

Evaluation and Peak Experience

Alan Dix

Lancaster University

<http://www.hcibook.com/alan/>

<http://www.alandix.com/>

evaluation

you've designed it, but is it right?

purpose

Three
Two types of evaluation

	purpose	stage
formative	improve a design	development
summative	say "this is good"	contractual/sales
investigative	gain understanding	research

points of comparison

- measures:
 - average satisfaction 3.2 on a 5 point scale
 - time to complete task in range 13.2–27.6 seconds
 - good or bad?
- need a point of comparison
 - but what?
 - self, similar system, created or real??
 - think purpose ...
- what constitutes a 'control'
 - think!!



types of knowledge

- descriptive
 - explaining what happened
- predictive
 - saying what will happen
 - cause \Rightarrow effect
 - where science often ends
- synthetic
 - working out what to do to make what you want happen
 - effect \Rightarrow cause
 - design and engineering

different kinds of evaluation

endless arguments

- quantitative vs. qualitative
- in the lab vs. in the wild
- experts vs. real users (vs UG students!)

really

- combine methods
 - e.g. quantitative – what is true & qualitative – why
- what is appropriate and possible

mechanism

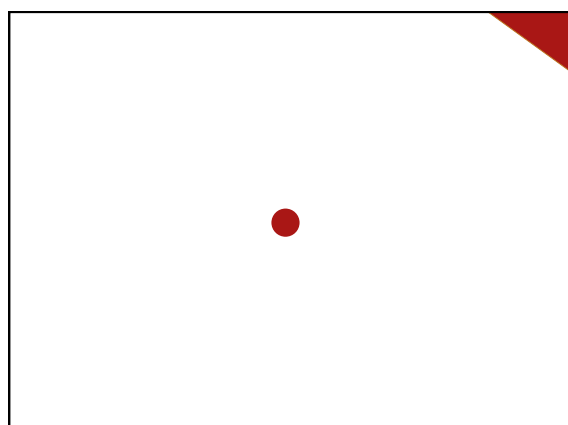
- reduction reconstruction
 - formal hypothesis testing
 - + may be qualitative too
 - more scientific precision
- wholistic analytic
 - field studies, ethnographies
 - + 'end to end' experiments
 - more ecological validity

when does it end?

in a world of perpetual beta ...

real use is the ultimate evaluation

- logging, bug reporting, etc.
- how do people really use the product?
- are some features never used?



from evaluation to validation

validating work

- experiments
- user studies
- peer review

generative artefacts

- toolkits
- devices
- interfaces
- guidelines
- methodologies

singularity
different people
different situations
different designers

(pure) evaluation of generative artefacts is methodologically unsound

validating work

justification

- expert opinion
- previous research
- new experiments

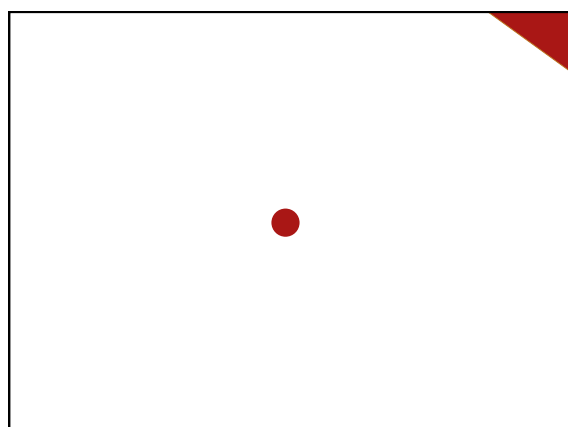
your work

evaluation

- experiments
- user studies
- peer review

justification vs. validation

- different disciplines
 - mathematics: proof = justification
 - medicine: drug trials = evaluation
- combine them:
 - look for weakness in justification
 - focus evaluation there



**... breaking the rules
interaction design at the edge**

kinds of experience (e.g. mobile apps)

- can't do it without ...
 - phone itself, address book
- can't live without ...
 - compelling apps
 - e.g. iPhone snooker, photo sharing
 - ... designing for peak experience ...

designing for peak experience baked bean vs. Mars bar products ...

yea, I know
very cultural

baked beans

- staple food
- good enough for everyone
- e.g. **word processor** – corporate decisions

Mars bar

- favourite chocolate bar
- best for some
- e.g. **video game, web email** – personal decisions

designing for peak experience who wins?

good enough products never win
for any user, some peak product always better

designing for peak experience

how to do it:

- traditional interface design
user profiles, central personas, average and typical, process and methods, from need to solution
- design for peak experience
individual user, niches, extreme personas, specific and eclectic ideas and inspiration, from concept to use

when to do it:

- individual choice, user experience,
the **long tail**: many applications for smaller groups

technology driven design?

product must be:

- wanted by users
- achievable with technology
- have route to 'market' (not necessarily selling!)

all need to be there
... but can start anywhere

