Aegis Innovation Training

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Today's Session

- Introductions
- Working successfully in teams
- Starting Points for ideas
- Sense-making the context
- Designing a response
- Evaluating and Developing ideas
- Business Plans

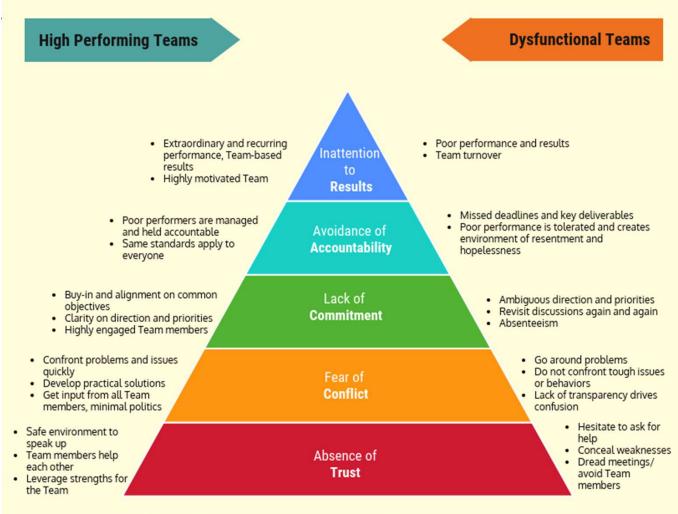
Working successfully in Teams



Working in groups: contributions, roles, and rules

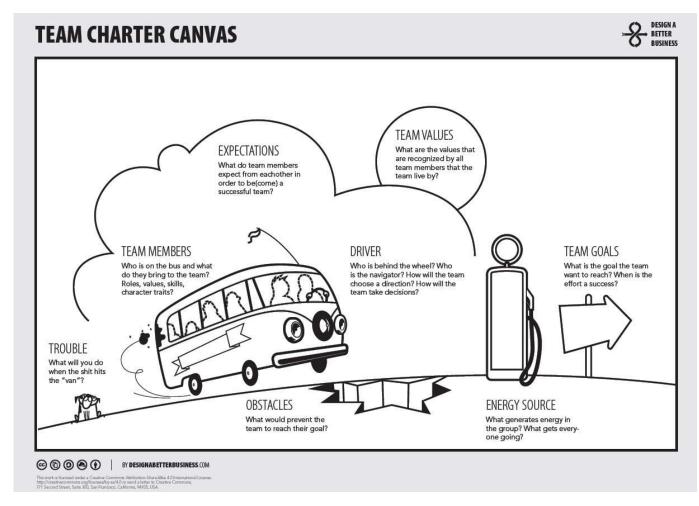
- Think about your individual **goals** and for the challenge:
 - Write 3 down what are you hoping to get by participating?
- What is everyone bringing to the project; specific skills or interests?
 - Write 3 things down you think you can bring to the team or challenge?
- What are you less confident of? What might be something you need to work on?
 - Write down 3 things that might be a stretch or personal challenge
- Discuss!
 - How can you make the most of what you have (and patch what you don't)?
 - Consider formal roles or allocated duties
 - Set some **Ground Rules** for how you'll meet, communicate, and manage tasks.

Overcoming Team Dysfunction

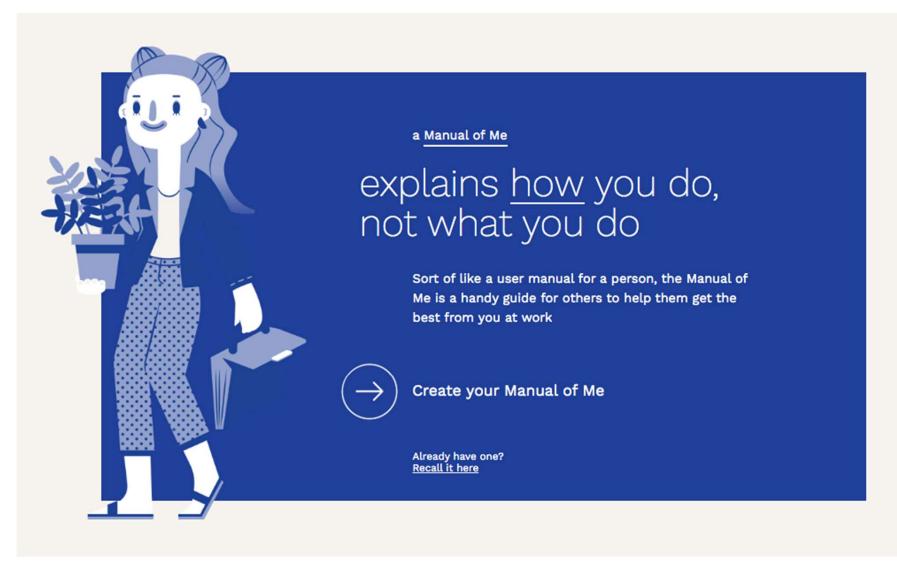


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Team Charter Canvas



https://www.designabetterbusiness.tools/tools/team-charter-canvas



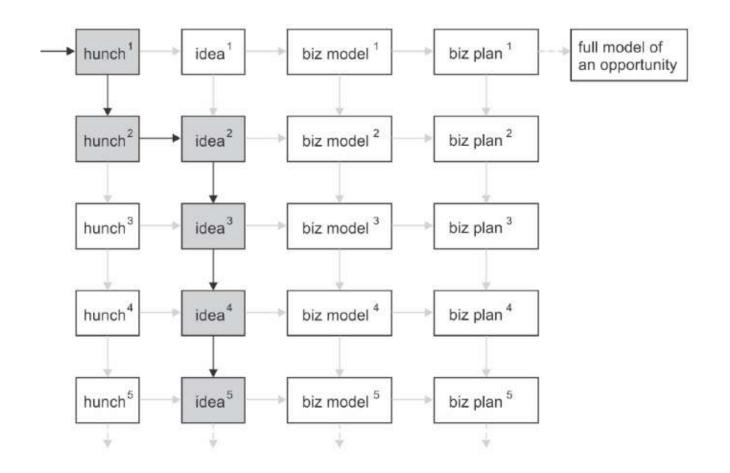
Do it: https://www.manualof.me/ Learn about it: https://medium.com/leapers/introducing-manual-of-me-91021385d812

Starting Points





The idea development process is not linear...



Bruton, A. (2016) Deliberate Opportunity Design (DOD)

Good ideas come from 'Spare Parts' and 'Firewood'

Practice origin: Stephen Johnson 'Where good ideas come from' (2011)



Photo by sergio souza on Unsplash

Spare Parts – Starting Points

Practice origin: Stephen Johnson 'Where good ideas come from' (2011)

Spare Parts or Starting Points are essential elements of the self-assembly approach to developing ideas.

It's using your own context and experience as the source of ideas of value.

A gathering of hunches, interesting test results, and unexpected revelations that make good ideas accessible to everyone.

https://www.telegraph.co.uk/culture/books/8141223/Where-Good-Ideas-Come-From-by-Steven-Johnson-review.html

These are all potential Starting Points

- "Opportunities" a pressing problem/opportunity that you've identified
- "Pain points" a pain point that impacts you or others
- "Topics" a topic that excites you
- "Trends" a trend you would like to explore
- "Hunches" a hunch or theory you have
- "Ideas" an idea you've been thinking about

What starting points can you identify for your own challenge based on the brief?

New tech opportunities? User pain points? Emerging trends? Novel methods or approaches? Niche use-cases?

In groups, share some starting points then...

#1 Categorise:

- Opportunity
- Pain Point
- Topic
- Trend
- Hunch
- Idea

#2 Dig deeper:

- Why?
- Why?
- Why?
- <u>Why?</u>
- <u>Why?</u>

#3 Scan:

- Social trends
- Tech trends
- Economic trends
- Environmental trends
- Political/Policy trends
- Legal trends
- Ethical trends

What drives new ideas and innovations?

- Need: identification of problems encourages people to solve them
- Possibility: another breakthrough provides a 'stepping stone'. Someone asks "what if?"

- Connections & networks
- Time and space to explore
- 'Spare parts'
- Bravery & foolishness
- "Engineered serendipity"

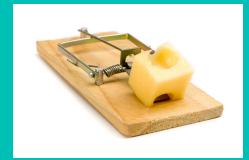
Innovation Defined

- "An Innovation is the implementation of a new or significantly improved product (good or service)."
 - OECD: Oslo Manual
- An idea acted upon.
- Success in innovation is measured by its adoption or impact, not its novelty.

- Product Innovation a new product or service (with significant new or improved features)
- Process Innovation a new or improved production or delivery method
- Marketing Innovation changes to positioning, pricing, packaging etc
- Organisational Innovation changes to a firm's practices, organisation or external relations (including the *Business Model*)

Ask the right question...

- How do I build a better mousetrap?
- How do I catch more mice?
- What is a shoebox for?
- What could you use a shoebox for?
- How many uses can you think of for a shoebox?
- Can you think of 100 ways to use a shoebox?





Idea-generation principles

- Diverge first!
- Reserve judgement
- Permit the Silly/Crazy/Useless (No Criticism)
- Stretch 'generate 100'
- Re-express / Illustrate / Build on other's Ideas
- Wear someone else's shoes
- Constraints can give direction

SCAMPER

- Substitute (materials)
- Combine (purposes)
- Adapt (for...)
- Modify (scale up or down)
- Put to alternative use
- Eliminate (an element)
- Reverse

Generate some initial solutions...

Making Sense

Understanding the systems and contexts within which an idea exists

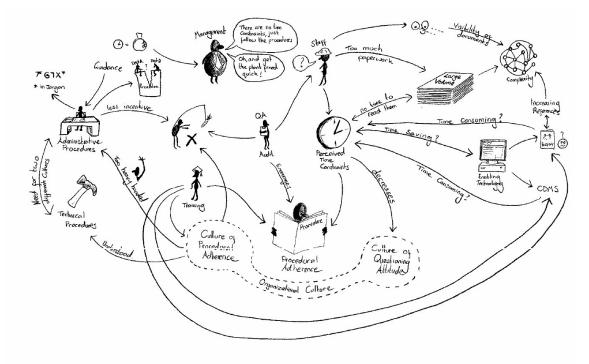


Find a pattern to interrogate the system

Problem Structuring:

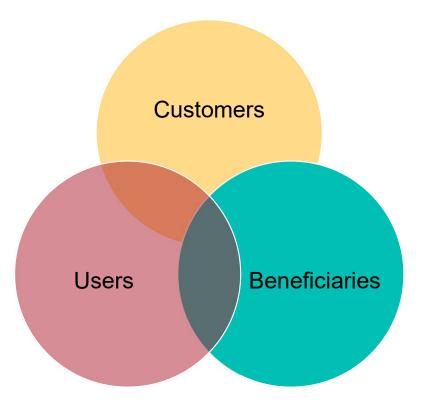
- What is the problem?
- Why is it a problem?
- When is it a problem?
- How is it a problem?
- Where is it a problem?
- Who is it a problem for?

• 'Rich Pictures':

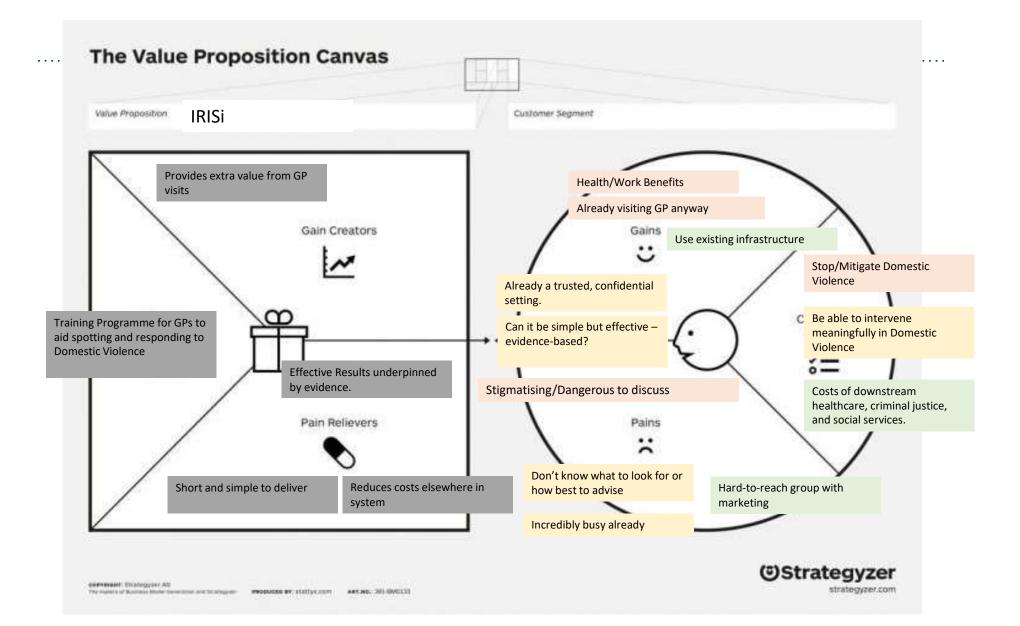


System Actors

- When you consider your starting point:
 - Who are the customers, who 'own' the decision-making? (the 'gatekeepers')
 - Who (or what) are the users, who (or what) is using your idea to deliver change?
 - Who are the beneficiaries, who gets impacted positively?



https://futures.nordkapp.fi/system-actors/



Taking the first step

- Getting started is the hardest bit
- Identify a grand goal
- Identify the gap you're trying to bridge
- Consider your options
- Find a place you're able to start

• GROW

- Goals what will success look like?
- **Reality** where are you now?
- Options how could you bridge the gap? (How Might We?)
- Willingness which option are you willing and able to take?

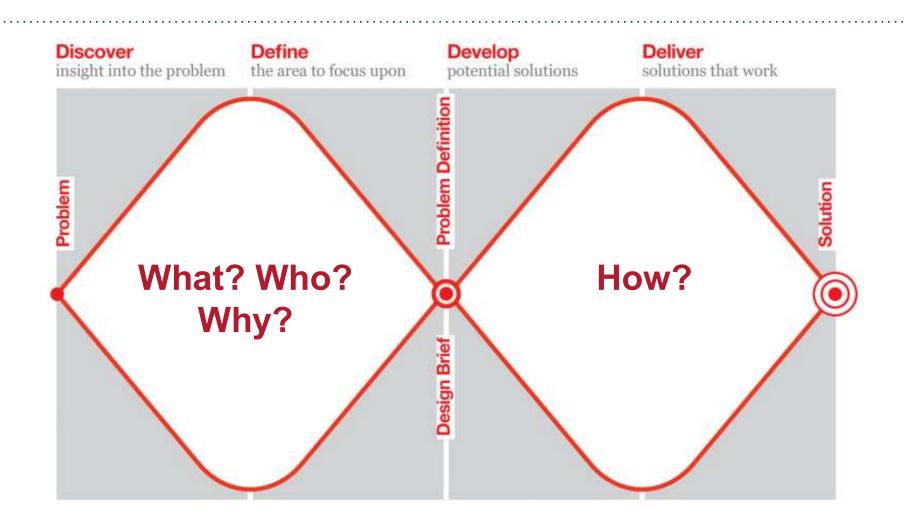
Group Task – 15 minutes (it's a rapid work-through!)

- Pick one starting point from those you've identified
 - If it's a problem fine
 - If it's a solution you might need to identify the problem it solves!
- Identify the <u>System Actors</u> (5 minutes)
 - (Beneficiaries, Users, Customers)
- Identify 3 potential *named* actors <u>you could engage</u> to effect change (5 minutes)
 - (consider who has Influence vs who has Interest)
- Work through the <u>GROW model</u> (5 minutes)
 - (Goals, Reality, Options, Willingness)
- You might generate more questions than answers that's expected!

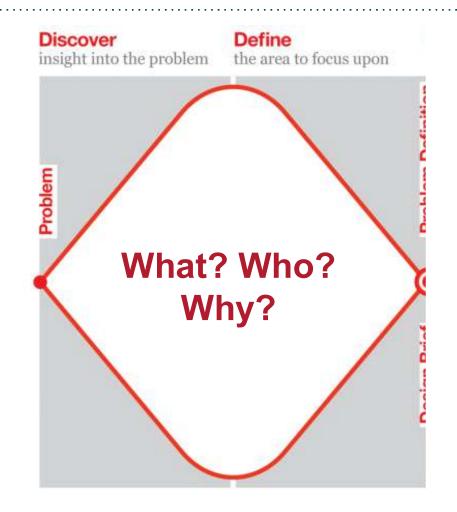
A Process of Designing

Introducing *Design Thinking* as a framework for exploring problems and ideas





The Design Council's Double-Diamond design process.



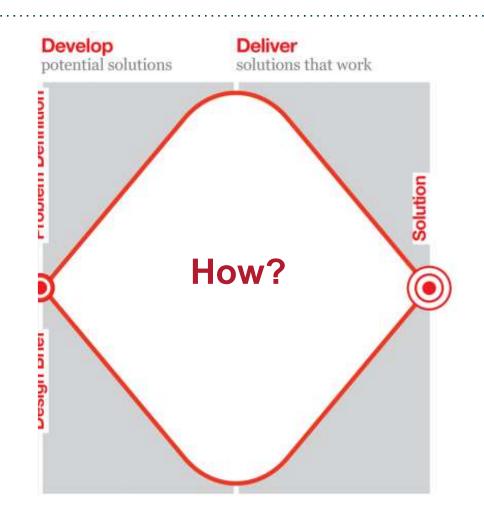
The Design Council's Double-Diamond design process.

Discovery & Definition:

- Secondary Research
- Primary Research
 - Stakeholder engagement
 - 'User Experience'
 - 3M's research model:
 - Observation
 - Ask questions
 - Experiment and prototype
- Prioritisation of issues found
- What can be acted upon?

Ideation & Prototyping:

- Generate lots of ideas
- Evaluate those ideas
- Test and Prototype them
- Select the best...

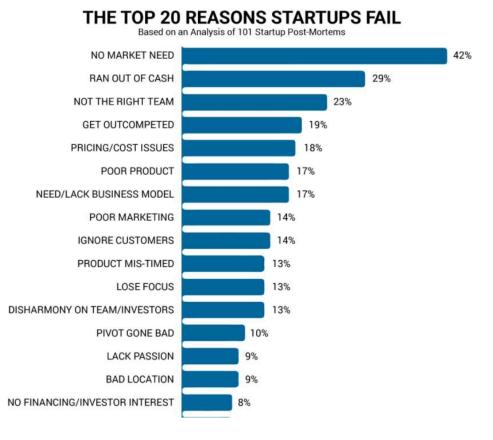


The Design Council's Double-Diamond design process.

Evaluating and Developing ideas

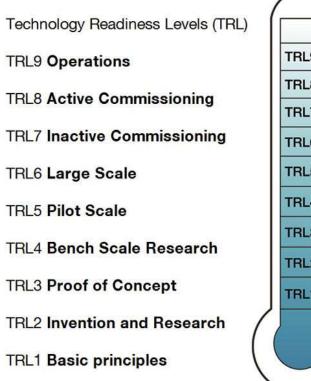


Validating the problem: the fate of start-ups and spin-outs



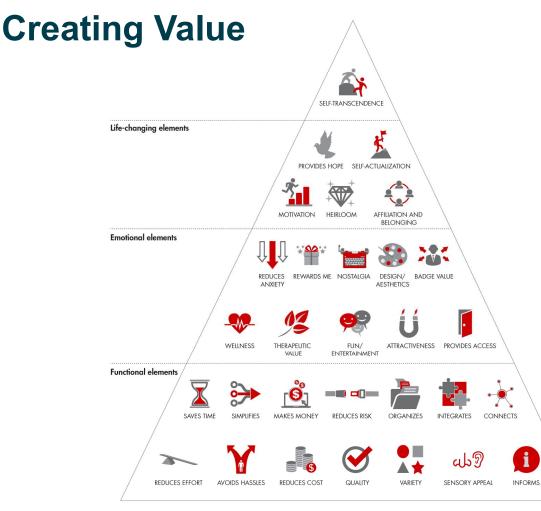
https://www.cbinsights.com/research/startup-failure-reasons-top/

The fate of research ideas



TRL9 TRL8 TRL7 TRL6 TRL5 TRL4 TRL3 TRL2 TRL1

https://www.gov.uk/government/news/guidance-on-technology-readiness-levels



If we have successfully identified and empathised with our users and stakeholders, we can start to identify the values they seek from any interaction.

This is a model developed by consultants Bain & Co as a model for understanding those values. It's a useful starting-point for thinking about framing the value of your offer.

How might you frame the value sought by your users and stakeholders in simple terms?

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How are your products/services improving lives?



Time and money Happiness and fulfillment Confidence + aspiration Skills and capability Employability Friends and Status Wealth and comfort Health and fitness

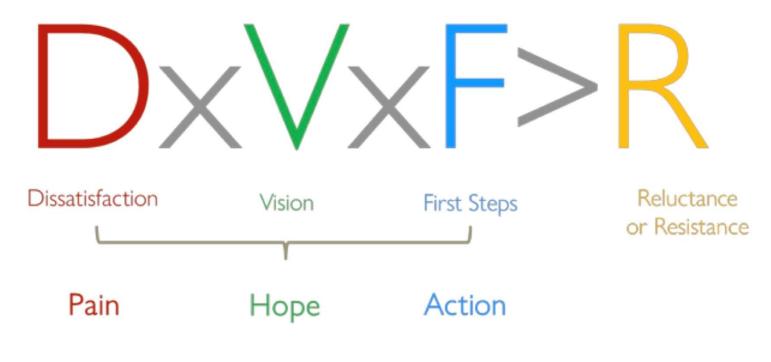


Less cost and effort More fulfilling More predictable Fewer mistakes More fun and laughter More companionship Less tiring / frustrating More freedom / relaxing



Wasted time and cost Physical / mental pain Stress and misery Effort to do things Debt and worry Bad habits + behaviours Mental / physical blocks Weight and ill health

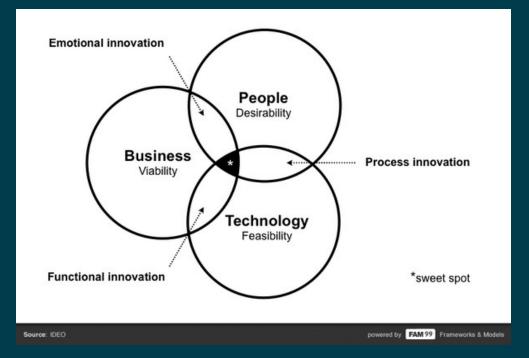
The Formula for Change



Dannemiller & Jacobs, 1992

How do you evaluate an idea as a business idea?

- Desirability: Do (enough) people want it (more than the alternatives)?
- Feasibility: Can it be made? Will it work?
- Viability: Do the profits outweigh the costs? Can it be sustained and scaled?



Unintended Consequences

- A systems-based approach also helps identify the wider impacts of innovation...
 - How might a 'superfan' of your idea take it too far?
 - How might a 'bad actor' abuse your idea?
 - Who or what else disappears or is marginalised if your idea succeeds?



http://tarotcardsoftech.artefactgroup.com/

ARC IDEA CANVAS		IDEA		AUTHOR:	
PROBLEM/OPPORTUNITY What problem are you solving or what opportunity are you creating?	HYPOTHESES TO TEST	FIRST AUDIENCES: Beneficiarie Who will benefit most or most easily be bene Who else might be interested?		, Stakeholders to create that benefit? Who is buying it to be used?	HYPOTHESES TO TEST
Are you able to provide a quantification of the problem or opportunity?					
Are you able to provide a qualified example of the problem or opportunity?		How will you reach each of these groups?][

SOLUTION/MITIGATION What is your idea and how does it create value?	HYPOTHESES TO TEST	IMPACT MODEL How will you measure it's being adopted and creating an impact?	HYPOTHESES TO TEST	REVENUE MODEL How (and from where) will you acquire initial and ongoing funding to provide your product or service?	HYPOTHESES TO TEST
What makes it better than existing solutions or alternatives?					
Is the idea easily replicated by others?					

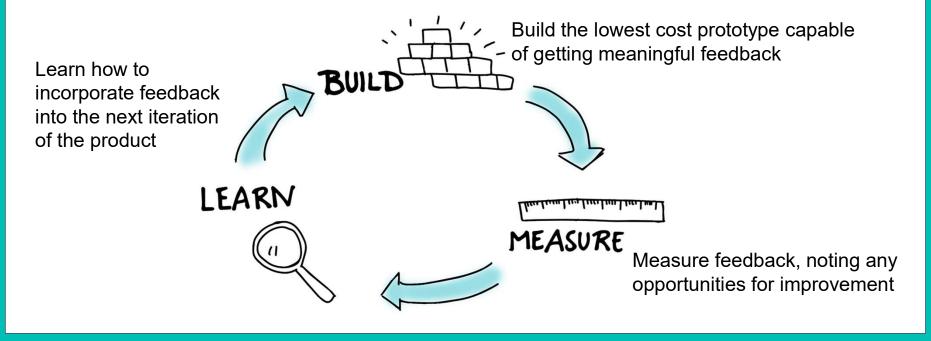
The original Idea Canvas was created by: Ben Mumby-Croft and Dr Harveen Chugh

This version was developed by Dave Jarman for use by the ARC Accelerator in 2023.

ARC Idea Canvas © 2023 by Dave Jarman is licensed under CC BY-NC 4.0. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc/4.0/



Co-create new products with your prospective customers



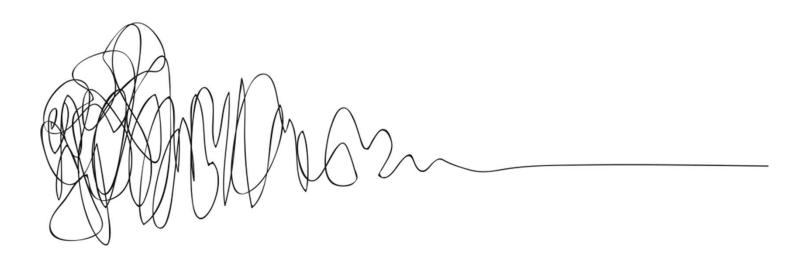
Eric Ries: The Lean Startup



The Design Squiggle

Noise / Uncertainty / Patterns / Insights

Clarity / Focus

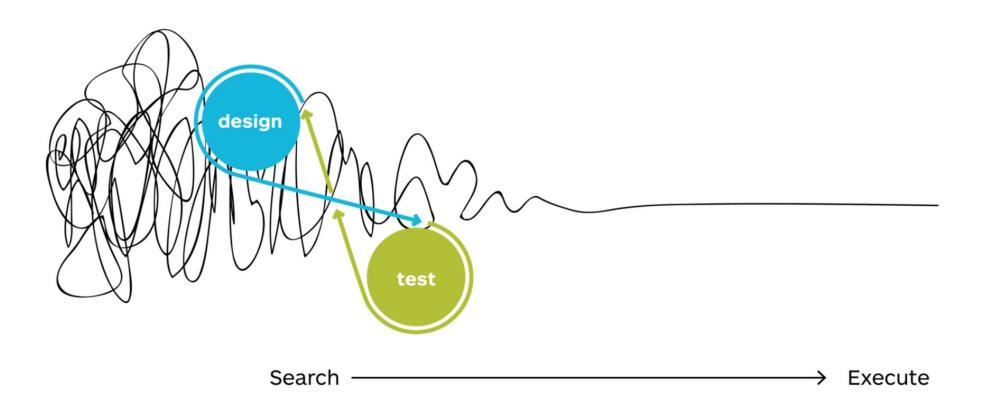


Research & Synthesis

Concept / Prototype

Design

Source: Damien Newman

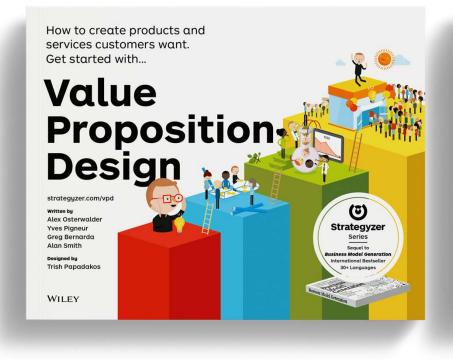


Strategyzer.

"It doesn't matter how beautiful your theory is, it doesn't matter how smart you are. If it doesn't agree with the experiment, it's wrong."

Richard Feynman, Theoretical Physicist.

Very useful books - Strategyzer



You're holding a field guide for rapid experimentation. Use the 44 experiments inside to find your path to scale. Systematically win big with small bets by...

Testing **Business** Ideas (\Im) strateguzer.com/tes Strategyzer WRITTEN BY Series David J. Bland This book integrates with Alex Osterwalder DESIGNED BY International Bestsel Alan Smith 40+ Language Trish Papadakos WILEY

Images: https://www.strategyzer.com/books

Business Plans

What goes into a business plan to make it convincing?





Business Plans

- What is a Business Plan?
 - A methodology?
 - A blueprint?
 - A forecast?
 - A guess?
 - A snapshot in time?
- All of the above.
- A compelling story (with evidence)
- A set of qualified assumptions.



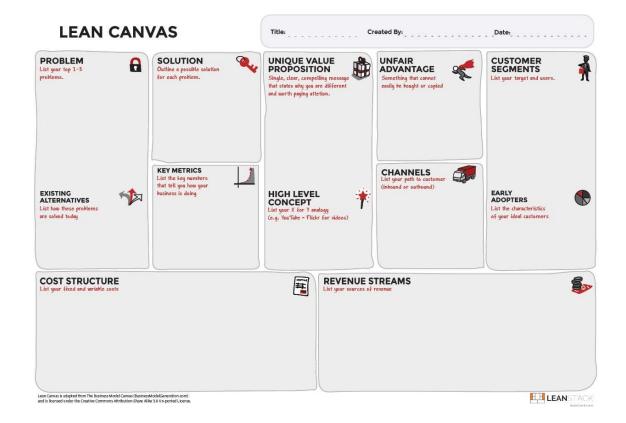
Business Plans

- No ideal size or structure.
- Exec summary is a must.
- Then lead with whatever is most compelling...
- Provide evidence that qualifies the assumptions you're making.

'Typical' Elements:

- Product/service description what is it?
- Market analysis who wants it?
- Competitor analysis who are we up against?
- Strategy how will we succeed?
 - Pricing
 - Route to Market
 - IP/barriers to entry
- Logistics/operations details, details...
- Team who are we?
- Financials do the numbers add up?
 - Where does the money come from
 - Including potential exits

A Business Plan on one page? Try the 'Lean Canvas'



The Elevator Pitch

- Who are you?
- What is it: either:
 - 1: *This* is a problem, *here* is our solution.
 - 2: *This* is our idea, it solves *this* problem.
- Why: It's better than the existing options because...
- (If you have time): **How** you'll achieve this...



www.bristol.ac.uk/innovation

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