**Threat**
- Wrong problem

**Validate**
- Observe and interview target users

**Threat**
- Wrong task/data abstraction

**Threat**
- Ineffective encoding/interaction idiom

**Validate**
- Justify encoding/interaction design

**Threat**
- Slow algorithm

**Validate**
- Analyze computational complexity

**Validate**
- Implement system

**Validate**
- Measure system time/memory

**Validate**
- Qualitative/quantitative result image analysis
  - Test on any users, informal usability study

**Validate**
- Lab study, measure human time/errors for task

**Validate**
- Test on target users, collect anecdotal evidence of utility

**Validate**
- Field study, document human usage of deployed system

**Validate**
- Observe adoption rates