Agile UX Research Practices in Android

Google I/O 2013

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Google I/O

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Agenda

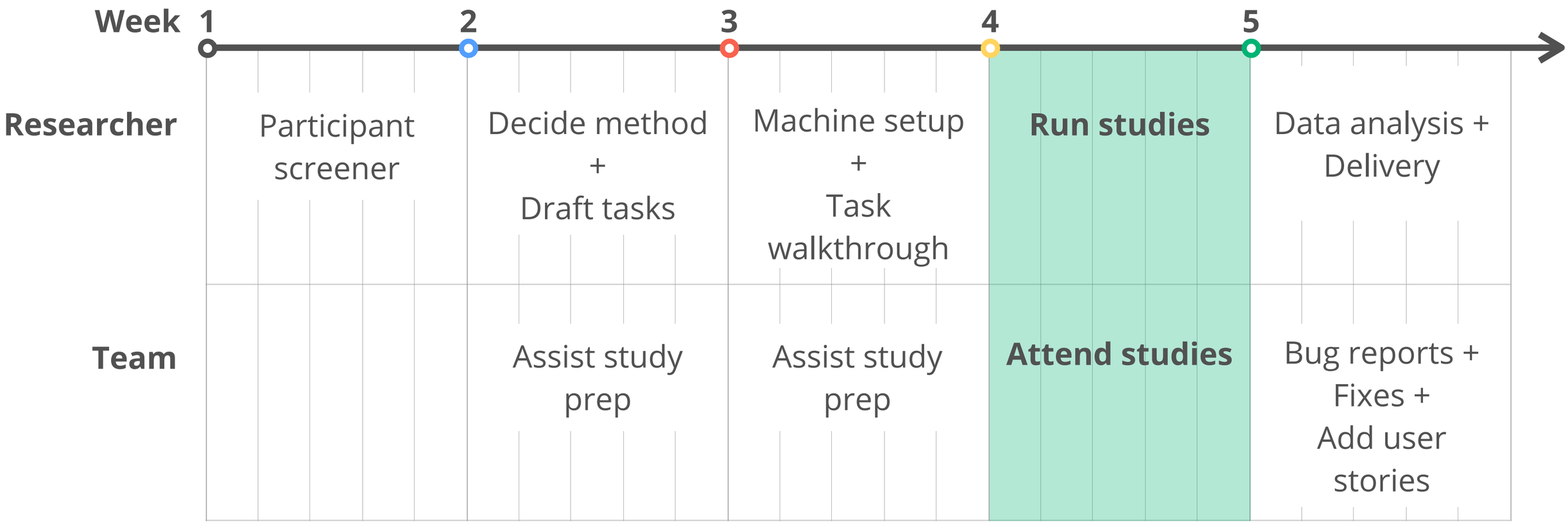
Challenges of UX testing for Agile Development
Case studies:
- Heuristic Evaluation
- RITE Study with Prototypes
- Cafe Study
- Pulse study
  - Deep dive

Wrap up

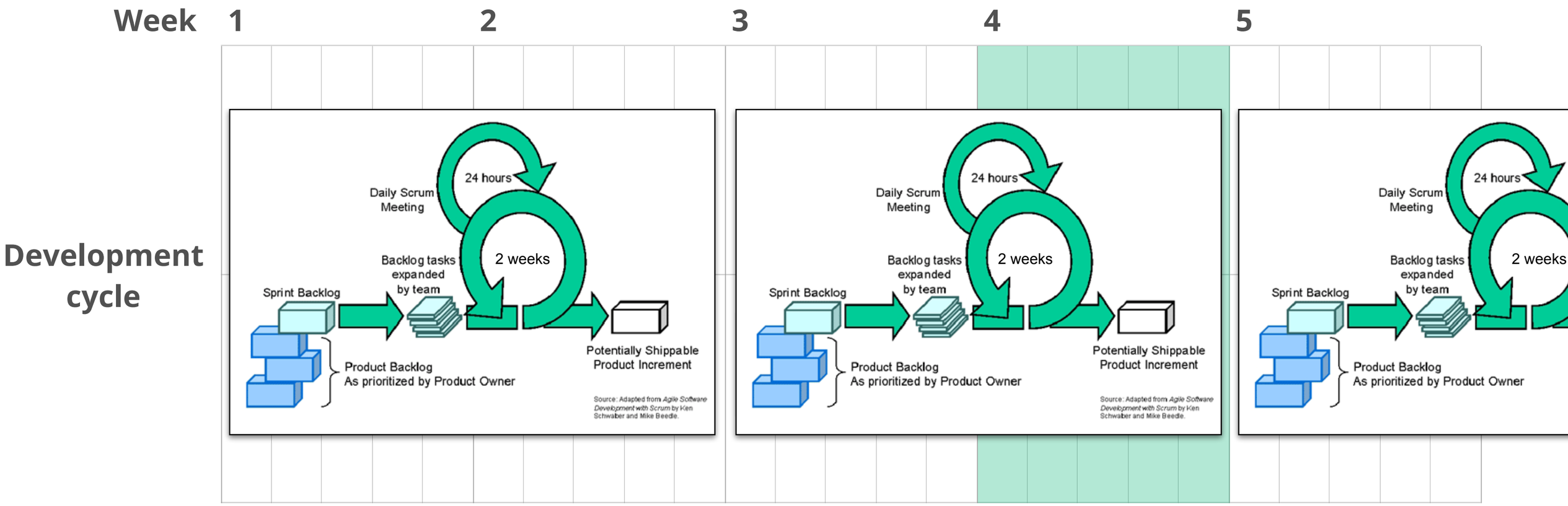
Challenges of UX Research for Agile Development

$1 : $10 : $100

Traditional UX Research Study Timeline

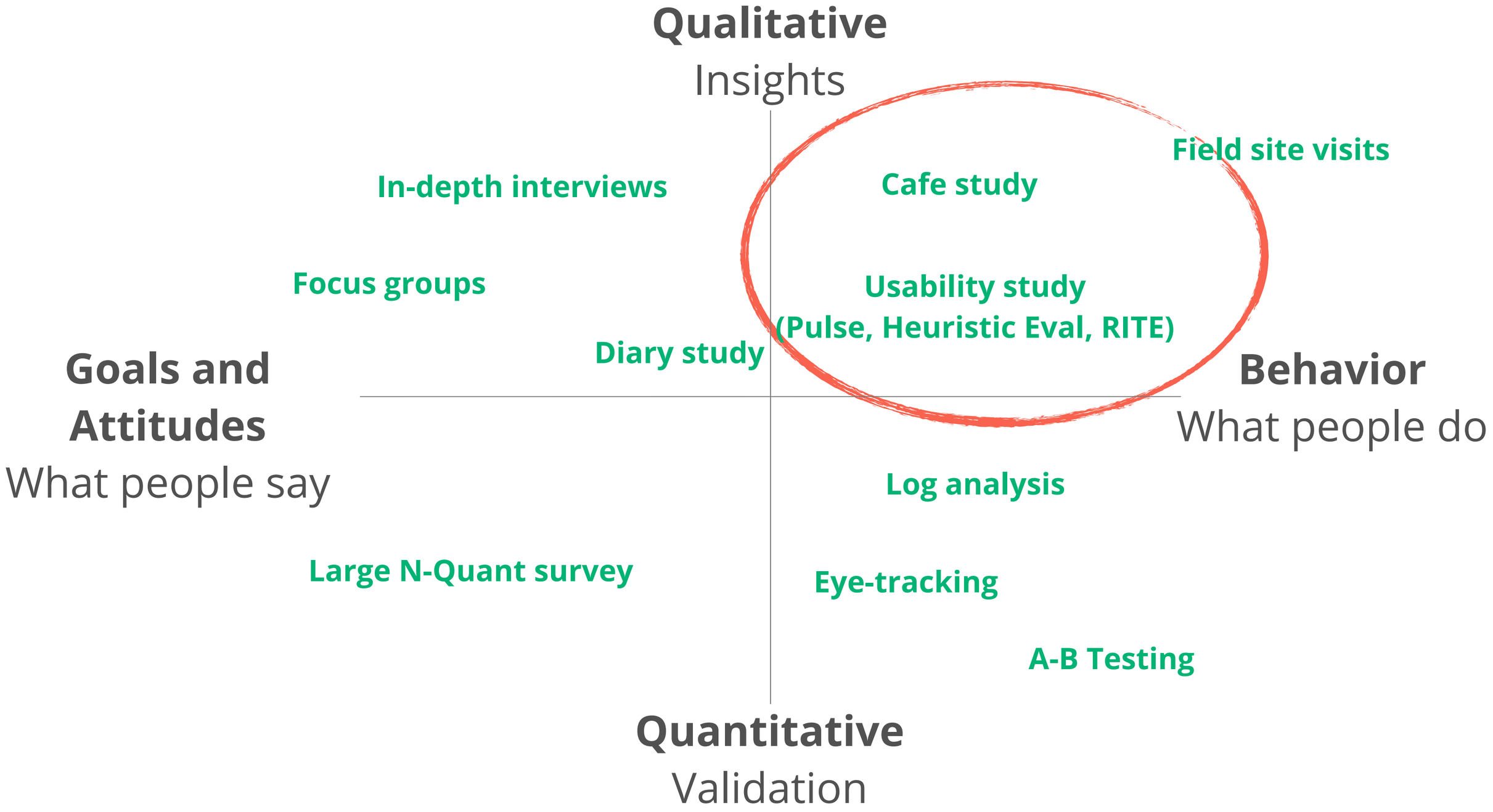


Traditional UX Research Study Timeline



BEFORE coding
feedback **NOW**
analyze **QUICKLY**
NO TIME for everything

Source: Brian Legate, Flickr


Qualitative
Insights
Field site visits
In-depth interviews
Cafe study
Focus groups
Usability study
(Pulse, Heuristic Eval, RITE)
Diary study
Goals and
Attitudes
What people say
Behavior
What people do
Log analysis
Large N-Quant survey
Eye-tracking
A-B Testing
Quantitative
Validation

Case studies

Heuristic evaluation
RITE study with prototypes
Cafe study
Pulse study

Heuristic Evaluation

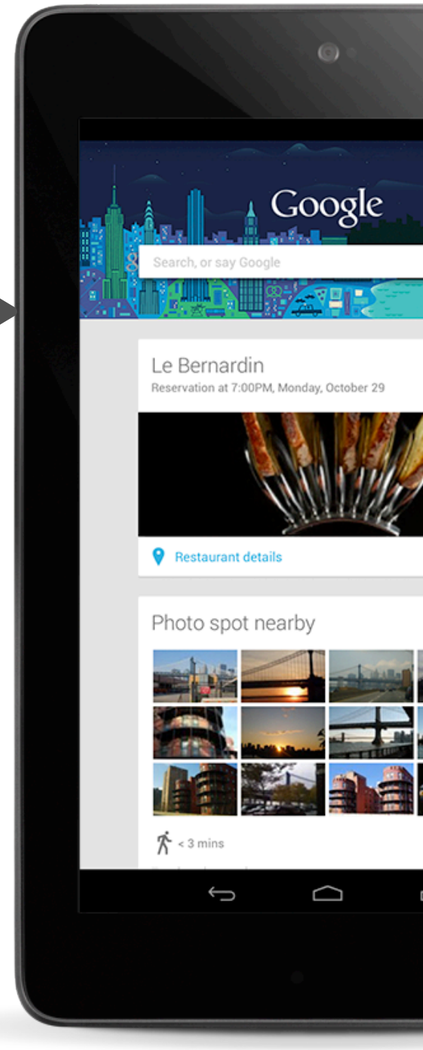
Heuristic Evaluation

Expert review against a set of principles

1-2 hours

Heuristic Evaluation **Process**

A measurable question	**Choose heuristics**	**Measure against heuristics**	**Summarize measurements**	**Assign action items**
“How long does setup take for new tablet X?”	Choose speed-based heuristics	Set up with team observing	Email report	Reprioritize work



0
USERS

1
RESEARCHER

Quantified Evidence

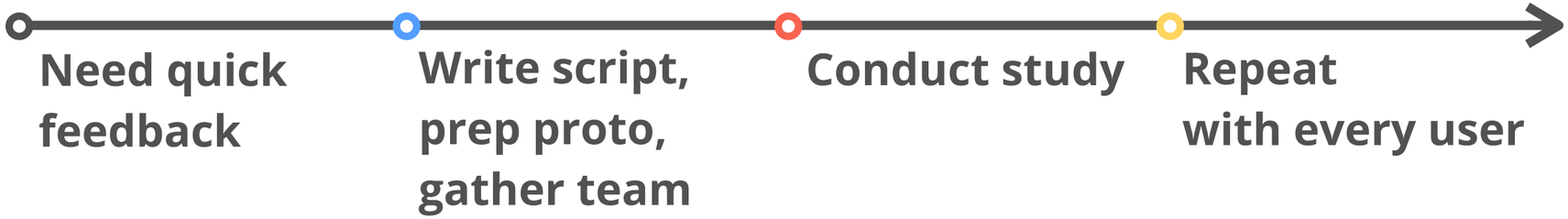
RITE Study with Prototypes

RITE Study with prototypes

Rapid Iterative Testing & Evaluation

1-2 days

RITE Study Process



RITE Study Process: One day

Need quick feedback

Write script, prep proto, gather team

Conduct study

Repeat with each user

9 am
Design v0.1

11 am
Design v0.2

1 pm
Design v0.3

3 pm
Design v0.4

5 pm
Design v0.5

Final iteration
Design v1.0

RITE Study Process: Two days

Day 1

9 am
Design v0.1

11 am
Design v0.1

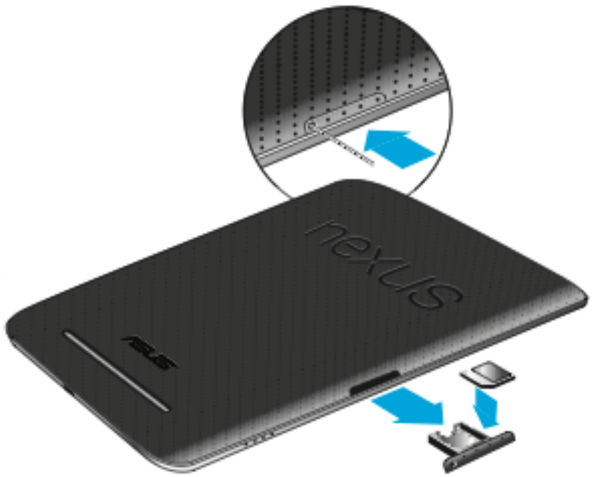
1 pm
Design v0.1

Day 2

9 am
Design v0.2

11 am
Design v0.2

1 pm
Design v0.2



Final iteration
Design v0.3

5
USERS

1
RESEARCHER

1
DESIGNER

USABILITY LAB

Focused Change

Cafe Study

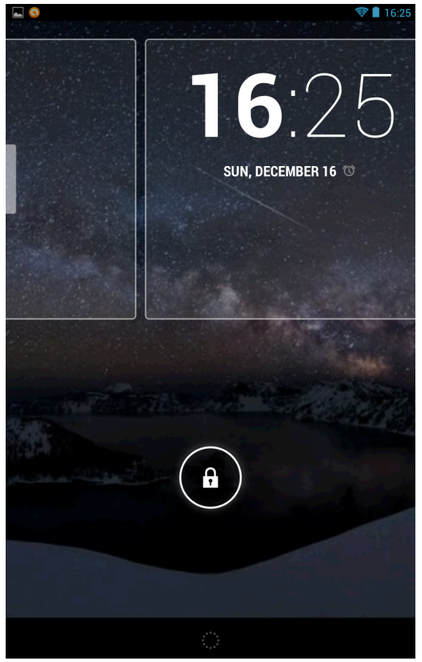
Cafe Study

Fresh eyes on small, isolated usability issues

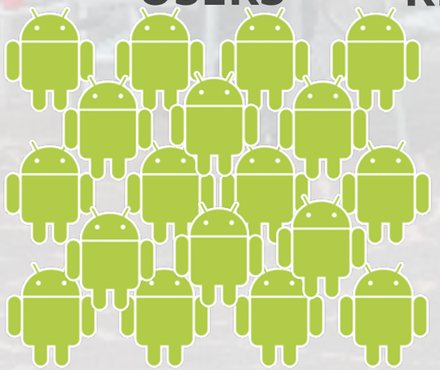
Half day

Cafe Study **Process**

A usability/ discoverability question	**Write script, prep prototype**	**Conduct study at cafe**	**Summarize observations**	**Assign action items**
“Can a user unlock their device successfully?”	Got several phones ready	5 min per person, taking notes	Email report	Changes to prototype, back out for more testing



18
USERS



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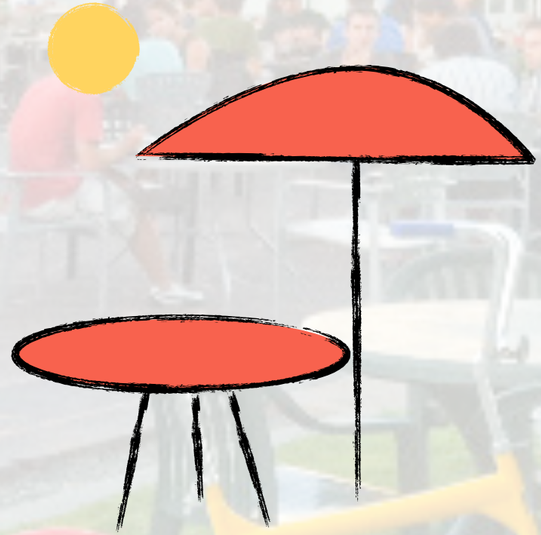
RESEARCHER

1
HELPER



CAFE, FARMER'S MARKET…
NOT YOUR OFFICE

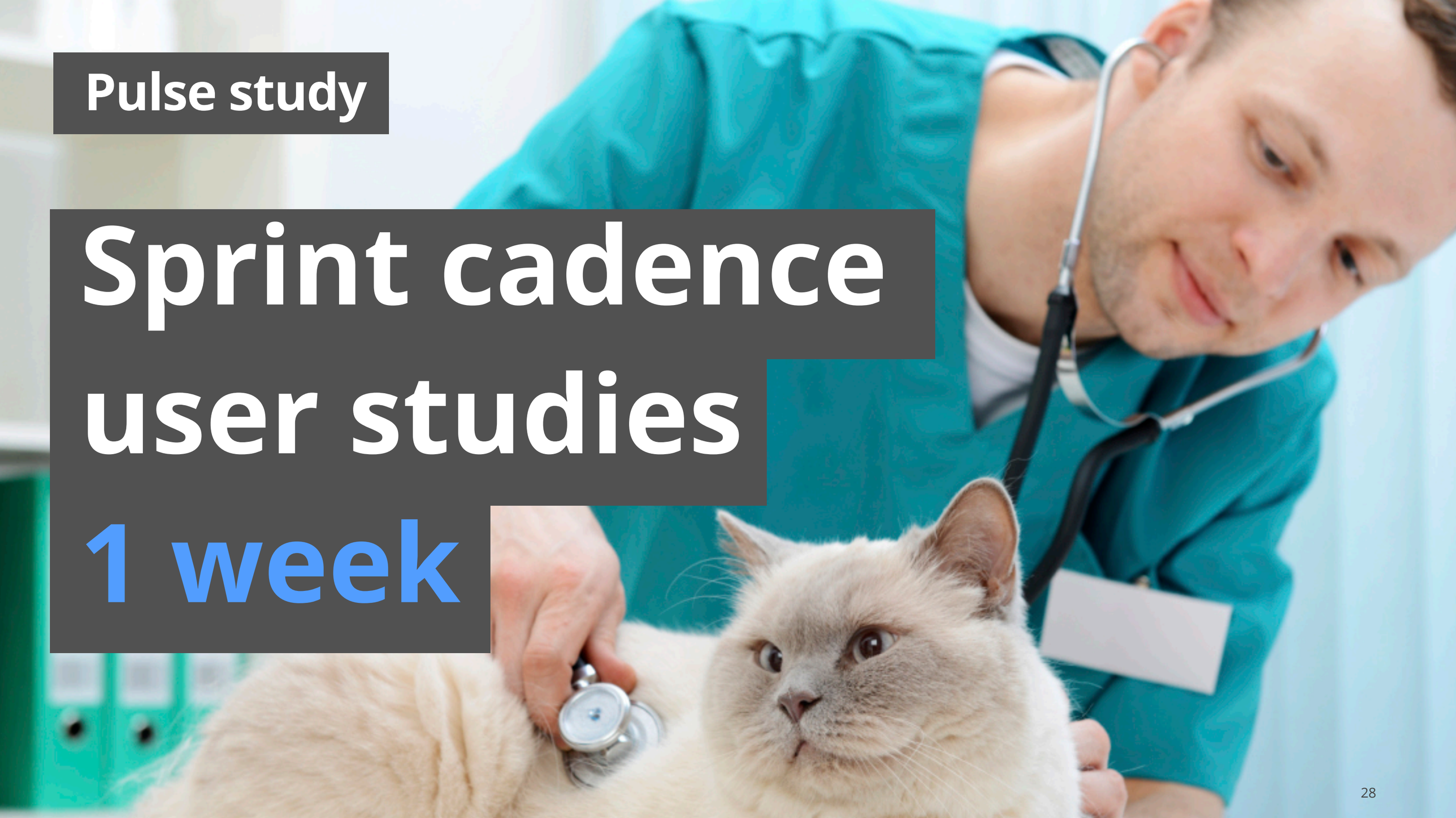
Quick Decisions

Pulse Study

Pulse study

Sprint cadence user studies

1 week



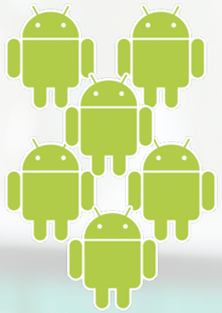
Pulse Study **Process**

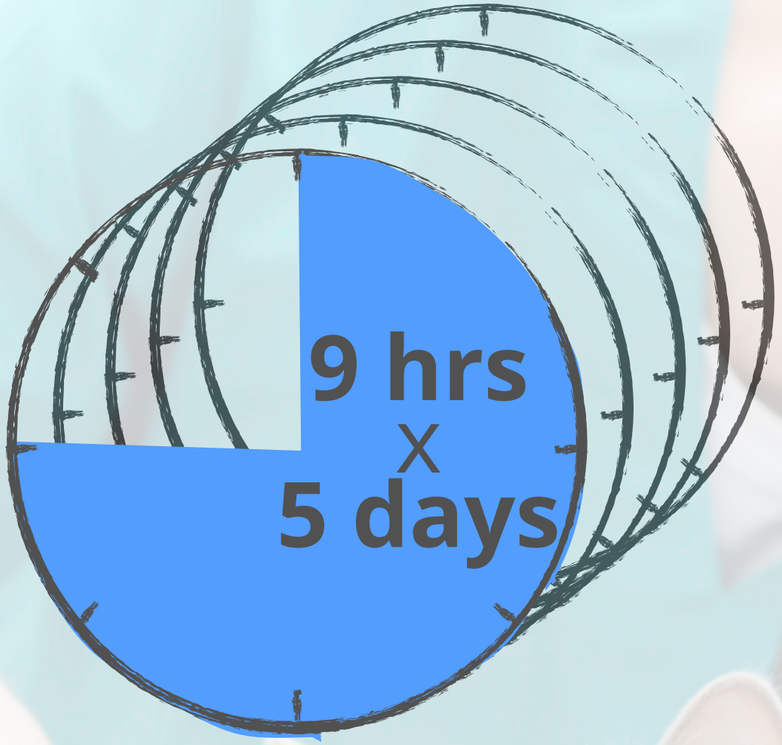
	Monday	Tuesday	Wednesday	Thursday	Friday
Researcher	Participant review	Decide method + Draft tasks	Write script + proto setup	**Run 3 users + Debrief with team**	**Run 3 users + Debrief with team**
Team	Scrum: Discuss what to test this week	Help with prep	Help with prep	**Debrief + File bugs + New work to backlogs**	**Debrief + File bugs + New work to backlogs**

6
USERS

1
RESEARCHER

X
OBSERVERS





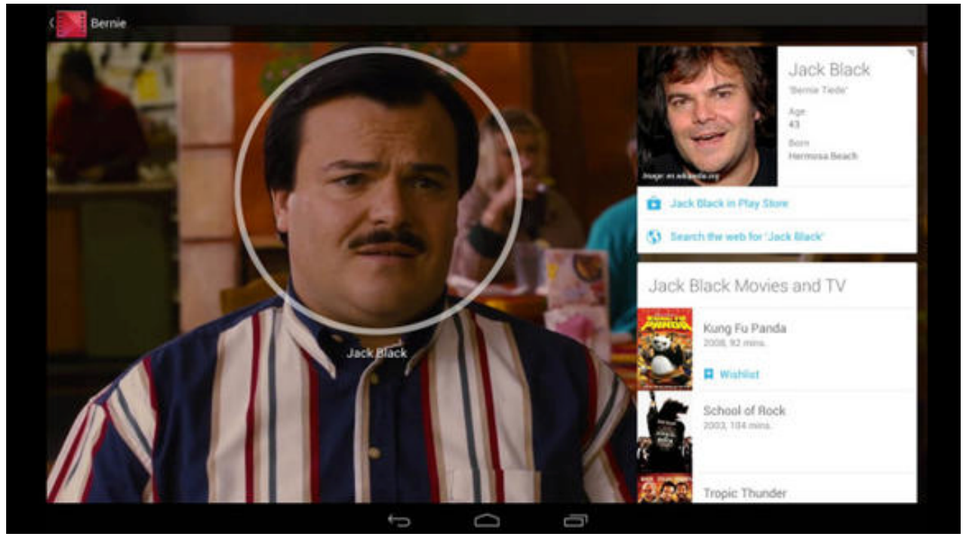
USABILITY LAB

Flexible research framework

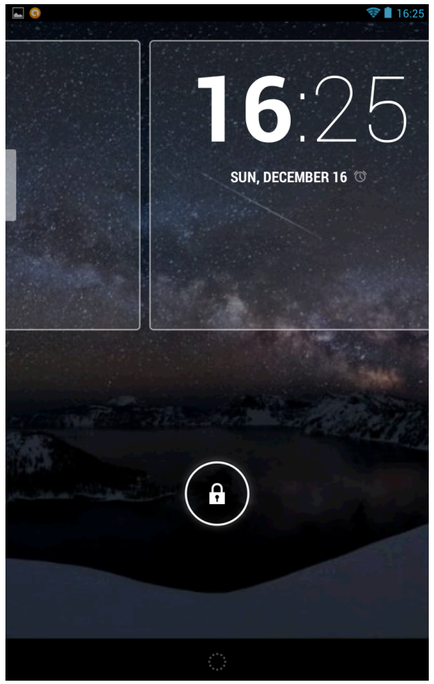
Pulse Study Deep Dive

Pulse Study Step 1: Preparation

What are we testing?



Sprint build
by product manager



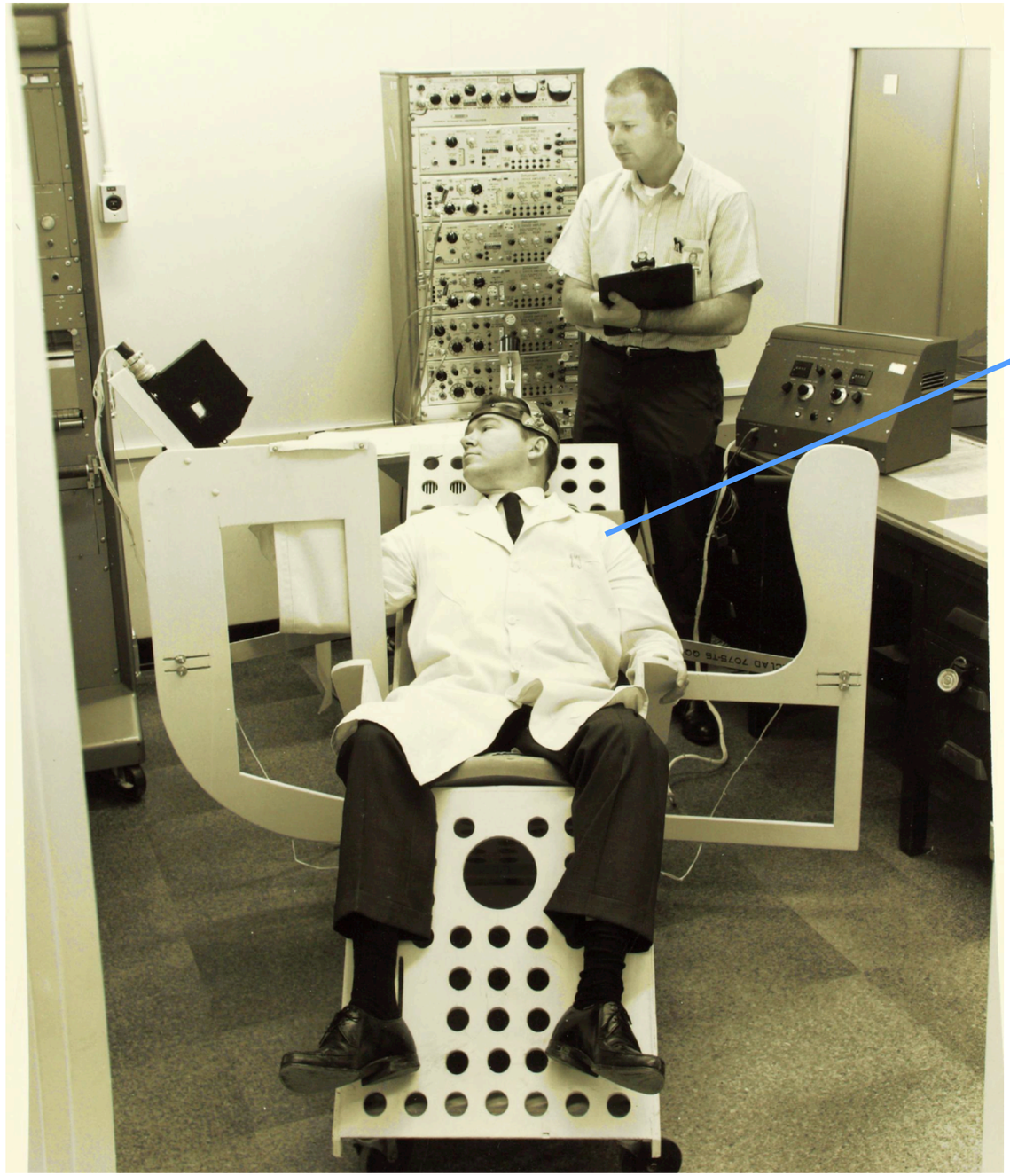
Prototype
by UX designer

OOBE
by industrial designer

Pulse Study Step 1: Preparation

Who are we inviting?

San Diego Air and Space Museum Archives Catalog #: 08_00828



Internal Googler?
External user?
Target a profile?

Pulse Study Step 1: Preparation

Who is doing what?

source: arcweb.archives.gov/arc/action/ExternalIdSearch?id=535579

Researcher

Observer

Observer

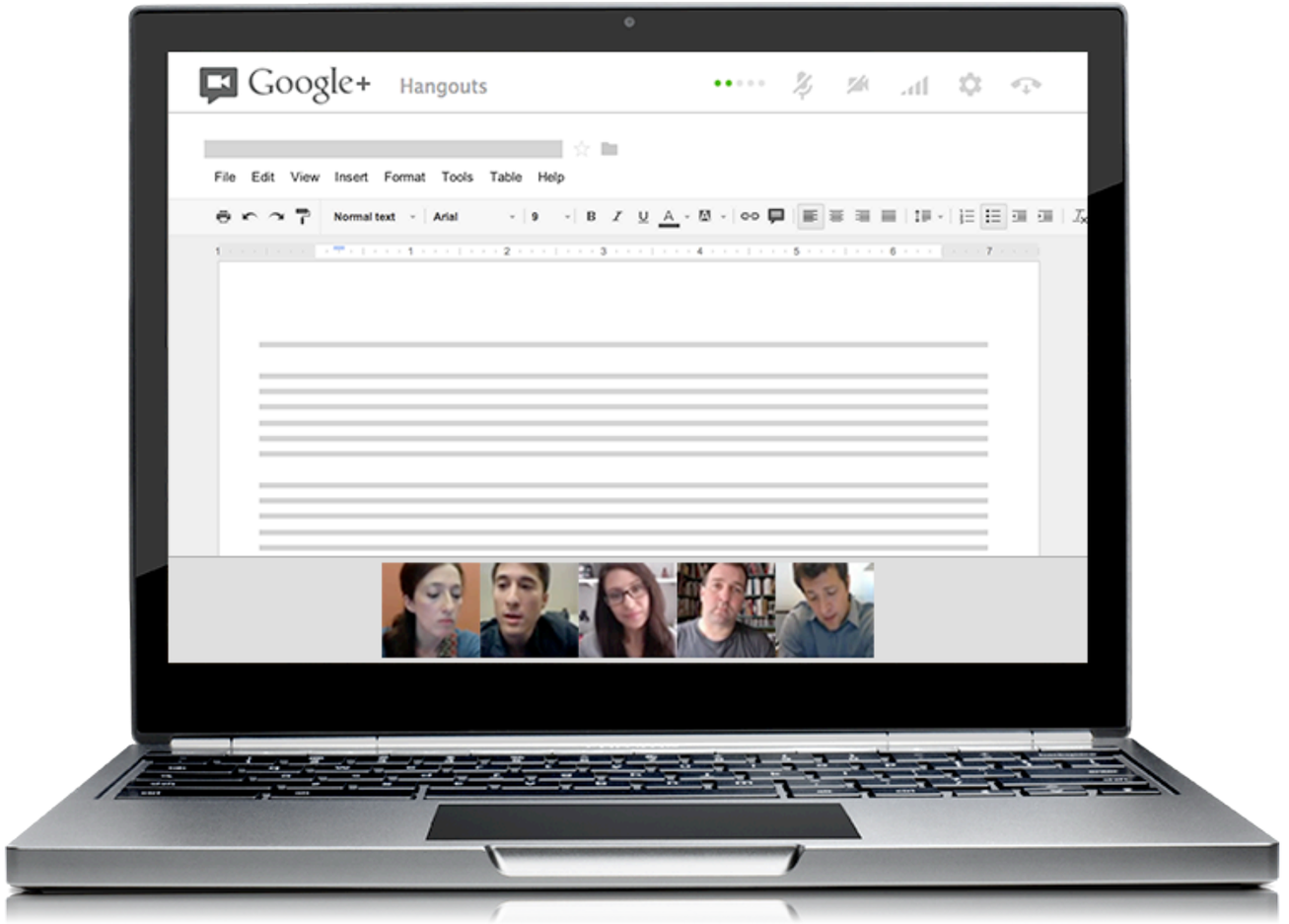
Note-taker

source: arcweb.archives.gov/arc/action/ExternalIdSearch?id=535579

Where are we testing?

EXIT

Or,


Google+ Hangouts
File Edit View Insert Format Tools Table Help
Normal text
Arial
9

Pulse Study Step 3: Execute

source: nasaimages.org/luna/servlet/detail/nasaNAS~9~9~58359~162203

I have a user in front of me! What do I do?

“Hi, thank you for helping us!”

“We’re not testing you, we’re testing the product.”

“What did you mean by that?”

What do I not do?

“Isn’t this a great product?”

“Seriously, I can’t believe you didn’t know that.”

“That’s still wrong. You have to keep trying.”

Use checkboxes

- [x] Did user notice the button?
- [ ] Did user discover the icon?
- [x] Did user use the tool?

Pulse Study Step 4: Debrief with Team

What happened and what can we do about it?

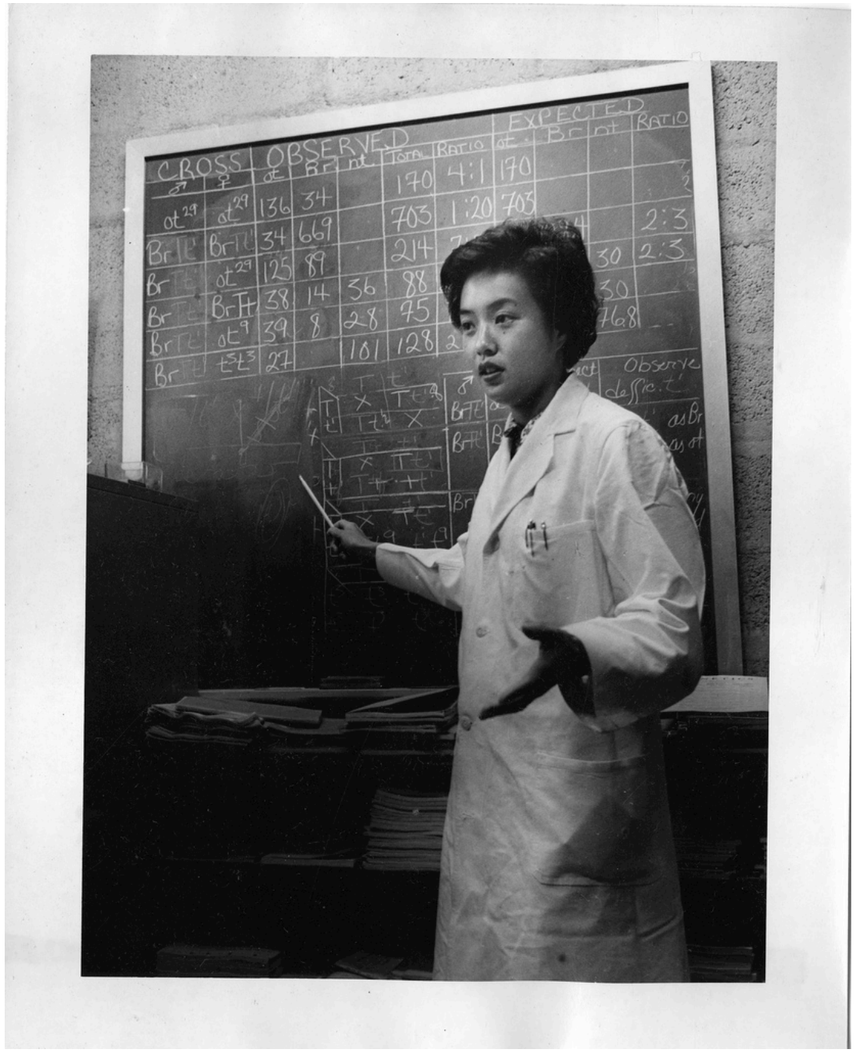
Listing action items

Filing bugs

Reporting
key findings

Noting design
fixes

What should we remember?

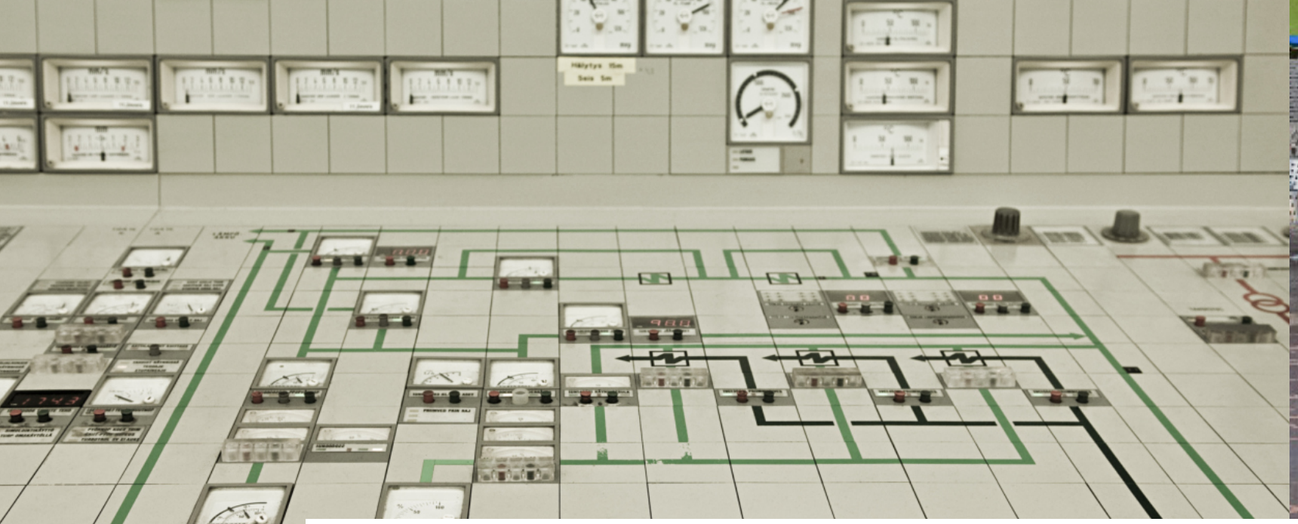


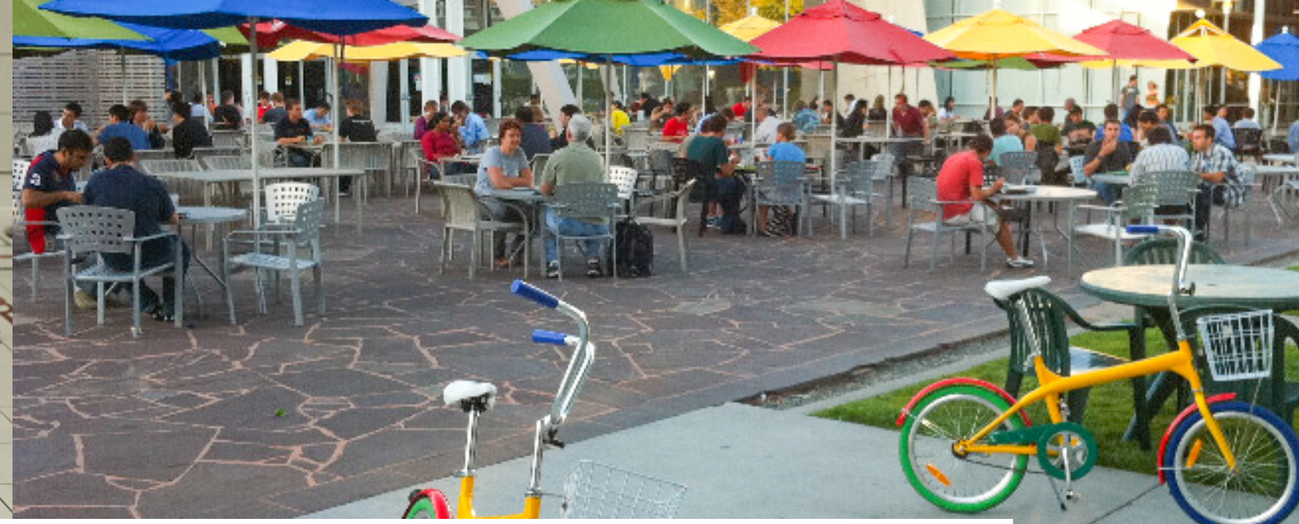
Quick summary by email +
Brief presentation to wider team

Source: www.chives.si.edu/ipac20/ipac.jsp?&profile=all&source=~!siarchives&uri=full=3100001~!306366~!0#focus

Wrap up

FAQ





$1 : $10 : $100

Thank You!

Stop by our office hours after the talk to get started on conducting your own study!

Bethany Fong
Miki Konno
#Androiddesign on Google+

Google
Developers