



HCI: CW1

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First, the news...

CW1 Question:

**Why do so few students use Office 365
Calendar?**

Why don't people use anything?

- People do not **know** about _____
- People can not **use** _____
- People actually do not **care** about _____

Why don't people use Office Calendar?

- People do not **know** that the calendar exists
- People can not **use** the calendar for the activities they want or need to do
- People actually do not **care** about calendar type activities like time management

Or in terms of our study...

Questions:

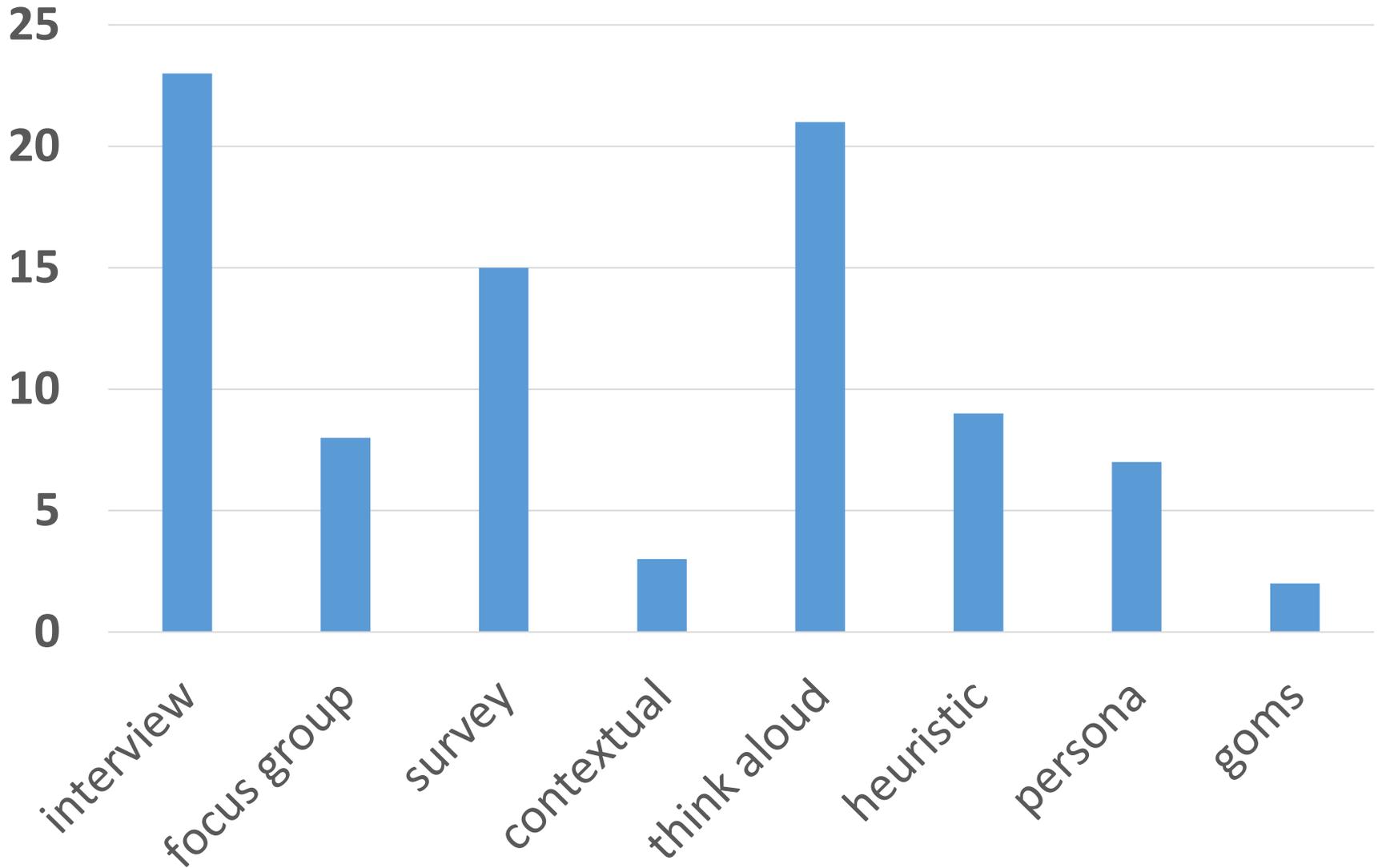
- Do students **know** that they have free access to Office365 calendar?
- What is a “calendar type activity” according to a typical student?
- What calendar type activities do students **need** to accomplish?
- What calendar type activities do students **want** to accomplish?
- Do students even need a calendar?
- What are non-calendar options students use?

Study options

- Interviews and Focus Groups
 - How people behave now and what their opinions are
 - Deep look into a small number of people
- Survey
 - Prevalence of an activity, opinion, behavior, trait, etc.
- Think aloud
 - Usability of the software on specific tasks
- Heuristic
 - Common usability issues divorced from user bias
- Persona
 - Collect together requirements into one “typical” user
 - Forces designer to think about what this person needs
- GOMS
 - Efficiency of use for common frequently accomplished tasks

Questions	Approaches
Do students know that they have free access to Office365 calendar?	Interview, Focus Group, Survey
What is a “calendar type activity” according to a typical student?	Interview, Focus Group, Survey, Persona
What calendar type activities do students need to accomplish?	What: Interview, Focus Group, Survey, Persona Can: Think aloud, heuristic, GOMS
What calendar type activities do students want to accomplish?	What: Interview, Focus Group, Survey, Persona Can: Think aloud, heuristic, GOMS
Do students even need a calendar?	Interview, Focus Group, Survey
What are non-calendar options students use?	Interview, Focus Group, Survey

Methodologies chosen



Lining up the studies (design requirements)

- Initial: Interview or Focus Group
 - What people do now, what activities they engage in, what they think a calendar is for, what problems they have, and why they do or do not use your product
- Figure out prevalence of findings: Survey
 - Interviewed person thinks X but does everyone?
 - Does X tend to impact Y? (Correlation)
- Synthesize the results: Persona
 - What does a typical user in our population look like?
 - What do they need to accomplish?
 - What would they like to accomplish?

Lining up the studies (usability)

- Find basic usability issues: Heuristics
 - Help the researcher learn about the interface
 - Identify potential pain points for the user
 - Get obvious stuff fixed or identified
- Usability issues: Think aloud
 - Use other studies to identify tasks that are common or likely to be confusing
 - Test these tasks on a user to see if they are easy/challenging
- Efficiency: GOMS
 - Use other studies to identify tasks that are common
 - Determine if common tasks are actually fast to do

Common errors

Focus Groups

- Group interview sessions
- Pros
 - Get group consensus about issues
 - Efficient way to test early ideas/designs
 - Good way to identify issues or areas of conflict
- Cons
 - Can be taken over by assertive individuals
 - Focus on people's opinions not actual behaviors
 - Limited sample size

Contextual Inquiry

- An approach to ethnographic study where user is expert, designer is apprentice
- A form of interview, but
 - at users' workplace (workstation)
 - 2 to 3 hours long
- Four main principles:
 - Context: see workplace & what happens
 - Partnership: user and developer collaborate
 - Interpretation: observations interpreted by user and developer together
 - Focus: project focus to understand what to look for

Interviews and Focus Groups

- These methods are great for learning about your participants
 - How do they normally do things?
 - What problems do they generally have?
 - What do their daily routines look like?
 - What is their opinion on something?
- End users are TERRIBLE designers
 - Should we build X?
 - Would you like X?
 - What should we build?
- End users are experts at being themselves
 - Do you use X as your current calendar? Why or why not?
 - How likely would you be to use X if your calendar added it?

Interviews and Focus Groups are not Questionnaires

- A structured interview is like a questionnaire
- Semi-structured interviews don't just give you the option of following up, they expect you to follow up
- Interview spent more than half the questions on Office 365 when the interviewee was unlikely to use it at all
- Interview took 10 minutes or less
 - Sign that the “semi-structured” interview was actually a structured interview. Follow up should take longer.

Surveys: Common problems

- Not picking a structured way of selecting answers
 - The survey writer just guessed at some questions and answers and put them on the survey
- Subject agreement issues
 - Asking the participant “which calendars do you use (multiple selection)” and then asking “how frequently do you use your chosen calendar” ...
 - Which calendar do you mean?
- Type agreement issues
 - Asking the participant “indicate how much you like the following” then saying “I use the calendar all the time”

Surveys

3. What kind of electronic calendar do you use? *

- Google Calendar.
- Office 365 Calendar.
- Other

- Why are there only two types of calendars here?
- Why can I only select one of them?
- Why can't I enter the name of another calendar?

Surveys

6. What do use it for?

- Professional work.
- Personal purposes
- Both

- I do things other than work and personal
- If I go to a class sponsored party is that personal or work?
- Is this question teaching us anything useful?

Response Anchors

Psychologists have been working for quite some time to determine the least biased way to present a set of answers.

On the right are a set of response anchors that are known to work well.

Likert-Type Scale Response Anchors

Citation:

Vagias, Wade M. (2006). *Likert-type scale response anchors*. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management. Clemson University.

Level of Acceptability

- 1 – Totally unacceptable
- 2 – Unacceptable
- 3 – Slightly unacceptable
- 4 – Neutral
- 5 – Slightly acceptable
- 6 – Acceptable
- 7 – Perfectly Acceptable

Level of Appropriateness

- 1 – Absolutely inappropriate
- 2 – Inappropriate
- 3 – Slightly inappropriate
- 4 – Neutral
- 5 – Slightly appropriate
- 6 – Appropriate
- 7 – Absolutely appropriate

Level of Importance

- 1 – Not at all important
- 2 – Low importance
- 3 – Slightly important
- 4 – Neutral
- 5 – Moderately important
- 6 – Very important
- 7 – Extremely important

Level of Agreement

- 1 – Strongly disagree
- 2 – Disagree
- 3 – Somewhat disagree
- 4 – Neither agree or disagree
- 5 – Somewhat agree
- 6 – Agree
- 7 – Strongly agree

Knowledge of Action

- 1 – Never true
- 2 – Rarely true
- 3 – Sometimes but

My beliefs

- 1 – Very untrue of what I believe
- 2 – Untrue of what I believe
- 3 – Somewhat untrue of what I believe
- 4 – Neutral
- 5 – Somewhat true of what I believe
- 6 – True of what I believe
- 7 – Very true of what I believe

Priority:

- 1 – Not a priority
- 2 – Low priority
- 3 – Somewhat priority
- 4 – Neutral
- 5 – Moderate Priority
- 6 – High priority
- 7 – Essential priority

Level of Concern

- 1 – not at all concerned
- 2 – Slightly concerned
- 3 – Somewhat concerned
- 4 – Moderately concerned
- 5 – Extremely concerned

Priority Level

- 1 – Not a priority
- 2 – Low priority
- 3 – Medium priority
- 4 – High priority
- 5 – Essential

Level of Problem

- 1 – Not at all a problem
- 2 – Minor problem
- 3 – Moderate problem
- 4 – Serious problem

Affect on X

Level of Support/Opposition

- 1 – Strongly oppose
- 2 – Somewhat oppose
- 3 – neutral
- 4 – Somewhat favor
- 5 – Strongly favor

Level of Probability

- 1 – Not probable
- 2 – Somewhat improbable
- 3 – Neutral
- 4 – Somewhat probable
- 5 – Very probable

Level of Agreement

- 1 – Strongly disagree
- 2 – Disagree
- 3 – Neither agree or disagree
- 4 – Agree
- 5 – Strongly agree

Level of Desirability

- 1 – Very undesirable
- 2 – Undesirable
- 3 – neutral
- 4 – Desirable
- 5 – Very desirable

Level of Participation

- 1 – No, and not considered
- 2 – No, but considered
- 3 – Yes

Frequency – 5 point

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

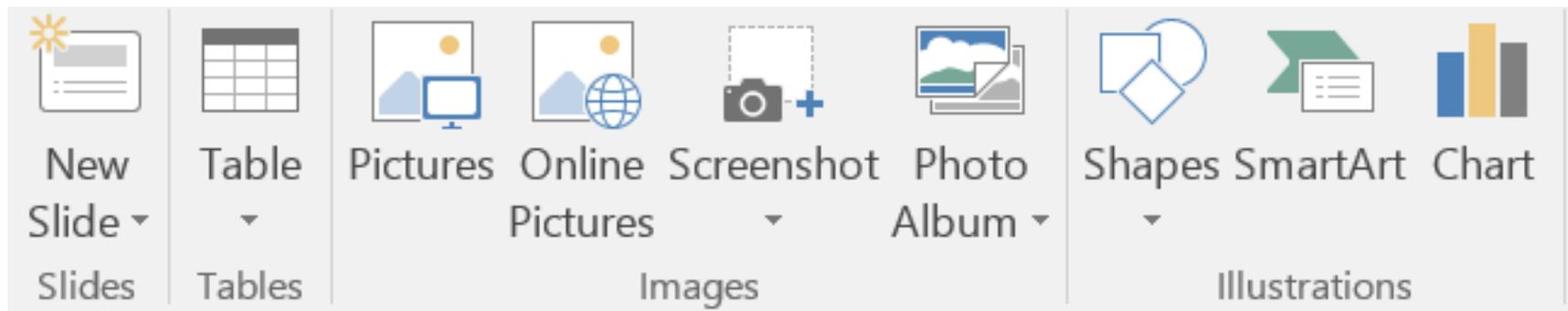
Frequency

Heuristics and Think Aloud

- Largest issue was not basing tasks on something
- Best to base tasks on earlier studies or on general information from the internet
- Second largest issue was people not training on think aloud ...
- Heuristics had some minor issues identifying “Recognition vs. Recall”

Recognition rather than recall

- Show all the options available to the user rather than expecting them to remember them all
- Do not require users to remember information from one screen to the next
- Why
 - People are less good at remembering (recall) than they are at recognizing (recognition)



Heuristics and Think Aloud

- Good for identifying general errors
- Tasks need to be based on what you think the users will want to do
- Explanation to developers needs to be clear
 - Referencing UAR numbers is a good idea

Results

Interviews / Focus groups / Survey

- How they handle time management
- Tasks
 - Striking through a completed task (happy)
 - Adding a event
 - Flagging calendars
 - Inviting others to events
 - Changing events
 - Adding timetables for classes
 - Holidays and festivals
 - Subscribing to calendars other people put together
- Observations
 - Paper feels like it won't get lost or run out of batteries
 - Use of multiple calendars for different things
 - Use different types of calendars for different things
 - Integration with email
 - Role of memory in calendar management
 - Picked calendar that came with my phone

Think aloud

- Hard to even find the calendar
- Save button not on top for event saving
- Adding people challenging, and limited feedback if it was done right or not
- Many language based issues
- Birthday calendar is a bit confusing

Heuristics

- Weather defaults to Slovakia
- Possible to delete event with no warning
- Event creation different on day/week/month views
- No recovery from accidental deletions
- Clicking off the event creation auto-deletes with no warning (or not?)
- Issue with room finding in UI
- Parallel booking warning
- Common issue
 - Recognition vs. Recall



Home

Accounts

Services

Teaching

Library

Help

Calendar

Edit Return to dashboard

Preferences

November 2016						
Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

View [Day](#) | [Week](#) | [Month](#)

Today

- 10:00 AM - 10:50 AM
[Computer Security](#)
- 11:10 AM - 12:00 PM
[Human Computer Interaction](#)

My Calendars

[Exchange](#)

Questions?