COLLABORATION TOOLS FOR EFFECTIVE MULTI-NATIONAL COLLABORATION ACTIVITIES

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Outline

1. Motivation
2. Historical background
3. What is collaboration
4. Web Conferencing
   - WebEx ...
   - ... and the others
5. Summary and Conclusions
Monday afternoon
December 9
3:45 p.m./arena

Chairman:
DR. D. C. ENGELBART
Stanford Research Institute
Menlo Park, California

A research center for augmenting human intellect

This session is entirely devoted to a presentation by Dr. Engelbart on a computer-based, interactive, multiconsole display system which is being developed at Stanford Research Institute under the sponsorship of ARPA, NASA and RADC. The system is being used as an experimental laboratory for investigating principles by which interactive computer aids can augment intellectual capability. The techniques which are being described will, themselves,
Dr. Douglas Engelbart - the father of groupware

- Envisioned collaborative computing in 1951
- 1968 - a 90 minutes demo which remained in the history of human computer interaction - the mother of all demos.
- A complete description and details of the demo - paper published in 1984
- Early 80s: proposed an integrated system NLS (oNLine System) which included
  - computer-supported meetings and teleconferencing
  - shared files
  - author-id, time stamps in source code and documentation
  - digital libraries
  - hyper-email
  - online communities
  - last but not least is the proposed mouse prototype.
Collaborative Software Development Structure

What is collaboration

Organisational Distribution

Stakeholders

Coordination

Communication

Technology

Process Direction

Temporal Distribution

Process Intensity

Process Discipline

Spatial Distribution

SOURCE: Hildenbrand et al. (2008)
Levels of collaboration and tools

- **Communication**: unstructured interchange of information (e.g. a phone call or an instant messaging chat); electronic communication tools send messages, files, data, or documents between people and hence facilitate the sharing of information
  - e-mail, fax, voice mail
  - wiki
  - web publishing
  - revision control

- **Collaboration**: electronic conferencing tools; facilitate the sharing of information, but in a more interactive way
  - Internet forums, message boards, discussion boards
  - Online chat
  - Instant messaging
  - Videoconferencing
  - Web conferencing (electronic meeting systems)
**Levels of collaboration and tools II**

- **Coordination**: collaborative management tools - to facilitate and manage project activities
  - electronic calendars (time management software)
  - project management software: schedule, chart and monitor the steps and activities in the project
  - knowledge management systems: collect, organize, manage, and share various forms of information
  - workflow systems: manage tasks and documents within a knowledge-based business process
Web Conferencing

What is Web Conferencing?

- Already for quite some time tools are available:
  - PC based conferencing, like for example Microsoft NetMeeting
  - Conferencing applications based on the client-server principle
  - Video conferencing: involves special rooms with special video equipment, extremely expensive
  - Discussion forums
  - Team rooms

**Definition**

"Web conferencing applications are technological basis for performing virtual conferences and meetings, which take place in real time and are used for the publication, exchange and viewing of information initiated through a web browser."

David Mayrhofer, 2004
Typical Web conference actions

- Invite participants simply by sending a link to the conference
- Identify participants as they join and leave meetings
- Presentation using slides created in PowerPoint or other presentation software.
  - While presenting one can highlight information on the slide in order to draw attention to specific topics;
- Live video display using webcam or digital camera;
- Real-time conversation with the session attendees through VoIP
  - it is necessary that all participants have headphones and speakers
- Share files and other material
- Run applications in real time
## Typical Web conference actions (II)

- **Session recording for playback later.**
  - This is particularly useful for presentations when not all attendees can be gathered together at the same time allowing those who were unable to attend the live session to view the recorded version at their convenience;

- **Making notes or drawing diagrams on a white board when necessary to further illustrate certain points.**
  - With some web conferencing tools it is even possible the presenter to give control to the white board to an attendee to add their own notes or drawings;

- **Use chat facilities to take and answer questions**
  - The chat dialogues can be kept private between the moderator and the attendee or shared with all participants;
Typical Web conference actions (III)

- Performing polls and surveys in order to gather information and feedback regarding the presentation;
- Sharing the desktop in real time;
- Integrate with email and calendars to schedule conferences (coming soon).
How to choose: User needs

Criteria for selection of a tool based on an analysis of the user needs:

1. Frequency of meetings: regularly or on-demand and if they are regular, how regular;
2. Average number and type of the participants: some tools require that the participants also register and pay, while others limit only the number of participants per session;
3. Level of interaction;
4. Confidentiality: how confidential the meetings are and is it necessary to record the meetings.

See also http://www.givemeareview.com/online-meeting/articles/buying-guide.html.
How to choose: *Must have* features

1. No software installation or downloads necessary;
2. High quality video streaming;
3. Reliable and fully integrated audio and video;
4. Slideshow presentation;
5. Sharing of documents;
6. Chat tools;
7. Host control;
8. Recording;
9. Reporting;
10. Desktop sharing;
11. Application sharing;
12. Mobile support.
WebEx: About

- Currently a market leader in the web conferencing
- Initially founded in 1996 with a vision: to use the Web to bring people together from around the world to collaborate and work collectively on creative ideas and business
- Bought by Cisco in 2007 in order to
  - strengthen their audio/video conferencing hardware business
  - build an own platform for online enterprize communication to compete with Microsoft
- WebEx is integrated in Cisco’s expanding portfolio of next-generation collaboration products and services which are based on Web 2.0 technologies
WebEx: The product

- WebEx is a real time on-demand web service which third party developers can integrate into their own applications
- WebEx applications are delivered as Software-as-a-Service (SaaS)
  - delivered over the Cisco Collaboration Cloud which is an own global network specifically designed for secure delivery of cloud-based applications
- Targets individuals, small and medium-sized companies, as well as large enterprises across many industries - financial services, high tech companies, healthcare, pharmaceutical, communications manufacturing and government.
- Today 2.2 million registered hosts rely on WebEx to connect with colleagues, customers, and partners all over the world.
WebEx: How does it work

To conduct an online meeting with WebEx meeting center the following three steps are necessary:

1. Schedule or set up a meeting: only a topic, date and time are required; invite attendees now or later, when the meeting is started.

2. Start the meeting: start a meeting with a single-click using the "One-Click Meeting" option.

3. Share a presentation, document, application or desktop: make annotations, use a pointer to highlight text or graphics, save as a file, print it or synchronize all participants’ displays with the host viewer content; grant attendees privileges; record the meeting for later use if necessary.
WebEx: Pricing

- **WebEx Meeting Center**: up to 25 people in meetings with unlimited usage for monthly fee of $49/month.

- **WebEx MeetMeNow**: a quick and easy meeting solution for personal use; up to 10 people in meetings with unlimited usage for monthly fee of $39/month.

- **WebEx Pay-Per-Use**: no minimum cost and no monthly commitment - 33 c/minute per participant; integrated conferencing can be added for 20c/minute each.

- **WebEx PCNow** provides remote access to a PC which is secure and reliable for $12.95/month.
WebEx: Other products

Cisco provides several other products based on the same platform: e-learning, remote support or organizing online events with up to 3000 participants

- **WebEx Training Center**: online lectures, vocational training, tutoring and group study projects.

- **WebEx Support Center**: minimizing costly on site service calls by viewing and controlling remote desktops and applications online for diagnosing and solving problems. Windows, Mac, Linux, Unix, and Solaris and is localized in 11 languages.

- **WebEx Event Center**: live or on demand online events for up to 3000 participants.
Alternative products

- **Adobe Acrobat Connect Pro**: Adobe Flash 10.1; it is necessary that every participant installs an add-on. Orientation pricing is $55 per month.

- **Citrix GoToMeeting**: favoring usability over advanced functionality; aimed at small and medium businesses; necessary to download and install a client application. Up to 15 attendees per meeting - from $39/month.

- **Microsoft Life Meeting**: tight integration with the Office suite; easy brainstorming on shared documents with annotation and white boarding; supports VoIP and PSTN. Minimum number of users is 5 and the minimum acquisition price is $15.42 per user per month with no on-time fees.

- **More tools from this category**: Saba Centra, Yugma, VoxWire, ReadyTalk, Infinite, netviewer, Fuze Meeting Pro, iLink.
**Summary and Conclusions**

- **Collaboration**: any interaction among people with the aim of achieving a common goal, which does not involve exchange of goods or services.
- Collaboration is unthinkable without **suitable collaboration tools**, mainly based on Internet technologies.
- A suitable collaboration tool integrates various technologies into a single application that makes sharing and managing information easier.
- **Web conferencing applications** are technological basis for performing virtual conferences and meetings, which take place in real time and are used for the publication, exchange and viewing of information initiated through a **web browser**.
Summary and Conclusions

- How to choose a Web conferencing tool: user needs and "must have" features
- **WebEx** by Cisco is (one of) the market leaders
- Other alternatives are **Adobe Connect, GoToMeeting** by Citrix, **Microsoft Life Meeting, Saba Centra**
References I

