

Why Groupware Succeeds: Discretion or Mandate?

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What is Groupware

“Computer-based systems that support groups of people engaged in a common task (or goal) and that provide an interface to a shared environment” (by Ellis et al)

The word “Groupware” include two elements:

A socio-organizational one: “group” how “a collective way of working, collaboration, the intimacy of staying together and sharing”)

A technical one: “ware” (the artefact and the tool)

But. in the real life, are these two worlds connected in the organizations hosting the groupware systems?

Functions supported by groupware

Typically, groupware supports the following operations:

- Scheduling meetings and allocating resources
- E-mail
- Password protection for documents
- Telephone utilities
- Electronic newsletters
- File distribution

Groupware is sometimes called *workgroup productivity software*

Types of Group Working

- o Time/ space matrix
- o Co-located/ Remote,
- o Synchronous/ Asynchronous

Introduction

- Review of meeting scheduling in the mid- 1980
- Description of two detailed interview studies (Microsoft & Sun)
- Observation study are special due to software developemnt firms ,anyhow meeting scheduling was not adopted in comparable observation study a deacde earlier
- What has changed in the software that contributes to current use?
- What is the adoption process?
- What is the actual presence that are identified in other setting about these factors or groupware suggestion of adoption process.

Explanation

- Mostly groupware developers hope to compete with successfully of individual software product like word processors or spreadsheets and the use of single-user application is often discretionary. Discretionary use and competition have led to emphasis on ease of use and more functionality
- Groupware lies between the two:
- Similarities to large systems included the need to build for individual settings and the likelihood of mixed reactions by group members.
- It has been argued that groupware success will require mandated use. On the other hand, the low cost of groupware gives it less visibility in a large organization; it is unlikely that upper management will become involved in promoting every groupware application.

Meeting scheduling in 1985

- By the early 1980s, many organizations had installed office systems that provided word processing, spreadsheets, email, and on-line calendars.
- In settings in which on-line calendars are widely available, the concept of computer-assisted meeting scheduling is simple:
- A person scheduling a meeting identifies the participants and the application checks each person's calendar, finds a time when everyone is free, and schedules a meeting or issues invitations.

Meeting Scheduling in 1995

Different Questions Promoted from Reports:

- How widespread is calendaring and meeting scheduling at these sites? (Microsoft & Sun)
- Who uses them?
- Are new application functionality and interfaces factors?
- Has the use of collective benefit has been made more important?
- Is adoption the result of top-down encouragement or mandate?
- How does adoption proceed over time?

Interview Questions

- There was queried subjects about their use of paper and electronic calendars.
- Questions covered procedures and protocols for arranging or responding to meeting invitations, privacy, granting viewing access, peer pressure, managing one's calendar when away from the computer,
- Using calendars for structuring work and handling resources such as conference rooms and equipment.

Site Descriptions

Microsoft Corporation & Sun Microsystems

The author spent three months as participant observer and conducted five interviews. The purpose was to know possible success factors of groupware adoption process.

Eleven persons were interviewed having 5 years experience and eleven now were using the electronic calendar.

Three participants had been on the Calendar Manager product team and provided technical implementation information, an historical account of the product's introduction, and data about their personal use.

Description of the Electronic Calendar Applications

Microsoft's Schedule+

It is a software that is used for project management working in a team and there are different check boxes and buttons about privacy and sending information to colleagues and reporting. Others can send response about his appearance in meeting Yes / No.

There are some options here:

- Viewing the Calendar
- Navigation
- Privacy Settings
- Booking Appointments
- Receiving Schedule+ Mail

Sun's Calendar Manager

A calendar manager is responsible for adding, editing, and deleting events on the Online Calendar.

It appears as an icon showing the current date. Calendars are maintained on their owner's host machines. Browsing other calendars requires specifying the host on which each calendar resides. Host names are listed in an on-line corporate rolodex of employee information.

- Viewing the Calendar & Navigation
- Privacy Settings & Booking Appointments

- Checking for Availability
- Receiving Mail with Calendar Manager Information

Factors Contributing to Successful Adoption

- Many factors can contribute to a pattern of application use in a particular setting, not all of which may be clear to participants and thus not recovered from interviews.
- However interviews addressing in two organizations yielded patterns different from those were common ten years ago in similar environments. These differences contribute to improved meeting scheduling, include:
 - ✓ the infrastructure, including network, software, support, and behavior
 - ✓ expanded application functionality
 - ✓ the versatility and ease of access provided by graphical interfaces

Group leaders strongly recommend and encourage group use, two aspects are below:

- ✓ Adoption process
- ✓ Product interfaces

Infrastructure

- Both companies have organization-wide platforms supporting the calendar and scheduler. All employees with PCs (Microsoft) or workstations (Sun) were networked.
- In the past, that was not true in large high-tech companies. Part of a company might rely on a mainframe, elsewhere minicomputers were in use for groupware platform, and advance PCs were difficult to network. Email could not span these environments, much less meeting scheduling software.
- Finally now people are much more comfortable with technology as compare to earlier.

Versatility and Ease of Access

- Ease and enjoyment are the main features. With the applications studied, many calendar and scheduling features are easily accessed and many tasks can be carried out multiple ways, with one or another way more natural depending on the context.
- With the earlier generation of schedulers, obtaining information was too time-consuming to promote some of the casual uses of calendar information that was observed.

Universal Adoption and Peer Pressure

- "The only way that makes it useful is that everyone is using it."
- There were different remarks from interviewed people that at starting 50% people started to use groupware applications and after that 100%, even who is unaware he did not use.
- The numbers have gone up dramatically. I think now ... everybody uses it, anybody who has a workstation uses it. It's hard to find someone who doesn't use it ..even non-technical people.
- someone can be who don't have access to the equipment.

The Adoption Trajectory

- No single adoption pattern fit every group. A few reported pressure from managers, and at Microsoft group by group adoption occurred.
- Several developers and managers reported that developers individual contributions were the first adopters, exerting pressure on others
- Once admins adopt meeting scheduling they can exert pressure in all directions. (It may be a significant factor that admins appear to wield more influence than secretaries did ten years ago.)
- A Microsoft manager said: "he tried to convince the people working under him to adopt the groupware, its necessary. Now he can't live without it."

Conclusion

- In past people spend a lot of time arranging and rearranging meetings, Even in software development organizations it was difficult to find successful use of software but Grudin in 1988 used meeting schedule to explain the factors of lackness of widespread adoption of groupware applications
- Groupware can succeed in the organization if the nature of the work is same without mandated use.
- Some features provide individual benefits (e.g., meeting reminders), can be attracted for other users, when technology is approved or encouraged from others then there is social pressure by colleagues and others also use.
- I don't say groupware use always follows this pattern but there were some examples of mandated use although from low management levels. Mandated use can clearly facilitate adoption.
- Exept to these large established organizations, actually there are also some new, small enterprises that organize themselves around groupware technologies.

End

Thanks