

Emerging measures

- web analytics ([Beasley](#))
 - Nutshell
 - Server tools that record user visits to sites, then present it back to you for analysis
 - Measures
 - Which pages a user sees
 - When they see pages
 - Time on page/website
 - Order of viewing (paths)
 - Where arrived from (search, link)
 - User browser
 - Screen resolution
 - Purchases (conversions)
 - Limitation: tells you what, not why
 - How it works
 - Log file analysis
 - One less commonly used option — problems are too large
 - Page tagging
 - More common: e.g. google analytics
 - Clicks
 - Not normally part of google analytics
 - Drawing inferences
 - Views
 - Conversions
 - Where users
 - Are from
 - What tools they use
 - What device they use
 - Testing website changes
 - It's designed to detect attention, not:
 - Satisfaction
 - Liking, Intent
 - Emotion
 - Persuasion...
- online experiment tools
 - You can perform experiments online! The essentials are
 - Define your independent variables (e.g. A/B test - two alternative interfaces)
 - Define your dependent measures
 - The usual
 - time, accuracy, efficiency
 - The experiential
 - ratings, qualitative responses
 - The novel
 - clickpath data: what and when you clicked on, in what order

- Choose a tool
 - Commercial
 - [Loop11](#), [UserZoom](#), [WebEffective...](#)
 - Free/open
 - [Google content experiments](#), [IntuitionHQ](#)
 - [CrazyEgg's list](#), [WooRank's list](#)
 - Roll your own
 - Related:
 - Mechanical turk
 - Concerns about mturk participants...
 - Demographics
 - Payment
- implicit association test ([Greenwald](#))
 - Nutshell
 - Problem: people are biased
 - May not want to tell you the truth
 - May not be conscious of how they feel
 - Answer:
 - Test their biased associations by measuring the time they take to make certain associations
 - Longer they take, less they agree
 - Example: free iat
 - Discussion:
 - Hard to learn how to perform
 - Hard to do
 - Seems to require less “power” (number of participants)
- subjective duration assessment ([Czerwinski et al.](#))
 - Nutshell
 - Problem: how engaged are folks?
 - People may again be biased if you simply ask
 - Answer:
 - Compare perceived to actual passage of time
 - If interrupted (incomplete), time is overestimated.
 - If completed, time is underestimated
 - Discussion:
 - Still largely unproven, not widely used.
- experience sampling ([Csikszentmihalyi & Larson](#))
 - Nutshell
 - Problem: how can we gain external validity, and test experience in situ?
 - Problem: how can we measure behavior over the long term?
 - Solution
 - Give people a diary
 - Ask them to enter stuff in it periodically
 - Often need reminders for entry
 - Discussion
 - What sort of biases remain?
 - How to trigger recording of behavior?
- mobile measurement

