Guest Keynote

Josh Valman

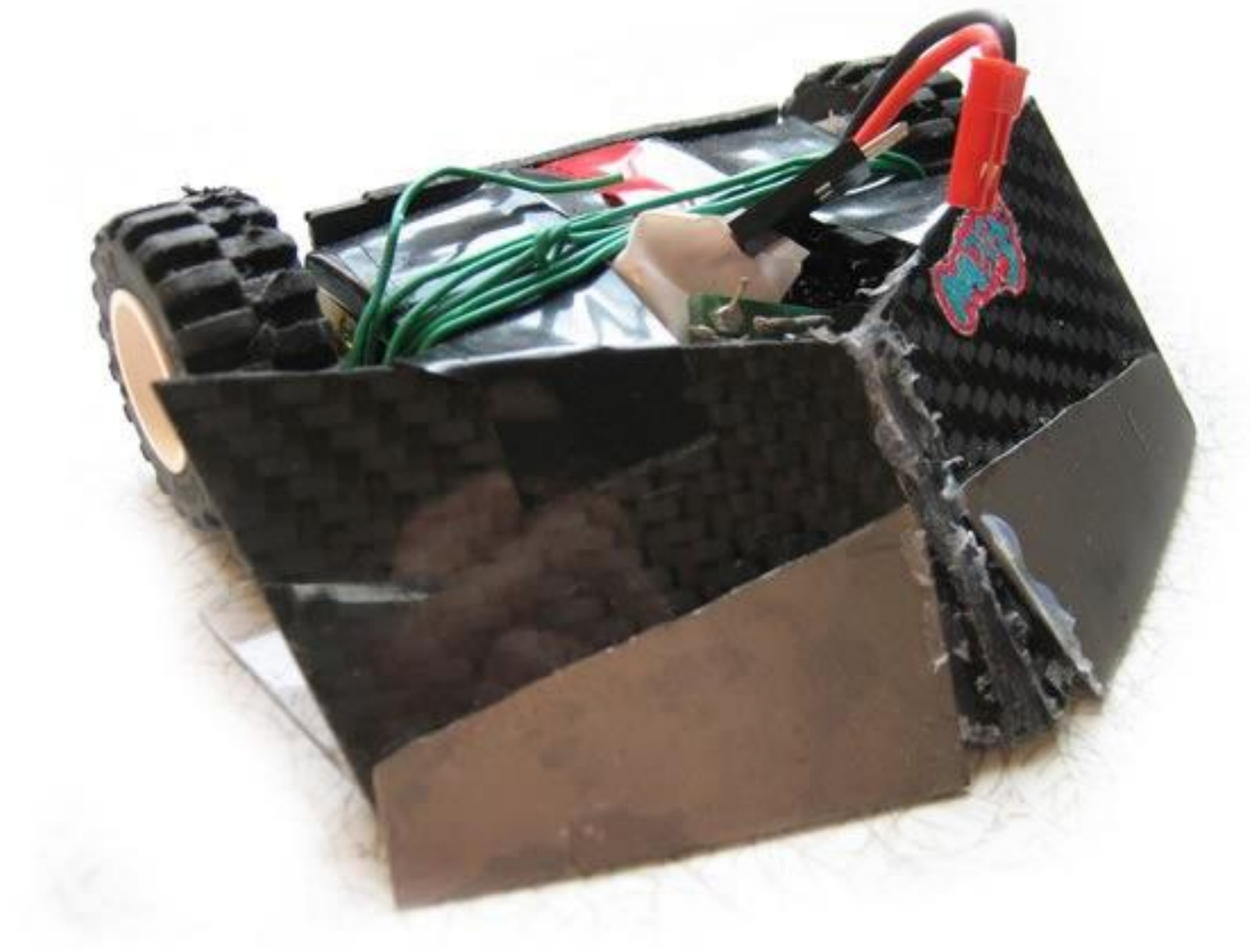Human Centric Innovation
Digital Co-creation

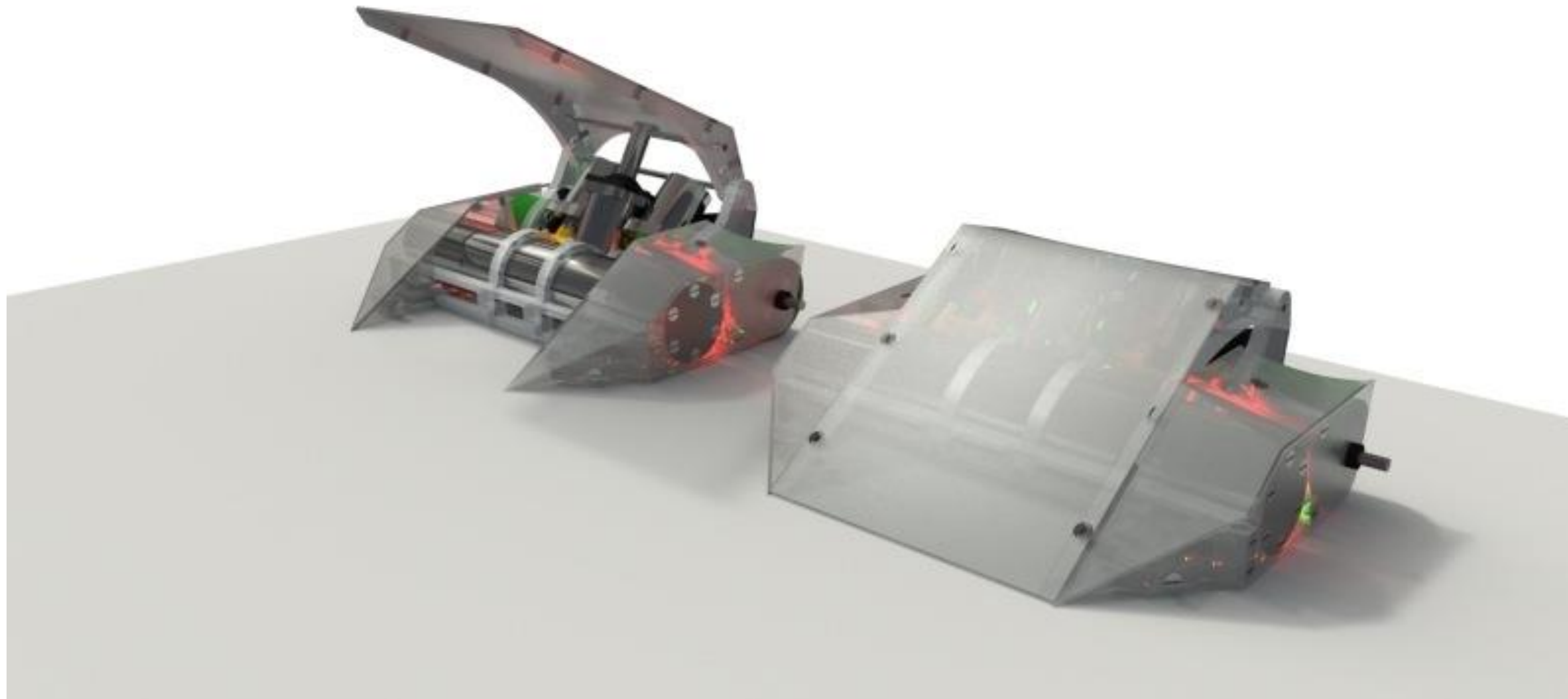# Making Innovation Happen

Josh Valman | RPD International

An Early Engineering Start With Robot Wars

Making robots from toys, lego, rubbish and scrap materials

Using Google to Learn

Using Google to answer each specific question, learning how engineering and design

Using Google to Learn

Using Google to answer each specific question, learning how engineering and design
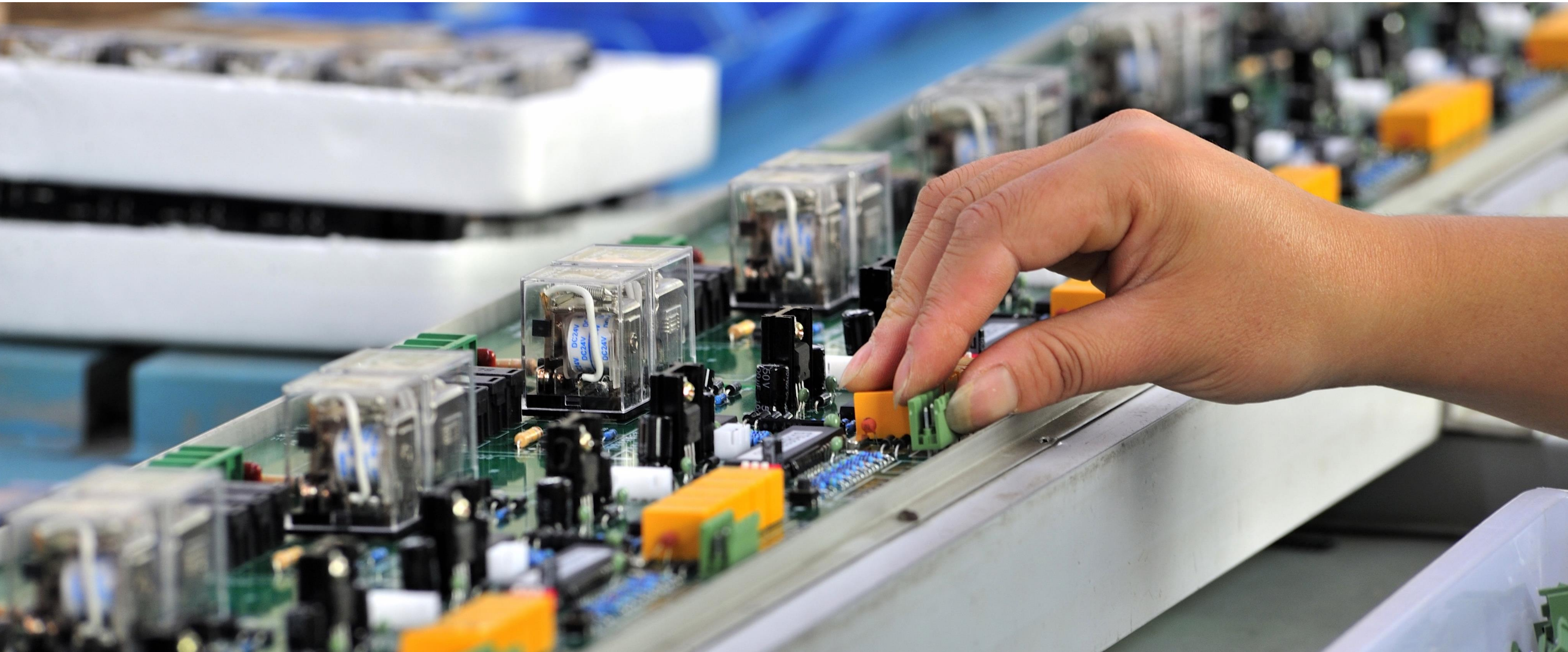
From Robotics to Dishwashers

My robotics soon earned me glorious roles in engineering replacement dishwasher parts

Running Global Supply Chains From School

Soon dishwashers escalated into corporate consulting on global product engineering and supply chain

@JoshValman

R&D to Supply Chain and Logistics

Research & Innovation

RPD helps companies solve problems in design and product, across a diverse range of sectors.

Prototyping & Iteration

RPD develops products and engineers solutions for your market purpose, in record times.

Production & Assembly

RPD manages manufacturing facilities in over 40 countries, for production and assembly.

Supply Chain & Logistics

RPD scales production and logistics, then helps integrating your PLM operation.

RPD INTERNATIONAL

@JoshValman

R&D to Supply Chain and Logistics

www.RPDintl.com

@JoshValman

What is Innovation, and what does it really mean?

Even Google Can't Really Define What Innovation Is

So how can we be expected to grow such a thing within our businesses?

innovation

/ɪnəˈveɪʃ(ə)n/ 🔊

noun

the action or process of innovating.
"innovation is crucial to the continuing success of any organization"
synonyms: change, alteration, revolution, upheaval, transformation, metamorphosis,
reorganization, restructuring, rearrangement, recasting, remodelling,
renovation, restyling, variation; More

"The action or process of innovating"

Global Governments are Encouraging Innovation

And yet, still nobody seems to really tell you what it is, only that it's essential?

Key steps towards business innovation

Develop a strategic, responsive plan, which includes innovation as a key business process across the entire business.

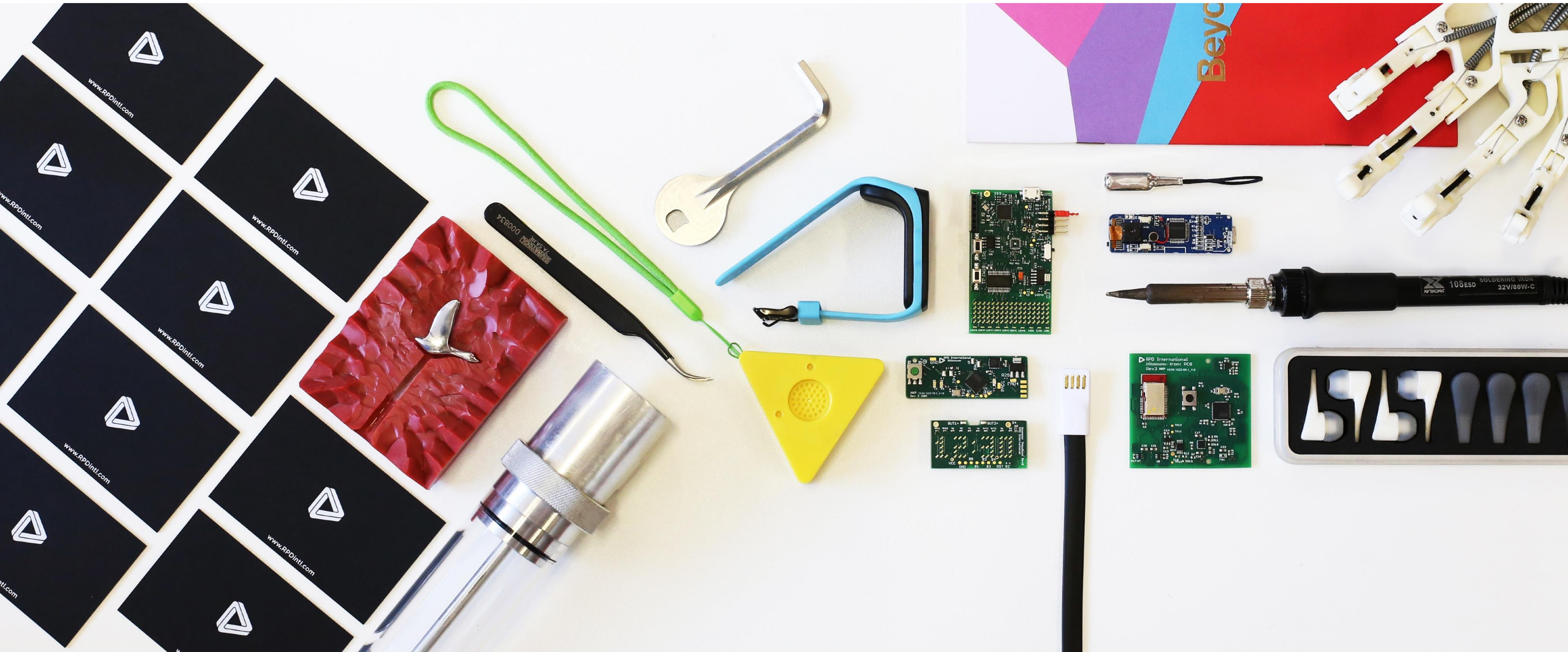Remember, innovation is the key to competitive advantage for your business.

"Develop a strategic, responsive plan, which includes innovation"

What is Innovation, and what does it really mean?

"Innovation is the process of executing on new ideas"

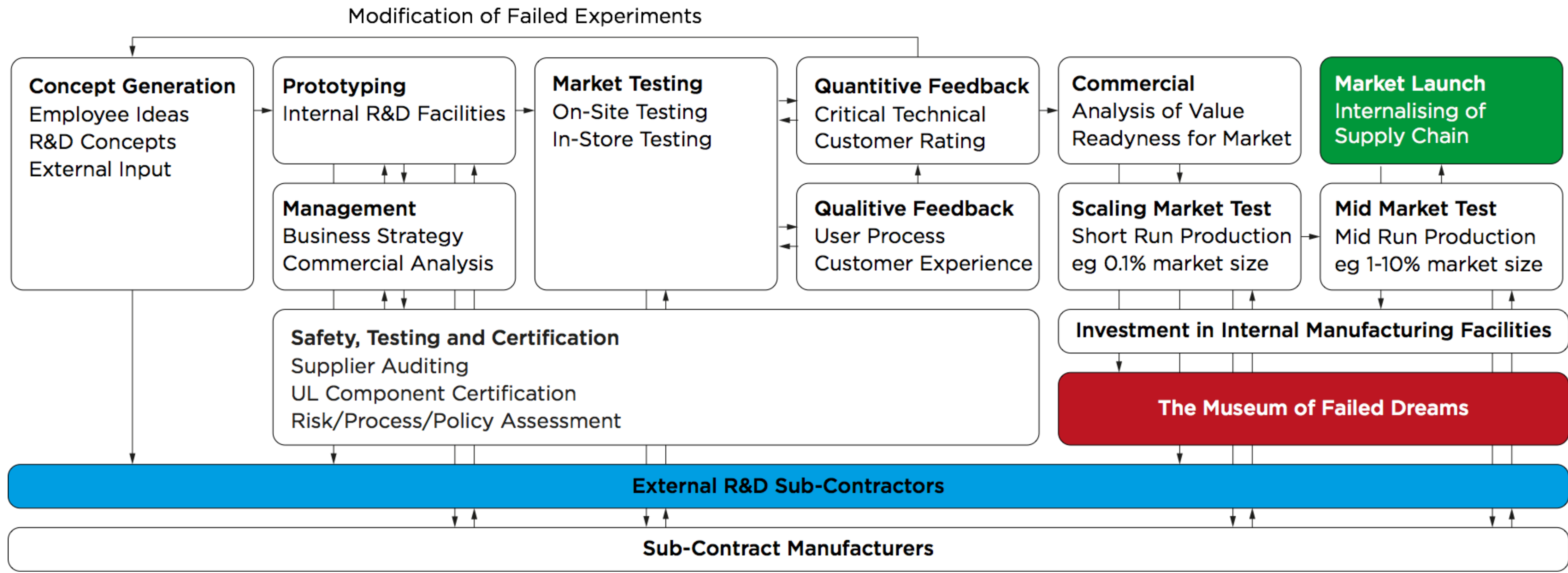# What if we could do this in a year, a month, a week, a day?

If we can accelerate the pace of corporate innovation, how far and fast can the world move?
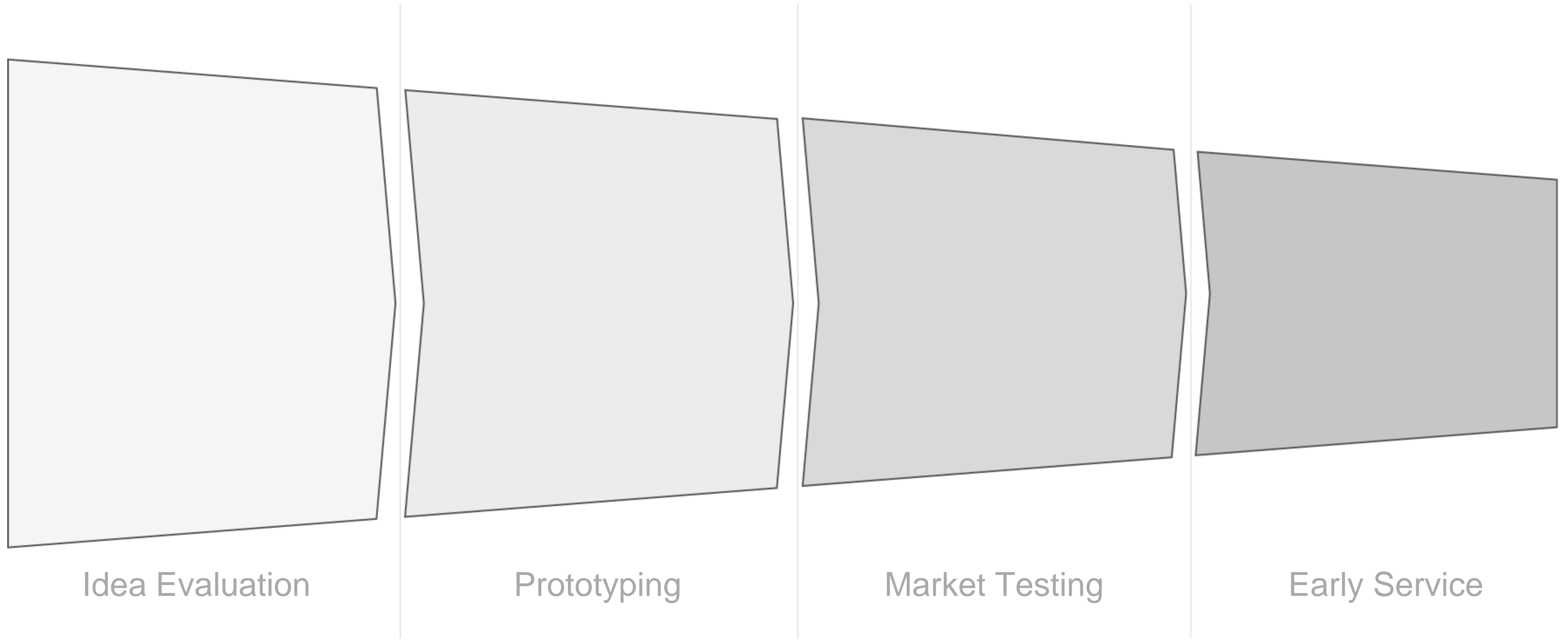
How do we make innovation and execution happen?

What Does Innovation Look Like?

Innovation fits into a system diagram - but it doesn't fit onto one slide

Modification of Failed Experiments

Concept Generation
Employee Ideas
R&D Concepts
External Input

Prototyping
Internal R&D Facilities

Market Testing
On-Site Testing
In-Store Testing

Quantitive Feedback
Critical Technical
Customer Rating

Commercial
Analysis of Value
Readyness for Market

Market Launch
Internalising of
Supply Chain

Management
Business Strategy
Commercial Analysis

Qualitive Feedback
User Process
Customer Experience

Scaling Market Test
Short Run Production
eg 0.1% market size

Mid Market Test
Mid Run Production
eg 1-10% market size

Safety, Testing and Certification
Supplier Auditing
UL Component Certification
Risk/Process/Policy Assessment

Investment in Internal Manufacturing Facilities

The Museum of Failed Dreams

External R&D Sub-Contractors

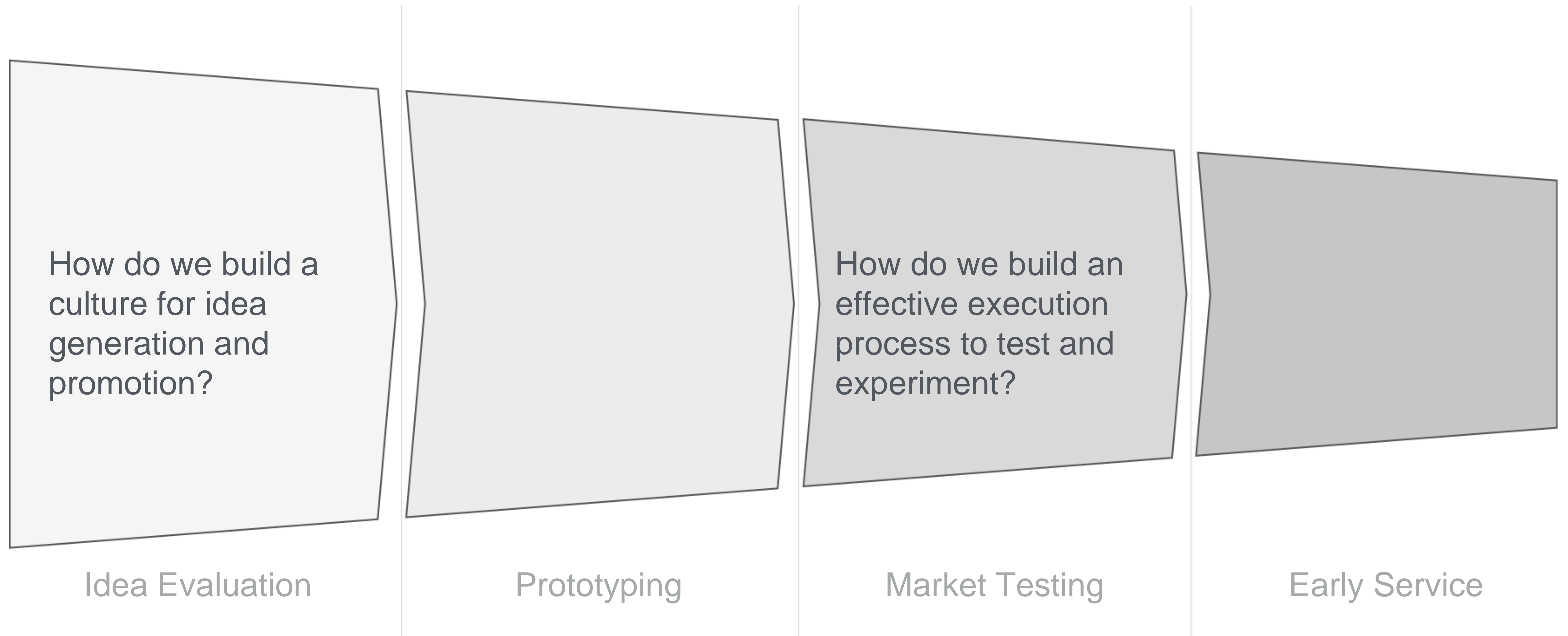**Sub-Contract Manufacturers**

@JoshValman

Innovation Is Execution When Expressed as a Pipeline
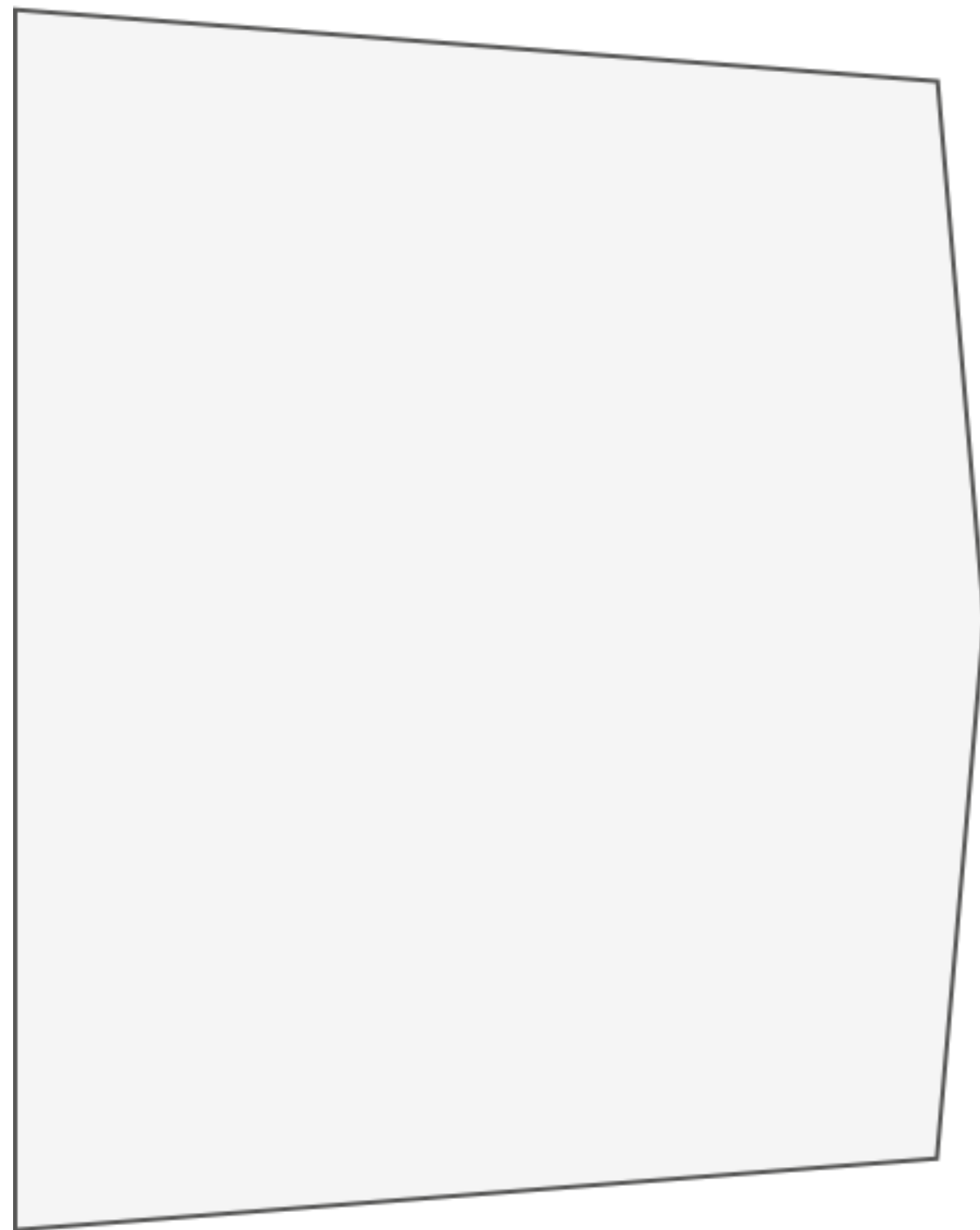
Whilst corporate stock imagery has you believe innovation lives on post-it notes, it might be better served in Salesforce

Idea Evaluation   Prototyping   Market Testing   Early Service

Innovation Is Execution When Expressed as a Pipeline

Whilst corporate stock imagery has you believe innovation lives on post-it notes, it might be better served in Salesforce

How do we build a culture for idea generation and promotion?

How do we build an effective execution process to test and experiment?

Idea Evaluation

Prototyping

Market Testing

Early Service

@JoshValman

How will we implement this across a global operation?

Building a Culture of Innovators

How can we build a culture that promotes the proposition of ideas in day-to-day and the generation of ideas in R&D?
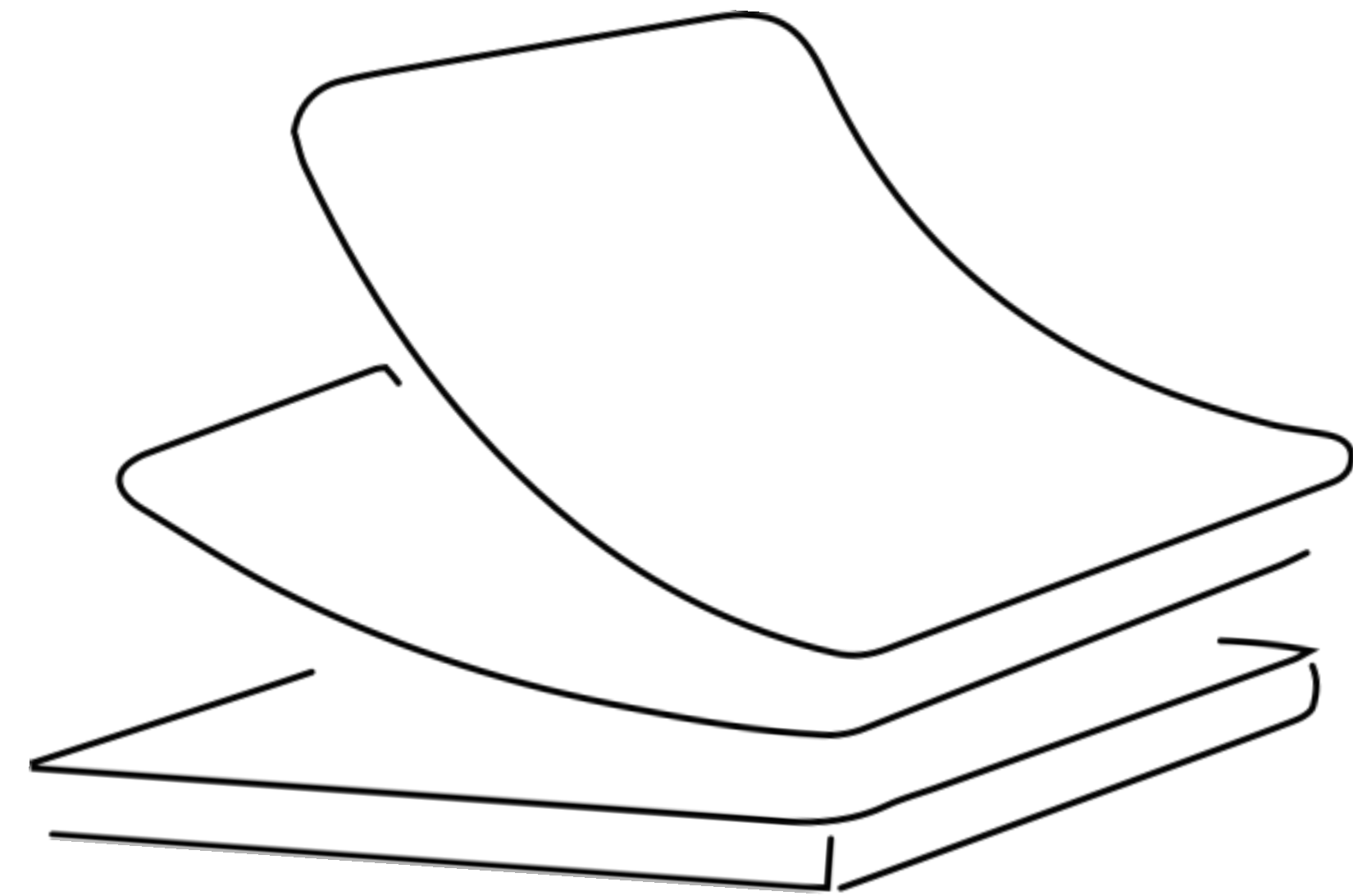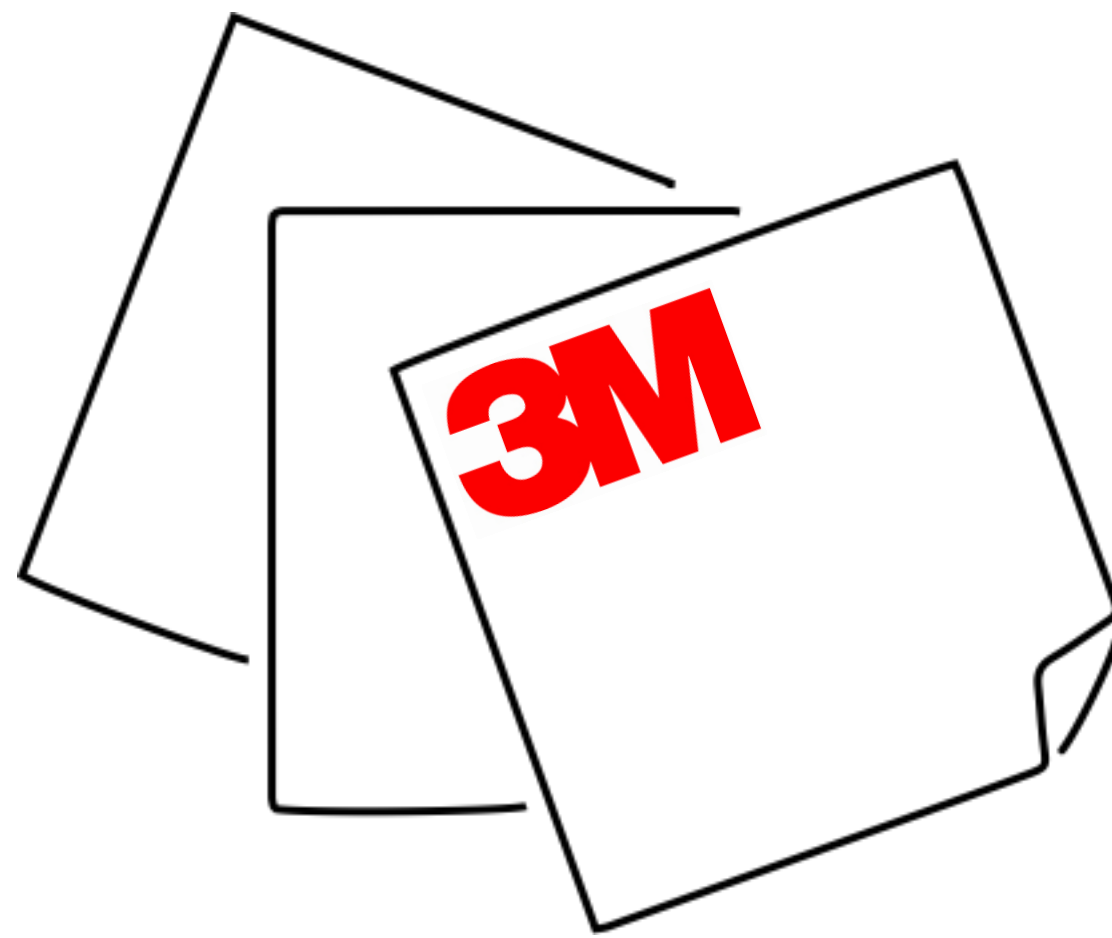
Idea Evaluation | Prototyping | Market Testing | Early Service

@JoshValman

Building a Culture of Innovators

The Post-It Note came from 3M's 15% time, but so did one of the word's largest innovations in abrasive materials
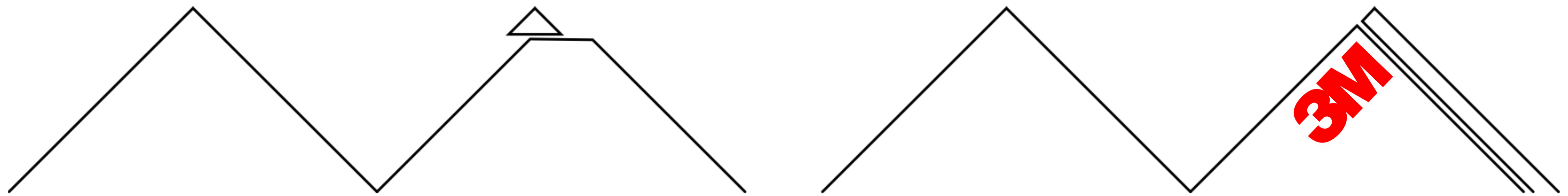

| Idea Evaluation | Prototyping | Market Testing | Early Service |

Building a Culture of Innovators

3M's engineers reformulated the crystal structure of the particles, making them fracture, leaving a constant sharp point

Idea Evaluation | Prototyping | Market Testing | Early Service

@JoshValman

Building a Culture of Innovators

How can we build a culture that promotes the proposition of ideas in day-to-day and the generation of ideas in R&D?

What if my idea offends the company?

What will I get from sharing ideas?

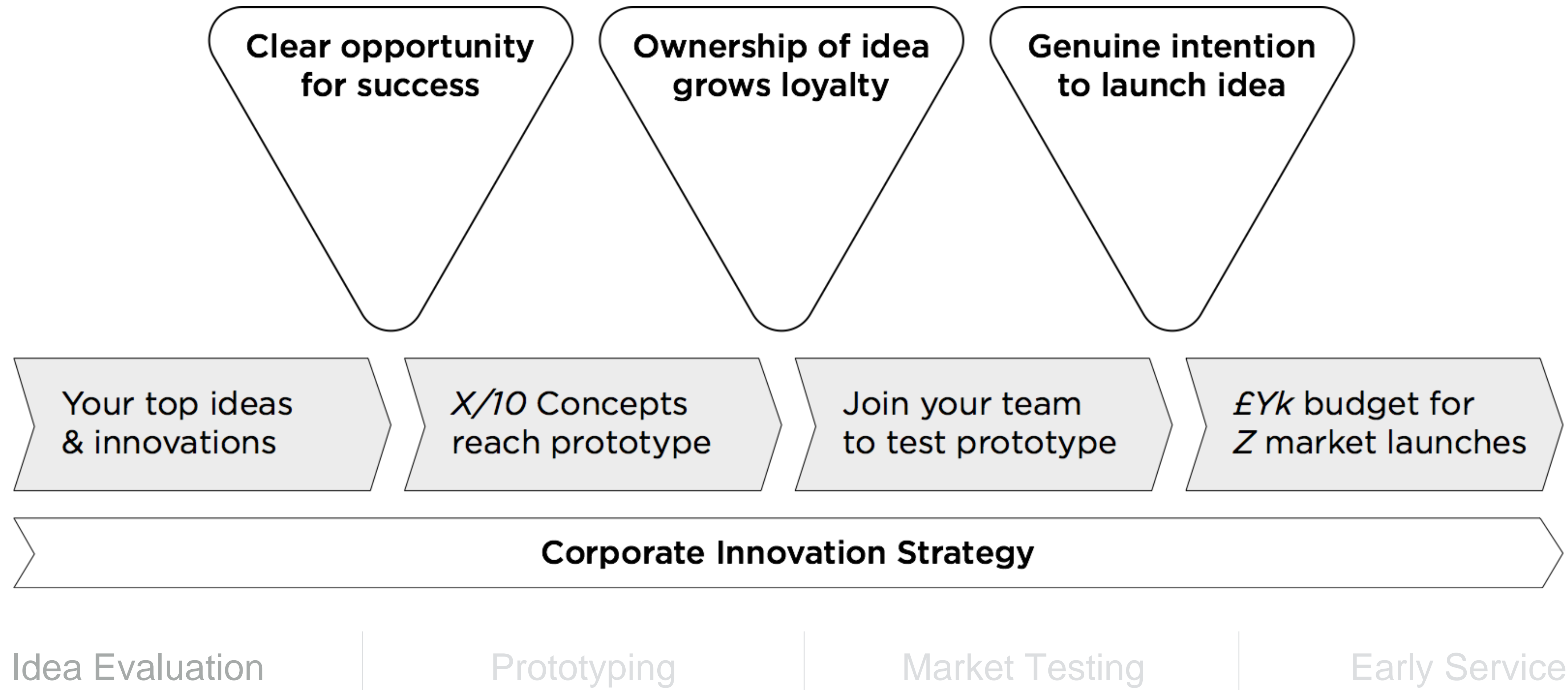What do I do with my ideas?

Employee

Idea Evaluation   Prototyping   Market Testing   Early Service

@JoshValman

Building a Culture of Innovators

Implementation of clear innovation processes allow your employees to understand the value, and gives permission to think

Clear opportunity for success

Ownership of idea grows loyalty

Genuine intention to launch idea

Your top ideas & innovations

X/10 Concepts reach prototype

Join your team to test prototype

£Yk budget for *Z* market launches

Corporate Innovation Strategy

Idea Evaluation | Prototyping | Market Testing | Early Service

@JoshValman

Empower employees by creating a clear call for contribution and define exactly how it will work
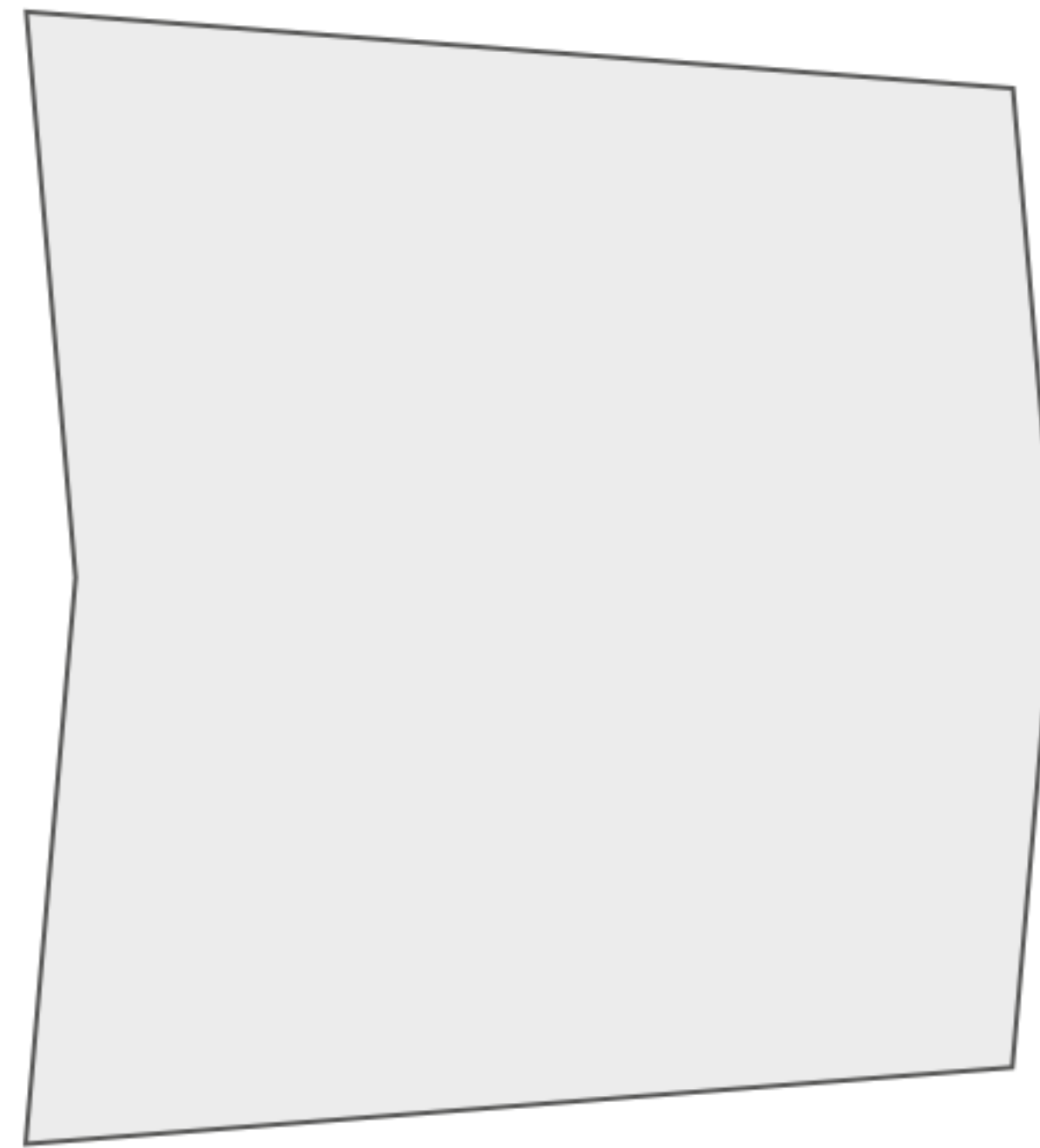
Idea Evaluation   Prototyping   Market Testing   Early Service

Building and Engine for Execution and Experiments

Most ideas get shut down by negative legacy thinking and process. How can we drive an experimental atmosphere?
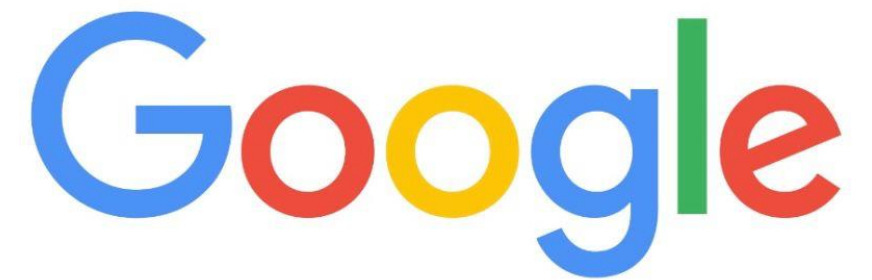
Idea Evaluation   Prototyping   Market Testing   Early Service

Building and Engine for Execution and Experiments

How long did Google take to put together the first glass experiment?

Idea Evaluation | Prototyping | Market Testing | Early Service

Building and Engine for Execution and Experiments
1 Day. That's how long Google's R&D team took to make the first cardboard frankenstein prototype
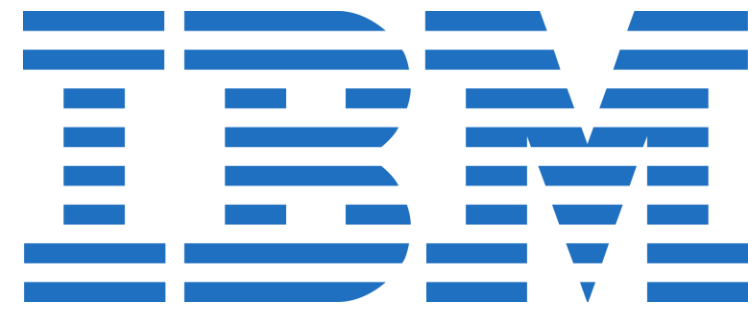

| Idea Evaluation | Prototyping | Market Testing | Early Service |

Building and Engine for Execution and Experiments

The greatest products, companies and solutions are built from an amalgamation of less successful products

IBM did not invent the personal computer

Apple did not invent MP3 technology

Amazon did not invent the online book store

Idea Evaluation   Prototyping   Market Testing   Early Service

@JoshValman

Building and Engine for Execution and Experiments

Unlike Sales, the innovation pipeline thrives on failure, it feeds itself to an extent

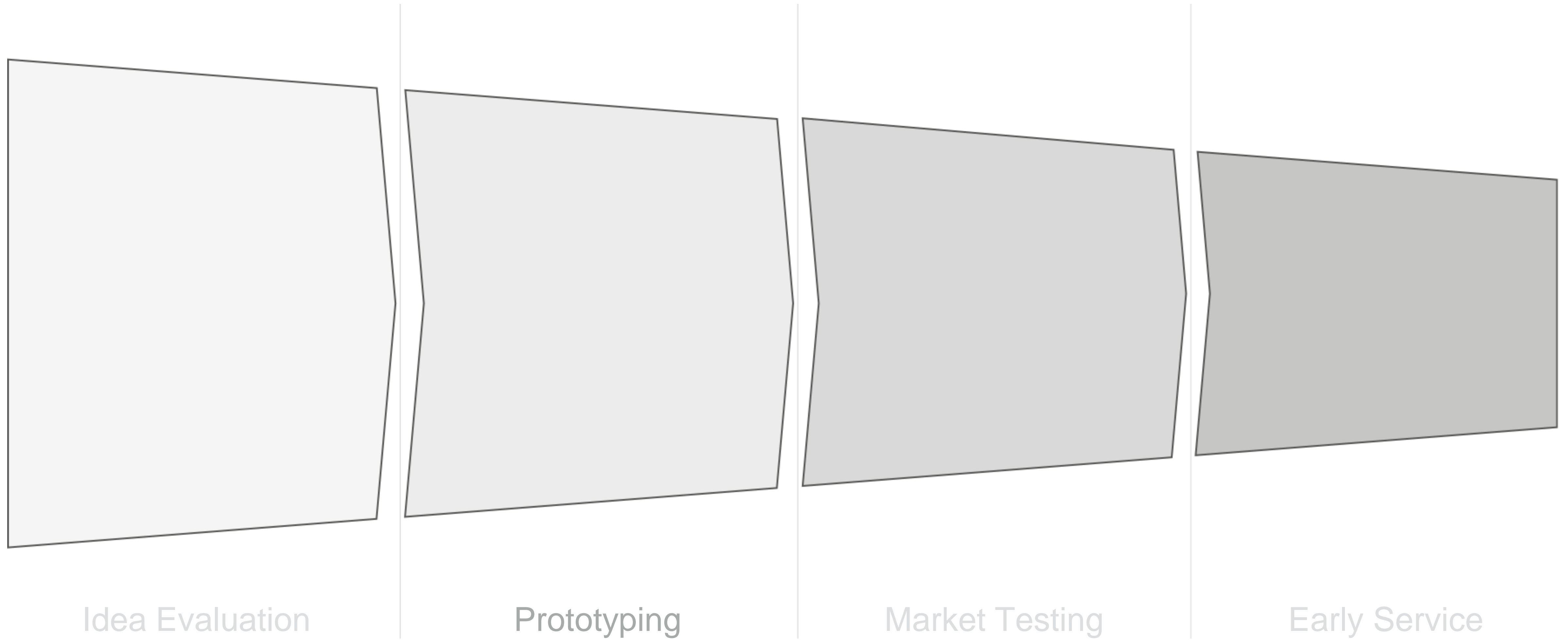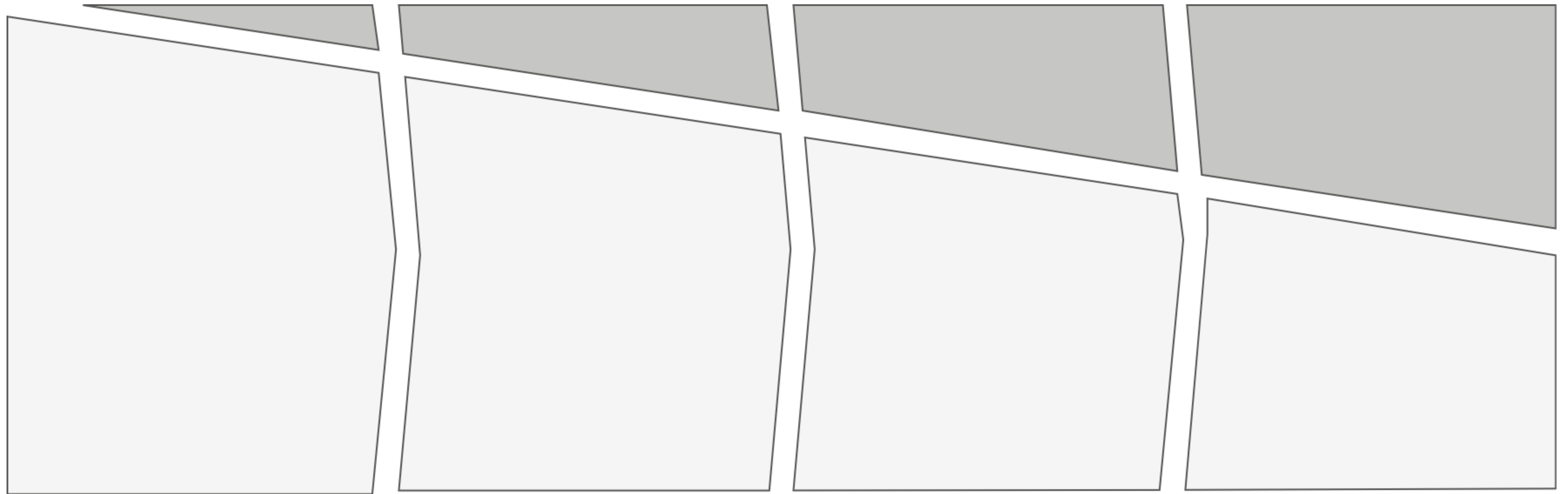Idea Evaluation   Prototyping   Market Testing   Early Service

Building and Engine for Execution and Experiments

Unlike Sales, the innovation pipeline thrives on failure, it feeds itself to an extent
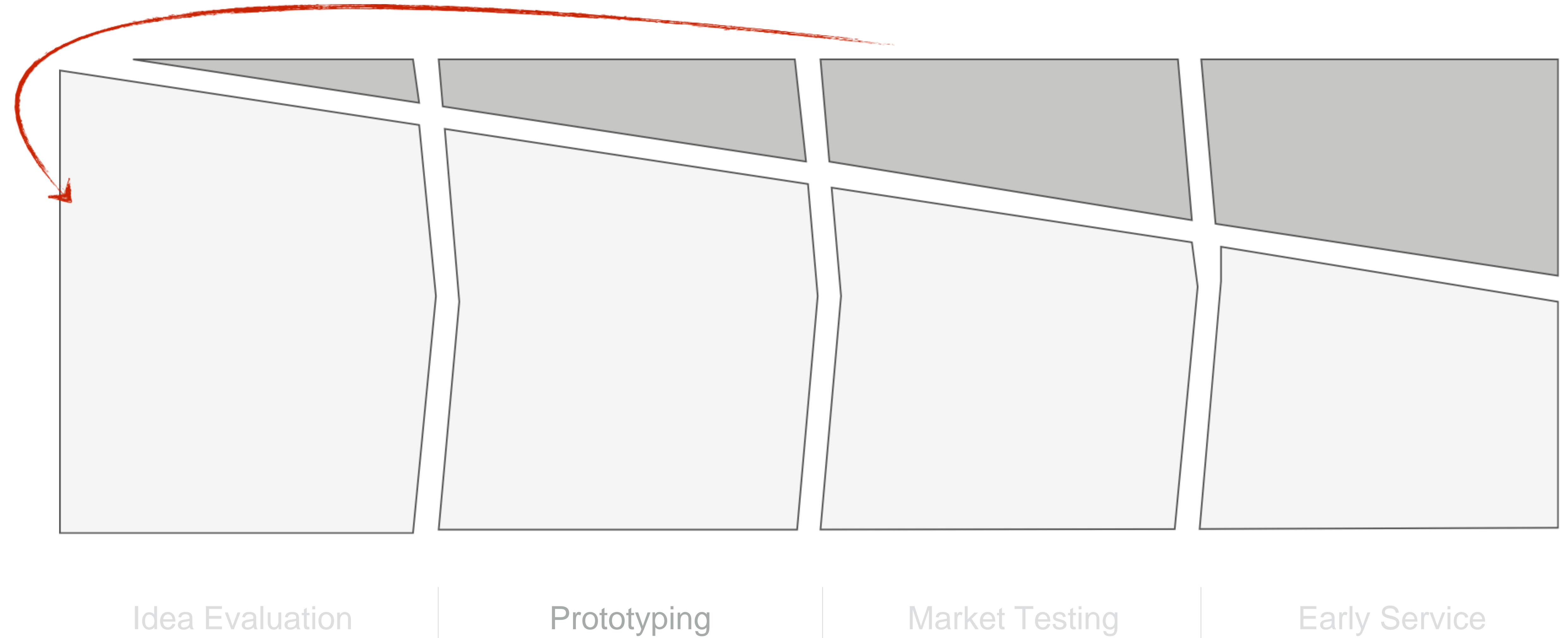

| Idea Evaluation | Prototyping | Market Testing | Early Service |

Building and Engine for Execution and Experiments

By focussing on how projects fail, and why, we can adapt and combine them to evolve into new ideas

Idea Evaluation | Prototyping | Market Testing | Early Service

Building and Engine for Execution and Experiments

Entrepreneurs and Corporate Entrepreneurs have different appetite's for risk - we need to create a safe haven for failure

Create an environment that
suits the necessary failure
of innovation

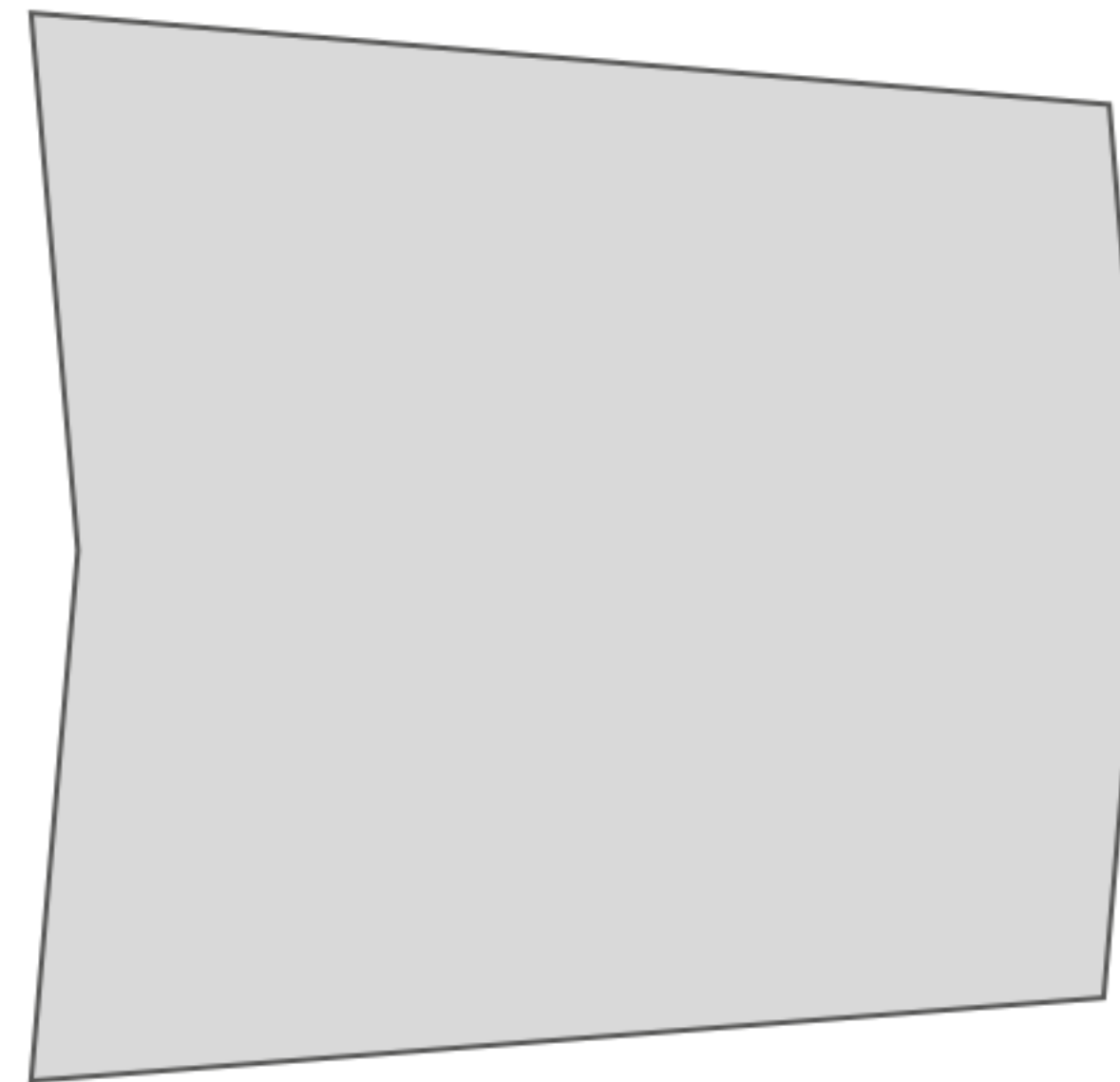Idea Evaluation   Prototyping   Market Testing   Early Service

Using The Real World To Define Success

How can we use real customers and scenarios to define success in our innovation?

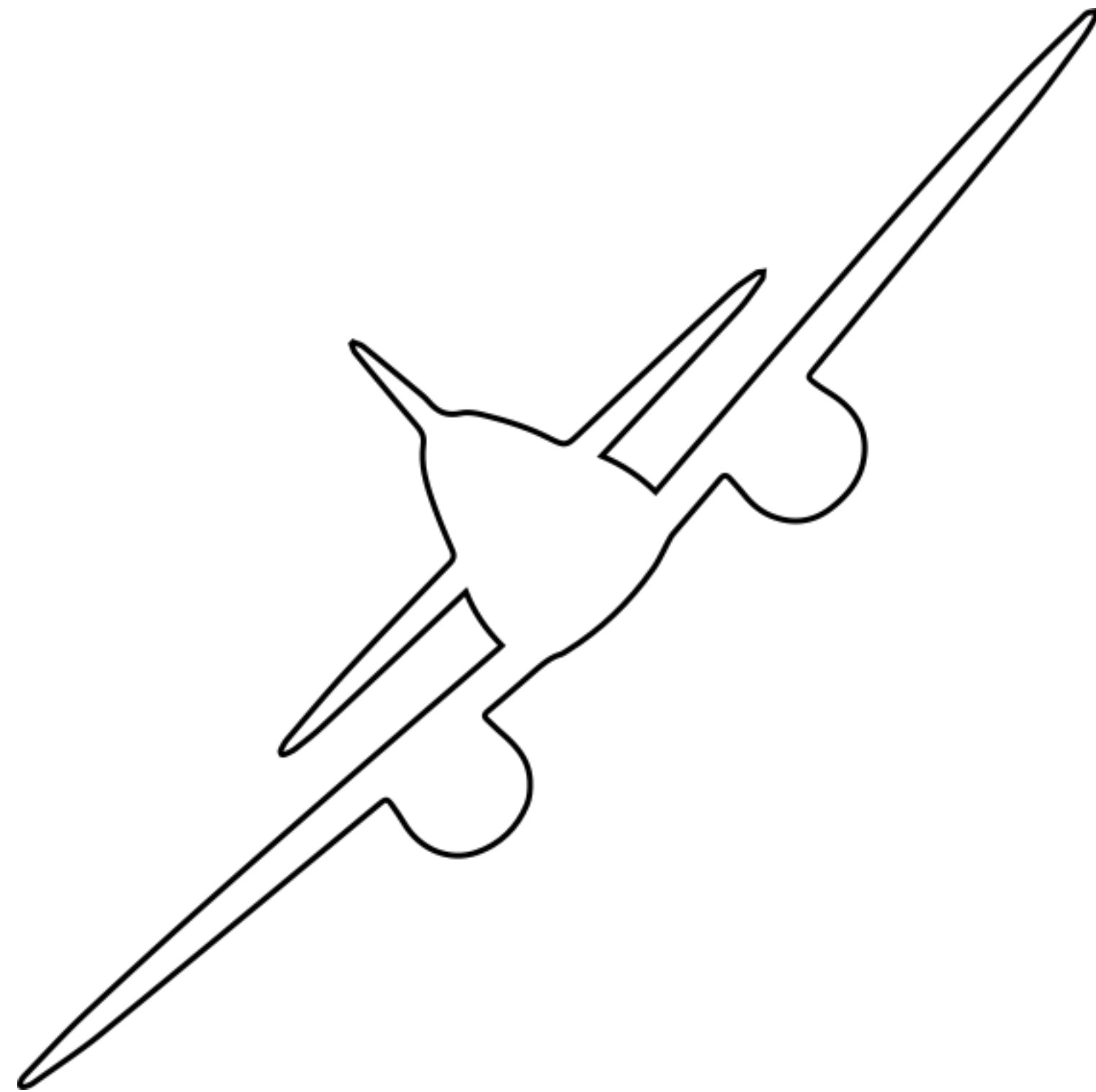Idea Evaluation   Prototyping   Market Testing   Early Service

Using The Real World To Define Success

What happens when you realise everything you know about your customer is hypothetical?
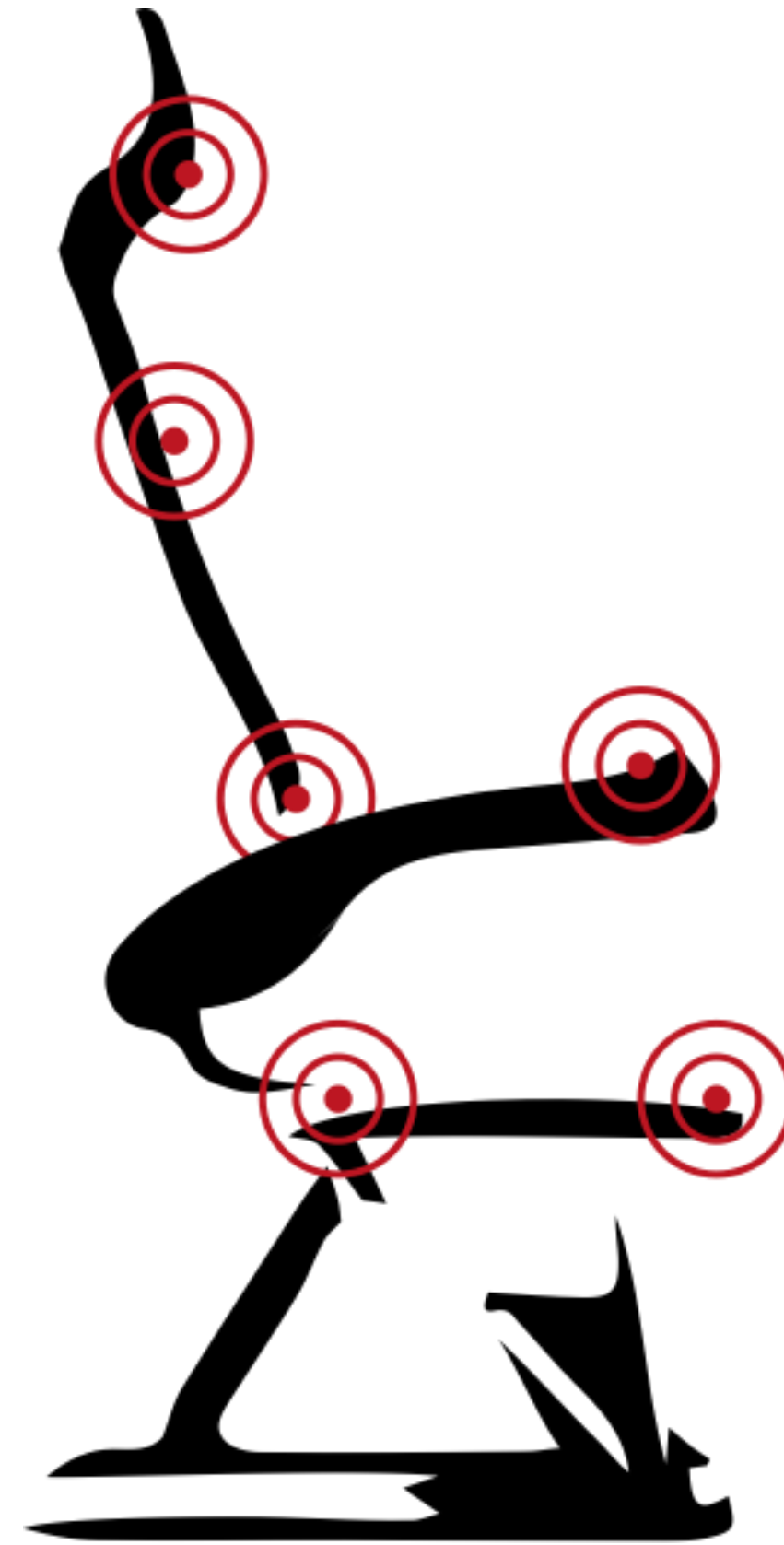

Idea Evaluation | Prototyping | Market Testing | Early Service

@JoshValman

Using The Real World To Define Success

How much do you really know about how your product/process/tool will be used?

Idea Evaluation   Prototyping   Market Testing   Early Service

Build feedback systems into everything you test,
because most humans lie,
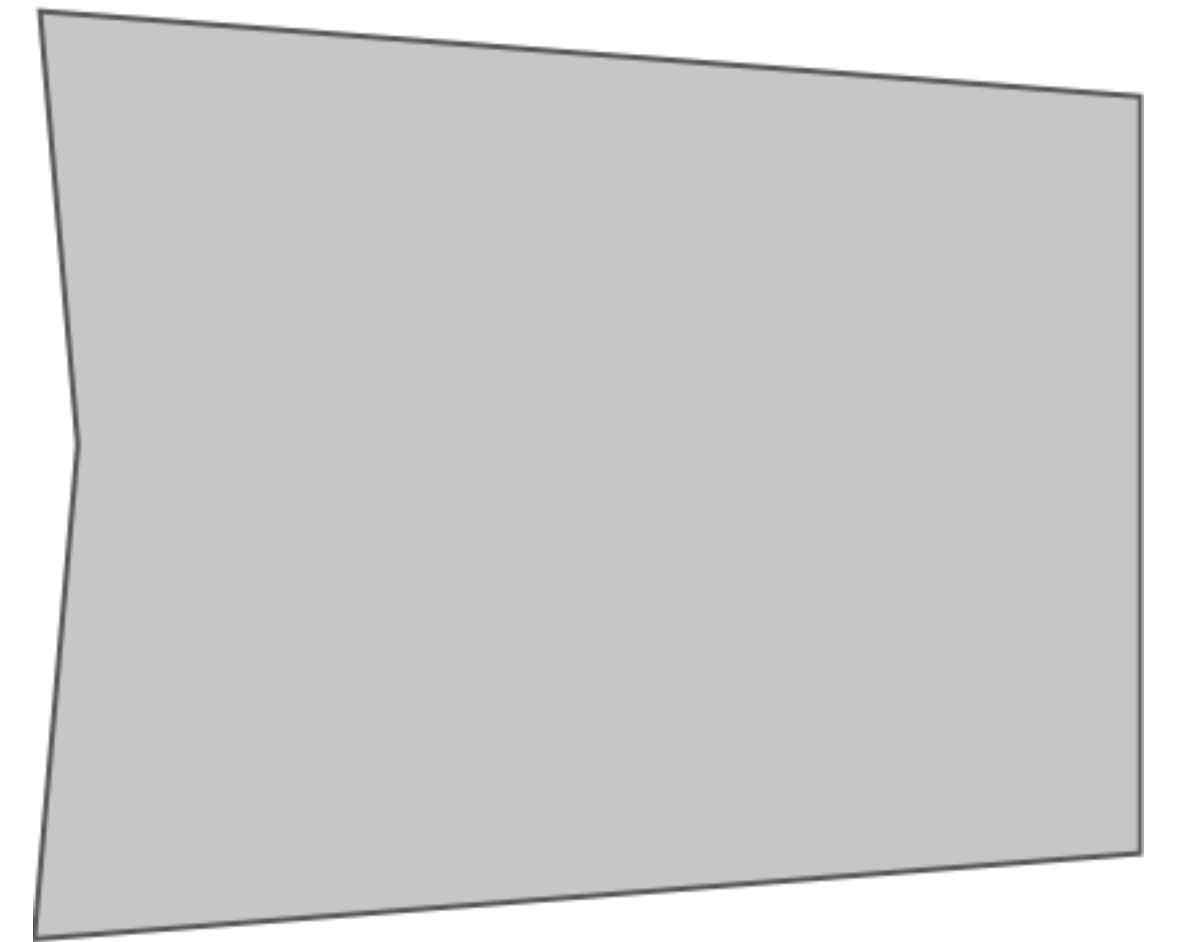even to themselves

Idea Evaluation | Prototyping | Market Testing | Early Service

Mastering Go-To-Market Strategy

Once validated, how can a business build the go-to-market strategy for any new process, tool or product?

Idea Evaluation   Prototyping   Market Testing   Early Service

Mastering Go-To-Market Strategy

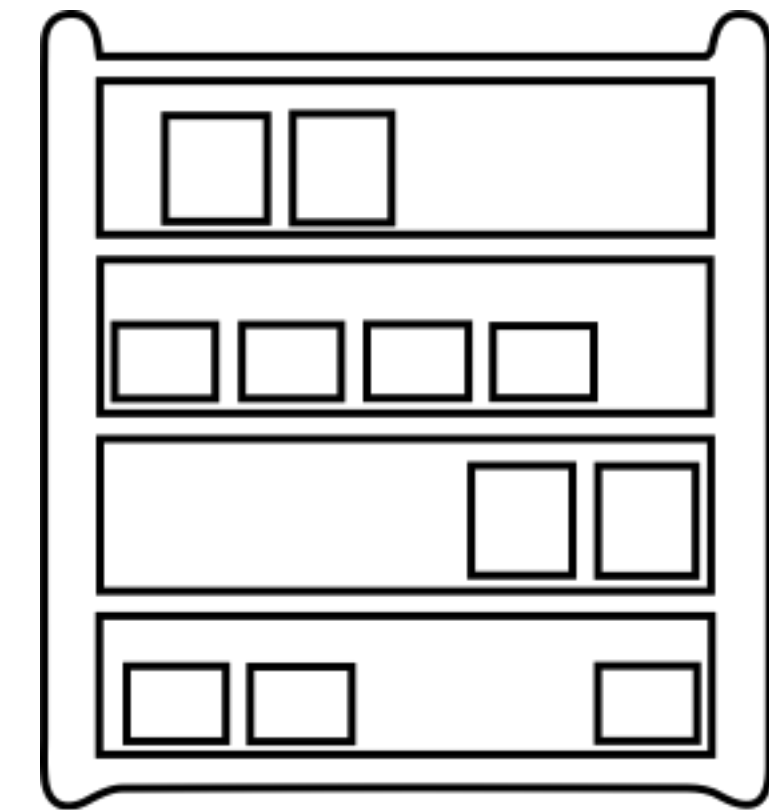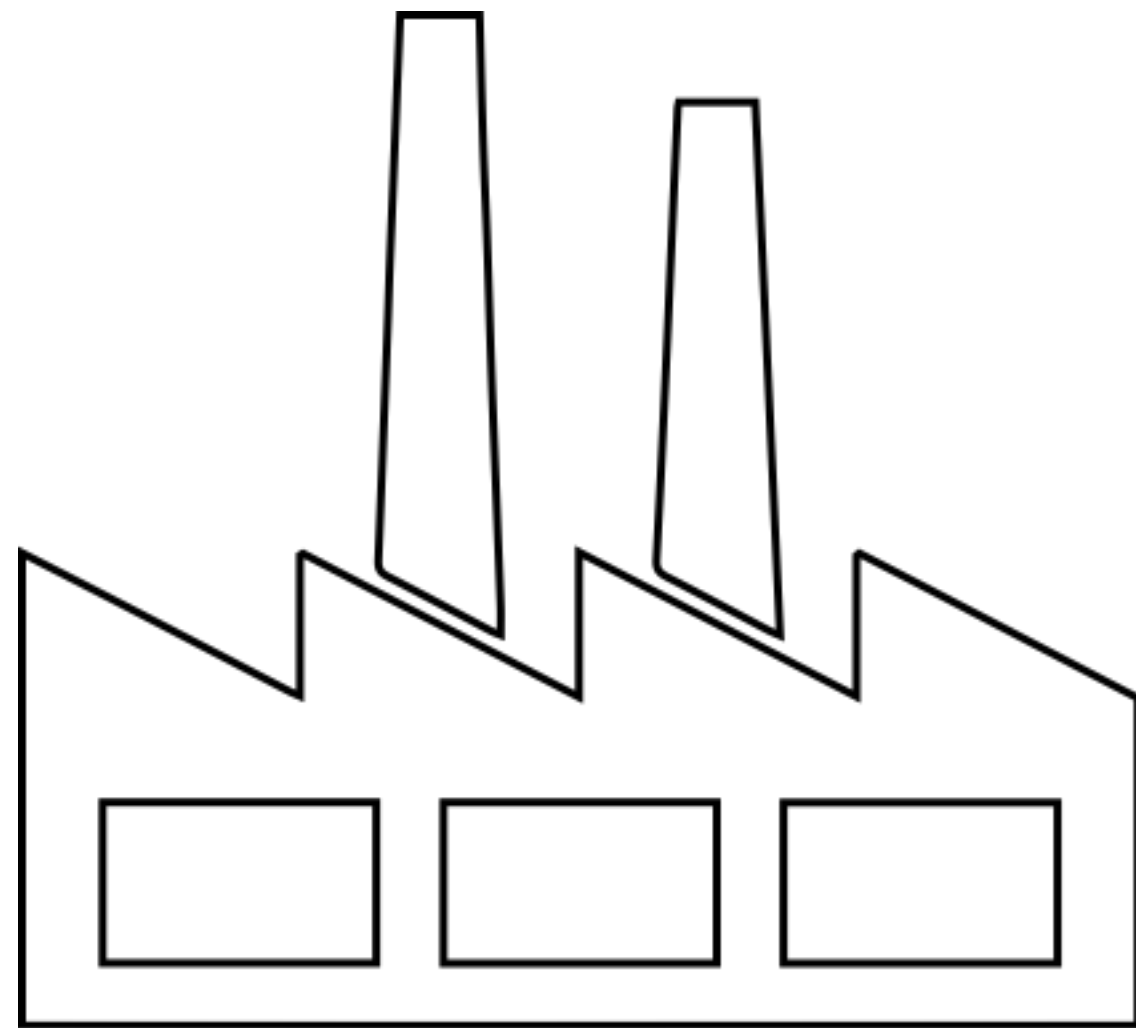Who makes more revenue, Pepsi Co, or Coca Cola?

Idea Evaluation | Prototyping | Market Testing | Early Service

Mastering Go-To-Market Strategy

Pepsi found the majority of their customers bought snacks too, so they utilised an existing supply chain to sell snacks

Idea Evaluation   Prototyping   Market Testing   Early Service

Mastering Go-To-Market Strategy

New Zealand is a 'test-bed', a customer base similar to the Western World, but a community that shares less outside

Idea Evaluation | Prototyping | Market Testing | Early Service

Mastering Go-To-Market Strategy

How do we keep things small and secluded, to reduce risk when trailing in the real world?

Use small opportunities to validate your market and restrict backlash from 'work in progress'

Idea Evaluation   Prototyping   Market Testing   Early Service

What is Innovation,
and what does it
really mean?

"Innovation is the process of executing on new ideas"

Making Innovation Happen

The 4 key steps to making innovation and execution work in your business, from 9am tomorrow

- Empower employees, by defining exactly how contribution works

- Create an environment that suits the necessary failure of innovation

- Build feedback systems into everything you test

- Find ways to validate, restricting backlash from 'work in progress'

@JoshValman

By Accelerating Innovation
How far and fast can the world move?