A Social and Professional Calendar: A review, survey and outcomes on the issues

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ABSTRACT

This paper provides a comprehensive review on the survey and research on the problems users face using the shared calendar for events and information management. A brief description on future steps is also provided.

General Terms

Survey, Analysis, Study

Keywords

Event tracking; Shared calendar; Calendar information management; Appointment sharing

1. INTRODUCTION

This paper gives an insight to the analysis done on the usage of calendar for a certain set of people. With multiple engagements for individuals these days, it is sometimes hard to keep a track of every appointment and social invites people receive. For business professionals, mostly Outlook or any other appointment management application is extremely important. For a personal appointment, some people prefer a to-do list with reminders and some schedule them as a personal appointment in the cellphone. Adding the social content to it, there are events circulated from portals like Facebook, Google, Meetup, etc. Today, users rely a lot on online calendars be it on laptops, tablets or cellphones. With so much happening together, people are bound to miss something important, maybe an office meeting, maybe a social gathering, or something else as a result of content sharing on multiple platforms and not a perfect single source to manage everything.

The sections further detail some online articles and paper which have been on the similar lines and lay a groundwork of our understanding of calendar usage for appointments and events. Our conversations and survey with a good number of users provides us with a strong understanding on what we can improve and resolve. The further sections would give a detail on the study we performed, data collection, analysis and the outcomes.

2. RELATED WORK

Planning and keeping track of events and activities is a very important feature among other features of electronic devices. Since 1980's, surveys have been done on professionals to discover how people in the business world kept track of their schedules.

It's evident from them that calendars are indispensable and need variety of features to satisfy diversity in the use. As per the survey done by Business Wire in 2013 on smartphone users in America, 10% people have Calendar as one of their top three most-used app which saves on an average of 23 minutes of their days' time. And if they get to add more accounts in just one application, they can plan their day better and further saving more time. Among the seven most popular apps surveyed by DNA India, shows the common characteristic of integrating the social events with calendar, but when it comes to professional events, not many apps support this feature and people end up checking events on different apps. A recent survey done by John Gordon suggests about half of people who are expert smartphone users, had to use both personal and employer calendars separately. Also there is still large percentage of iPhone users use web to access Google's obscure calendar sync web page. This further hints towards that even good calendar apps being platform specific. Of the 25 people that used iPhones about 1/3 were using either Google's Calendar app or some other Google Calendar client (eg. Calendars 5 app) and 2/3 used iOS Calendar app. Most of the iPhone users of Google's Calendar service used multiple calendars and sent event invitations. iPhone non-experts who didn't use Google Calendar also didn't access more than one calendar and most had never sent an invitation. Many were unsure if their iPhone Calendars sync'd to iCloud (the default setup). Many existing apps like CrowdCompass, EventMobi have features like activity feed, beacons, interactive maps, attendee messaging etc. So some of these useful features can be picked and included in the calendar apps for easy access of information around the event.

In their research on "An Exploratory Study of Personal Calendar Use", Manas Tungare and Alyssa Sams explored the factors that contributed to adoption of groupware calendars and the role of peer pressure and network effects in expanding the use of a shared calendar system for meeting scheduling. Also it talks about how Visualizing calendar information on desktop computers and mobile devices has been explored in several studies. Another research paper on "On Scheduling Events and Tasks by an Intelligent Calendar Assistant" states that Common commercial applications, such as Apple iCal, Google Calendar, and Microsoft Outlook, embed some artificial intelligence techniques, such as natural language parsing, but are primitive in comparison with the state of the art in scheduling algorithms. Task management research efforts have concentrated on facilitating task assignment,

execution monitoring, and raising reminders as a very important aspect of calendar application which some users might select to give more preference over event management.

3. STUDY DESCRIPTION

Our study was a combination of scholarly articles along with data collection methods like survey and interactions with a large number of people.

3.1 Readings

During our study, we read various scholarly articles to get a broad insight on how calendars have been used. These papers provided a background on how calendars have played a critical role of an automated assistant in personal information/time management. These articles also highlighted how current calendar applications are inefficient in providing complete and self-sufficient event scheduling and management for its users.

3.2 Data Collection

3.2.1 Interviews

We had in-depth personal interviews and telephonic conversation with people and collected their input on how they use calendars for personal and professional information management. Our participants included students and business professionals. The questions revolved around overall combined scheduling issues the users face while using various calendar applications and how this impacts their day-to-day management.

3.2.2 Online Survey

Based on the information collected from the interviews with our participants, we created an online survey consisting of 8 questions for our wider audience. Following are the questions we included in our survey.

Question 1: Do you attend social events circulated on different social networks?

This question was asked to get a general idea about how many people require event scheduling in their personal information management.

Question 2: Do you find it hard to keep track of work, social and personal appointments?

We wished to realize how hard it is for our users to manage various appointments and events in their day-to-day lives.

Question 3: Do you sync your calendars from multiple e-mail accounts often?

This question was added to the survey to get an idea of the necessity of automated syncing of calendars from different applications.

Question 4: Have you ever forgotten/missed about an appointment due to clashes or tracking issues?

The results of this question supported our assumption of how managing multiple scheduling applications create a chaos in proper management.

Question 5: Would you prefer a scheduled (eg. daily, weekly) overview of your appointments?

We wished to get an idea on what is the preference of our users on the frequency of receiving a notification for the combined scheduling report.

Question 6: Would you want to share your specific schedule to a stakeholder/friend/colleague to keep them informed?

This question was asked to understand if our users consider sharing a specific schedule with their colleagues or friends useful with their information management.

Question 7: Which social sites do you use often for events information?

This question was asked to understand the preference of survey's audience on various scheduling applications available in current software market.

Question 8: What kind of tracking information would you like to have?

Finally we asked this question to understand what our users expect out of such a tool and what more functionalities we can add to our solution in near future.

4. ANALYSIS

We analyzed the data received from multiple sources to see what exactly users are facing issues with and how we can solve it. From the 74 responses received from Google surveys, verbal communication with colleagues and literature readings, we realized how much people rely on electronic devices and web services for social, professional and other events and tasks. The importance and reliance on portals like Facebook, Meetup, etc. has become extremely important.

The online social media has become a prime source of information sharing these days and it was evident given that 86% of our online survey respondents rely and use these services to get information on the events. The colleagues we talked to rely heavily on online social media and content these days to see what's happening in and around the city. For information on lectures, professional informative seminars and fairs, and others school events, they rely on official school calendar. A telephonic conversation with a business professional gave us an idea how managing multiple appointment sources was tough for him. He had to manage his official stakeholder meetings and personal appointments as a priority over the other social meetups. He preferred Outlook as a preferred method for the same, along-with a separate "to-do" application on portable devices.

4.1 Sources

Our first point was to check as to how many people actually follow and make use the social events online. The study (Figure 1) gave a strong outcome of 45% of the users who always do it and roughly 41% of the users who follow it sometimes.
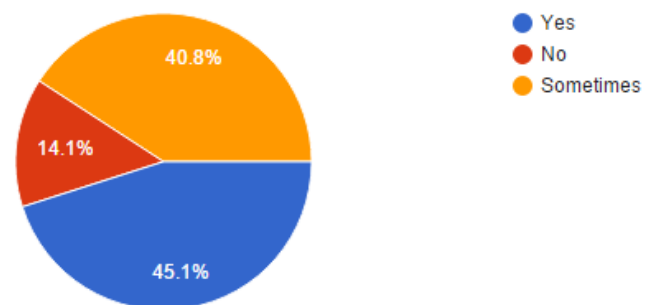

Figure 1: People following and attending events published on social networks

Out of the appointment calendar and event management tools available today, almost 85% of the respondents used Google calendar for appointments, 60% used Facebook events for social events and gatherings, roughly 8% use Meetup for professional and casual outings and 8% also count towards other sources which are not widely used by everyone. Figure 2 highlights the same which is a strong reason to believe that a single go-to service accompanying multiple sources could resolve a big problem. We do have existing applications which can take up multiple emails and appointment sources but they aren't flexible enough to cater to a diversified set.
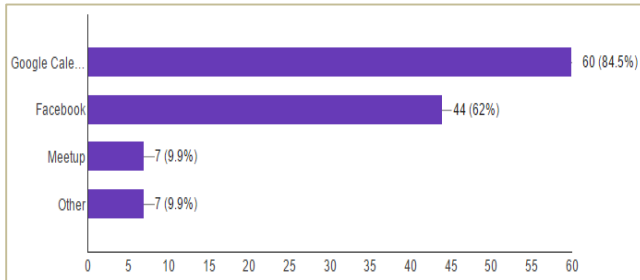
Figure 2: Event and appointment sources

4.2 Problems

From the study, we arrived at the following aspects:

4.2.1 Appointment Tracking

One of the biggest issue user face is keeping a track of multiple appointments, be it professional or personal. As per the Figure 3 pictorial representation of the same, 28% of our respondents always found it hard to keep track of appointments and approximately 44% of the total did it sometimes too given the reason that we have multiple sources to keep a track of events and to-dos.
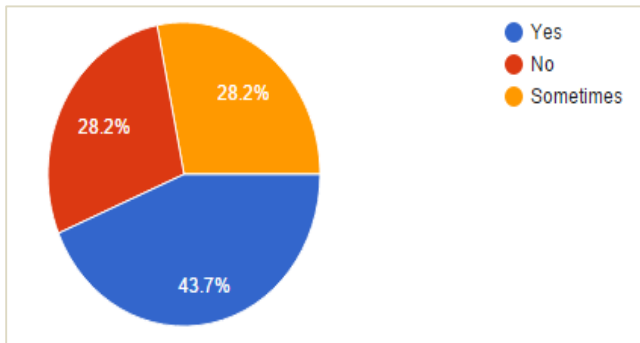

Figure 3: People finding hard to keep track of appointments from multiple sources

In a small face-to-face interview with a user, we asked if they have missed any appointment due to a similar reason to which he replied that it happens often with him. He did cite an example how once he had scheduled a meeting using Outlook during a time he was supposed to attend a small social gathering whose invite was sent on Google. He followed his Outlook often and that lead to him to miss tracking the Google one due to the clash at the same time. Had he known before and somehow if both clashes could have be seen on a single calendar, he would have taken a decision on the same and timely change his meeting appointment. We looked to expand the same query to a larger base asking our online surveying users if they had ever missed something due to

clashes and as expected, majority of the users, close to 60% had been through the same. Figure 4 gives an idea on the same. This was indeed one of the important takeaways for us.
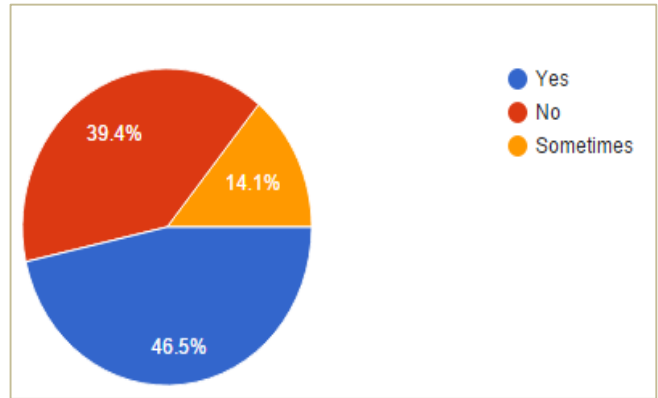

Figure 4: People who have forgotten about an appointment due to clashes or tracking issues

4.2.2 Scheduled Appointment Reports

People like planning ahead and getting a reminder of what's on their agenda, so they don't miss something important. Our survey revealed that an estimated of 86% users wanted to have a report overview of their agenda. This helps them planning well for the activities to come. Figure 5 shows the breakup on the schedule. 45% of the users wanted to be in constant track of their appointments and preferred a daily overview of report, 33% of the respondents preferred a weekly one and a minority 8% opted for a bi-weekly report. Most of us have had some kind of work experience involving software and managerial domain together and know how scheduling and reporting is an important aspect of work.
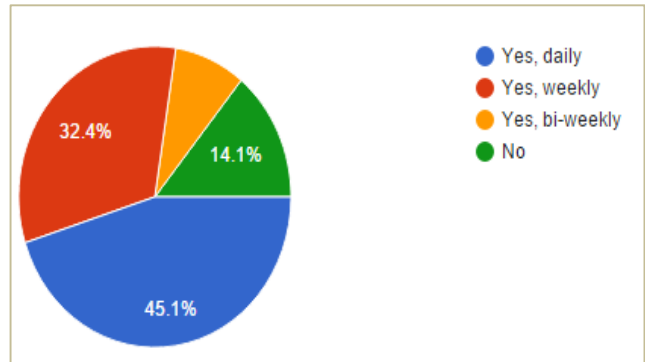

Figure 5: Preference of overview of scheduled appointments

4.2.3 Appointment/ Report sharing

Figure 6 shows us how an estimated 28% of the users said a strong "Yes" to sharing of schedule with their colleagues or friends, with 38% saying that they would sometimes do this. The idea is not to tell others about each and every details but give an overview if required to others, so they if they need to schedule something and you are required, they could know your availability. This could be in any form, an email report, calendar snippet, or just a small summarized view.
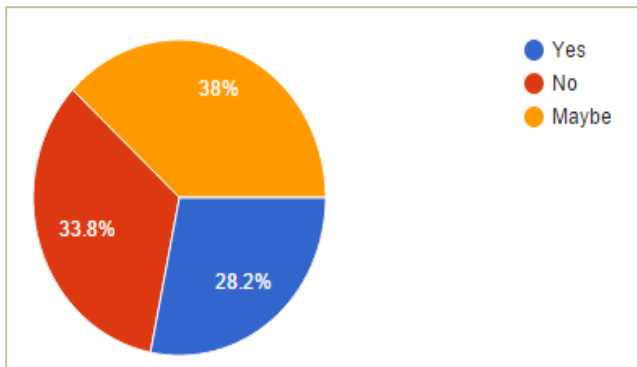
Figure 6: Sharing of schedule with others

4.2.4 Scheduled calendar syncing

Our survey suggested one of a strong drawback of users syncing their calendars often to keep the appointments updated. It is easier to keep the emails synced but a lot of sources only provide an export file to export events and hence, users have to continuously sync them. The results (Figure 7) show that two-third of the people keep syncing the calendars often which is tedious task and can lead to appointment misses.
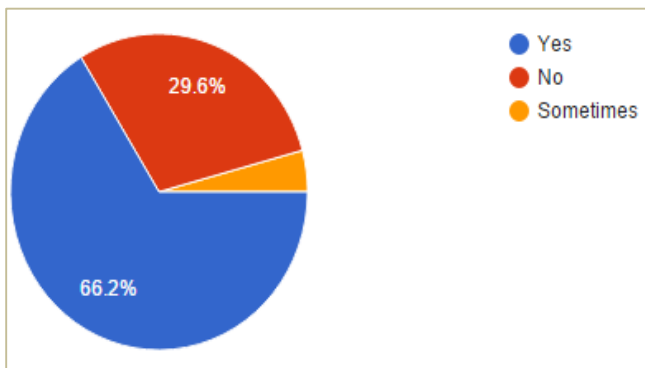

Figure 7: Users syncing their calendars from multiple accounts

4.3 A step further

We went ahead and asked our users if they wanted something added to their schedules and majority of people opted for having movie bookings, flight timings and bugs/issues tracking information. Figure 8 shows us the same and something which could be incorporated further.
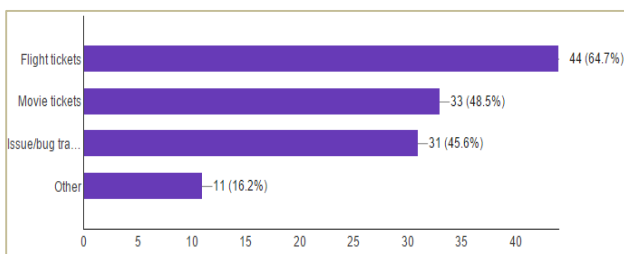

Figure 8: Tracking information in calendar

5. ACKNOWLEDGMENT

6. CONCLUSION

In this paper, we specified the study and analysis of our thorough research and survey conducted. We talked to various user groups and concluded that a lot of the users face some issues when it comes to calendar management. A majority of the users reported that they have missed events due to improper organization/ systemization of their personal and professional schedules.

To resolve this, we need to have a clean collaborative application or a web service or maybe an extension to the options already available to us which can resolve the issues users face, a service which saves time, learning effort and allow users to customize according to their convenience. Such a tool will help the users to grab events from various sites along with other appointments and populate them on a single calendar, as well as work towards reports and reminders.

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