Whisper: analysis and design for a community event service

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Abstract

We present an analysis of what we call the community event space, looking at how social events are planned and organized. Based on a series of interviews, field studies, and a focus group, we introduce a framework outlining six phases of events: proposition, polling, participation, parting, perpetuation, and persuasion. We also present the design of Whisper, a web-based event service that addresses the planning and organizational challenges identified in this framework. This analysis and design serves as a blueprint for existing and future community event services.

Keywords

Event service, Planned Events, Social groups

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ACM Classification Keywords

H.5.2 User-centered design

Introduction

Events—planned social gatherings or occasions—bring people together for an activity or a purpose. People attend events for a number of reasons—the location, the content, the time, who else is attending, etc. In preparation for an event, coming to consensus about the details and the final coordination [1] of the event itself are often the most time-consuming and laborious parts of the process.

Consider Andrea, an outgoing graduate student at a large state university. When Andrea wants to do something with the people she knows, she sends an email to a student mailing list and tells her officemates people she sees on a day-to-day basis—about upcoming events. Unfortunately, some people do not attend due to scheduling conflicts, not "knowing anybody", or not having transportation to the event. As a result, Andrea often attends events with the same few people. Over time, people in her graduate program form into smaller groups—not knowing that they could all have met other interesting people in the program. Our design proposal for the Whisper community event service addresses this challenge. In such an event service, it is essential to address the context of use the type of people attending a particular event, the type of event, and the location of the event [2]. We describe the results of field studies and a focus group that led to a six-phase framework describing the event space. Then, based on this analysis, we present the design of Whisper, a web-based community event service built to address the core elements of the event planning process.

People find out about events in a number of ways: word of mouth, mailing lists, posters, postal mail, etc. Websites such as upcoming.org, zvents.com, meetup.com, and eventful.com also help people find events that they are interested in attending. These sites also include ways of organizing events for groups and let users see who is attending a particular event. Sites such as evite.com, suretomeet.com, and meetwithapproval.com have addressed the needs of planning events rather than finding events. However, these existing sites fail to foster the idea of community planning. Our goal for the Whisper event service is not only to announce events to specified groups but also to simplify and improve the planning and the organization of informal social events within small or large communities of people.

Previous Iterations of Whisper

Initial iterations of Whisper focused on developing a location-based mobile interface that delivered interesting events based on a user's location. Through user tests and field studies, we discovered: (1) location information is not the most important aspect in

deciding on an event to attend, (2) it is both difficult and time-consuming to pick out interesting events in a large database of events, and (3) people prefer attending events with others.

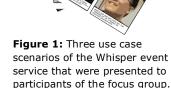
This guided us toward designing an event service that significantly embodies the social component of an event.

Field Studies and Focus Groups

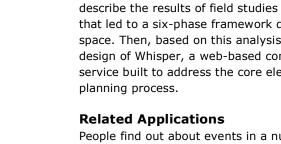
Through observing how people plan, organize and attend events, we sought to uncover the fundamental phases of event planning and attendance. We focused on events people organized and how these events were announced to a group.

The field study consisted of observing a social group of 25 first-year masters students at Carnegie Mellon University that had recently moved to Pittsburgh. Over the course of a month, we observed how the students informed each other about possible events through e-mail and informal discussion, the content and location of events, and which people attended which events. In addition, we interviewed these students to understand the challenges they faced in either planning or attending the events.

The focus group included four participants in their twenties (also from Carnegie Mellon University), consisting of two graduate and two undergraduate students. Adopting a comic book style (figure 1), we designed and presented three scenarios to illustrate how Whisper might be used, allowing them to comment on how Whisper would or would not support their event-going process.







Focus Group Quotes

"I wouldn't just go [to an event] with random people, but I'd go to a thing with a bunch of other people with at least one friend with me."

"I have only been to the Strip [shopping area] four times, because I don't know how to get down there."

"I had lunch with my girlfriend, but my parents invited themselves to go along. It was awkward."

"Jack isn't in any of my classes this semester and I forget to invite him out to things." Based on the field study and the focus group, we determined that a private event—an event that is not publicly advertised and involves a high level of interpersonal communication—requires a lengthy event planning process. While existing event web sites allow users to discuss these events and invite others, our field studies and focus group suggest that planning such events involves more than this. Drawing from this user research, we propose four principles that should be considered in the design of an event service:

1

| Principle | Explanation |
|----------------------------------|---|
| Social connections | People are more likely to attend a given event if they have a social connection with an attendee. Attending an event alone is difficult for most people. People are more likely to attend an event if they are personally invited. e.g. Mary attends the bowling event only because her friend Joel asks her to attend. |
| <i>Plausible deniability</i> | Maintaining ambiguity in organizing events should be allowed to support social nuance. Such plausible deniability is useful for social connections so that people do not know whether certain actions were intentional or not. e.g. Paula organizes a dinner for her close friends but may not want her roommate to hear about it. If asked, she can claim that her roommate was just not around when the plans were made. |

| <i>Consider everyone</i> | People want to see other people they have not see for awhile. However, they are innately creatures of habit and routinely attend events with the same group of people. e.g. Larry invites all his officemates but forgets to invite his friend Lori to a party because she works in a different building. |
|------------------------------|--|
| Minimax | People want to minimize their effort while maximizing the benefits of attending an event. If too many obstacles exist in attending an event, people are less likely to attend. e.g. Mike decides not to attend a dinner even though he is hungry because the weather is bad, he has to take the bus, and he does not know the host very well. |

The Event Space Model

In our analysis of the event space, we focus on private events—events that friends plan together but will not necessarily publicize to a large group of people they may not know. Informed by our empirical studies, we constructed a model of the event space, identifying six main phases of the event-going process (figure 2). We now describe each phase in detail, with each followed by an example of the phase in the context of an event.

Proposition: This phase corresponds to what many people would call "ideation." Ideas are first generated internally in someone's mind and are then posited to

other possible participants for evaluation and scrutinization.

Andrea is looking for something to do this weekend. She asks around and someone suggests bowling.

Polling: After an idea for a possible event has been decided, the Polling phase begins. This phase is used to gauge interest in the idea as well as to determine what times and locations work best for interested parties.

Andrea and her friends discuss times and locations that they could go bowling. They eventually decide to go bowling at Forward Lanes, Saturday night at 10.

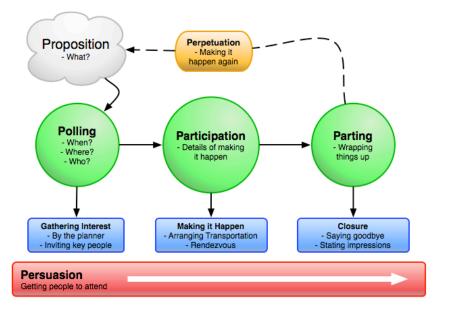


Figure 2: The event space model for event planning – Proposition, Polling, Participation, Parting, Perpetuation and Persuasion.

Participation: This phase deals with the specifics of making an event actually happen. Considerations in this phase include details such as transportation to and from the event and the rendezvous at the event itself.

With Saturday night quickly approaching, Andrea calls her friend Mike and asks for a ride to bowling on Saturday. She also lets other people know that Mike has three more seats in his car. Andrea and her friends arrive at the bowling alley and bowl until midnight.

Parting: The Parting phase provides closure to the event participants. As the event comes to an end, people often reveal their impressions of, and share anecdotes about, the event itself.

With the event coming to an end, Andrea and her friends discuss their high scores for the night. Mike takes some pictures at the event and promises to send them to everyone the next day.

Perpetuation: Perpetuation is the final phase of the event-going process and is where experiences from the event may influence future ideas generated in the Proposition phase. If an event is enjoyable, similar event ideas may be chosen in future proposition phases. If an event is not enjoyable, it is unlikely to be proposed again.

Andrea gets together with her friends again later in the week. They talk about the pictures Mike sent and how much fun going bowling was. Several of her friends suggest going again next week.

Persuasion: Throughout each of the other phases, there is internal and external social pressure to attend,



Figure 3: The Ideaboard allows users to add stylized text anywhere they want to express their thoughts and ideas.



Figure 4: Maps and directions allows users to suggest locations, vote for preferred locations, and find their way to an event. or not attend, an event. This pressure normally propagates out from the event planner to increase event attendance. The Persuasion phase is pervasive and encompasses all phases of the event-going process.

Throughout each of the phases above, Andrea was involved in a number of situations where social and personal pressure was involved. For example, in the Proposition phase, Andrea presses her friends for ideas. In the Participation phase, people ask each other whether they are attending an event.

A Conceptual Design for Event Planning Design Rationale

Existing event sites primarily address the Proposition phase. In contrast, our design for Whisper addresses all six phases of an event. By designing for groups of people rather than for just the individual, we lower the barrier to event coordination. This addresses both the *social connections* and *consider everyone* principles outlined previously by encouraging spontaneous discussion and reflection of planned events and completed events.

Current Design

For each phase of the event space model, we asked the question: *How can Whisper support the information flow between people and the role of this phase in the event-organization process?* Our main goal was to facilitate the flow of ideas, information, and people from phase to phase of the event model. With this in mind, we designed several web pages and components using HTML, flash, and JavaScript that address user needs in the event planning process.

Ideaboard (figure 3)

During the Proposition phase, ideas are put out for people to consider, discuss, and develop. To support this activity, we developed an Ideaboard that allows groups of people to share their ideas in an informal manner. The Ideaboard lets people add event ideas to the board, suggest event locations, or even voice their support for a particular idea. The spatial nature of the Ideaboard allows for quick and intuitive grouping of idea information. Over time, unused ideas slowly fade from the Ideaboard, perhaps reminding users of ideas they have not explored lately.

The Ideaboard also acts as a transition into the next phase-the Polling phase. Anyone interested in seeing an idea becoming an event can circle the relevant ideas and, from that, create an *under construction* event page. The *under construction* page supports the Polling phase by allowing the event organizer and others to specify potential dates, times, and locations for the event via calendar and map widgets. Users may also indicate their interest in attending the event. After a period of time, the event organizer formalizes the event by choosing a particular date, time, and location based on people's votes or suggestions. The organizer can send out invitations to any number of groups or individuals to let them know that an event is happening and the details of the event.

Maps and Directions (figure 4)

Maps and directions on the event page support the Participation phase of the event model. People can also see who else is attending the event and may be able to contact someone to arrange transportation to and from the event, based on user privacy settings. By communicating transportation issues, people will invest



Stories

I got there the night before and camped out in my U2 gear!

Bono and Edge shoot a playful video with fans outside the arena in fans about The Edge. As the show starts, Bono takes the stage with Blinding Lights. During Elevation, Bono takes a Chilean (we think)

Figure 5: Pictures and stories allow for people to discuss and reflect on what happened during a particular event. less effort to arrive at an event, addressing the *minimax* principle.

Pictures and Stories

Once an event has ended, the event page lets participants post pictures and stories that users may want to share from the event. The event page will stay active indefinitely unless the event organizer explicitly removes it.

Linking Events

Allowing similar events to be created from completed event pages fosters perpetuation. After an event has finished, a link appears next to the event name that reads: "Organize a similar event?" The information from the original event page is preserved, but a user can change specifics such as the time, date, or location, or make the event *under construction* and let others suggest the details as before.

Conclusions

Our analysis of the event space, informed through our field studies and focus group, led to the design of an event service supporting community event organization and planning. By starting with the analysis of the event space, Whisper's design supports each phase of our event space model better than existing event sites, via concepts such as the Ideaboard and community contribution during the organization of an event.

Further, the design detailed in this paper addresses two of the three key lessons learned in the previous iterations of Whisper. By shifting the focus of the design from providing location-based events to a community event service, Whisper helps people realize their ideas for events and find events they're interested in with the people they know.

Future Work

We are currently in the early stages of developing the user interface and backend for a fully working community event service. With a design to help people organize and plan events, a mobile version of finding events from this structure will be explored. Using an established social network is essential to determine the service's usefulness. Field trials with the same group of 25 graduate students will be conducted to examine how such a service works in a context of use.

Acknowledgements

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Works Cited

[1] Kowitz, B., Darrow, A., Khalsa, H., and Zimmerman, J. Gather: Design for Impromptu Activity Support Utilizing Social Networks. In *Proc. DPPI 2005*, ACM Press (2005).

[2] Pousman, Z., Iachello, G., Fithian, R., Moghazy, J., Stasko, J. Design iterations for a location-aware event planner. *Pers. Ubiquit. Comput.* 2004, 8: 117-125.