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The CALENDARING & SCHEDULING CONSORTIUM

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Introduction

The Mobile Technical Committee of the Calendaring & Scheduling Consortium (<http://www.calconnect.org>) developed a questionnaire about mobile devices currently being used, their capabilities, and the extent of their support for calendaring applications.

The goal of this questionnaire was to determine how and to what extent Calendaring is being used on mobile devices, with a view to using those results to aid in the development of recommendations on how to address any problem areas.

A number of responses were received to the online questionnaire, and a summary and brief conclusion of these results is presented, along with the raw results themselves.

Respondents to the questionnaire answered based on the capabilities of their device. The results show an aggregate of these results.

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Questionnaire Background

The questionnaire was answered by 60 respondents, which covered 14 different device manufacturers and 40 different devices. Most of the devices were high-end mobile devices released in the last few years. The respondents come from a spread of localities, with 40% of respondents from America and 38% from the UK.

The questionnaire consists of 53 questions. The bulk of the questions required a “yes”, “no” or “don’t know” response. 15 of the questions were text based. Some questions allowed the user to respond with more than one response (e.g. from a pick list).

The percentage totals for most questions were calculated from the number of answers compared to the total of all possible answers (typically “yes”, “no” or “don’t know”).

Where the answers are mutually exclusive the total answer percentages add up to 100% (with +/- 1% for rounding errors). For questions where multiple responses are possible the percentages still show the answer compared to the total of all possible answers, but the total percentage will not be 100%.

Summary of Results

Section 1 – General Information

- There is a good spread of respondent’s geographic location (though lacking input from Japanese and South Korean users).
- Good spread of devices – reasonably representative of (smart) phones for the sample though generally Palm is much over-represented and Samsung especially is much under-represented.
- 30% of respondents intend to replace their device soon. This is similar to the yearly replacement average for US/Europe.
- Balance in usage business / personal use of devices is 50/50
- A quarter of respondents do not travel. Northern hemisphere continents (Europe, Asia, N America) are all travelled to by a large majority of respondents.
- 18% of respondents travelling to Asia (given only 3% are in Asia) is high
- Of the 28% who do not know if their devices would work out of their primary location, not all are the 27% who do not travel with their device. 8% of these do travel with their device
- A large range of primary desktop Calendar applications is used. Slightly surprising there are not more respondents using Outlook (17%).

Section 2 – General Device Capabilities

- High percentage of “high end” devices in survey, which is supported by a large percentage of devices having QWERTY keyboards (37%).
- Large amount of perception involved in respondents ranking their devices as low, mid or high range. The same device is often ranked differently by different respondents
- Large amount of perception involved in respondents describing the screen size. The same device is often ranked differently by different respondents
- Only 12% of respondents thought their screen “small”.
- 32% have run out of space or memory. This is obviously dependent on phone usage. The results seem to show this is more prevalent on the lower spec phones. However, this is encountered on the higher end devices too.

Section 3 – Access to Calendar Information

- 95% of respondents normally use their device's Calendar application
- Large number (83%) of devices can run third party apps but 37% don't know if there are third party calendar apps or not
- 10% use a third party application of their phone
- 43% don't know if they can use a web based calendar. 47% know they can on their device
- But no respondents normally use web based calendaring on their device
- Respondent / questionnaire confusion over: How to respond to whether they use the Calendar to View, Edit or View and Edit their data
- 87% of respondents use their device's Calendar application at least once a day
- Almost half of respondents say the experience of using the device's calendar application is worse than their desktop application. There is some very negative feedback in this area.
- However 20% said it was better than their desktop application

Section 4 – Calendar Application

- The sophistication of repeat rules seems to be subjective, however some devices don't support any repeat rules and some devices don't support "second Tuesday in month" type repeats typically simple (MS Outlook type) functionality seems to be supported
- No-one said alarms can't be created on their entries
- 67% can't invite other people to events - only 18% can. Implies almost all phones don't support Group Scheduling. Indeed, some of the devices that claim to support this only support it in a limited way (e.g. Nokia 9500, 9300)
- ToDos widely supported (83%)
- 67% use Data Sync out of the 87% of phones that support Sync
- Numerous different suggestions for Sync improvement
- Most affecting current behaviour – duplicating entries, slow, poor (or no) interoperability with desktop apps, poor support for recurrence and no support for syncing multiple calendars.
- Automatic sync also requested (e.g. over BT)
- Much comment on Data Sync being a limitation for the device:
- 30% saying it was the main thing they wanted to do that they currently couldn't do
- 93% of respondents only have one Calendar on their device
- 58% would like to overlay different calendars on top of the existing one
- Respondents wish to be notified of events with functionality (sounds, alerts, vibrate) that are currently available on their devices.

Section 5 – Calendar Date and Timezone Support

- Only 42% of respondents say their device knows what the timezone is automatically. Though some of the replies (compared with the devices in question) are not correct
- Only 7% of respondents say their device allows timezones to be set on events other than the current timezone
- Despite the fact that only 28% of respondents don't visit other timezones (*) 32% don't know if their device adjusts the events for the local timezone. 47% of respondents say their device does do this

Section 6 – Security

- 53% of respondents are concerned about security
- 77% say their calendar content is confidential (business or personal) – surprisingly high, but the only other choice was "non-confidential public data"

- However, 55% did not respond on what security features they would like.
 - 13% wanted SSL and/or encrypted data
 - 12% wanted Password protection at phone or application level
 - 7% wanted biometric security

Section 7 – What would you like to do with your mobile calendar?

On aggregate, Free / Busy time viewing is rated as the most important use case (of five)

On aggregate, Adding events downloaded from mobile browser second most important – this is more important to respondents than basic Group Scheduling. However, in a straight listing respondents also ranked this the joint least most important use case

Areas of ignorance for the respondents

- The existence of third party calendars for the device (37% don't know)
- If web calendars can be used on the device (43% don't know)
- If timezones can be set on events other than the current timezone (47% don't know)
- How good the documentation/manual is (27% don't know)

Results

Section 1 - General Information

Q1.1. Who is your device manufacturer?

Nokia	35%
Palm	23%
Sony Ericsson	13%
HTC	7%
Motorola	3%
Panasonic	3%
Siemens	3%
HP	2%
Kyocera	2%
Samsung	2%
RIM	2%
Apple	2%
Audiovox	2%
Dell	2%

Q1.2. What model is your device?

Results not summarised

Q1.3. Who is your service provider?

Vodafone	30%
Cingular	17%
T-Mobile	7%
Fido	7%

O2	7%
Verizon	5%
Sprint	5%
Orange	3%
Hutch	3%
AT&T	2%
Telus	2%
Virgin Mobile	2%
Elisa	2%
Other	10%

Q1.4. How long have you had this device? (years)

The average was 1.5 years. 25% of responses were under 1 year.

Q1.5. Do you intend to replace it soon?

Yes	30%
No	43%
Don't know	27%

Q1.6. How would you rate the documentation/manual that came with the device?

Good	22%
Average	47%
Poor	5%
Don't know	27%

Q1.7. What is the primary use of this device?

Business	51%
Personal	47%
Other	2%

Q1.8. What is the primary desktop calendar application that you use?

Lotus Notes	27%
Oracle Calendar	20%
Microsoft Outlook	17%
Mac iCal	12%
Meeting Maker	7%
Mozilla Sunbird	5%
Other	13%

Q1.9. What type of organization do you work in?

Business	30%
Mobile software vendor	30%
Education	28%
Other	7%
Government	3%
Mobile device manufacturer	2%

Q1.10. What is your primary geographic location?

USA	40%
UK	38%
Canada	10%
India	3%
Other	3%
UAE	2%
Finland	2%
Anguilla	2%

Q1.11. Which other geographic locations do you travel to?

Europe	43%
N America	28%
None	27%
Asia	18%
Australasia	5%
S America	2%

Q1.12. Does your service provider provide support outside your primary geographic location?

Yes	63%
No	8%
Don't know	28%

Section 2 - General Device Capabilities

Q2.1. How would you describe the capabilities of this device as a whole?

High-end	60%
Mid-range	37%
Low-end	3%

Q2.2. What size screen does it have?

Large	28%
Medium	57%
Small	12%
Unspecified	3%

Q2.3. What type of keypad does it have?

Phone	48%
Qwerty	37%
Other	15%

Q2.4. Have you found that you run out of storage space or memory for your data and applications?

Yes	32%
No	68%

Q2.5. Does it allow third-party applications to be used?

Yes	83%
No	10%
Don't know	7%

Q2.6. What are the standard set of applications on the device?

Results not summarised

Q2.7. What are its multimedia capabilities?

Camera	87%
Audio Player	65%

(summary of main responses)

Q2.8. Which multimedia capabilities do you actually use?

Camera	67%
Play Audio	38%

(summary of main responses)

Q2.9. Which multimedia capabilities would you like to have?

Better Music Player	35%
Better Video	33%
Better Camera	33%
VOIP	5%

Section 3 - Access to Calendar Information

Q3.1. Does the device have a built-in calendar application?

Yes	98%
No	0%
Don't know	2%

Q3.2. Are there third-party calendar applications for the device?

Yes	53%
No	10%

Don't know	37%
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Q3.3. Can you use a web-based calendar with this device?

Yes	47%
No	10%
Don't know	43%

Q3.4. Do you normally use any calendaring applications on this device?

Yes	95%
No	3%
Don't know	2%

Q3.5. Do you normally use a web-based calendar on this device?

Yes	0%
No	93%
Don't know	7%

Q3.6. Do you use the calendar feature to just view a calendar or to also edit it (e.g. create new events)?

View & Edit	43%
Edit	33%
View	23%

Q3.7. How often do you use the calendar feature on this device?

Several times a day	62%
Once a day	25%
Once a week	5%
Not very often	5%
Only when travelling	3%

Q3.8. Do you use the built-in or a third-party application?

Built-in	90%
Third party	10%

Q3.9. How would you compare the experience of using the calendar application on this device with using one on a desktop computer?

Worse	48%
Similar	13%
Better	20%
Other	19%

Section 4 - Calendar Application

Q4.1. Does it support creation of recurring events?

Yes	68%
No	18%
Don't know	13%

Q4.2. How sophisticated is the recurrence capability?

Result not summarised

Q4.3. Does it support creation of alarms on events?

Yes	92%
No	0%
Don't know	8%

Q4.4. Would you like to receive notification of your desktop calendar alarms on your mobile device?

Yes	75%
No	22%
Don't know	3%

Q4.5. How would you like your mobile device to notify you about events?

Sound	70%
Vibrate	32%
Pop-up	21%
SMS/Email	8%

Q4.6. Can you invite other people to events?

Yes	18%
No	67%
Don't know	15%

Q4.7. Does it support tasks/to-dos?

Yes	83%
No	8%
Don't know	8%

Q4.8. Does the device support synchronization of your phone and desktop calendar?

Yes	87%
No	5%
Don't know	8%

Q4.9. Do you use the synchronization support?

Yes	67%
No	32%
Don't know	2%

Q4.10. How would you improve the synchronization support with your desktop calendar?

Interop with desktop apps	12%
Recurrence issues	10%
Automatic Sync (BT)	8%
Speed	5%
Multiple Calendars	5%
Duplicates	5%
No Response	30%

Q4.11. How many different calendars do you have on your mobile device?

1 calendar	93%
2 calendars	3%
3 calendars	2%

Q4.12. Would you like the ability to overlay other calendars on top of your existing events?

Yes	58%
No	22%
Don't know	20%

Section 5 - Calendar Date and Timezone Support

Q5.1. Does the device itself know what the correct time is automatically?

Result not available

Q5.2. Does the device itself know what timezone it is in automatically?

Yes	42%
No	48%
Don't know	10%

Q5.3. Can you configure the device timezone manually?

Yes	77%
No	10%
Don't know	12%

Q5.4 Does the calendar application adjust the displayed time of events based on the local time and timezone information

Yes	47%
No	22%
Don't know	32%

Q5.5. Does the calendar application allow timezones on event times to be set different from the devices own timezone?

Yes	7%
No	47%
Don't know	47%

Section 6 - Security

Q6.1. Are you concerned about the security of the calendar data stored on the device?

Yes	53%
No	47%

Q6.2. How sensitive is the calendar data stored on the device?

Confidential - personal	45%
Non-confidential	33%
Confidential- business	22%

Q6.3. Are there any security features you would like to have on your mobile device?

No Response	55%
SSL/Encryption	13%
Password control	12%
No	8%
Biometric lock	7%

Section 7 - What would you like to do with your mobile calendar?

Q7.1 What would you like to be able to do with your device that you cannot do right now?

Improve Sync	30%	(of which use Web Sync)	12%
Group Scheduling	12%		
GUI issues	10%		
Timezone support	7%		
View Others Calendars	7%		

No Response 37%

Q7.2 Please rank these mobile calendaring use cases in order of importance to you

Overall result - most to least important:

- Sharing a calendar with colleague or spouse to identify free and busy time
- Adding calendar events to your calendar that have been downloaded from a mobile web browser
- Book appointments with other people using your mobile device
- Automatically arranging a meeting at a time convenient for meeting participants after they have agreed they want to meet
- Accessing a public transport timetable on your mobile device that is relevant to your current location

Section 8 - About this Questionnaire

Q8. What do you think of this questionnaire?

Ok to Good	38%
No Response	33%
Too Long/Detailed	8%
Unclear	5%
Other	15%

Selected Answers to Text Questions

Q3.9. How would you compare the experience of using the calendar application on this device with using one on a desktop computer?

"Substantially less useful. Due to synchronization problems with my calendar server, the inability to edit/schedule events is a major issue. Also, the web-based calendar provided by our calendar server uses frames, which makes browsing from the ##### device very cumbersome."

Lots of comments on data entry and screen size

"awkward to view some information, poor summary of information on phone, data input difficult, no group scheduling"

Q4.10. How would you improve the synchronization support with your desktop calendar?

"iCal supports multiple calendars (eg one for work, one for personal events etc..) - I wish the phone would support this too"

"Make it faster and more reliable - syncing sometimes create multiple enteries of the same enteries"

"I would add support to subscribe to iCal URL's & update at hotsync time"

"Works great!"

"Support undo, show user the data being synced - I don't trust sync."

Q7.1 What would you like to be able to do with your device that you cannot do right now?

"time zones on events. per-event alarm preferences (volume, etc). Share calendars (other people's). Filter by category. link an event to contacts. want more than 30 chars in Location field (or link to metadata). show more than just calendar events (todos, for example, or TV listings). transparent negotiation of meeting times"

"Sync properly to Oracle Calendar and other calendars. View other people's calendars (not via web)."

"push email and cal events. overlay calendars. access event calendars. better scheduling with corporate cal solution "

"It would be nice to have multiple calendars to categorise different events, each with there own sync source. For example work calendar events and personal calendar events, one syncing from my a work syncML server, the other from my home pc.As mentioned earlier, the ability to apply a pass code for a calendar with sensitive data (i.e. work related events) would be essential."

Appendix A – Questionnaire

Calconnect TC-MOBILE Questionnaire V2

This questionnaire is designed to give the Calendaring & Scheduling Consortium's TC-MOBILE technical committee information about mobile devices currently being used, including specifics about the device capability as well as support for calendaring applications. The information provided in this form will be used to help guide the technical committees report on mobile calendaring. A summary of the results will be published by the Consortium through its usual process.

Please fill out this form with as much information as possible. If you are not sure of any answers, just leave that field empty or select the "Don't Know" option.

Personal Details *(will not be included in published report)*

What is your name?

What is your email address?

What is your organization?

Section 1 General Information

Q1.1. Who is your device manufacturer?

Q1.2. What model is your device?

Q1.3. Who is your service provider?

Q1.4. How long have you had this device? years

Q1.5. Do you intend to replace it soon? ☐ Yes ☐ No ☐ Don't know

Q1.6. How would you rate the ☐ Good ☐ Average ☐ Poor ☐ Don't

documentation/manual know
that came with the
device?

Q1.7. What is the
primary use of this
device?

☐ Personal ☐ Business ☐ Other

Q1.8. What is the
primary desktop
calendar application
that you use?

Q1.9. What type of
organization do you
work in?

Q1.10. What is your
primary geographic
location?

Q1.11. Which other
geographic locations
do you travel to?

Q1.12. Does your
service provider
provide support
outside your primary
geographic location

☐ Yes ☐ No ☐ Don't know

Section 2 General Device Capabilities

Q2.1. How would you
describe the
capabilities of this
device as a whole?

☐ Low-end ☐ Mid-range ☐ High-
end
☐ Don't know

Q2.2. What size
screen does it have?

☐ Small ☐ Medium ☐ Large

Q2.3. What type of
keypad does it have?

☐ Phone keys (0-9 etc)
☐ Full qwerty ☐ Other

Q2.4. Have you found
that you run out of
storage space or
memory for your data
and applications?

☐ Yes ☐ No ☐ Don't know

Q2.5. Does it allow third-party applications to be used? ☐ Yes ☐ No ☐ Don't know

Q2.6. What are the standard set of applications on the device?
(e.g. Contacts, calendar, email, alarm, games)

Q2.7. What are its multimedia capabilities?
(e.g. takes pictures, video playback)

Q2.8. Which multimedia capabilities do you actually use?
(e.g. audio recording)

Q2.9... Which multimedia capabilities would you like to have?
(e.g. digital music playback)

Section 3 Access to Calendar Information

Q3.1. Does the device have a built-in calendar application? ☐ Yes ☐ No ☐ Don't know

Q3.2. Are there third-party calendar applications for the device? ☐ Yes ☐ No ☐ Don't know

Q3.3. Can you use a web-based calendar with this device? ☐ Yes ☐ No ☐ Don't know

Q3.4. Do you normally use any calendaring applications on this device? ☐ Yes ☐ No ☐ Don't know

Q3.5. Do you normally use a web-based calendar on this device? ☐ Yes ☐ No ☐ Don't know

Q3.6. Do you use the calendar feature to just view a calendar or to also edit it (e.g. ☐ View ☐ Edit

create new events)?

Q3.7. How often do you use the calendar feature on this device?

Q3..8. Do you use the built-in or a third-party application?

- ☐ Built-in
☐ Third-party

Q3.9. How would you compare the experience of using the calendar application on this device with using one on a desktop computer?

Section 4 Calendar Application

Q4.1. Does it support creation of recurring events?

- ☐ Yes ☐ No ☐ Don't know

Q4.2. How sophisticated is the recurrence capability?

(e.g. repeat daily, weekly, every n days etc.)

Q4.3. Does it support creation of alarms on events?

- ☐ Yes ☐ No ☐ Don't know

Q4.4. Would you like to receive notification of your desktop calendar alarms on your mobile device?

- ☐ Yes ☐ No ☐ Don't know

Q4.5. How would you like your mobile device to notify you about events?

(e.g. play a sound, set-up a phone call etc.)

Q4.6. Can you invite other people to events?

- ☐ Yes ☐ No ☐ Don't know

Q4.7. Does it support tasks/to-dos?

- ☐ Yes ☐ No ☐ Don't know

Q4.8. Does the device support synchronization of your phone and desktop calendar?

☐ Yes ☐ No ☐ Don't know

Q4.9. Do you use the synchronization support?

☐ Yes ☐ No ☐ Don't know

Q4.10. How would you improve the synchronization support with your desktop calendar?

Q4.11. How many different calendars do you have on your mobile device?

Q4.12. Would you like the ability to overlay other calendars on top of your existing events?

☐ Yes ☐ No ☐ Don't know

Section 5 Calendar Date and Timezone Support

Q5.1. Does the device itself know what the correct time is automatically?

☐ Yes ☐ No ☐ Don't know

Q5.2. Does the device itself know what timezone it is in automatically?

☐ Yes ☐ No ☐ Don't know

Q5.3. Can you configure the device timezone manually?

☐ Yes ☐ No ☐ Don't know

Q5.4 Does the calendar application adjust the displayed time of events based on the local time and timezone information

☐ Yes ☐ No ☐ Don't know

Q5.5. Does the calendar application allow timezones on event times to be set different from the devices own timezone?

☐ Yes ☐ No ☐ Don't know

Section 6 Security

Q6.1. Are you concerned about the security of the calendar data stored on the device?

☐ Yes ☐ No ☐ Don't know

Q6.2. How sensitive is the calendar data stored on the device?

Q6.3. Are there any security features you would like to have on your mobile device?

Section 7 What would you like to do with your mobile calendar?

Q7.1 What would you like to be able to do with your device that you cannot do right now?

Q7.2 Please rank these mobile calendaring use cases in order of importance to you
(mark the most important use case as 1, second most important as 2,.... least important as 5)

1. Sharing a calendar with colleague or spouse to identify free

and busy time

2. Book appointments
with other people
using your mobile
device

*(e.g. scheduling a
follow-up meeting at
the end of a meeting
or making an
appointment at the
physician and the
event automatically
being added to your
mobile calendar)*

3. Adding calendar
events to your
calendar that have
been downloaded
from a mobile web
browser

*(e.g. adding your
favourite team's
football matches or a
list of public holidays
to your calendar)*

4. Accessing a public
transport timetable on
your mobile device
that is relevant to your
current location

*(e.g. automatically
downloading a
timetable at bus stop
or ticket office).*

5. Automatically
arranging a meeting at
a time convenient for
meeting participants
after they have agreed
they want to meet.

Section 8 About this Questionnaire

Q8. What do you think of this questionnaire? *(e.g. how long did it*

take to fill out, did you understand all the questions)

Reset

Submit Questionnaire

*If you press "Submit Questionnaire " and **nothing happens**, please shorten your free-form answers. Some browsers enforce an arbitrary limit on the amount of data that can be submitted via this form.*
