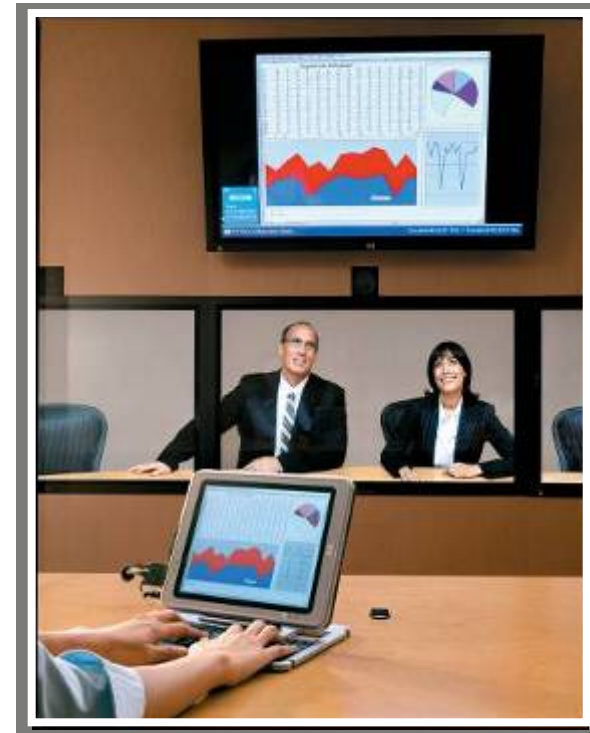


Halo Collaboration Tools

High-definition Halo collaboration screen displays simultaneously in Halo studios



-OR-



Physical objects on the tabletop is captured by the overhead high-resolution, high-powered zoom camera

Information from a PC through VGA monitor connector -- Any file sharing is enabled through existing corporate network.

Halo Solution - 1, 2, 3



1. Halo Collaboration Studios

- Broadcast quality studio
- Initial design by DreamWorks
- Collaboration screen
- “Same room” experience



2. Halo Video Exchange Network

- OC class backbone for no-perceived delay video/audio exchange
- Private network
- High-bandwidth, multi-point connections

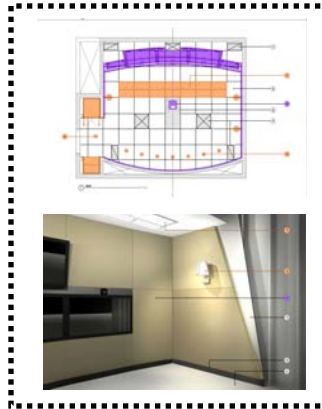
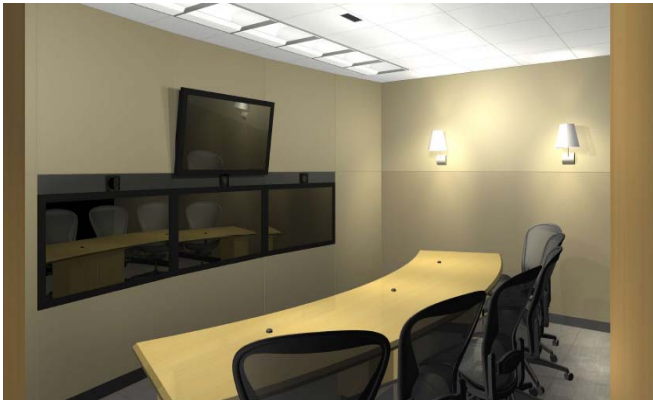


3. Full Service & Support

- HP Concierge service for 24x7
- Remote management and support
- Full installation

Halo Configurations

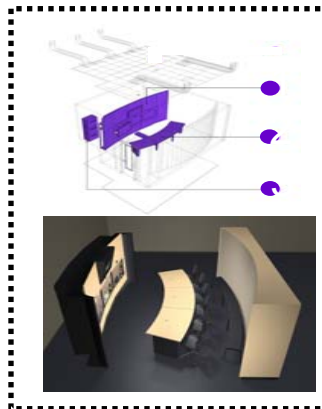
Halo Collaboration Studio 'Room Replacement'



Key Advantages:

- Fully immersive environment
- Precisely calibrated, consistent lighting and sound
- Private

Halo Collaboration Meeting Room 'Existing Room Enhancement'



Key Advantages:

- Reduced site preparation cost & time
- Location flexibility
- Best in class experience
- Options available to optimize experience

Customer Feedback

[Building Unity](#)

[Enhanced Productivity](#)

[More Feedback](#)

Quotes



“You’ve got people all around the world making important decisions in a fatigued state. And it’s so pervasive, nobody even notices it. Everyone is in massive denial.” “Halo is not offering exchange of information. It’s not offering a souped-up videoconference. It’s something that really is the equivalent of face-to-face working time.”
– Peter Senge, *The Fifth Discipline*



Halo “was so realistic that you could practically feel the breath of the other parties.” Companies “could easily make one of these suites pay for itself in a year.” – Thomas Friedman, *The World is Flat*

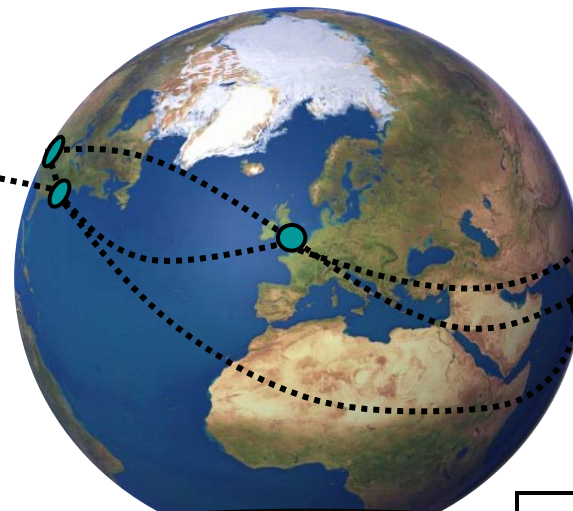
Quotes - Press & Media

- *IDG News Service*: “Halo will pay for itself in less than a year” with the savings on travel and related expenses, he claimed [Hector Ruiz, CEO, AMD]. But AMD's engineers and executives also appreciate the ability to collaborate with colleagues on a more personal level, and that type of satisfaction is difficult to quantify, he said.”
- *Business Week*: “Many companies have tried--and failed--to make videoconferencing a ubiquitous, must have technology. But HP brought together computing skills and combined them with imaging smarts from the printer group to create a collaboration technology that really works.”
- *Tech News World*: “Third-party research indicates that the system [HP Halo] is truly providing substantial improvements in productivity and significantly reducing firms’ travel hassles and expenses.”
- *Austin Business Journal*: "This is going to revolutionize how collaboration is done..."

Business Benefits

Faster Time to Business Results Through Enhanced Workflow:

- More effective collaboration between global teams = faster decision making
- Increased productivity and efficiency
- Business continuity



Reduced Travel Costs

- Lower OPEX = Better bottom line performance
- Less wear & tear on critical teams
- Better work/life balance



Supports Green Initiatives

- Reduced carbon footprint
- Energy conservation



Sampling of HP Halo customers:

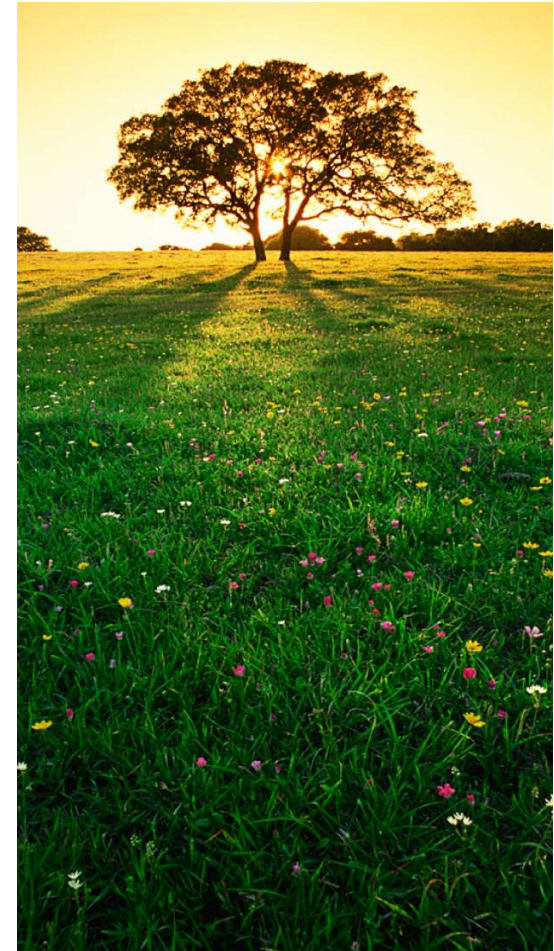
The Halo customer base spans 13 different industries, including:

- Financial Services
- Pharmaceuticals
- Oil & Gas
- Technology
- Wireless Telecom
- Chemical Engineering/Manf.
- Consumer Goods & Beverage Dist.
- Software Development & Dist.
- Public Sector

Telepresence & Environmental Benefits

Managing Greenhouse Gas Emissions

Design for the Environment



Managing Greenhouse Gases

Facts & Benefits

Global Climate Change has been identified as one of the greatest threats to our Planet

The EU is already regulating emissions of carbon dioxide and it is expected that other countries and regions will also take steps to manage emissions of carbon dioxide (CO₂) and other greenhouse gases

Halo Telepresence is an outsourced managed service that is supporting global companies efforts in minimizing greenhouse gas emissions associated with business travel while assisting those companies in meeting their corporate citizenship objectives

If you use a Halo Studio instead of flying (US to London), you can avoid emitting over 3000 lbs (1360 kg) of CO₂. To put this into perspective, that's like taking over 90 cars off US roads for one day².

Design for Environment

A typical Halo studio uses an average of 2.43 kW (58 kWhr/day) of electricity when operating for an average of 8 hours per day. Three round trip flights for one passenger from London to Tokyo results in a similar level of CO2 emissions as running one Halo studio in Europe for an entire year¹.

CO₂ Reduction Estimate for one Halo Studio

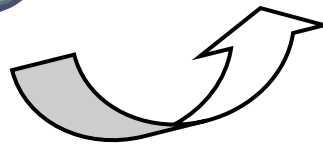
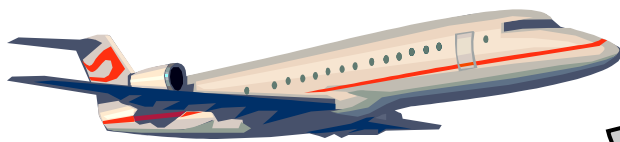
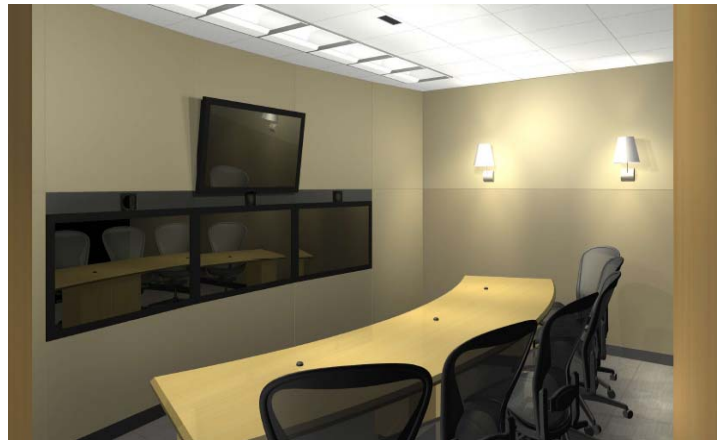
Example based on HP Travel Reduction Study

Total CO₂ avoided by using a Halo studio to reduce travel

- **Over 0.5 million lbs of CO₂ per Halo studio per year**
- Equivalently, 237 Metric Tons CO₂ per Halo studio per year



Telepresence and Travel



Is Telepresence a Cost-Effective Substitute for Travel?

Yes

Solutions deliver travel cost savings which outweigh the cost of deployment

Enhanced productivity, improved work-life balance, environmental benefits, company cost structure savings, etc. are incremental benefits

Successfully Implementing Telepresence

Place studios in correct locations

- # of employees per site not necessarily indicative of studio placement to reduce travel
- Collaboration between business units, real estate and travel organizations

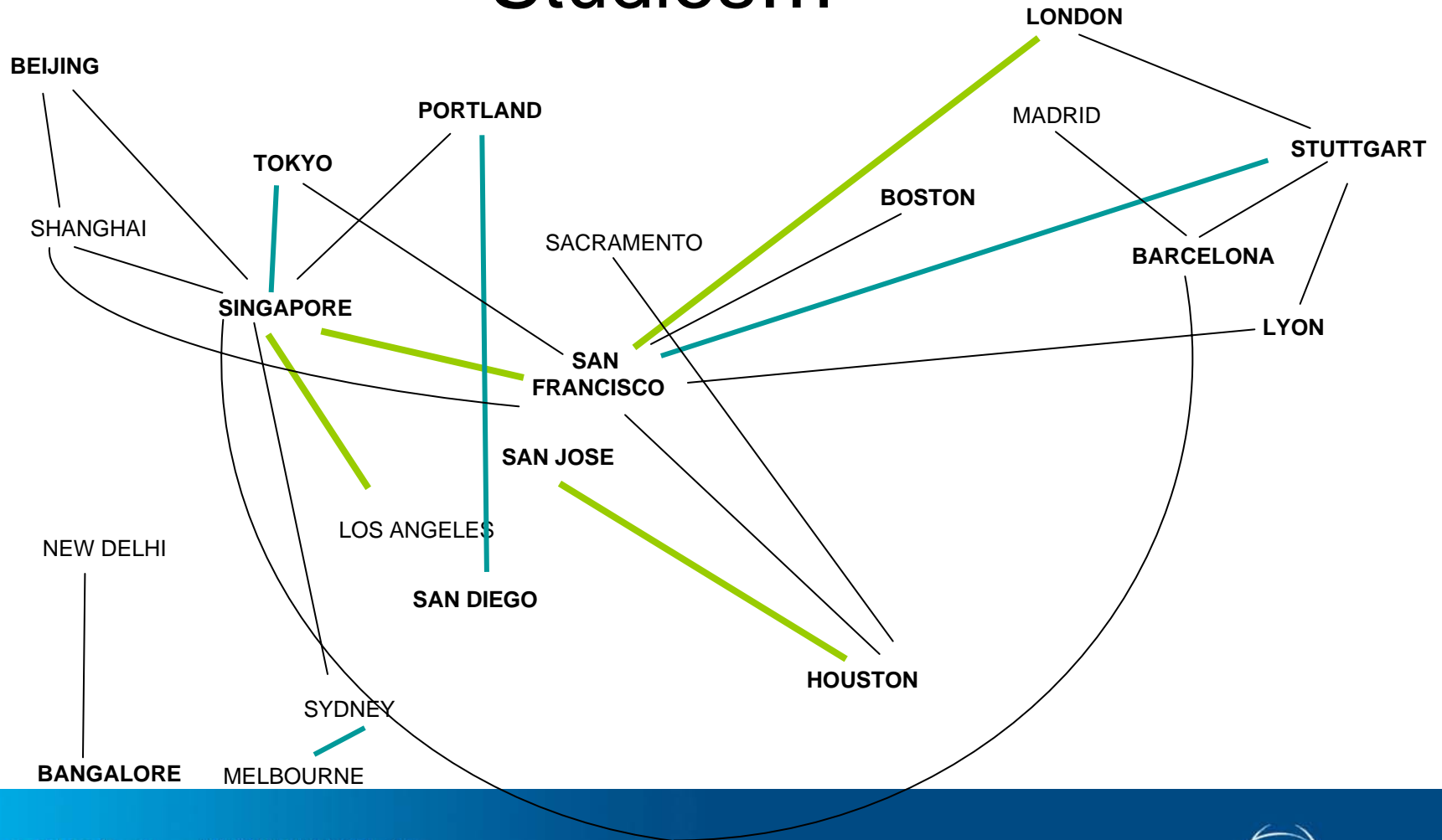
Communicate clear company dependant usage Policies

- Executive v. non-executive priority access, etc.
- Customer v. internal use access
- International v. domestic
- 15 min v. 6 hour meeting

Gain intra-company agreement on cost-allocation methodology

Scheduling

Strategically Place Telepresence Studios...



Successfully Implementing Telepresence

Availability is key - getting bumped from a meeting will be a deterrent to utilizing the technology in the future

Integrate studios in both conference room scheduling and travel reservation applications

- Alert pop-up when making travel reservation

Recognize initial adoption will require shifts in behavior and thinking to maximize travel savings

- Behavioral
 - Being in SF and having a meeting with Tokyo from 12-3am PST
 - Frequent User Reward Programs
 - Create broad-awareness (depending on deployment)
- Disruptive
 - Tops-down travel guidance may force usage
 - Global conflicts, climate events, pandemics, etc.

Telepresence Deployment Risks And Concerns

Understanding of Total Cost of Ownership and ROI

- Studio cost, operations may at first seem expensive, however when you look at the potential savings, a company-wide deployment may be a no-brainer

Degree of company geographic disbursement

- The greater the company geographic disbursement is, the greater the benefit of Telepresence

Acceptance and access

“Water-Cooler” productivity

Summary

Telepresence is both a substitute and complement for travel that can enable companies to compete globally more effectively and reduce travel costs.

Q&A

For more information, visit <http://www.hp.com/halo>