

# The shape of our work: R&D

The goal of this document is to lay out the process and criteria by which the Studio selects and manages its investments.

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## Grounding

**North Star:** we iteratively select and develop new shared services for TTS that have specific impact on public benefit programs.

**What this means for us in 2025:** we want to be ready to pilot a new tool by the end of the fiscal year (September 2025), but more importantly we want to demonstrate our value as an iterative developer of new solutions. Moving to pilot in an open, data-based way is *how* we anticipate demonstrating our value.

## How do we work as an iterative developer?

The way we do this is identifying the highest risk for the product based on where we are in the life cycle, make an assumption based on the information we have about what this risk means, then run a quick test to validate or invalidate that assumption.

Based on what we learn in the test, we may validate/invalidate a different assumption about the same risk OR identify the next highest risk to test against. **The risks, assumptions, and learnings will be different for every product at every stage so there is not one set path to follow.** We will always be evaluating desirability, viability, and feasibility at each phase, but the level of information needed and the type of question asked at each stage will be different. In early

phases, we will be relying on as much proxy data (e.g., data from products that already exist) as possible to form hypotheses and assumptions. In later stages we will be using primary data to form conclusions.

At all stages we are focused on learning through rapid, well-scoped tests (e.g., coming forward with an opinion, meeting specific targets, having the information needed to make a decision). In this way, design and research are never concluded, they are leveraged continuously to make decisions.

**What this means for us for the rest of 2024:** we want to get to our next decision points for the two products we're developing.

Our decisions are:

1. What are we going to start building?
2. Are we only building one thing, or is there a second idea still being developed in some capacity?

**What this means for us immediately:** based on the work we've done so far, we have some confidence that building a solution for Document Upload or Automating Proofs would be desirable, viable, and feasible. In order to invest in starting to actually design and build a specific solution in those spaces, we need to increase our confidence in the desirability, viability, and feasibility of each- *in that order*.

Because desirability is the highest risk for both products, that is where our first test plan will be. Put differently, in order to invest any more time in these two products, **we need a clear signal that there is demand for a solution** around Automating Proofs, and for a shareable solution in Document Upload.

The way we plan to get to answers for each is different because the product spaces are at different levels of maturity.

1. For Document Uploader, we are testing **what kind of demand** there is – first, does anyone want a basic uploader? Second, if not, what kind of uploader do they want?
2. For Automating Proof, we are testing for **any signal at all** – does anybody want a solution in this space enough that it warrants us digging in?

Once we have enough confidence in the level of demand for *a solution* in this problem space (note: not a specific solution), we need to test the viability. Since we are still focused on validating that this is the right problem space the test for validation is getting signal on our most basic solution constraints. As we use this data to make pause/pivot/stop decisions, we will test feasibility.

## Solution Constraints

<sup>1</sup>Because of where we sit in government (GSA > TTS > Public Benefits Studio), we know the following must be true of any solution we build:

- ☐ Federally provided (following federal dollars)
- ☐ Federal owned and hosted (must meet federal security privacy accessibility requirements and also GSA ATO requirements)
- ☐ Operates between programs or across – but never just for one
- ☐ Used primarily by agency or delivery staff – not the public
- ☐ Product we'd pilot must be a web-based stand-alone tool, with limited to no integration needed

We have to gather signals for these before we invest in building anything. These must be tested before we can launch anything.

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<sup>1</sup> For more on rationale, see the [Studio Market Strategy](#)

## How does this fit into the bigger picture?

	Phase	Core Question	Evaluation Framework		
			Desirability	Viability	Feasibility
Scope	<b>Phase 1</b>  Landscape (discovery)	<i>Which problem space do we think is the highest leverage for us?</i>	Do we have signals from other launches or commercial tools that this is a real and solvable problem?	Is this product leveraging TTS's unique position to work across federally funded programs, while staying within its authority? (constraint gate)	Do we have signal from other launches or commercial tools that this is a product we can build?
	Discovery ends with a prioritized short list of products to dig into. We prioritize based on the notional strength of our own leverage point.				
	<b>Phase 2</b>  Prioritizing (research)	<i>Are we focused on the right solution?<sup>2</sup></i>	Is this product likely to improve the agency experience?	Is there a demonstrated need for a government solution, and is there a market gap that wouldn't otherwise be filled? (constraint research)	What technical or launch hurdles did others' face in building/launching, and do we believe we're positioned to avoid or overcome them now?
	We end with a notion of the problem space and the (narrow) solution. We theorize that because this problem seems real, and because solutions exist somewhere, we should build the connection.				
	<b>Phase 3</b>	<i>What is the most</i>	Is this a solution that customers will invest	Can we make any solution that fits in our	Is this product prohibitively technically

<sup>2</sup> This is flipped from normal (solution before problem). We take this approach because we are specifically looking to leverage existing tools and products to scale from- not create from the ground up.

	Learn about the problem by testing (validate)	<i>narrow and opportune problem for our solution? What shape must our solution take to fit that problem?</i>	effort and resources to implement?	solution constraints? (constraint testing)  Market timing: should we invest it in this now	complex to build?
	This ends with clarity/proof of problem, notion for solution (what we would build vs what already exists). At the end, we have an idea of what we'd build for MVP- what the product vision is for the product overall.				
<b>Build</b>	<b>Phase 4</b>  Learn about the solution by testing (MVP)	<i>Are we building the right solution?</i>	Is this product providing clear value to customers? (do we see that this product is likely to solve real problem)  Do we see signals this product can impact the public/ecosystem	Investability: is the anticipated value high enough to warrant investment for development?  Build a GTM plan (Constraint proving)	Is the product able to meet security and privacy requirements?  Is the product compliant with legal or policy-based constraints? (will fixed rules block us from reaching customers?)
	At the end of MVP, we have a defined solution with clear anticipated value. We can articulate target customers, target outcomes. We have pilot partners signed up to try it with us and we have reasonable assurance we've precleared fixed blockers. We have a strong Go to Market plan				
	<b>Phase 5</b>  Learn about the product<>	<i>Are we getting strong product market fit</i>	Have we proven that this product solves a real problem?  Is this product easily	Is there a plan to ensure our sustainability and the ability to charge for our work?	Is the product able to pass procedural or operational constraints? (will non fixed- e.g. not law or rule based- norms

Iterate	market match through testing (pilot)	<i>signal?</i>	incorporated into existing agency workflows?  Are we likely to see that this product impacts the public?	Refine market penetration strategy	block customers from buying or using this?)
	At the end of pilot, we've proven our targets were right (or we're changing our targets based on live customer needs) . We have an actual thing with users and data that shows our theories were correct (or we changed our approach to meet them). We have a 3 year revenue generation plan.				
	<b>Phase 6</b> Learn about the future by testing at scale (beta)	<i>Do we have product market fit?</i>	Are we continuing to provide clear value as customer base expands?  Can we prove public impact?	Quality of cost recoverability plan/ is it working and do we think it'll keep working?	What size team is needed to stabilize and transition this product?
	At the end of beta, we've proven our product is defined and has value. Focus now is on growing and stabilizing enough to ensure sustainability				