NTSPAKATHON



From Idea to Theory

How Startups Create & Capture Value (and Prove & Pitch It)

Why Theory-Based View (TBV) vs. 'Just Talk to Users'?



Lean Startup:

- "Fail early-and-often" based on customer feedback is useful in the context of information asymmetry, ...
- but not universally avoid 'one-size-fits-all' MVPs and interviews.

Entrepreneurs as scientists:

- Generative rationality and belief asymmetry.
- Your (contrarian) beliefs should <u>precede</u>
 validation and (customer) feedback.
- Start from a causal theory, then test.
- Advice:
 - Choose validation methods that fit your theory.
 - Utilize your theory to explain and pitch your venture idea.



What Is a 'Theory of Value'?



- Actor-specific, forward-looking causal logic that guides search, experiments, and governance choices.
- Set of beliefs & assumptions.
- "If-Then" relationships that connect antecedents with consequences.



Plain language:

- "If [assumptions A] holds, then [problem P] for [who] gets stronger."
- "If we do [action X], then we solve [problem P] for [who]."
- "If we do [action Y], then we capture [value V]."

What Is a 'Theory of Value'?



Box-and-arrow diagram:

Example: Elder-Care Activity Tiles

Privacy-by-design Contrarian Belief (no cameras / audio) Families & clinicians willing to pay for privacy-preserving monitoring (peace of mind, reduced risk) Non-intrusive tiles on doors, beds, chairs Can profitably offer in-home elder monitoring On-device RNN detects routine Weakest Link changes & falls Accurately, timely anomaly detection at affordable BOM and service cost Low-power Zigbee/Thread mesh; easy install & maintenance

Keep Theories Small & Testable



Structure matters:

- Size, complexity, elaboration, and confidence in assumptions all impact experimentation & pitching effectiveness.
- Smaller, simpler, lower-confidence early theories iterate faster.
- Think like Kindergartners (vs MBA students) in a Marshmallow Challenge:





Where Do Good Theories Come From?



Theory Type	What It Means	Good First Experiments
Arbitrage	Value of an <i>asset in a new use context</i> that others do not see (<i>Information</i>)	Product-market/segment fit; channel/price discovery; time-to-market.
Recombination	Value of an <i>new asset combination</i> that others do not do or see (<i>Imagination</i>)	Interface/compatibility tests; access to complementary assets; two-sided activation.
Specialization	Value of a <i>unique</i> , <i>specialized asset investment</i> that others cannot do (<i>Transformation</i>)	Feasibility sub-problems; make-vs-buy; IP position before demoing.

Further useful theory foundations:

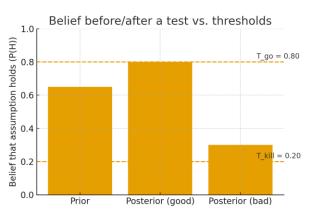
- Customer-problem fit (Jobs-to-Be-Done / problem framing
- Resource-Based View (RBV; VRIO).
- Capabilities/Dynamic Capabilities.
- Network Effects & Platform Theory.
- Transaction Cost / Make-or-Buy.

- Signaling & Information Economics.
- Learning Curves & Experience Effects.
- Real Options.
- Institutional Theory / Legitimacy.
- Behavioral Economics.

Good Theories Improve Experimentation



- With a theory, experimentation is more targeted:
 - you start testing the weakest link in your causal chain, not random features.
- ... and more discriminating & calibrated:
 - evidence is weighted against an explicit prior (belief strength in an assumption), so small, noisy signals don't whipsaw decisions.
 - Bayesian Updating:
 - Posterior odds =Prior odds × Test Quality (Bayes Factor)
 - Theory-informed decisions when to
 (1) proceed/scale; (2) stop/pivot or
 (3) continue testing ...



Translate Your Theory into an Investor Pitch



- Replace "feature tour" with a Theory Card investors can underwrite:
 - 1. Contrarian belief (what you think is true that others miss).
 - 2. Problem framing & subproblems (your causal map; list the "must-be-true"s).
 - 3. Theory type (arbitrage / recombination / specialization) and how that matters for your venture dev approach (go-to-market speed, cooperation, R&D, etc.)
 - 4. Weakest-link experiment (fastest way to de-risk the theory) and Bayesian update rule (what evidence changes your mind).
 - 5. **Discriminating alignment** (your choices in experiments, team, partners, and financing fit the theory).

Translate Your Theory into an Investor Pitch



Classic Deck Section	TBV Insert (What to Add)
Title	One-line contrarian belief (what others miss).
Problem	State 2–3 must-be-true assumptions; mark the weakest link.
Solution / Product	If—then causal path + theory type (Arbitrage/Recombination/Specialization).
Why Now	Belief asymmetry: what changed that makes your theory true now.
Market	TAM/SAM tied to assumptions (who adopts first, where).
Business Model	Value capture that fits the theory type (IP/secrecy/platform/ownership).
Go-To-Market	First experiment stresses the weakest link; pre-set pass/fail.
Traction	Evidence Board: Prior \rightarrow Test \rightarrow Posterior \rightarrow Decision (continue/stop/revert).
Competition	Compete on theory: why your causal story + tests beat feature-chasing.
Team	Roles/partners justified by theory type (builders/complementors/speed).
Ask / Use of Funds	Budget mapped to the sequence of de-risking tests; thresholds for go/kill.

1-Page Template: Theory of Value



Contrarian Belief (≤20 words):
Theory Type: Arbitrage / Recombination / Specialization:
Must-Be-True Assumptions (A, B, C):
Weakest Link & 1 Test (method, sample, timeline):
Update Rule (evidence that changes your mind):

Summary & Outlook



"Act like scientists":

- Start with a contrarian / unique belief-
- Build a simple theory around it-
- Design experiments for the weakest links.
- Focus your pitches around your theory.

My Research:

- Can we infer startups' competitive positions over time from their website texts?
- Can we fine-tune an LLM to infer the startups' theory of value they use to compete?