

A Survey of Personal and Household Scheduling

A.J. Bernheim Brush and Tammara Combs Turner

Microsoft Research

One Microsoft Way

Redmond, WA 98052-6399

{ajbrush, tcombs}@microsoft.com

ABSTRACT

We describe results from a survey of employees at Microsoft about how they manage personal and household scheduling. We saw a much greater use of digital calendars than we expected. Of our 621 respondents, 51% (317) used their digital calendar at work as the calendar where most of their personal and household events were recorded, while 38% (233) of respondents primarily used paper calendars. We discuss reasons respondents gave for choosing a particular type of calendar as well as challenges faced by respondents in scheduling events for themselves and their households.

Categories and Subject Descriptors

H.5.3 Group and Organization Interfaces

General Terms

Human Factors.

Keywords

Digital calendar, groupware calendar systems, family, home

1. INTRODUCTION

“Can you pick up the kids when I have to work late on Tuesday?”

This seemingly innocent question strikes at the heart of how people manage their personal time. Families or any multi-person households are prime examples of small groups that need to coordinate their schedules to get people to the right places.

Several commercially available products aim to help families schedule including: OurFamilyWizard [5], marketed to divorced parents sharing custody, and services for publishing and consuming group calendars such as Trumba [7] and Apple’s iCal [4]. However, while digital calendars are relatively common in many corporate settings, wide adoption among families does not seem to have occurred. The Family Calendar Survey [3], conducted by researchers at the University of Maryland in 2002, found that their 401 respondents relied on multiple calendars most of which were paper, even though 70% used a computer at least 30 hours per week.

Our survey builds on the University of Maryland’s Family Calendar Survey and we have focused in greater detail on the relationship between work and personal scheduling, scheduling challenges, and the types of technology respondents have in their

homes. Conducting a survey also offered the opportunity to collect data from more people than previous ethnographic studies [1, 2, 6] and see whether similar themes emerge. In this abstract we focus on the type of calendars our respondents use to manage their personal and household schedules and challenges they face.

We surveyed the employees at our company, Microsoft, using a snowball sample technique. One of our aims was to recruit respondents with children so we invited members of Microsoft’s new mothers and working parents email distribution lists. We also invited members of our work division and colleagues across the company and encouraged people to forward the invitation. To counterbalance the snowball approach, we randomly invited 1000 employees from the company address book to take the survey.

We received 621 responses to the survey, of which 53% (332) were from males, 45% (279) from females and 2% (10) opted not to disclose their gender. Our respondents primarily live in the United States (88%, 548), mostly in Washington state where the Microsoft headquarters is located (79%, 491).

Of our respondents, 65% (406) have children in their household compared with 28% of the respondents to the University of Maryland survey. We believe this gives us additional insights into scheduling by the people we anticipate will have the most challenges. Most respondents with children (92%, 372 of 406) self-identified their family status as couple (married, domestic partner, etc). One hundred and three of the respondents reported that their partner also worked at Microsoft, so we may have data from two members of the same household in our sample.

We, of course, recognize that our respondents represent a very particular group of people. However, we believe studying how they and their households manage personal scheduling is a reasonable place to begin as Microsoft employees are familiar with technology and thus are some of the most likely early adopters of digital family calendars.

2. SURVEY RESULTS

Our respondents reported using a median of 3 different calendars (paper and digital combined) at least once a week for their personal scheduling information. Respondents also reported that of these calendars, one was digital (median response), which we presume most likely to be the respondent’s work calendar. When asked how satisfied they are with their current method of scheduling household events, the median response was “Somewhat Satisfied.” However, 20% (127) of respondents reported being “Somewhat Dissatisfied” and 4% (23) were “Very Dissatisfied,” so about a quarter of our respondents are dissatisfied with their current scheduling method to some degree.

We asked respondents to tell us more about the “calendar where most of [their] personal and/or household events are recorded.” In particular, whether they use a paper calendar, their Microsoft

Outlook Calendar at work, another digital calendar, or do not record events on the calendar. Informed by the Maryland Family Calendar Survey we expected most people to be using paper calendars for personal and household scheduling.

Digital Calendars: Much to our surprise 59% (368) of our respondents told us they used a digital calendar as their primary personal calendar. Most of these respondents were using their Microsoft Outlook digital calendar provided at work (51%, 317). The respondents (8%, 51) using other digital calendars were primarily using self-hosted Outlook (29%, 15 of 51), or a Pocket PC/Palm Pilot (29%, 15 of 51).

We asked respondents to select reasons why they chose a particular calendar type for their personal and household information (respondents could mark more than one option). For the respondents using their work Outlook digital calendar having all scheduling information in one place was the most popular reason selected (76%, 240 of 317), followed by the ability to access their calendar from multiple locations (72%, 227). Representative comments include: "I NEVER double-book my work and home life, since it is all kept on the same calendar" and "I use outlook for my calendar so all calendar information is on my mobile phone/pda."

When asked about challenges they face in scheduling for themselves and their households, the top challenges for respondents using their work calendar were forgetting to write things on a calendar (57% 180 of 317), trouble keeping track of other members of their household (46%, 146), and difficulties accessing the calendar from other locations (42%, 133). Respondent comments highlighted challenges in sharing calendars, synchronizing calendars across devices, and some concerns around privacy – from the level at which they share the details of their calendar to the server on which their calendar information is stored.

Paper Calendars: Paper calendars were used by 38% (233) of our respondents as the calendar where most of their personal and household events are recorded. These calendars were most often located in the home kitchen (67%, 156 of 233) and most often wall calendars (71%, 166) rather than pocket (15%, 36) or desk (11%, 25) calendars. Twenty respondents (3% of 621) told us they did not record personal items on a calendar.

When asked why they used paper calendars, respondents' most popular reasons were: "Easy to use" (88%, 204 of 233), "Always available" (83%, 193), and "Accessible in a central location" (79%, 184). These reasons were also cited in comments, for example: "It's much easier to scribble in an entry than data enter into a PDA. It's also much easier to browse" and, "I like the flexibility and visibility of it (hanging in kitchen, no need to turn it on)."

The most commonly selected challenges for respondents using paper calendar were forgetting to write things on a calendar (70%, 164 of 233), difficulty accessing the calendar from other locations (65%, 152), trouble keeping track of other members of their household (39%, 91) and difficulties moving or changing events (39%, 91). The first three challenges are the same as the top challenges for digital calendar users, although a greater percentage of paper calendars cited forgetting to write things and

difficulty accessing the calendar as challenges. Comments highlighted other challenges including the lack of space on paper calendars and difficulties when changing or moving events.

3. CONCLUDING REMARKS

We believe our calendar survey has given us a rich and interesting data set that can be used to understand needs for digital family calendars. Because we have a diverse set of respondents including those already using digital calendars we can explore factors leading to choosing a particular type of calendar for personal and household scheduling.

The fact that a significant portion of our respondents use their digital calendar at work as the primary place for their personal events highlights the importance of helping people get all their scheduling information in one place and the value respondents found in being able to access their calendar from other locations while mobile.

For those using paper calendars, ease of use, and availability were important suggesting a digital family calendar must be carefully designed. For example, it is unlikely a digital calendar that required going to another room and logging in would be adopted by families that want their calendars accessible in a central location and always available.

We continue to analyze our survey results to explore a variety of topics including: the effect of children, who manages the calendar, how families handle negotiating schedules and tentative events, and the interaction between technology in the home and household scheduling. In addition, we plan to further analyze the data from our 70 international respondents. We intend to make the complete text of the survey available to the research community and are interested in working with others to gather results from different populations.

4. ACKNOWLEDGMENTS

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