Decision tree for running experiments

Wondering how to accelerate your learning and find out what work and what doesn’t? This flowchart helps you to reflect on your decisions and set a direction for your experiment. Please note, this tool is not meant to provide absolute answers (e.g. on what method to choose), instead it is supposed to help you consider options.

Draft version (July 2018) by Bas Leurs. This work builds on our blog post ‘Towards an Experimental Culture in Government’ available on the Nesta website.

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**Do you know what the solution is?**

- **No**
  - Are you absolutely certain this solution will work?
    - **No**
      - Do you have (strong) evidence it will work?
        - **Yes**
          - Build and ship it!
          - No experiments needed
        - **No**
          - Validating solutions
            - Randomised controlled trials, A/B testing
          - No experiments needed
        - **Maybe not...**
          - Exploring new frames
            - Ethnographic research, systems mapping, speculative design, positive deviance, asset mapping
          - Solutions are unknown
    - **Yes**
      - Validating solutions
        - Randomised controlled trials, A/B testing
      - Solutions are known
    - **No**
      - EXPLORE
        - Identifying trends and signals of change
          - Foresight, horizon scanning, data analysis & visualisation
        - Exploring new frames
          - Ethnographic research, systems mapping, speculative design, positive deviance, asset mapping
        - Solutions are unknown
    - **No**
      - Are you sure you are solving the right problem?
        - **Yes**
          - Exploring new frames
            - Ethnographic research, systems mapping, speculative design, positive deviance, asset mapping
          - Solutions are unknown
        - **No**
          - TRIAL & ERROR
            - Generating potential solutions
              - Co-creation, proof of concept, prototyping
            - Evaluating (various) solutions
              - Pilots, multiple parallel experiments, riskiest assumption testing
          - Solutions are unknown
      - **No**
        - TRIAL & ERROR
          - Generating potential solutions
            - Co-creation, proof of concept, prototyping
          - Evaluating (various) solutions
            - Pilots, multiple parallel experiments, riskiest assumption testing
    - **Yes**
      - Are you sure you are solving the right problem?
        - **Yes**
          - Validating solutions
            - Randomised controlled trials, A/B testing
          - Solutions are known
        - **No**
          - TRIAL & ERROR
            - Generating potential solutions
              - Co-creation, proof of concept, prototyping
            - Evaluating (various) solutions
              - Pilots, multiple parallel experiments, riskiest assumption testing
          - Solutions are unknown
      - **No**
        - Are you sure you are solving the right problem?
          - **Yes**
            - Exploring new frames
              - Ethnographic research, systems mapping, speculative design, positive deviance, asset mapping
            - Solutions are unknown
          - **No**
            - Solutions are unknown
    - **No**
      - Are you absolutely certain this solution will work?
        - **Yes**
          - Build and ship it!
          - No experiments needed
        - **No**
          - Validating solutions
            - Randomised controlled trials, A/B testing
          - No experiments needed
      - **Yes**
        - Are you absolutely certain this solution will work?
          - **Yes**
            - Build and ship it!
            - No experiments needed
          - **No**
            - Solutions are unknown
      - **No**
        - Are you absolutely certain this solution will work?
          - **Yes**
            - Build and ship it!
            - No experiments needed
          - **No**
            - Solutions are unknown
      - **No**
        - Are you absolutely certain this solution will work?
          - **Yes**
            - Build and ship it!
            - No experiments needed
          - **No**
            - Solutions are unknown
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**EXPLORE**
Explore what’s going on and generate hypotheses
- Identifying trends and signals of change
  - Foresight, horizon scanning, data analysis & visualisation
- Exploring new frames
  - Ethnographic research, systems mapping, speculative design, positive deviance, asset mapping

**TRIAL & ERROR**
Find out what might work to establish a hypothesis
- Generating potential solutions
  - Co-creation, proof of concept, prototyping
- Evaluating (various) solutions
  - Pilots, multiple parallel experiments, riskiest assumption testing

**VALIDATE**
Learn what works and what doesn’t, proving a hypothesis
- Validating solutions
  - Randomised controlled trials, A/B testing
- Solutions are known

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**Solutions are unknown**
- EXPLORE
- Exploring new frames
- Solutions are unknown
- TRIAL & ERROR
- Validating solutions
  - Randomised controlled trials, A/B testing
- Solutions are unknown

**Solutions are known**
- Validating solutions
  - Randomised controlled trials, A/B testing
  - Solutions are known
- Build and ship it!
  - No experiments needed