TENNESSEE TECHNOLOGY ADVANCEMENT CONSORTIUM

Communicating Science for Business

Translating technical description into language that imparts customer value

Introduction

Academics often describe the technical mechanisms of their research and assume the value is obvious. Framing technology in terms of a value proposition is critical for communicating with government program managers and commercial customers. Core to this translation is moving the subject from the technology to the person using it and ideally something a non-expert can understand and repeat.

SCIENCE-SPEAK	PRODUCT VALUE
“We leverage MLOps-enabled CI/CD to operationalize SOTA LLM pipelines for COTS-grade deployments.”	“We ship reliable AI features customers can buy off the shelf.”
“We developed a multiplexed CRISPR-based biosensing platform leveraging cell-free synthetic biology for rapid nucleic acid detection.”	“A clinic can test one sample for twelve infections in twenty minutes, with no lab and no specialist.”

Step 1. Capture Your Current Pitch

Write two or three sentences describing your technology exactly as you would say it today to someone outside your lab. This is a draft, so no need to make it perfect.

Review.

Underline any acronyms, method name, and field-specific term.

Is your technology used as the subject?

Is a user or customer referenced?

Step 2. Pitch Decomposition

Provide descriptions of your technology in the four components listed below:

MECHANISM
What does the science or technology do?

CAPABILITY
What becomes possible that was not possible before?

OUTCOME
What changes for a specific user: faster, cheaper, safer, more accurate and by how much?

VALUE
Why someone would pay/adopt the technology?

Step 3. Start with Why

Most pitches lead with the What (the technology), hoping the listener infers the Why. Start with the purpose, then the distinctive approach, then the deliverable.

WHY	The purpose. The change you want to see in the world. No technology named yet.
HOW	The distinctive approach that makes the why real. This is where your insight lives.
WHAT	The product, system, or deliverable. Concrete enough to picture.

Step 4. Different Lenses

The same technology earns attention for different reasons depending on who is listening. Write one sentence for each reader, answering the question they are actually asking. Recognize that the person who uses it and the person who pays for it are often different, so all three sentences should look different.

READER	WHAT THEY ARE ASKING	YOUR ONE-SENTENCE ANSWER
Program manager or reviewer	What problem does this solve, and why is it now solvable?	
End user or operator	What do I stop doing or do better if this works?	
Non-technical stakeholder (investor, dean, Hill staffer)	If this succeeds, what difference does it make, and how big is that difference?	

Step 5. Rewrite the Pitch

Using components of Steps 2, 3, and 4, rewrite the three-sentence pitch from Step 1.

Review

Do you check all the boxes?

- [ ] No acronyms or field-specific terms left undefined.
- [ ] Names a specific problem, not a research area.
- [ ] Names a specific beneficiary, not “everyone who works in X.”
- [ ] States an outcome someone could measure or verify.
- [ ] Leads with the problem or purpose, not the method.
- [ ] Could not be mistaken for dozens of other research programs.
- [ ] A smart non-expert could repeat it back without asking a follow-up question.