Scheduling Meetings with Guests' Approval

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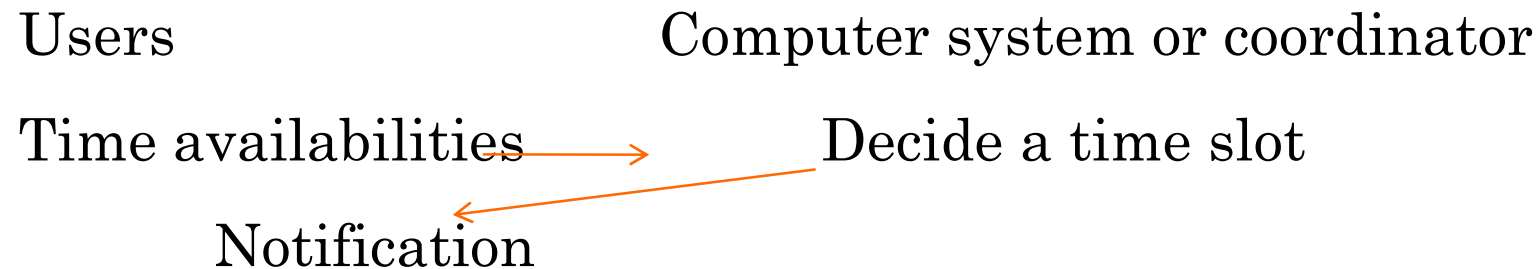**Universidad de Chile**

Keywords: CSCW, Group Scheduling, Elect. Calendar systems

OBJECTIVE

- Mosier & Tammaro (1997): meeting scheduling success case.

- In general, meeting scheduling tools are not successful.

- Why?

- Perhaps the explanation is a complex combination of several factors.

- Our objective: present a hypothesis for one of these factors and a way to solve it.

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MEETING TIME COORDINATION

Users   Computer system or coordinator

Time availabilities   →   Decide a time slot

        Notification ←

Grudin's explanation (1989): Who benefits with meeting scheduling tools? CSCW vs. Information Systems.

Time availability? No trivial issue: example

"I am invited to attend a meeting next Monday at 2:00 PM. Will I attend?"

Well, it depends…

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PREVIOUS APPROACHES

- Synchronous system   (Greif & Sarin, 1987)

- Optimization problem   (Sugihara et al., 1989)

- Calendars as virtual overhead transparencies (Beard at al., 1990)

- Agents negotiating scheduling options (Sen & Durfee,1991)

- Learning Personal Assistants (Mitchell et al., 1994)

- Voting (Ephrati et al., 1994)

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PERSONALIZING PREFERENCES

Ephrati et al. (1994) propose two meeting scheduling
scenarios: Open Systems
                   Closed Systems

Difficult to accept them as realistic.

Our proposal:

Latitude model:

- employees must attend most of the meetings
- they may decline some invitations
- variety of reasons to prefer, defer or anticipatemeetings, places, have them one next to the other,...
- preferences may change over time
- people prefer not to disclose some of these reasons.

People should schedule meetings themselves!

IMPLICATIONS

- Example: for some people, "next Thursday at 10 AM" is good time slot. For one person, it is not

  Voting Strategy   Negotiating strategy

- Distributed and asynchronous

- Proposed approach is simpler than previous attempts

- It is also more complex, incorporating people's preferences: a time slot is not simply available or not. It may be, depending on a conjunction of factors

CONFLICT RESOLUTION AND NEGOTIATION

- Negotiation should be short: propose schedules likely to be accepted, with known preferences.

- Privacy vs. awareness.

- One solution: let people tell other people whatever they feel adequate.

- Incentive: meeting schedules will be most satisfying to users providing as much information as possible.

- Social environment must be positive.

DESIGNING A SYSTEM TO IMPLEMENT THE LATITUDE MODEL

- Any user with access to a local network can be invited to a meeting.

- Menu-based, graphical interface. Privacy must be ensured. Facilities to express various degrees of agreement.

- Negotiation in three stages:

  a) Coordinator working with preferences

  b) Request sent to each invitee, specifying details

  c) If all invited persons accept $\longrightarrow$ confirmation

  otherwise $\longrightarrow$ cancelation

GRACE: EXAMPLE IMPLEMENTATION

- It runs on a network of Sun Sparc workstation with   Sun Os/Xwindows.

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GRACE

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Meeting Invitation

Scheduled By: _____   **When:** 12/5/1997

Subject : Annual Budget

Location : A24 room

Priority : High

My Choice is:

Accept   Decline   Decide Later

(See Detail)   [OK]

GRACE

GRACE

CONCLUSIONS

- Latitude model is an alternative to the Open or Closed strategies.

- Usefulness depends on the trust people have the information they provide will be well used.

- Reduced number of messages needed to schedule a meeting when compared with a conventional tool.

- Differences in details users provide

- Privacy features may puzzle new users trying to schedule a meeting.

- Limited number of preference choices offered to the users.

- GRACE is robustly running, but there are no tests with real users yet.

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