MODULE 06 TESTING AND ITERATION

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TESTING AND ITERATION

Module 6: Testing and Iteration

- **Key Topics**
  - How to incorporate customer input into design
  - How to test your ideas
  - Focus on how usable the solution is, not whether people 'like' it
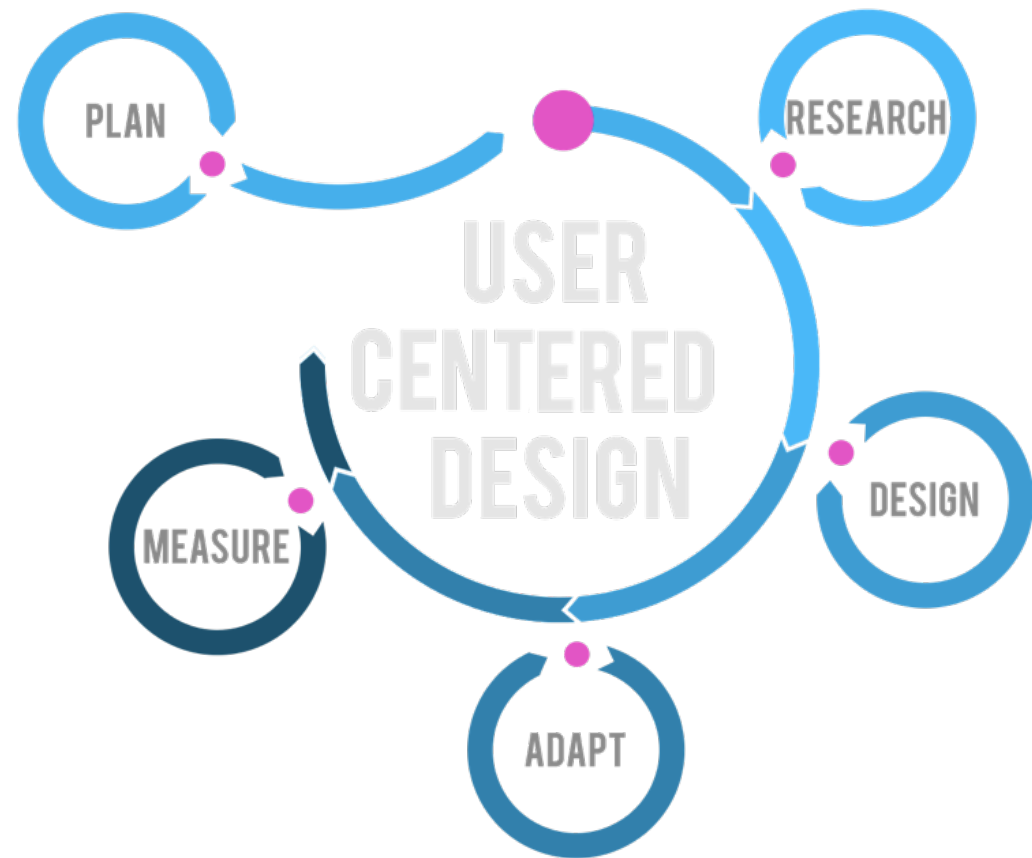
- **Activities**
  - Test a prototype, reflect on results, iterate on improvements

- **Ask yourself:**
  - Have you ever participated in a product test or research?
  - What are the benefits of testing with customers?
  - How many people should I test with?

The User Centered Design Process

How to run usability tests right!

- Remind yourself – and your participant – you are not testing them! You are testing the effectiveness of the design.

- More formal tests may include a consent statement at the beginning of the session discussing how information will be used, rights to end session, etc.

- Ideally – especially for high-stakes research – the person moderating the test should not be the designer.

Trust the behavior. Not the words

- When asked, people will tell you a task was easy – even when they have failed.

How many people should you test with?

https://www.nngroup.com/articles/how-many-test-users/
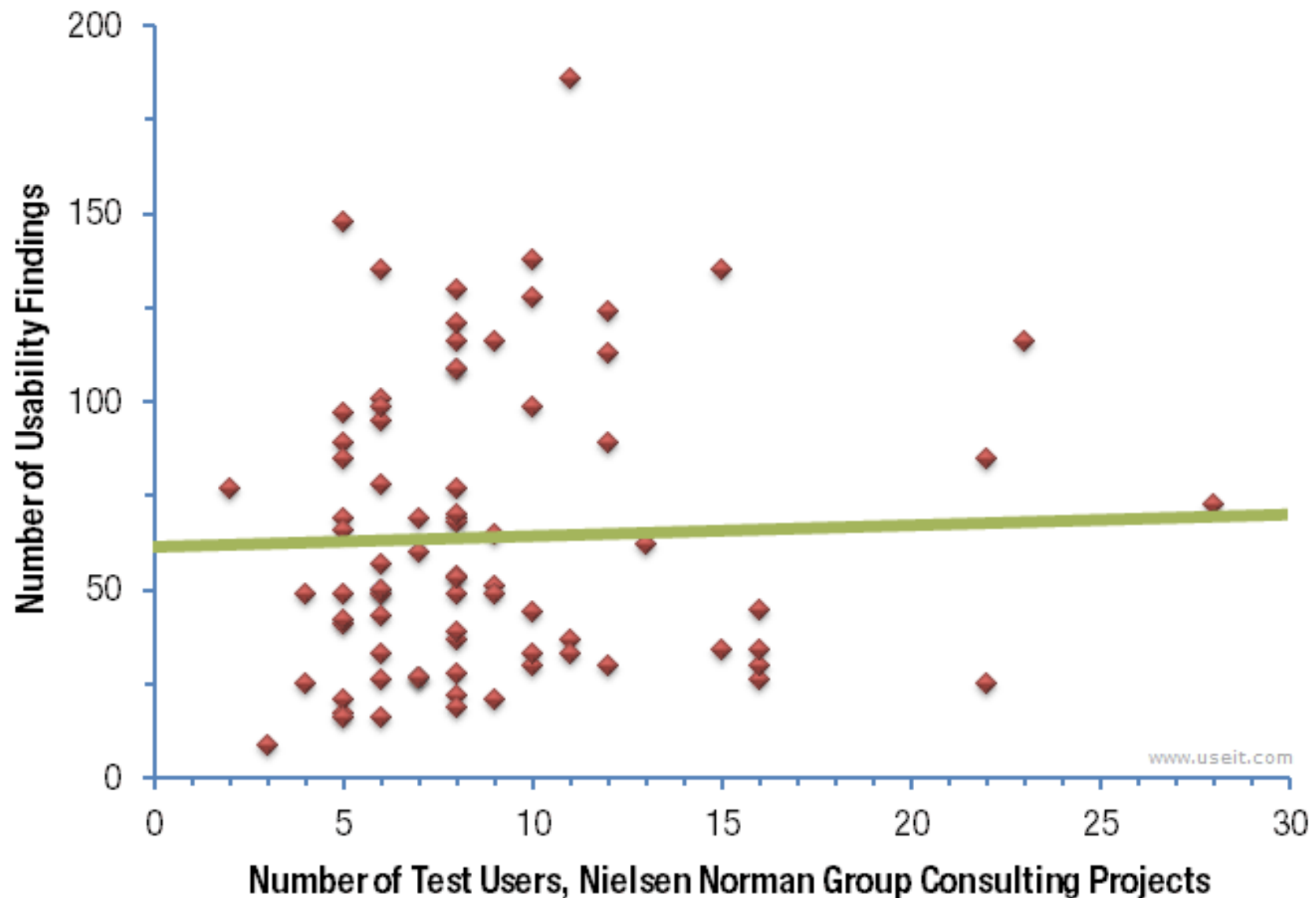
How many people should you test with?

- Jared Spool says it depends on the product.
  - Simple products: 12-15
  - Complex apps/sites: 20-30
  - Expensive/High-stakes products (cars): Many more.
- Other factors:
  - Budget
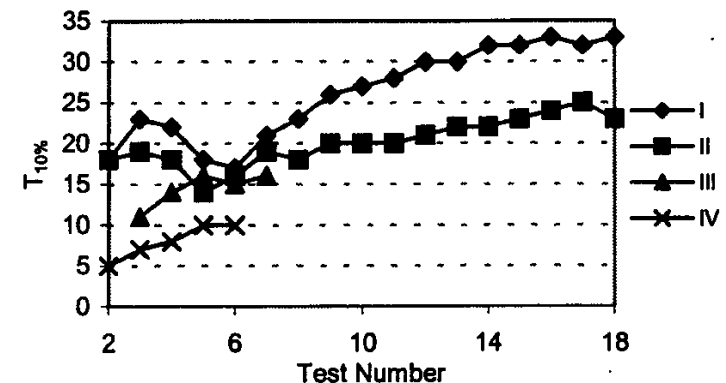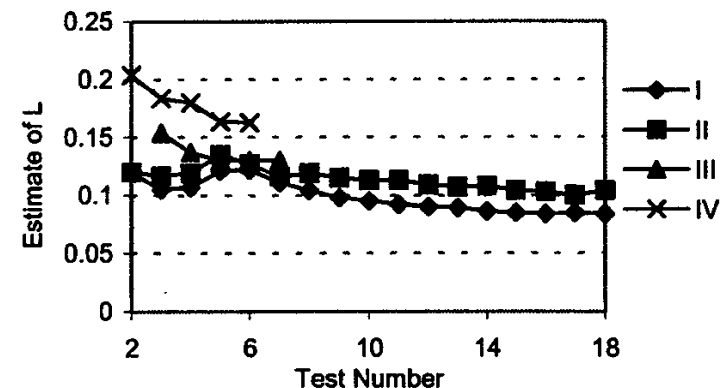 - Cost of product
  - Human life / safety

Figure 1: $T_{10\%}$ made after each completed test

Spool, J., and Schroeder, W. Testing web sites: Fiveusers is nowhere near enough.
CHI 2001 Extended Abstracts
, ACM Press, 285-286.

Be careful about biases

- **Streetlight Effect (Framing Effect):** Looking for something where it is easiest, or too-narrow of an approach.
- **Confirmation Bias:** People tend to see what reinforces their existing beliefs – to the exclusion of new data.
- **Self-Serving Bias:** Claiming more responsibility for successes than failures. Evaluating ambiguous information in a way that serves their interests.
- **Recency Bias:** People tend to give more credibility to recently seen information.
- **Belief Bias:** Disregard of logical arguments due to one's belief.
- **Hindsight Effect:** I-knew-it-all-along.
- And many more!

Remember

- This is all about testing the design.

- Not the intelligence or knowledge of the participant.

- Not your ability as a designer, or to solve problems.

- People are always watching each other.

- Maintain control of your emotions.

  - Monitor your voice, posture, be aware of microexpressions YOU are presenting.

What does Google think of user testing?

- https://youtu.be/Qq3OiHQ-HCU

- And…

- https://youtu.be/0YL0xoSmyZI

ACTIVITY: CONDUCTING A USABILITY TEST

Usability Testing

- You've built and refined your prototypes!
- You've iterated
- Lets take them out to people and test them.

Class activity

- In your groups, generate 5 questions about your prototypes; test them with eachother to pilot your tests

- Let's share as a class

- We'll refine our questions and prototypes

- Test your protoypes with random people.
  - On the street, store, lobby, etc

ACTIVITY TIME:
60 MINUTES

DEBRIEF

Module 6: Wrap Up

- **Key Topics**
  - How to incorporate customer input into design
  - How to test your ideas
  - Focus on how usable the solution is, not whether people 'like' it

- **Activities**
  - Test a prototype, reflect on results, iterate on improvements

- **Ask yourself:**
  - Have you ever participated in a product test or research?
  - What are the benefits of testing with customers?
  - How many people should I test with?
  - Have you ever encountered cognitive bias in projects?