E.B. Howard Consulting

Beyond SBIR/STTR & Capital Readiness Framework: Proof, Packaging, Position, and Pathway

The 4-Step Model

PROOF (De-Risk)

Build real evidence: customer pull *and* technical risk worthy of federal dollars.

PACKAGING (Data Room)

Organize diligence materials so reviewers/investors can say "yes" without scavenger hunting.

POSITIONING (Narrative)

Outcomes-first story that answers: who pays, why now, why you, why this approach wins.

PATHWAY (Systematic Outreach)

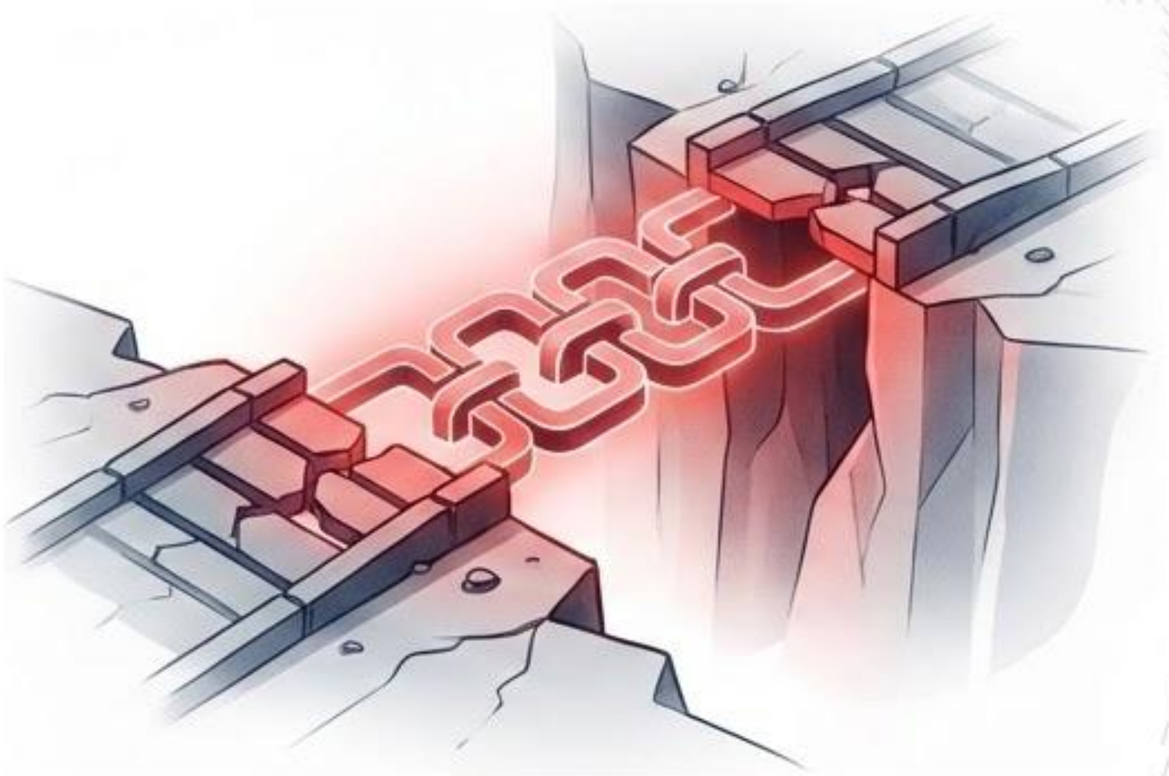
A disciplined, measured process to match the right capital/grant to the right company.

Hard Truth

Most SBIR losses aren't technical.

They're readiness gaps:

- unclear market logic,
- thin evidence,
- messy documentation,
- a story investors/agencies can't retell.

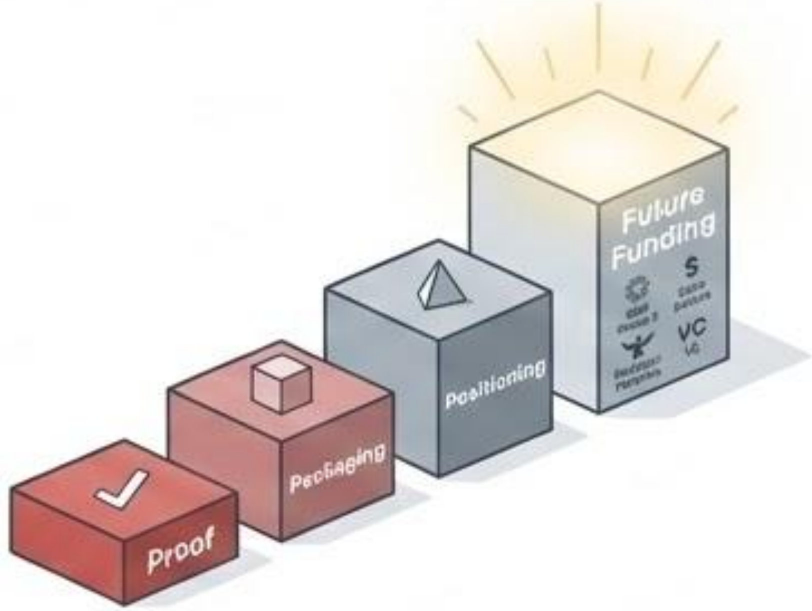


Readiness = de-risking + packaging + narrative + outreach. If any one pillar is weak, the whole raise (SBIR/STTR or equity) wobbles.

Why this matters

SBIR is a capital source — not a lottery ticket.

The companies that win are the ones that look ready to execute on Day 1.



Readiness compounds. Once proof + packaging + positioning exist, companies can reuse them for SBIR Phase II, state dollars, angels, strategic partners, or VC (if appropriate).

Step 1: PROOF - What Makes a Project "Fundable"

Fundable = de-risked. Proof is the de-risking engine.

Before anyone funds you *(e.g., SBIR, angels, VC, strategic partners)*,
they're asking the same question:
"What evidence says this will work — technically and commercially — without us gambling?"

PROOF has two halves:

A) Customer Evidence (Commercial Proof): Clear signals that a real buyer has a real problem *and will pay to solve it.*

PAID PILOTS WITH DOCUMENTED OUTCOMES

Even small dollars beat big opinions.

LOIs / MOUs THAT INCLUDE SPECIFICS

Budget range, timeline, success criteria, decision-maker signatures.

INSTRUMENTED SALES PIPELINE

Not “we talked to 40 people,” but:
lead → qualified → pilot → conversion with real ratios.

WHAT THIS PROVES:

- You’re solving a **PAINFUL** problem (not a nice-to-have).
- There is a **BUYER**, not just an enthusiastic user.
- Your pricing and market timing are **GROUNDED IN REALITY.**

Common customer-proof mistakes (that kill fundabiliity):

Confusing end users with purchasers.

Example: **nurses** love it, but hospital **procurement** owns the budget.

"Everyone is our customer."

If your customer is "anyone with lungs," your **SOM is fiction**.

Validation without commitment.

Lots of "interesting!" but **no pilots/LOIs = low proof**.

PROOF has two halves:

B) Technical Evidence (Scientific / R&D Proof): Evidence that your project is hypothesis-driven R&D with real technical risk.

Third-party validation data:
Benchmark results, lab tests, academic or industry partner findings.

Milestone achievement vs. known baselines:
"We hit X performance under Y constraint". Shows momentum and remaining risk.

Defensibility signals:
Provisional patents, IP filings, data moats, trade secrets.

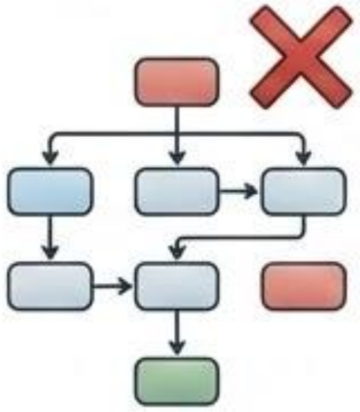
Clear technical risk statement:
What's hard? What might fail? Why is that worth federal R&D dollars?

What this proves:

- The work is not just implementation.
- There is a legitimate unknown to resolve.
- Success would move the field/product forward in a meaningful way.

Common technical-proof mistakes:

Writing a feature roadmap instead of an R&D hypothesis.



ROADMAP

R&D PLAN

Roadmap: “Build A, then B.”

R&D plan: **“If A works, we expect B because C; risk is D.”**

Presenting low-risk incremental improvements as “research.”

INCREMENTAL IMPROVEMENT

RESEARCH

SBIR funds uncertainty, not convenience upgrades.

Under-explaining risk to sound confident.

Ironically, if you say it’s easy, reviewers ask, **“Then why do you need SBIR?”**

The SBIR Angle:

PROOF does **three** things simultaneously:

Customer Validation

Validates the customer need need is real and urgent.

Technical De-Risking

Shows the science/tech is real and still risky enough to fund.

Execution Confidence

Builds confidence you can execute post-award.

Proof isn't a section of your application. It's the reason your application survives.

Quick “Proof Checklist”

A project is fundable when you can answer yes to these:

Customer Proof

- ☑ Do we know who pays and why now?
- ☑ Do we have **paid pilots** or LOIs with teeth?
- ☑ Can we show early conversion signals?

Technical Proof

- ☑ Do we have a clear, testable hypothesis?
- ☑ Is the technical risk explicit and **non-trivial**?
- ☑ Do we have early data or third-party validation?
- ☑ Is defensibility credible?

If any answer is “not yet,” that’s not failure, that’s your Proof work plan.

Step 2: PACKAGING — The Diligence-Ready Data Room

Packaging is how you prove execution maturity before anyone meets you.

A strong project can still lose funding if the documentation is sloppy, missing, or scattered.

PACKAGING turns your Proof into something reviewers/investors can verify quickly.

A **diligence-ready data room** is a clean, standardized set of materials that makes it easy for a funder to say:

"This team is real, this plan is real, and the risk is managed."

Why PACKAGING Matters (Especially for SBIR)

SBIR reviewers are doing diligence too. They are just faster and harsher.

They are scanning for:

- **Execution readiness** – *"Can they actually deliver this work?"*
- **Compliance competence** – *"Will they be a post-award headache?"*
- **Commercial credibility** – *"Is there a real path to adoption?"*
- **Competence signal** – *"Do they know what they're doing?"*

What Packaging signals:

- You operate like a company that can steward public dollars.
- You're not improvising your way through milestones.
- Your story and your evidence match the paperwork.

Messy documentation kills momentum. This is table stakes, not optional.

The 9 Essentials and what “good” looks like

1. Corporate / Legal Documents

- **Purpose:** Confirm you’re a legitimate, governable entity.
- **What belongs:** incorporation, bylaws/operating agreement, registrations, key contracts.
- **Red flags:** unclear ownership, missing signatures, outdated filings.

2. Intellectual Property (IP)

- **Purpose:** Prove you can protect and commercialize outcomes.
- **What belongs:** patents/provisionals, invention disclosures, licensing terms (if university-based), freedom-to-operate notes.
- **Red flags:** IP owned by someone else with no license, no defensibility plan.

3. Product / Technology

- **Purpose:** Show what exists, what’s being built, and why is this high-risk/unproven research.
- **What belongs:** architecture, prototypes, performance data, R&D hypothesis-to-milestone mapping.
- **Red flags:** feature roadmap masquerading as research plan or market speak

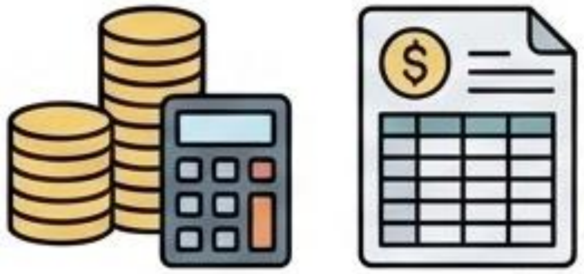
The 9 Essentials and what “good” looks like

4. Market Analysis

- **Purpose:** Validate your market story with real logic.
- **What belongs:** SAM/TAM/SOM, buyer map, competitive set, pricing evidence, real customer discovery.
- **Red flags:** market size theater “1% of a trillion = we’re done”.

5. Traction / Metrics

- **Purpose:** Demonstrate demand and momentum.
- **What belongs:** pilots, LOSs, pipeline data, conversion rates, churn/retention (if relevant), planned partnership.
- **Red flags:** vanity metrics, not able to name names.



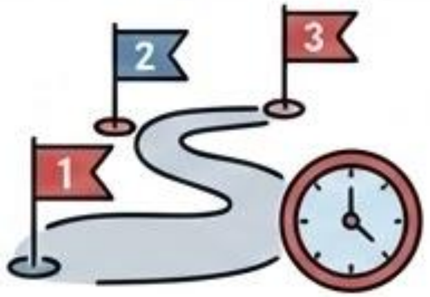
6. Financial Model

- **Purpose:** Verify you can plan and execute responsibly.
- **What belongs:** 3-year forecast, assumptions, burn + runway, SBIR budget logic.
- **Red flags:** “Excel by vibes,” no assumptions shown, unclear idea of cost to exist

The 9 Essentials and what “good” looks like

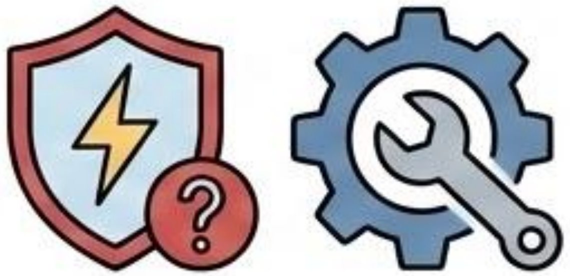
7. Team Credentials

- **Purpose:** Prove the humans are capable of delivering the plan.
- **What belongs:** bios/CVs, prior awards, publication/patent list, PI qualifications, sufficient staff to do the work.
- **Red flags:** role gaps not acknowledged, PI mismatch with technical plan, missing SMEs.



8. Roadmap / Milestones

- **Purpose:** Show a credible path from Phase I → Phase II → market.
- **What belongs:** milestone chart tied to hypotheses, timelines, go/no-go criteria, resourcing plan.
- **Red flags:** milestones that are tasks, not proof-points.



9. Risk Assessment

- **Purpose:** Show you understand what could fail and how you’ll manage it.
- **What belongs:** top technical risks, commercial risks, mitigation strategies, contingency pathways.
- **Red flags:** “no real risks,” or risks that aren’t paired with mitigations.

If it isn’t documented, it doesn’t count.

What “Packaging” Actually Does

1. Speed

- You’re not rebuilding materials for every SBIR, angel meeting, or partner convo.
- You can apply/respond quickly because your core diligence set is ready.

2. Consistency

- Your narrative, data, team resume/bio sketch, and budget align.
- Reviewers don’t find contradictions between sections.

3. Confidence

- Funders feel less uncertainty.
- They can focus on the opportunity, not your admin gaps.

Translation: Packaging makes you look like a low-risk awardee.

Common PACKAGING Mistakes That Sink Fundability

1. "We'll pull it together after Phase I."

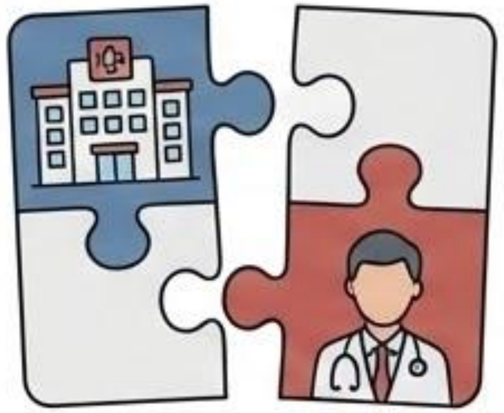
Reviewers hear: "We're not ready to manage public dollars."

2. Team accessibility

- Documentation exists... but not in a place anyone can find.
- If the reviewer has to hunt, they assume the worst.

3. Materials don't match the narrative.

Example: market slide says hospitals buy, LOIs are from individual clinicians.



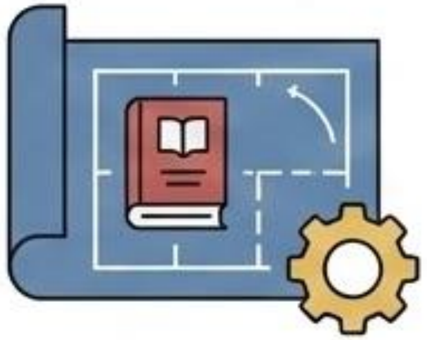
4. No version control / lots of "draft_final_v7_REALfinal.pdf."

It signals chaos, even if you're brilliant.

PACKAGING answers the unstated reviewer question:
"If we award you $300K–$500K, will you deliver without drama?"

Step 3: POSITIONING — Narrative Architecture (Make the Story Repeatable)

Fundable Story, Not Marketing Fluff

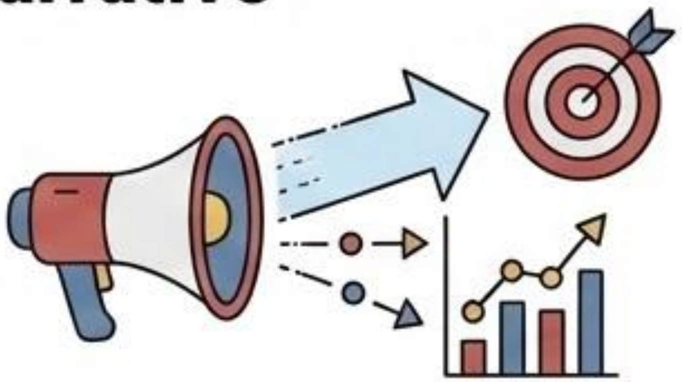


- Positioning is not marketing fluff.
- It's the fundable story investors and SBIR reviewers without you in the room.

The Reviewer's Retell Test

- A founder can have Proof and Packaging and still lose if reviewers can't explain the opportunity back to themselves.

Evidence into Narrative



- POSITIONING turns your evidence into a crisp, outcomes-first narrative.

Ultimately, Positioning ensures your story is repeatable and memorable.

What POSITIONING does

Who pays?

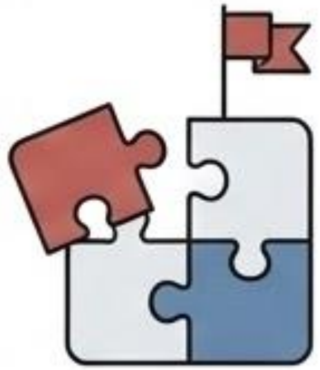
real buyer, real budget owner

Why now?

timing + urgency + market/demand pull

Why you?

team credibility + unfair advantage



Why this approach wins?

differentiation + defensibility + feasibility

If you don’t answer these **clearly, reviewers fill in the blanks,** and they’re not as optimistic as your mom.

What “Good Positioning” Looks Like

1. Lead with outcomes, not features

Bad: Feature-focused

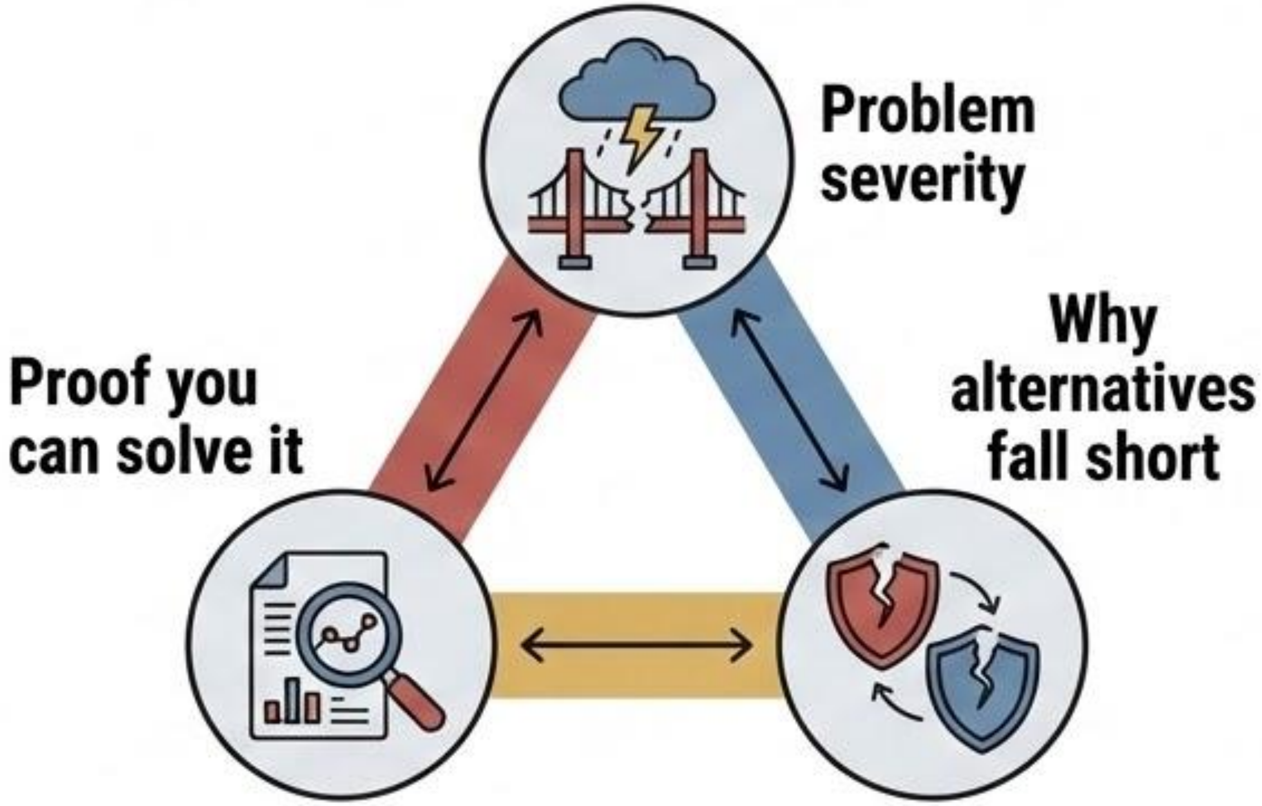
We built a platform with X functionality.

Good: Outcome-focused

We reduce Y cost/time/risk by Z% for this buyer.

SBIR translation: outcomes show impact, not just activity.

2. Make the value proposition defensible



Test: Can you demonstrate a true need vs a want or nice-to-have

What "Good Positioning" Looks Like

3. Integrate proof points into story flow

Don't dump evidence in a "validation section." Weave it into the narrative:

Example: "Hospitals lose $X per year from A. In paid pilots with B and C, we cut A by 34%. That unlocks ROI within 6 months."

4. Make it repeatable by investors/reviewers

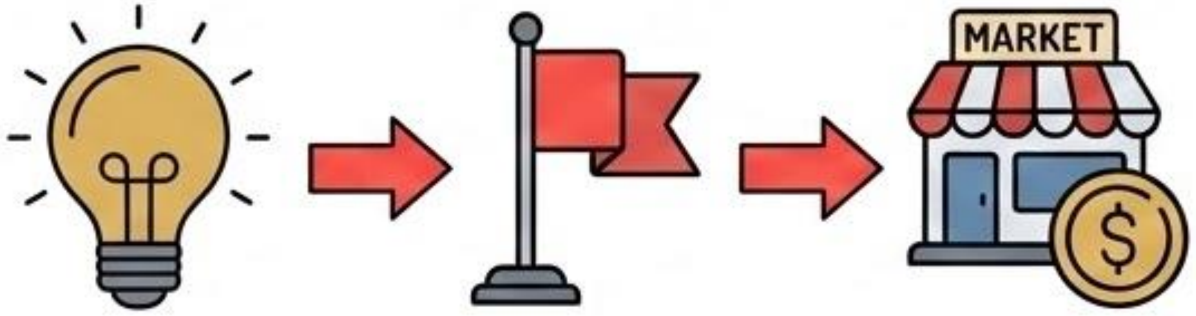
If someone can't summarize you in one sentence, you don't own your positioning yet.

Test: "If I gave your deck to a stranger, could they pitch you correctly?"

SBIR-Specific Positioning Moves

These are the differences between “Phase I science project” and “fundable company.”

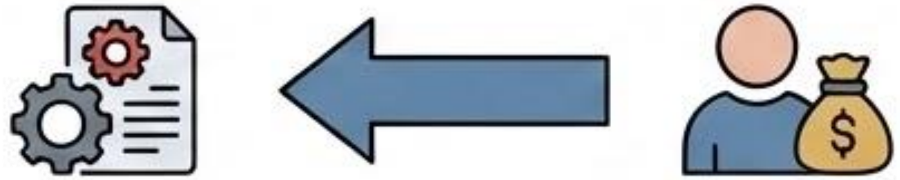
1. Frame research as a bridge to adoption



Hypothesis → Milestone → Commercial Consequence

“If we prove X, we unlock Y market.” ↗

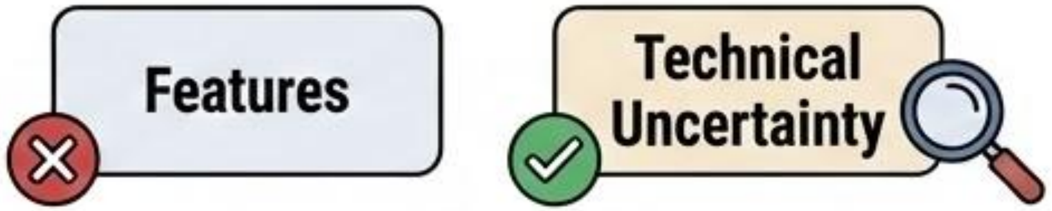
2. Use a buyer-backwards commercialization spine



R&D Plan ← **Paying Customer**

Start with the paying customer and work backward into the R&D plan.

3. Show why this is R&D now



Not “we need more features,” but “we need to resolve this technical uncertainty to enable adoption.”

Common POSITIONING Mistakes

🚩 Red flags reviewers notice fast

- **Feature soup**: 20 capabilities, zero outcome.
- **No buyer clarity**: end users described like they're the check-writers.
- **"Me-too" differentiation**: only claimed, not evidenced.
- **Story mismatch**: narrative says "healthcare," evidence is in consumer pilots.
- **Not providing Quantifiable Measurable Data**: USE SMART Metrics (Goals, Objectives, Performance Indicates, milestones)

SMART is

Specific

Clearly define the goal; answer who, what, where, when, and why.

Measurable

Include criteria to track progress and quantify success (e.g., numbers, percentages).

Achievable

Ensure the goal is realistic and attainable, though still challenging.

Relevant

Confirm the goal aligns with broader objectives, providing purpose.

Time-bound

Set a clear deadline to create urgency and a target date for completion.

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Positioning Pitfalls & Red Flags

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If they can't repeat it, they can't fund it.

SBIR Budgets: Costing & Compliance Essentials

A practical session that goes beyond "allowable vs. unallowable", focusing on what startups often underestimate.

Strategic Budget Building

- Building a realistic indirect cost rate.
- Hiring a CPA for post-award accounting, payroll, etc.
- Treating consultants, subcontractors, and data rights to strengthen the application.

Compliance & Specifics

- No administrative positions (for NIH).

- Use DOL stats for **median income** in your area (employees).

- Consultants rates differ significantly.

Detailed Personnel Justification

The Justification Formula

First Name & Last Name + Degree + Research Focused Title/Role → Estimated Time (hours/weeks/months) & % Effort → Direct BLS Web Page Link & SOC Code Alignment → Connect BLS Data to Proposed Duties

Example: (X hours at Y% effort = # months @ $ hr/month) at BLS hourly rate = Total Requested Salary based on location.

Key Rules & Constraints

Agency-Allowable Functions

Must be tied to technical/R&D work. No business admin, marketing, or general executive duties.

Document Alignment

Ensure consistency with resumes and biosketches.

Median Wage Cap

Salary rates must not exceed the median BLS wage for the specific SOC code and location.

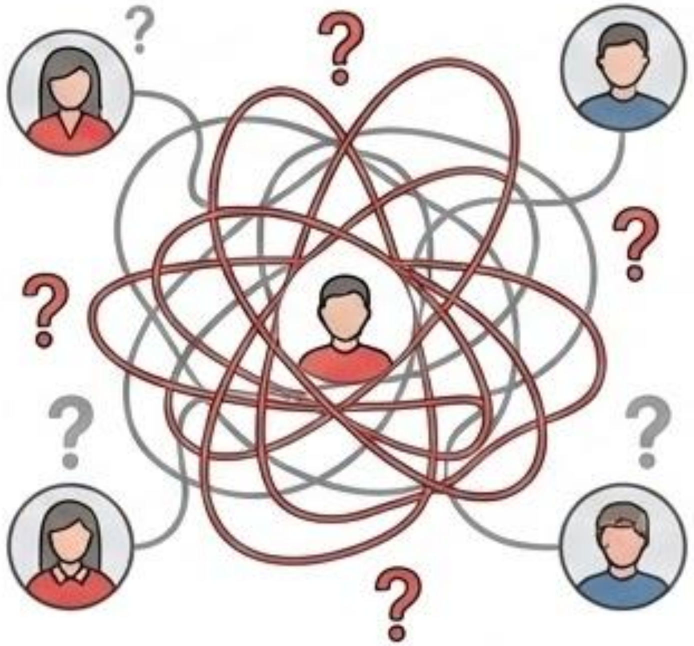
NSF Exception

Exceeding median requires compelling evidence (e.g., internal payroll history, revenue sources).

Step 4: PATHWAY — Systematic Outreach

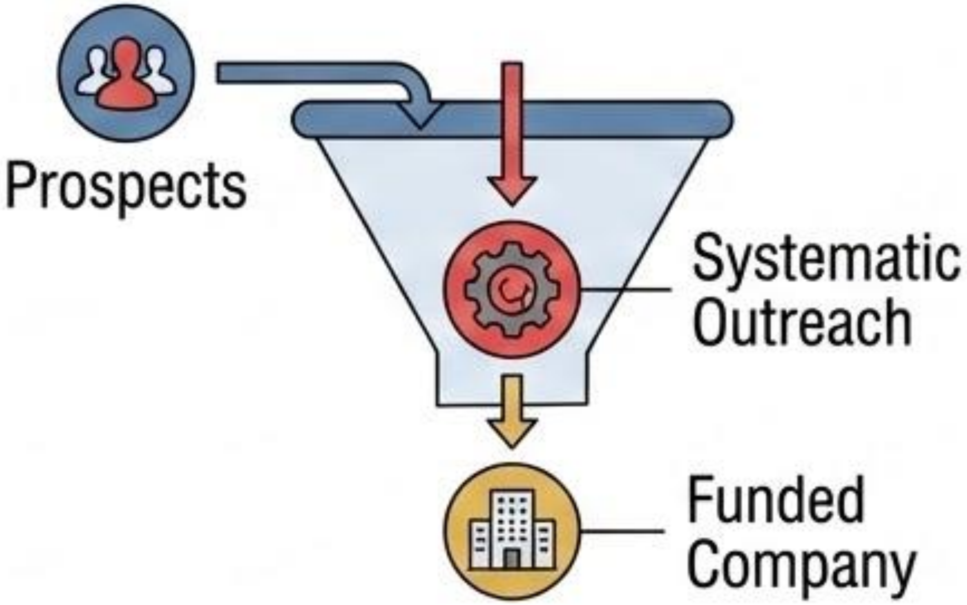
Make Fundraising a Process

The “Random Acts” Approach



Most founders treat outreach like random acts of networking. Fundraising is a personality contest.

The PATHWAY System



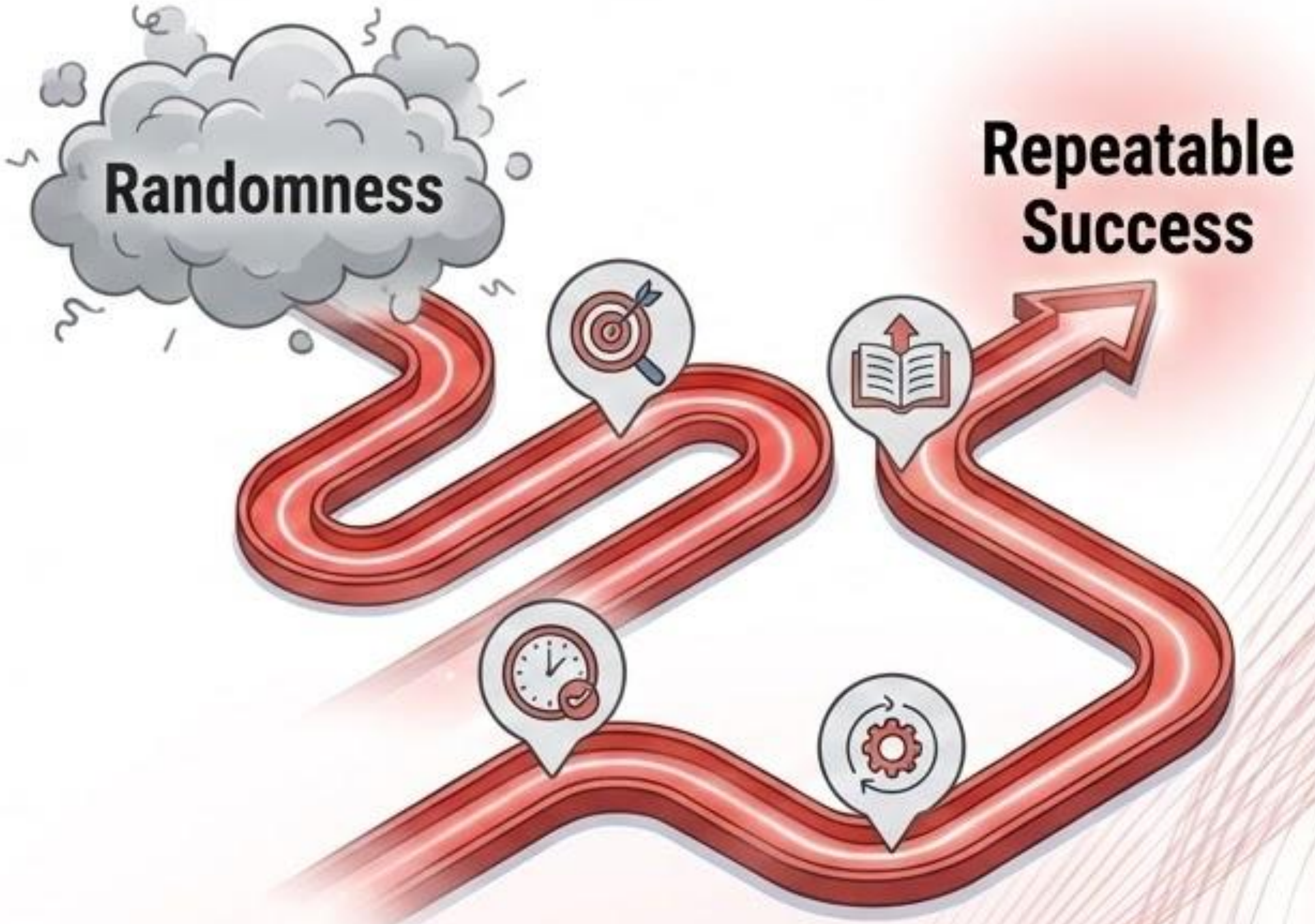
Fundraising is a system, like operations.

PATHWAY turns capital raising into a measured pipeline you can improve week.

What PATHWAY does

PATHWAY ensures you:

- **Talk** to the **right funders** (thesis fit)
- With the **right story** (positioned)
- At the **right cadence** (consistent)
- While **learning** and **improving** (iterative)



In other words: PATHWAY makes fundraising **repeatable** instead of emotional.

SBIR-Specific PATHWAY Moves

Treat agencies like relationship capital

program manager conversations are your warm intros

Track topic fit & reviewer signals over time

“We’re getting the same critique twice = that’s a Proof/Positioning gap, not bad luck.”

Parallel path the capital stack

SBIR outreach + strategic partners + angels can run together when the story is aligned.

3. Log objections + iterate messaging

1. Every “no” is data.

2. Categorize:

- **timing**
- **market doubt**
- **technical doubt**
- **team doubt**
- **model doubt**

Iteration Loop

Then refine your story and proof accordingly.

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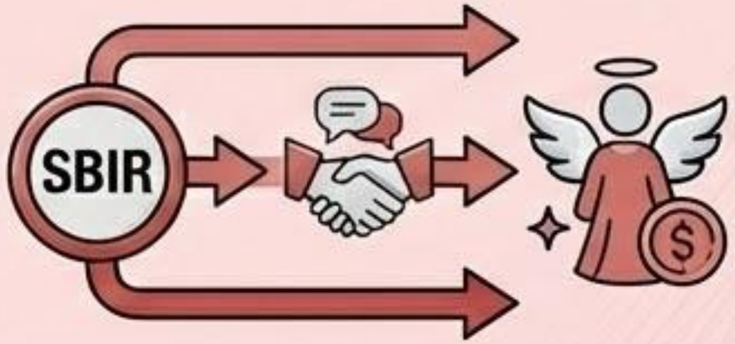

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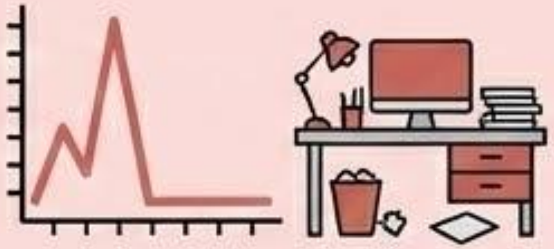
Common PATHWAY Mistakes

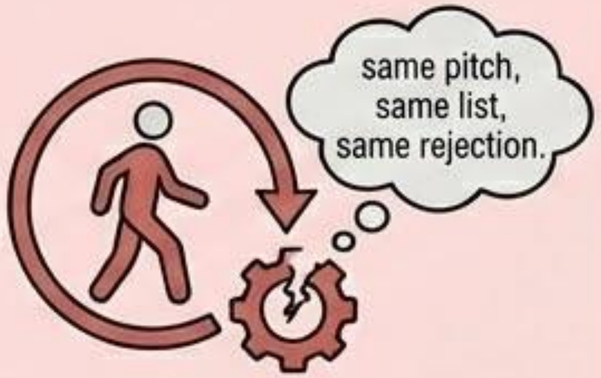
what kills momentum

Random outreach: "We're pitching anyone who'll listen."

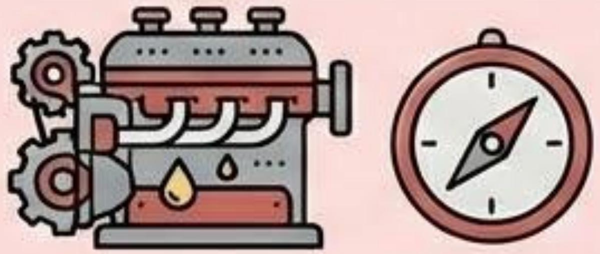
No system: activity spikes before dead-lines, then flatlines.



No learning loop: same pitch, same list, same rejection.



Not tracking conversion rates: if you don't measure it, you can't fix it.



Fundraising is operations. Process discipline wins.

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