

Halo Collaboration White Paper



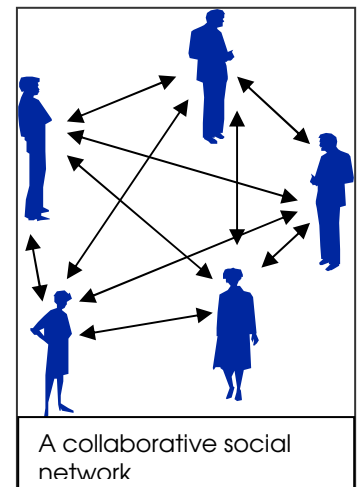
An all too typical business trip.....	2
Social collaboration as the source of value creation.	2
The Halo Collaboration Studio.....	3
It's about time (and space)!	3
The new business trip—"accessing Halo is like accessing travel".	4
A few tips for new Halo users.....	5
For more information	6

An all too typical business trip

Perhaps there is no greater testimony to the commitment of people to increased organizational effectiveness than the transcontinental business trip. As business executives, we leave the home office and, with the comforts of home reduced to a small carry-on bag, we find ourselves in ticketing, security and boarding queues only to be seated in a constricted space where we will spend the next 9 hours at 36,000 feet. For the most part, our flight is uneventful but the drone of the engines, dehydration and the worrisome cough of the passenger next to us all contribute to the discomfort of our travel. Once we have reached our destination halfway around the world, the physiological effects of our journey set in. In 2 days, our work is done and we return home experiencing the same physiological effects, dampened only because we are home again. The phone rings. It's the boss and the business needs us on the other side of the planet. After a quick word with the family, we're back at the carry-on bag getting ready to do it all over again. Friends admire the exotic destinations stamped in our passports, but this is not leisure travel to satisfy some wanderlust. This is making a living.

Social collaboration as the source of value creation

The fact is that people do their best work in collaborative social networks.¹ Like any winning sports team, an unforgettable ballet or the best theatrical production, collaborative social networks are the source of value creation. This is because they are our most cohesive pattern of social relationships.² Performance is at its best as everyone contributes to the group in a fluid coordination of action. Research done over the past 15 years in China, Latin America, the U.S., France and Turkey has proven that social collaboration is the source of organizational effectiveness and is at its best when it is face to face. Research using social network analysis has shown that networks of social collaboration occur when everyone in the network is in reciprocal relations with everyone else in the network.³ Using social network analysis, social scientists have found that new knowledge, innovation and value are created in what we have typically referred to as *informal social networks*. These networks improve performance by connecting people both horizontally and vertically across the company and around the world. They not only connect people across the business but also connect the organization to customers, vendors and strategic partners in a dynamic web of accelerated performance. These patterns of collaboration are critical to organizational success. Just as a winning team depends on its best players, organizational effectiveness depends on collaborative social networks. A Harvard-trained Chilean biologist Dr. Humberto Maturana⁴ explains that, like language, social collaboration is a fundamental part of human nature. At Hewlett-Packard we have been studying social collaboration for over five years. Social research studies of business performance improvement have repeatedly shown collaborative social networks to be at the heart of the business.



Business increasingly depends on geographically dispersed social networks to achieve business goals and has come to rely on travel for critical face-to-face meetings and on technology to facilitate daily communications. Technology in the form of teleconferences, email and facsimiles can help people communicate across great distances and is useful to

¹ See *Nature of Social Collaboration: How work really gets done* (Sandow & Allen, 2005)

² See *Social Network Analysis* (Scott, 1991)

³ See *Personal Development: The Key to Change Acceleration in Global Operations* (Jewell-Larsen & Sandow, 1999)

⁴ *Biosphere, Homosphere and Robosphere*, (Maturana & Bunnell, 1998)

coordinate action between our face-to-face meetings, but it falls short in fostering effective social relations. In some teleconferences we lose precious minutes waiting for the bridge to work, sometimes hanging up after 15 minutes of waiting. On other occasions, there are so many people on the line we can't tell one person from the next. Over long distances we might also experience signal delays or latencies resulting in people talking over one another. Video teleconferences are hardly any better. Faces appear to be tiny and fuzzy and, again, signal latency interferes with what should be a natural conversation. Signal latency of 2-3 seconds reminds us of old motion pictures where the audio and video were never quite synchronized. In either case we are quite aware that we are interacting with technology instead of people. The psychiatrist and father of social network measurement, Dr. Moreno, defined a fundamental problem with technology when he pointed out that *technology interferes with our natural social interactions because it lacks spontaneity*.⁵ At least up until now.

The Halo Collaboration Studio

The Hewlett Packard Company has introduced a business collaboration and social connection experience called Halo. Months before its formal release, Halo was being cited as "the next best thing to being there."⁶ Halo creates a new conferencing experience that exceeds any previous attempts to replicate face-to-face meetings. Halo could very well be the first product offering that actually facilitates, instead of interfering with, social collaboration. This can be credited to a unique partnership between DreamWorks and HP in the development of Halo. DreamWork's painstaking attention to audio and visual detail created a unique social environment. HP brought an end-to-end solution from signal acquisition to signal presentation. The collaboration resulted in a unique social experience in which users can perceive the subtle emotional changes in conversations.

Dr. Moreno's criticism of technology as interfering with spontaneity in social relations has been addressed by Halo engineers who have created an experience that replicates that of a face-to-face meeting. Brain research may offer some insight into the strong positive reaction users have to the Halo experience. The importance of face recognition to humans may be explained by brain research showing that facial recognition stimulates the emotional region of the brain where agreement, consternation, joy, play, pleasure and seriousness are found. Early in life, children focus on facial features (eyes, ears, etc.). Later in their development, they focus on the whole face and become aware of changes indicating displeasure, joy, excitement, etc. Just as in face-to-face encounters, Halo opens the biological pathways required for conversations.

It's about time (and space)!

Early user research suggests that DreamWorks and Hewlett-Packard have introduced a new era in social connections. The very first Halo experience invariably begins with smiles and exclamations as people enter the studio. From an audio perspective the room is so quiet, you can hear a whisper from a meeting participant on the other side of the globe. The studios are visually appealing with identical lighting, neutral colors and lack of clutter to enhance the sensation of being in the same space. Other communication technologies are accompanied by a plethora of gadgets, buttons, displays, wires, and devices but, in a Halo studio, there is an absence of these distractions. Studio sessions are easier to initiate than dialing an international call and, once the high resolution displays bring others into the Halo room, it feels as if they have physically joined the meeting. Usually within 10 or 15 minutes participants have forgotten about the technology and are completely focused on

⁵ Dr Moreno is known as the father of social network analysis

⁶ Business Week, September 12, 2005

the conversation they are having. It's easy to imagine why the Halo studio quickly becomes the preferred meeting location. The experience is soothing, unlike most business meetings, which are plagued by so many visual and auditory distractions that participants literally check out or struggle to stay engaged. Halo's design, with attention to sight, sound and time has created an experience that is often "better than being there"—so much so that those who meet people for the first time in a Halo meeting, and later meet them physically, report an odd sensation, as if they have met before.

Halo studios take advantage of bandwidth and technology in other ways as well. Located above the displays showing those on the other side of the meeting is a high definition display or collaboration screen. The collaboration screen is activated with a wireless mouse and can be used to share data, laptop computer screens and the software interface to operate a Halo session. In each Halo suite there is a high definition camera mounted above the table that can view any item that fits on the table top. Participants can use the camera to zoom in and examine even the smallest details on an object. Participants on both sides of the meeting can use the collaboration screen to view failed components on a printed circuit board, examine product details or read very fine print. Halo makes sharing information of all kinds simple, immediate and accurate.

The new business trip—"accessing Halo is like accessing travel"

Companies using Halo have described a shift in their corporate cultures. Even in the first month, senior staffs report a change in the way they communicate. Teams become comfortable with Halo studios very quickly; the rooms are simple to use, requiring just a mouse to operate, and do not require support from IT specialists or other technically trained staff. Just as the worst teleconference experiences generate frustration and anger, experiences in the Halo studio generate satisfaction and an appreciation of simple and natural conversations. Meetings change and become more frequent and shorter in duration. Travel almost immediately declines, which is why many believe that the decline in travel costs alone constitutes Halo's return on investment.

Though in most cases, Halo is purchased initially for senior management, businesses also report cultural changes across the company, its customers, vendors and strategic partners. Human Resources staff use the Halo studio to interview applicants instead of flying them in for interviews. Managers eliminate travel by conducting performance appraisals and contract negotiations in Halo rooms. Projects with vendors can be completed quickly with no in-person meetings at all. At the same time, relationships develop, as if all of the project work were done in the same location. Companies that have gone through mergers or acquisitions report that Halo has brought the organizational cultures together because, even though not everyone affected by mergers can travel to establish new work relationships, they can do so using the Halo suites.

While Halo has proven to reduce travel costs, it is also reported to bring new levels of group productivity. As informal social networks begin to meet in Halo rooms, they accelerate innovation, problem solving and project completion. Social capital or group productivity improves for a number of reasons. Face-to-face interactions that occurred quarterly or semi-annually now occur on a daily basis allowing informal social networks to flourish. Travel time and its physical effects on individual productivity are eliminated. Finally, loss of productivity from being away from the home office is avoided, while improved quality of life is realized, both of which contribute to productivity on the job.

Over time the Halo experience continues to evolve. People meet casually to have coffee or meals together. Work support networks spring up as workers "back home" join their

colleagues in remote locations. Humanitarian solutions are possible as organizations open their Halo studios for disaster relief, academic meetings and not-for-profit organizations. Because the Halo experience is a network experience, the diversity and value of Halo grows with each new room that is connected.

Another common report from Halo users is that their studios quickly reach 100% utilization. This in itself is testimony to the effectiveness of Halo, but it has both positive and negative aspects. When utilization reaches 100% some scheduled meetings are involuntarily rescheduled to accommodate more pressing meetings. It comes as no surprise that those "bumped" are often bumped by senior managers! While this can be negative, what is more common is that new Halo studios are added to the organization. Most Halo users report that 100% utilization is a positive outcome assuring them of the full benefit of having Halo rooms operating 24/7. If organizations continue to document reduction of costs and improvements in productivity, utilization will eventually become a metric for calculating order points. It stands to reason that as Halo improves organizational effectiveness, companies will want to order new rooms when utilization reaches 75-80%.

A few tips for new Halo users

- 1. Use your strategic-value-creating networks to inform where you locate Halo studios.** A good deal of value is created, not in administrative meetings, but in collaborative conversations among customers, vendors, strategic partners and employees. Look at the critical meetings that require travel. These are most likely your value-creating collaborative social networks.
- 2. Leave the door unlocked.** When situations arise that potentially can cost a business millions of dollars in expense or lost revenues, people will naturally want to meet in the Halo suites. Significant financial improvements using Halo have been documented at all levels of the organization. Everyone in the workforce is a potential Halo user and will meet to solve critical business challenges. Make scheduling easy and intuitive.
- 3. Experiment, play and create.** Collaborative social networks are our natural social order. It is in these relations that we create value. Sponsor a Chief Financial Officer's lunch with CFOs from other companies using Halo and share metrics for evaluating Halo's effectiveness. Play with the collaboration monitor and experience having the capability to draw, share, video and photograph in amazing high definition.
- 4. Use the concierge to improve your experience.** Your Halo suite comes with concierge services provided by HP. This is not a help desk manned by an uninformed employee but a technical expert ready 24/7 to help you get the most from the Halo experience.
- 5. Expand the network.** As you begin to realize the organizational effectiveness and positive financial results of using Halo, let the network grow. As the saying goes, the whole is greater than the sum of the parts. This is true of Halo. The greater the number of nodes on the network, the greater the value of the network. The expansion of Halo suites should be based on rigorous analysis of performance and financial improvement.

Sandow, D. and A. M. Allen (2005). "The Nature of Social Collaboration: How work really gets done." Reflections 6(2/3).

For more information

www.hp.com/halo