

**POWER
CRUNCH**





(re)Define the Problem

Iterate to generate more and refine concepts

Needfinding and Benchmarking

Understand the users, design space

Brainstorm

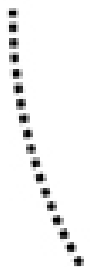
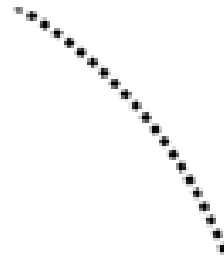
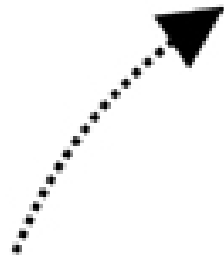
Generate as many ideas as possible

Prototype

Rapid prototyping to explore ideas

Test

Learn from the prototypes



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Mission I: Redefine the problem

Agree on **terms** and **goals**

Fix the pen cap ----- Fix the world



Redesign astronaut experience when waiting to be launched.



A photograph of an astronaut inside a spacecraft cabin. The astronaut is wearing a dark flight suit and is seated in a specialized seat. The cabin is filled with various pieces of equipment, including a large circular hatch or window in the background. The lighting is somewhat dim, typical of an interior spacecraft environment.

Redesign astronaut experience when waiting to be launched.

- Improve the **haptics of the seat** to enforce the feeling of comfort and safety
- Provide non-disruptive **meaningful activities** that eliminates the feeling of waiting
- Provide the astronaut with superior **sense of connection with the flight control** to heighten sense of safety

Mission I: Redefine the problem

“Write your redefinition with 1 clear sentence on a flap paper - must be visible to all”

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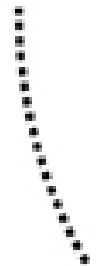
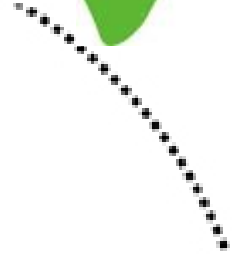
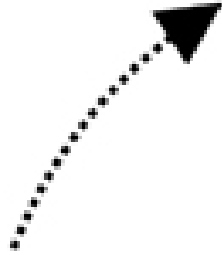
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MISSION II: (needfinding) Dirty benchmarking

- **Needs - you might use assumptions - Fix it later/validate when testing**
- **Benchmarking : “What means do people use now to satisfy the need you try to solve?”**
- **Products..... yes AND business models, technologies, logistic channels, services, ways of working, processes....**



Mission II: (Needfinding) dirty benchmarking

“Saturate the board with your discovered/assumed needs + benchmarks that relate to the redefined problem”

(re)Define the Problem

Iterate to generate more and refine concepts



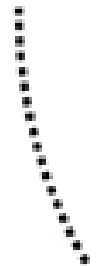
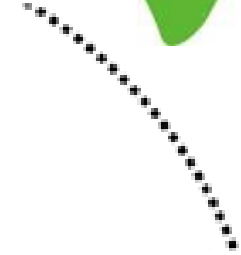
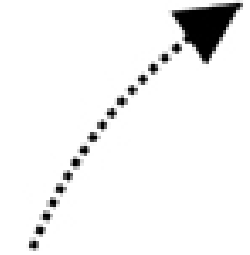
Needfinding and Benchmarking

Understand the users, design space



Test

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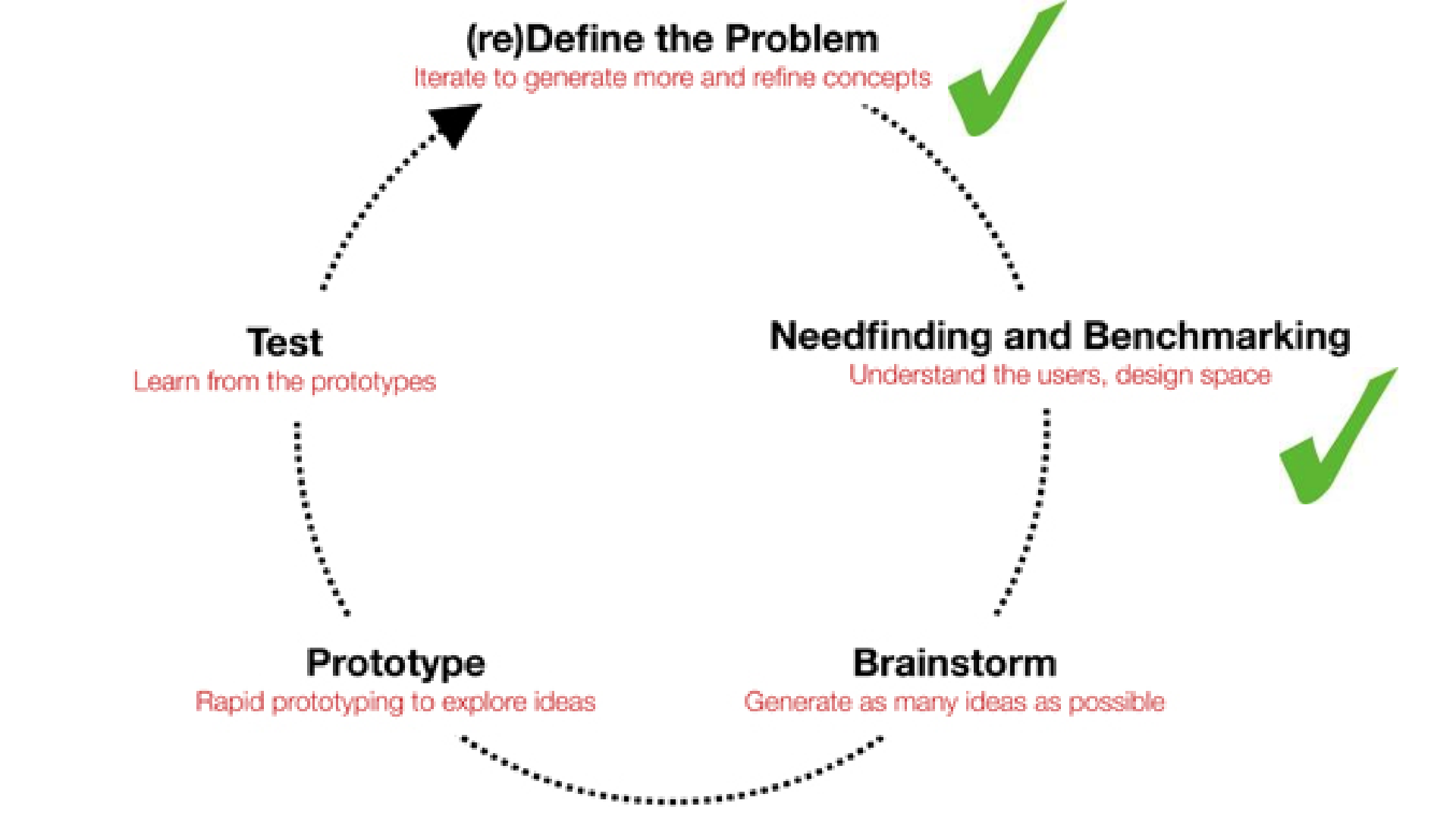
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Brainstorm

Generate as many ideas as possible



Mission III: Ideation



No bad ideas!



No wrong way to ideate!

Mission III: Ideation

“Write down at least 3 ideas and pin on board”
(color: yellow)

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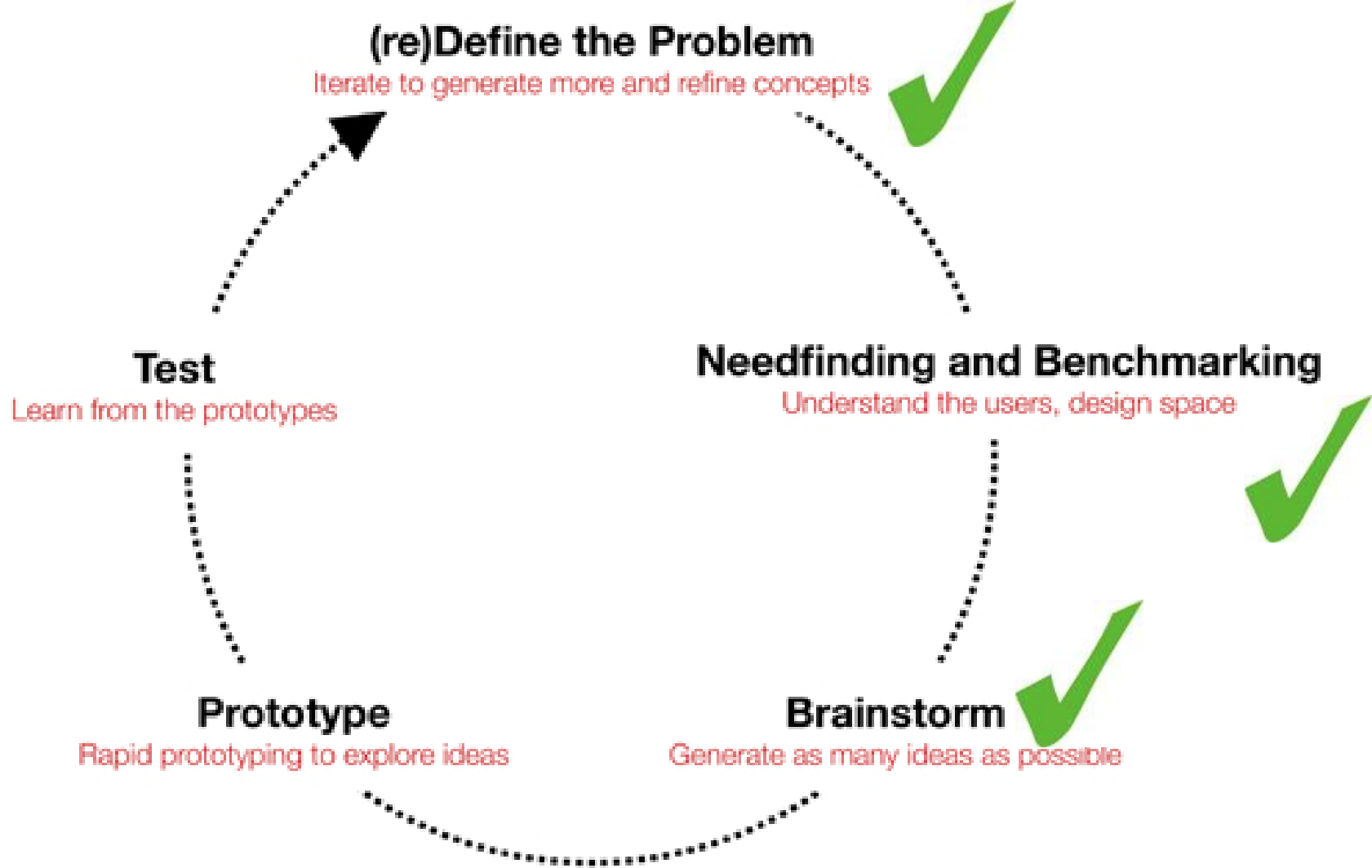
“Read others ideas and write and pin at least 3
YES-AND ideas next to them” (color pink)

Mission III: Ideation

“Write down at least 3 ideas and pin on board”
(color: yellow)

“Read others ideas and write and pin at least 3
YES-AND ideas next to them” (color pink)

“Freestyle!”



MISSION IV: Convergence and selection



- Cluster into categories e.g. “What problem do the ideas cater for?”

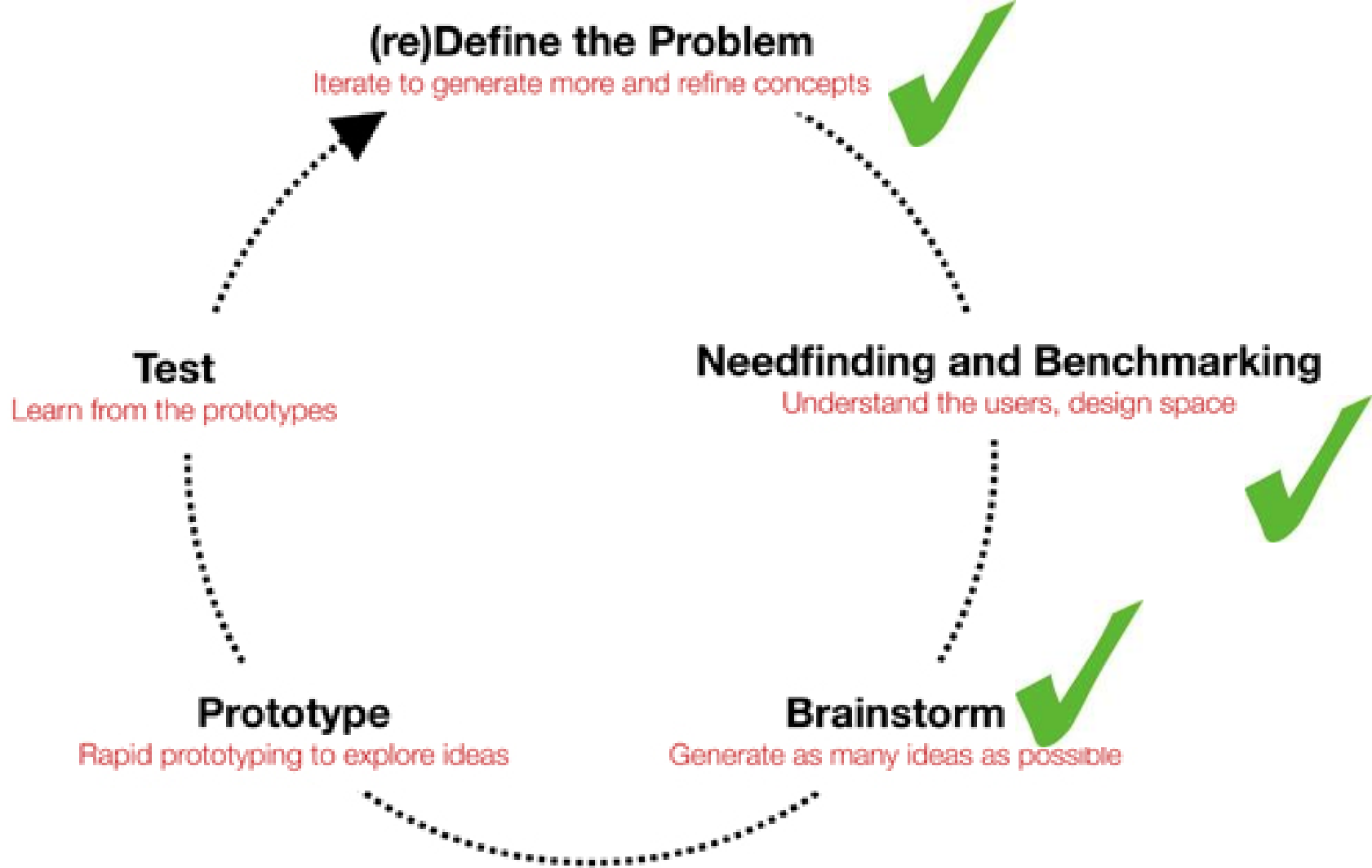
axes you might use --- rich poor, young old, technological human

- Draw 3 marks next to the most delicious and extravagant ideas to get an idea of what is interesting
- (don't get too abstract and greedy)

MISSION IV: Convergence and selection

“Select 1 idea you can't wait to push forward”





Mission IV: Concept development

Idea vs. concept: More developed, less abstract, testable hypothesis with implications of execution

Idea: “Eating your bread crispy and nice” Concept: “A device that holds the bread and uses an iron construction to heat the surface of the bread.”

SUPERSYSTEM



SYSTEM



SUBSYSTEM



PAST

PRESENT

FUTURE

Mission IV: Concept development

“Develop your idea into a concept. Visualize and present it.”

Launch: Concept development

- Difference between an idea and a concept (more developed, less abstract, testable hypothesis with implications of execution)
- [9 windows](#) (think about the systemic level how your idea connects to the world and the surrounding environment --- think about the details, the materials and joints that make your idea... past ---- future)
- Know what is critical: what makes your concept unique
- Idea: “Eating your bread crispy and nice” Concept: “A device that holds the bread and uses an iron construction to heat the surface of the bread.”

“Present your concept”

- Provide feedback capturing grid for presentations for memory support

Launch: Presentations

