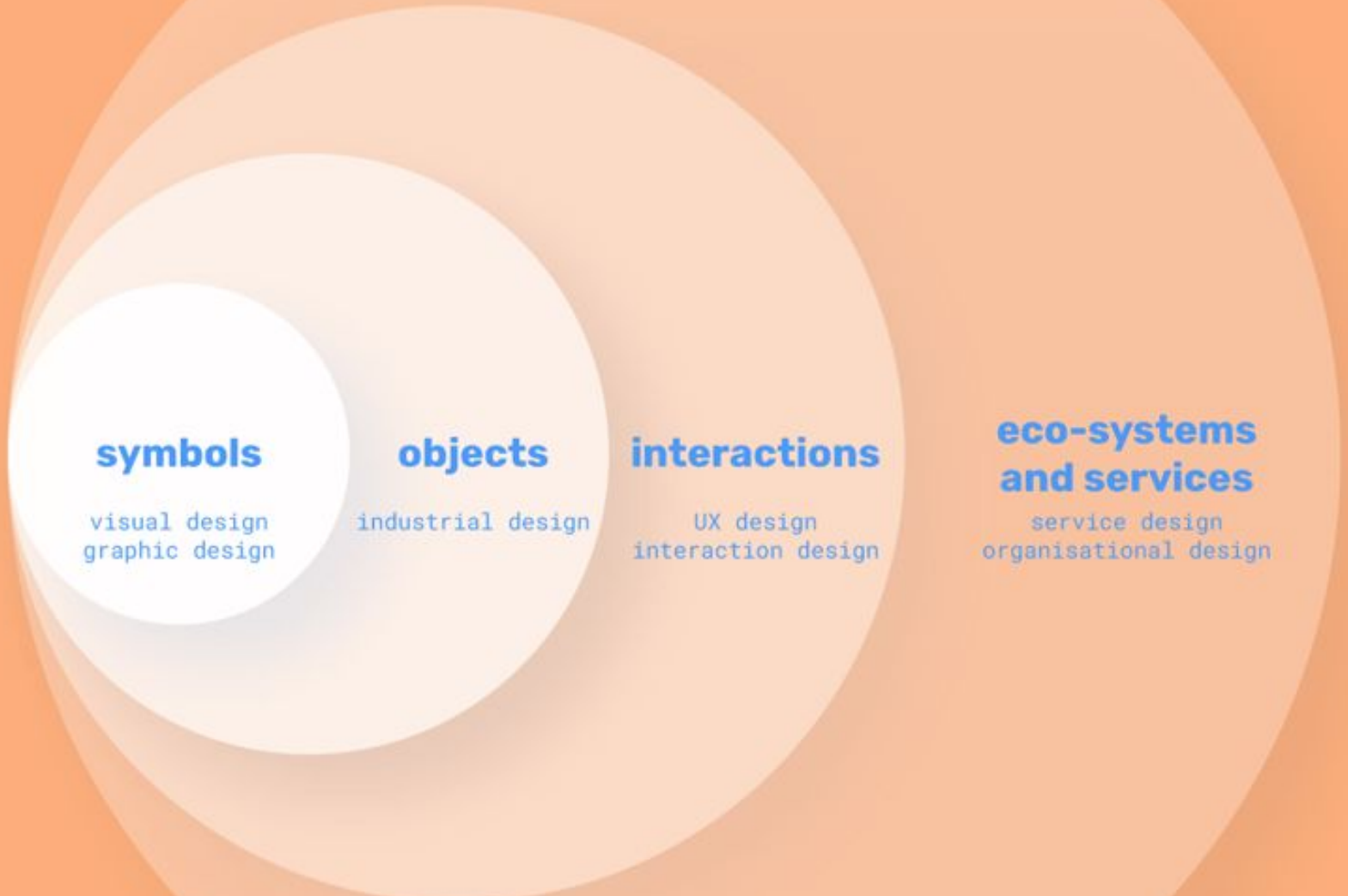

symbols
visual design
graphic design
objects
industrial design
interactions
UX design
interaction design
eco-systems
and services
service design
organisational design

Google Search I'm Feeling Lucky

You Are America's Smartest Investment

The U.S. Department of Education's office of Federal Student Aid provides more than $120 billion in financial aid to help pay for college or career school each year.

Log In

Create Account

Considering School
I'm thinking about going to college or a career school.

In School
I'm in the process of earning a degree or certificate.

Parent
I want to help my child pay for college.

In Repayment
I have loans I need to repay.

Getting ready for college can be easier than you think.

POPULAR TOPICS

Get Checklists for Academic and Financial Preparation

A MINDSET FOR SERVICE DESIGN

a logic to the 'madness'

GUEST SPEAKER:
MAURICIO MANHAES

THREE PART EVENT
JUNE 3, 10 & 17
6:30-8PM EDT / 5:30 CDT/ 3:30 PDT

SERIES HOSTED AND ORGANIZED BY:
SDN
PITTSBURGH · WASHINGTON DC · ATLANTA

Typical Digital Team

Product Owner

Service Designer

Front End Designer

Digital Architect

Full Stack Developer

Scrum Master

Typical Digital Team

Product Owner: symptoms, context, communication

Service Designer: frame the problem, solution

Front End Designer: how will users interact with it

Digital Architect: how will the solution fit together

Full Stack Developers: makers!

Scrum Master: how does the team work together

SNAP Supplemental Nutrition Assistance Program

NIH U.S. National Library of Medicine
National Center for Biotechnology Information

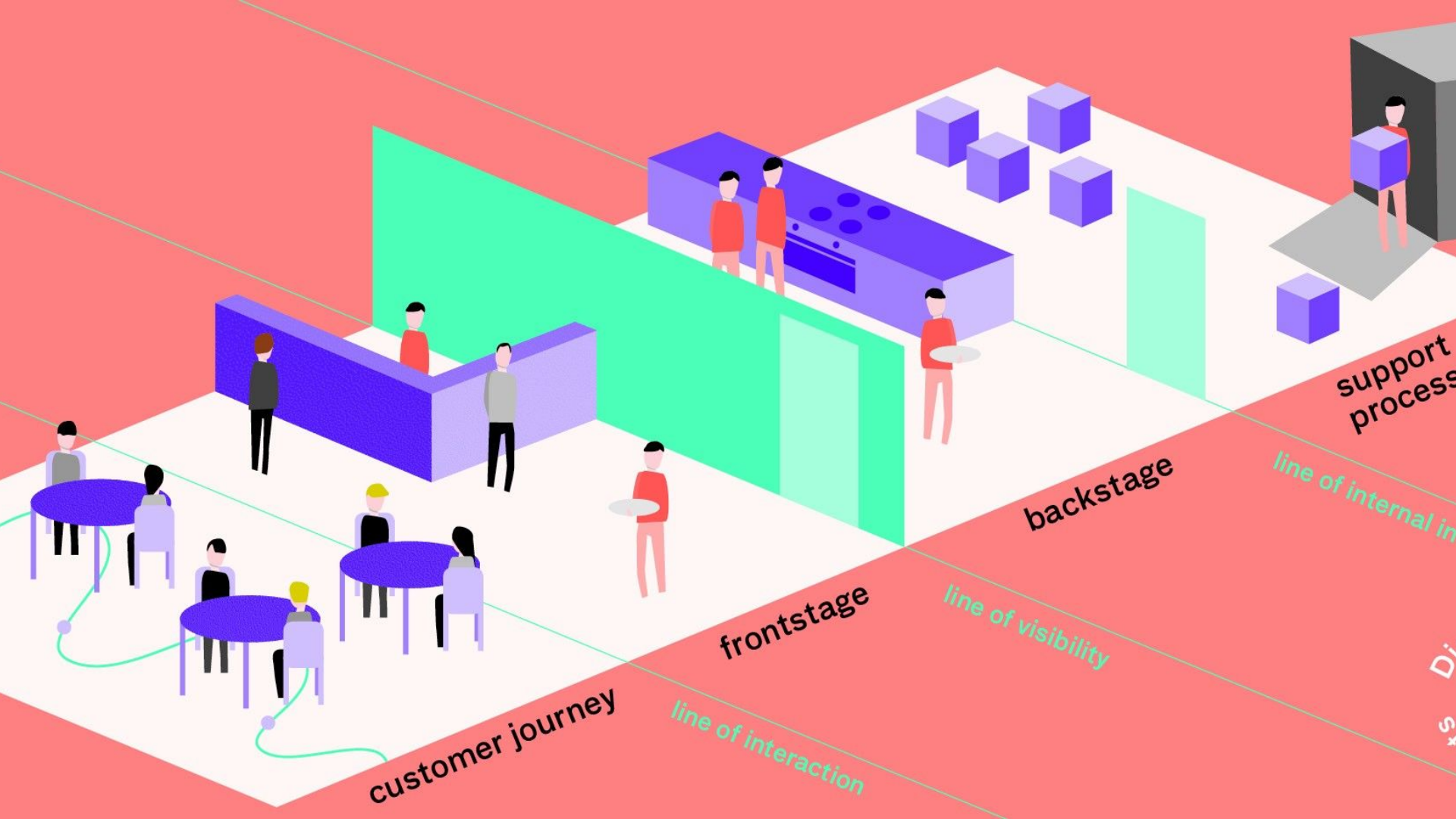
PubMed labs

Search

Try otitis media treatment koonin e crispr influenza vaccine effectiveness

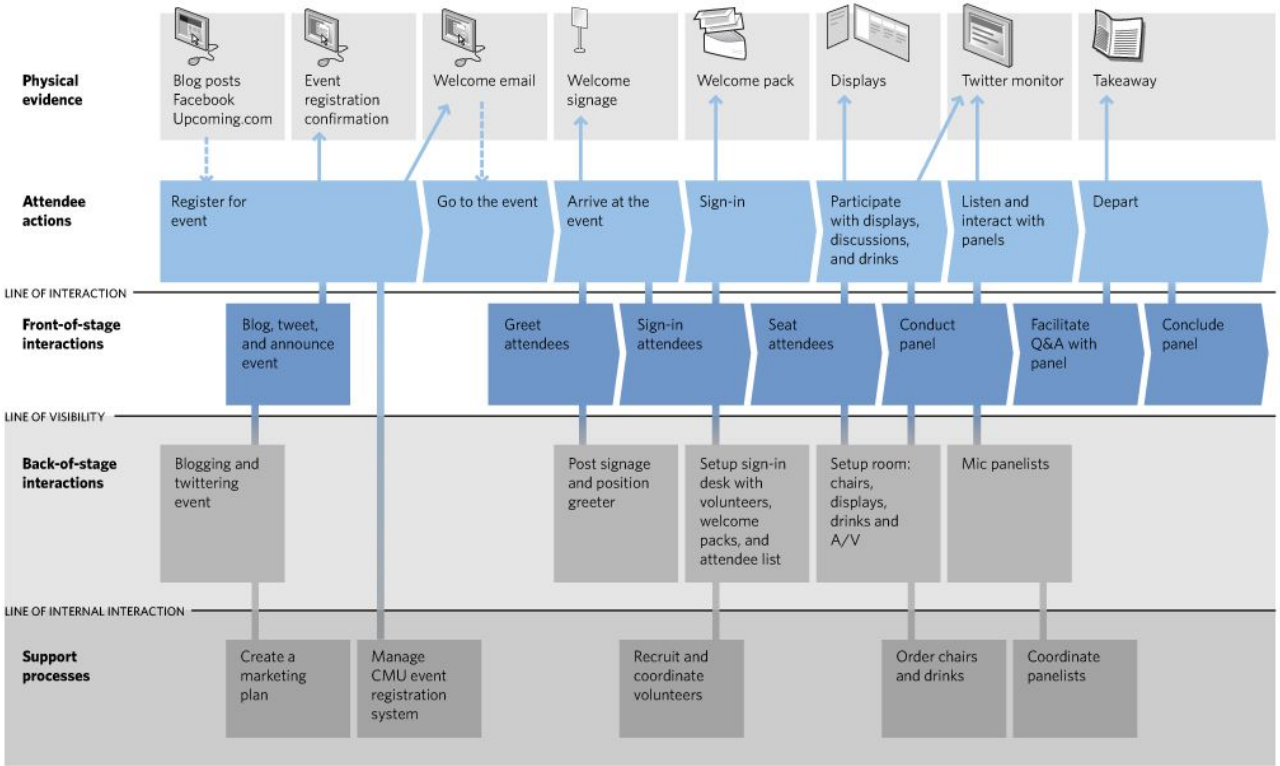
What is PubMed Labs?

PubMed Labs is a test site where we are *experimenting* with new


customer journey
line of interaction
frontstage
line of visibility
backstage
line of internal in
support
process

Service Blueprint for Seeing Tomorrow's Services Panel

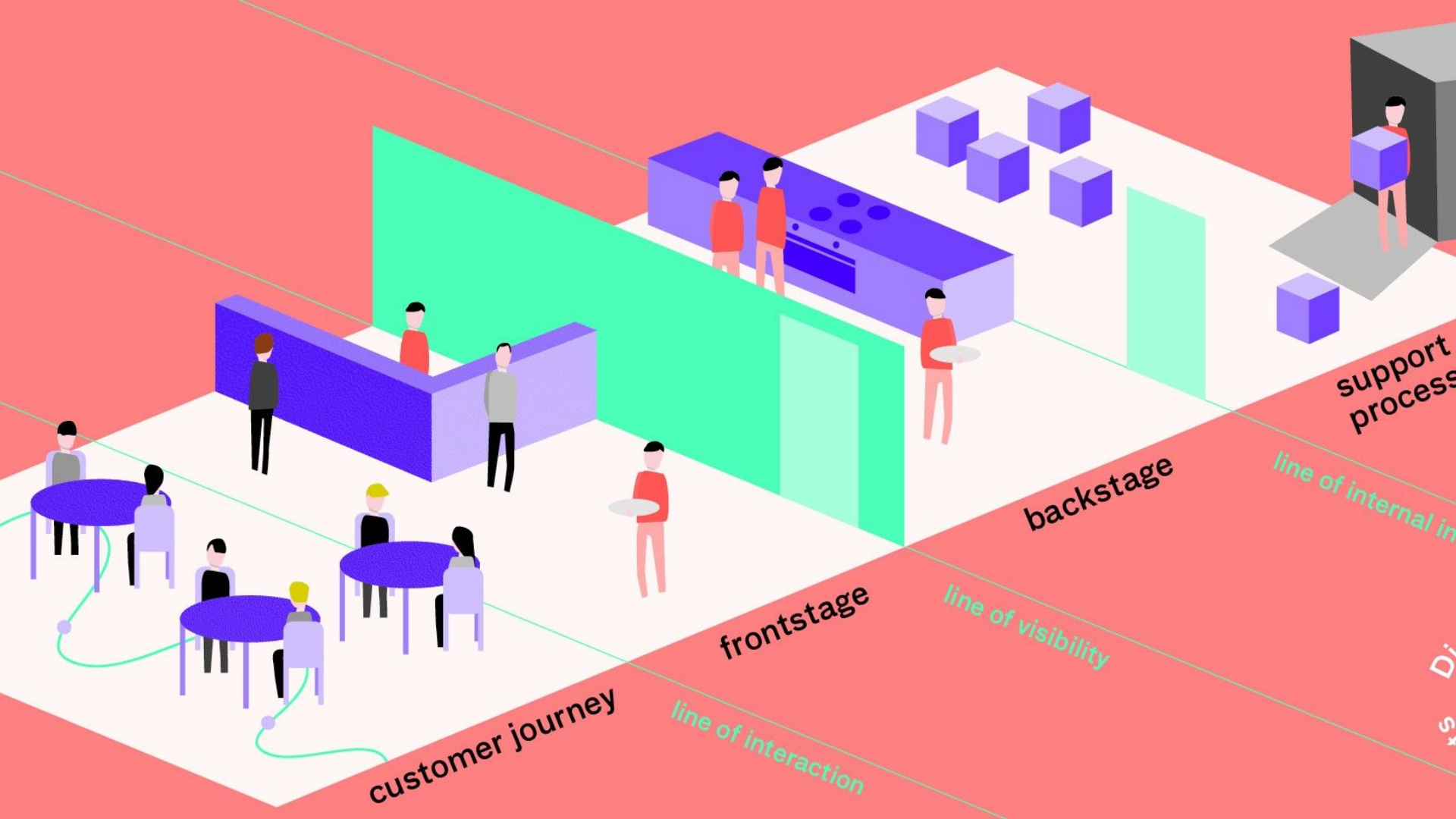
find out more: http://upcoming.yahoo.com/event/1768041



SERVICE DESIGN

Researching, designing, prototyping, and implementing

Both a service and the mechanics behind the service in order to improve the customer & employee experience


customer journey
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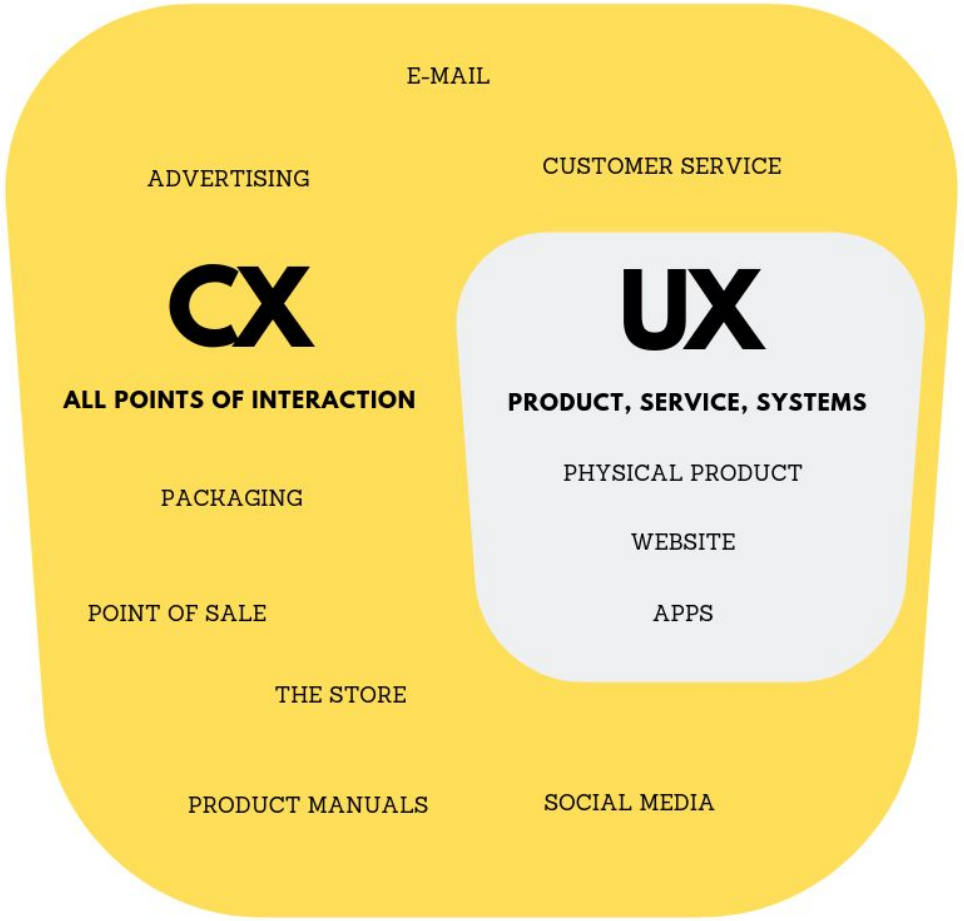
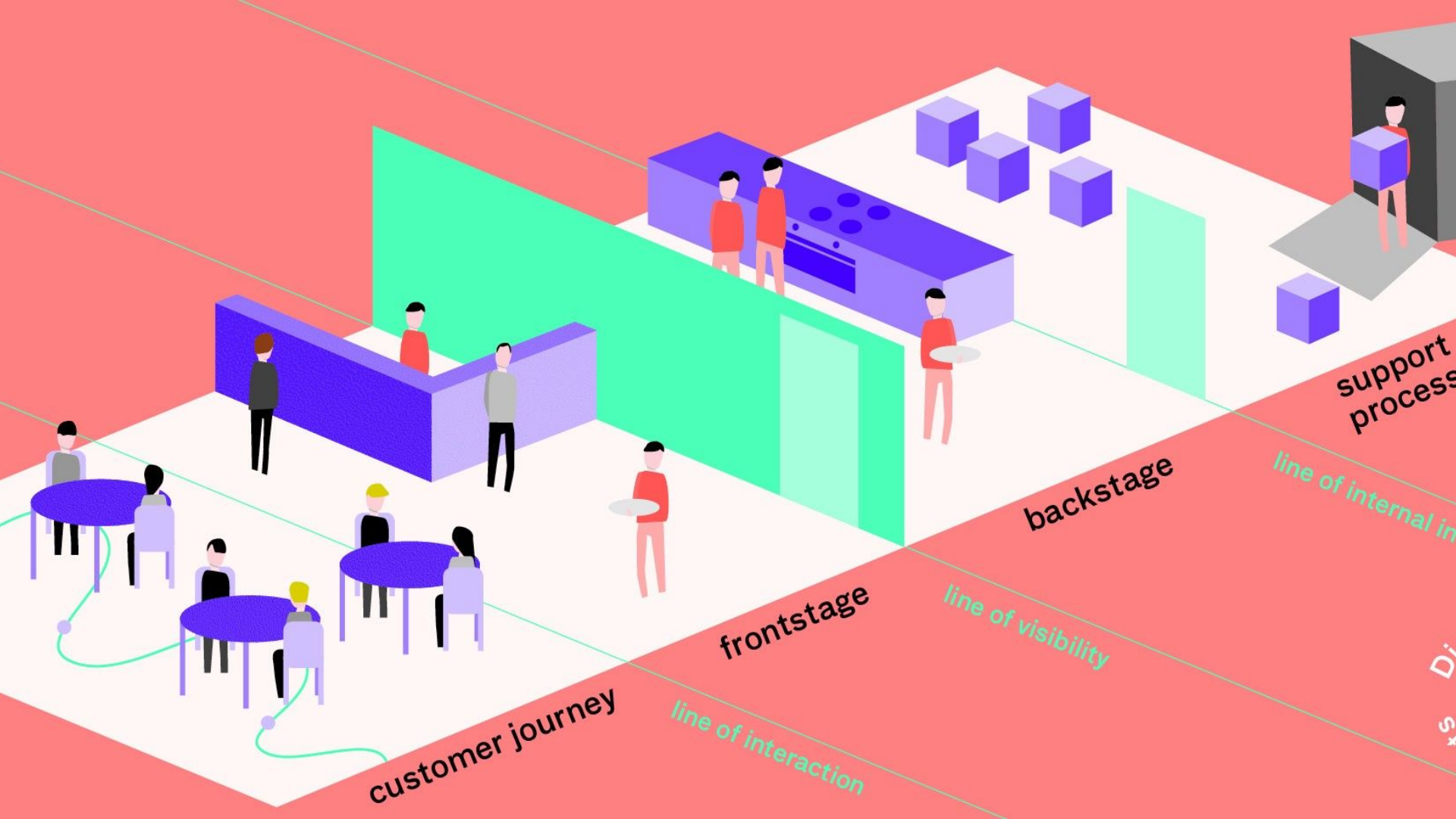
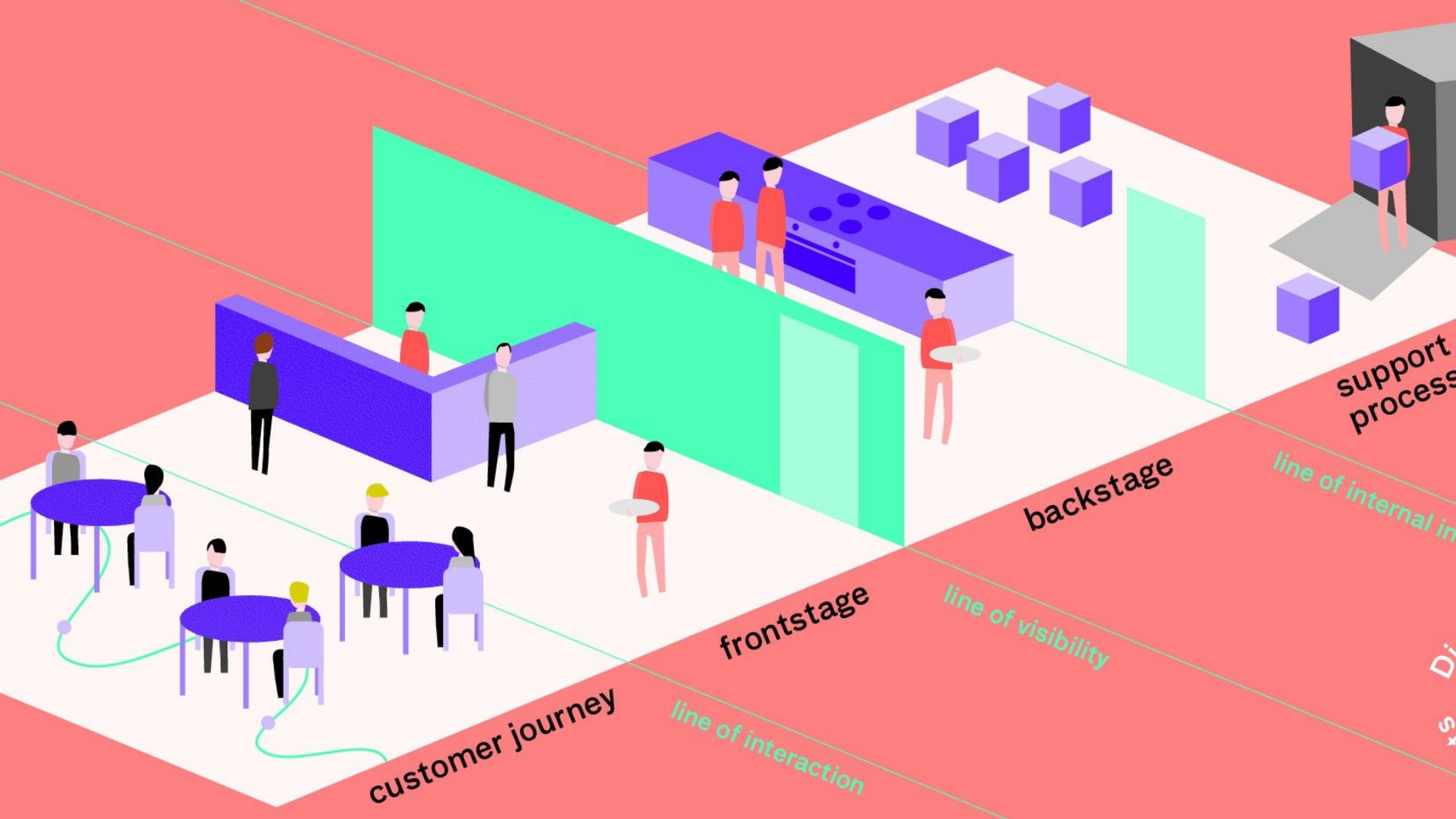
process


E-MAIL
ADVERTISING
CUSTOMER SERVICE
CX
ALL POINTS OF INTERACTION
UX
PRODUCT, SERVICE, SYSTEMS
PHYSICAL PRODUCT
PACKAGING
WEBSITE
POINT OF SALE
APPS
THE STORE
PRODUCT MANUALS
SOCIAL MEDIA


customer journey
line of interaction
frontstage
line of visibility
backstage
line of internal in
support
process

ngati
Simply Intelligent

EX & CX: The virtuous cycle


customer journey
line of interaction
frontstage
line of visibility
backstage
line of internal in
support
process

Service Design Team

Qualitative researchers

Quantitative researchers

Research analysts, research synthesizers

Storytellers

Workshop facilitator

Strategists

Data visualization specialists

Learning designers

Communication designers

Prop designers

Process designers

Policy designers

Technology designers (UI, Visual, UX, Content)

Business Designers

Organization Designers

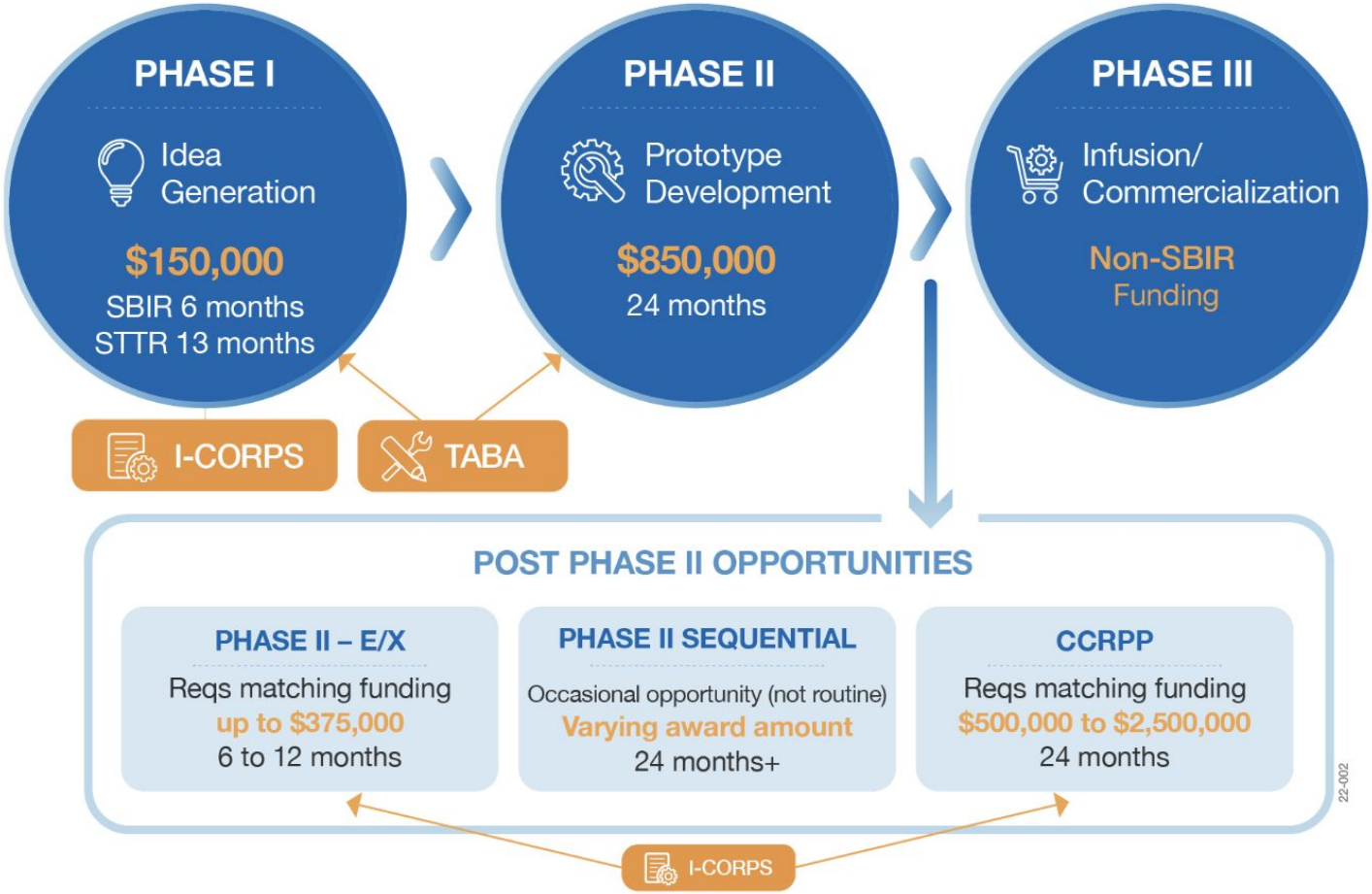
Evaluation specialists

National Aeronautics and Space Administration

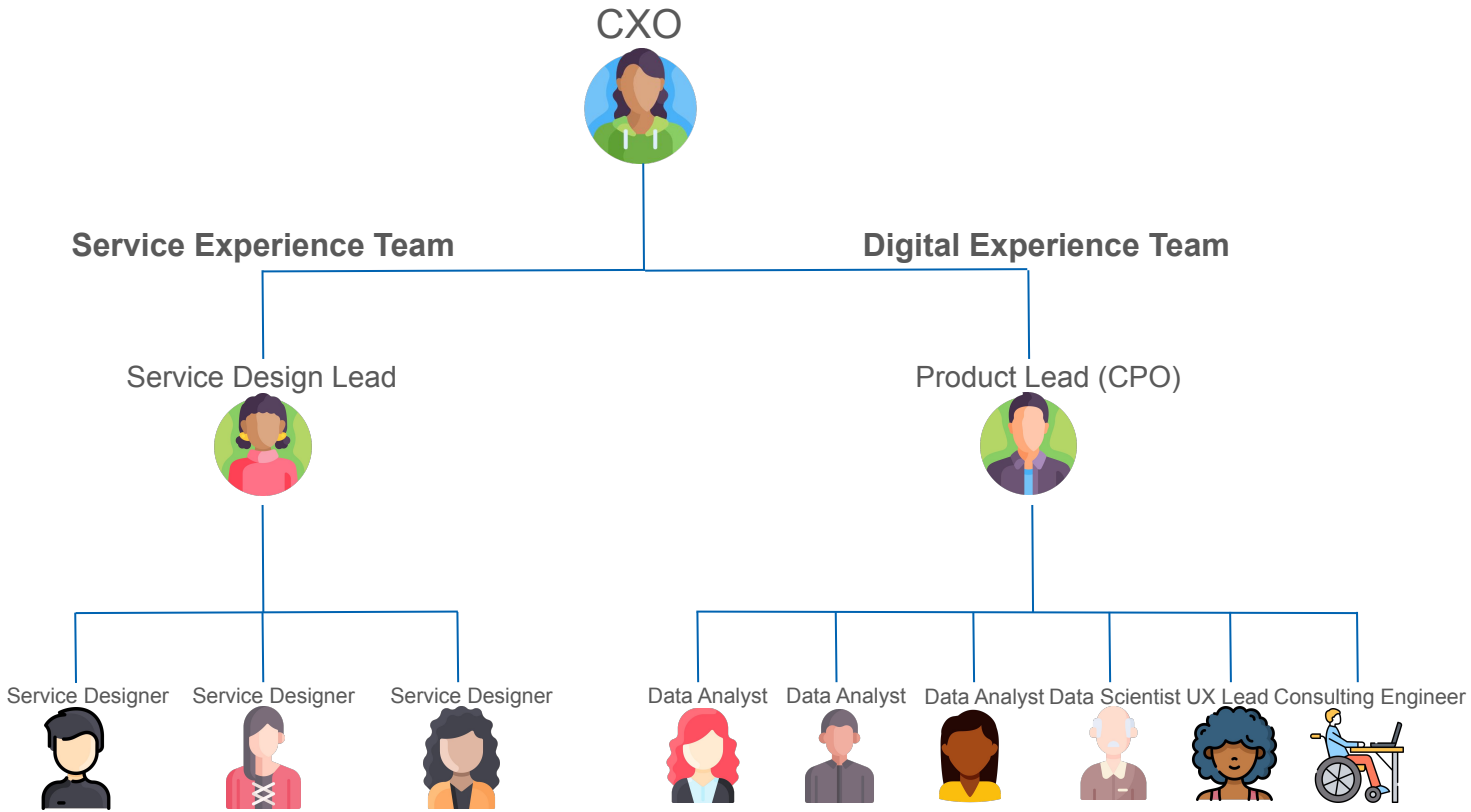
NASA SBIR AND STTR PROGRAM SOLICITATION 2021

sbir.nasa.gov

NASA SBIR/STTR PHASES



Experience Minimum Viable Team



Presenting our Team

5min

The awesome team

Janelle Nguyen

Victor

Alison M.

Carita O'Rourke

Bethany

Cale

Kate

Dina

Eric

Brandon

SCOTTY

Allison Z

Let's get started!

Service Research

Customer/Employee Interviews

Customer/Employee Observations

Experiential research team

- Mystery shopping team
- Helpdesk worksalong team

Expert Interview research

Quantitative research

Positive deviance research

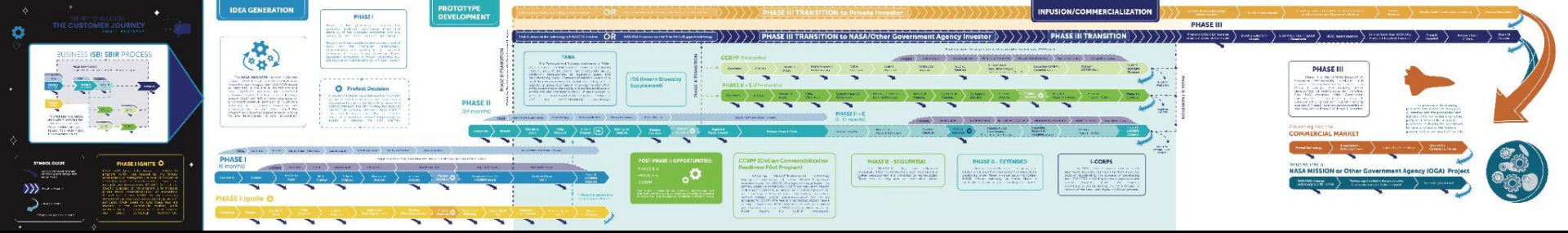
Analogous inspiration research

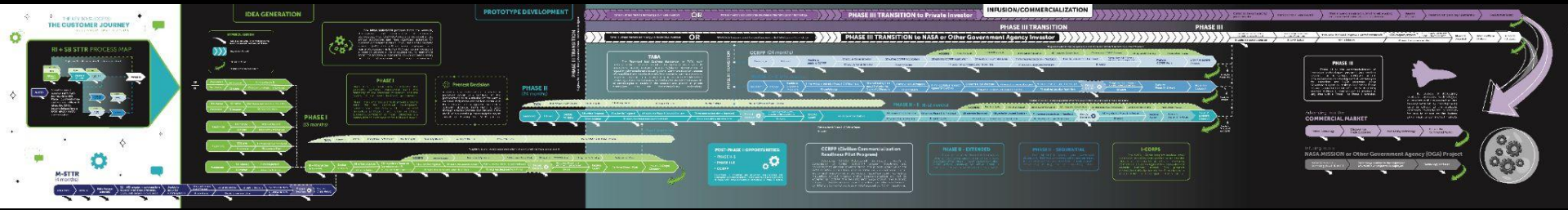
Market research

Futures research

Systems research

Assets and core competencies research


THE KEY TO SUCCESS:
THE CUSTOMER JOURNEY
BUSINESS (SB) SBIR PROCESS
SYMBOL GUIDE
PHASE I IGNITE
IDEA GENERATION
PHASE I
Protest Decision
PROTOTYPE DEVELOPMENT
PHASE II
(24 months)
PHASE I
(6 months)
PHASE I ignite
PHASE II ignite
PHASE III TRANSITION to Private Investor
OR
PHASE III TRANSITION to NASA/Other Government Agency Investor
INFUSION/COMMERCIALIZATION
PHASE III TRANSITION
PHASE III
TABA
105 (Intern Diversity Supplement)
CCRPP (24 months)
PHASE II - SEQUENTIAL
PHASE II - EXTENDED
I-CORPS
POST-PHASE II OPPORTUNITIES
CCRPP (Civilian Commercialization Readiness Pilot Program)
COMMERCIAL MARKET
NASA MISSION or Other Government Agency (OGA) Project


THE KEY TO SUCCESS:
THE CUSTOMER JOURNEY
RI + SB STTR PROCESS MAP
M-STTR
(4 months)
IDEA GENERATION
PROTOTYPE DEVELOPMENT
PHASE I
(33 months)
PHASE II
(24 months)
Protest Decision
PHASE III TRANSITION to Private Investor
OR
PHASE III TRANSITION to NASA or Other Government Agency Investor
INFUSION/COMMERCIALIZATION
PHASE III TRANSITION
PHASE III
TABA
CCRPP (24 months)
PHASE II - SEQUENTIAL
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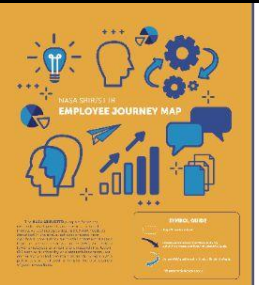
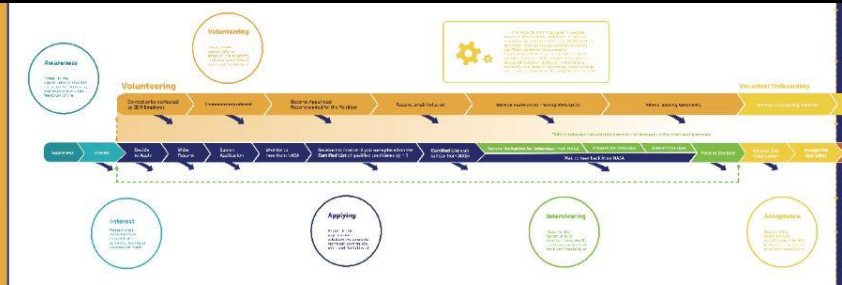
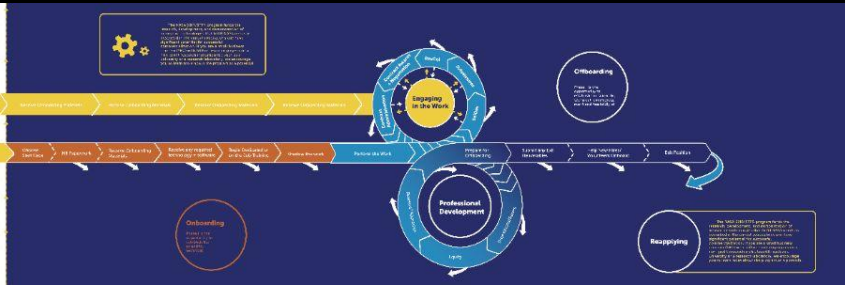

NASA SBIR/STTR
EMPLOYEE JOURNEY MAP
SYMBOL GUIDE


Awareness
Volunteering
Volunteering
Volunteer Onboarding
Interest
Applying
Interviewing
Acceptance


Engaging in the Work
Onboarding
Professional Development
Onboarding
Reapplying

voice of the CUSTOMER

Findings Report | 2021

voice of the EMPLOYEE

Findings Report | 2021

RESEARCH

3 Main Research Artifacts

1

CX

Voice of the Customer

2

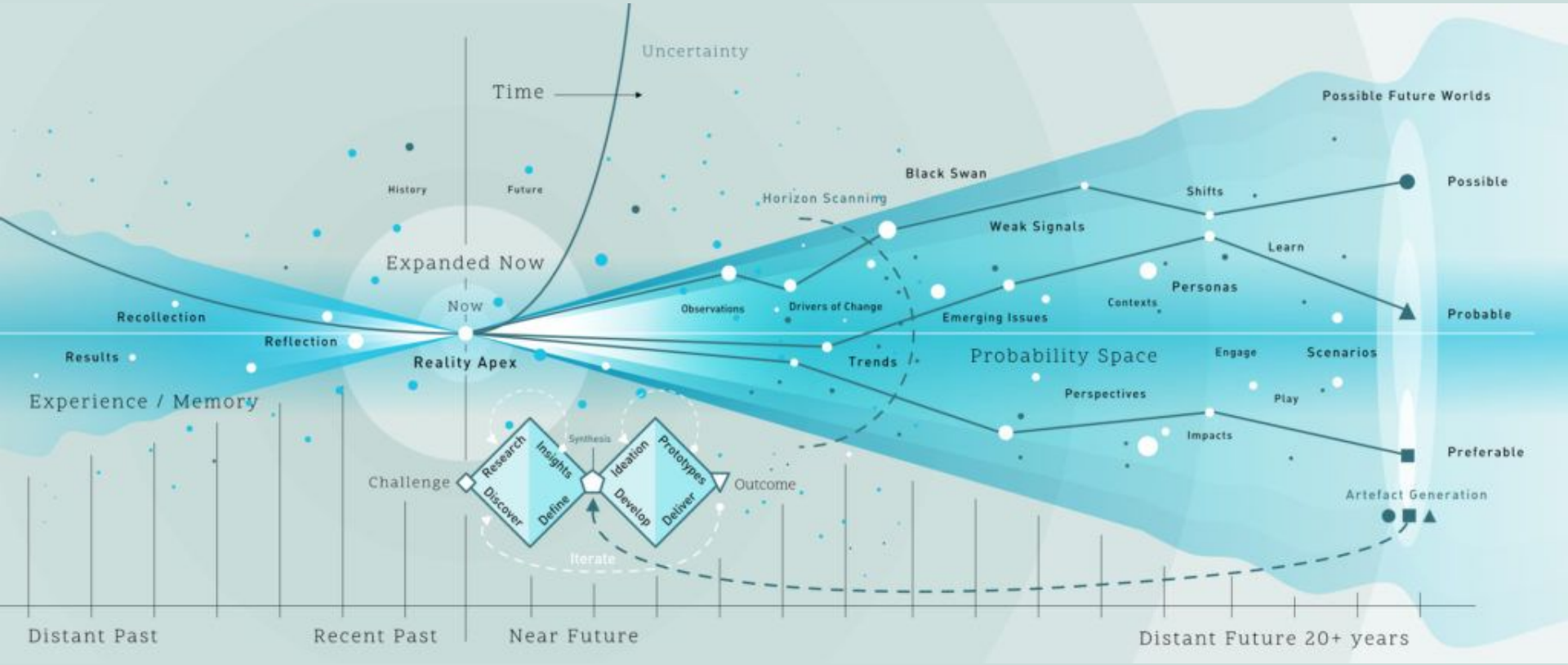
EX

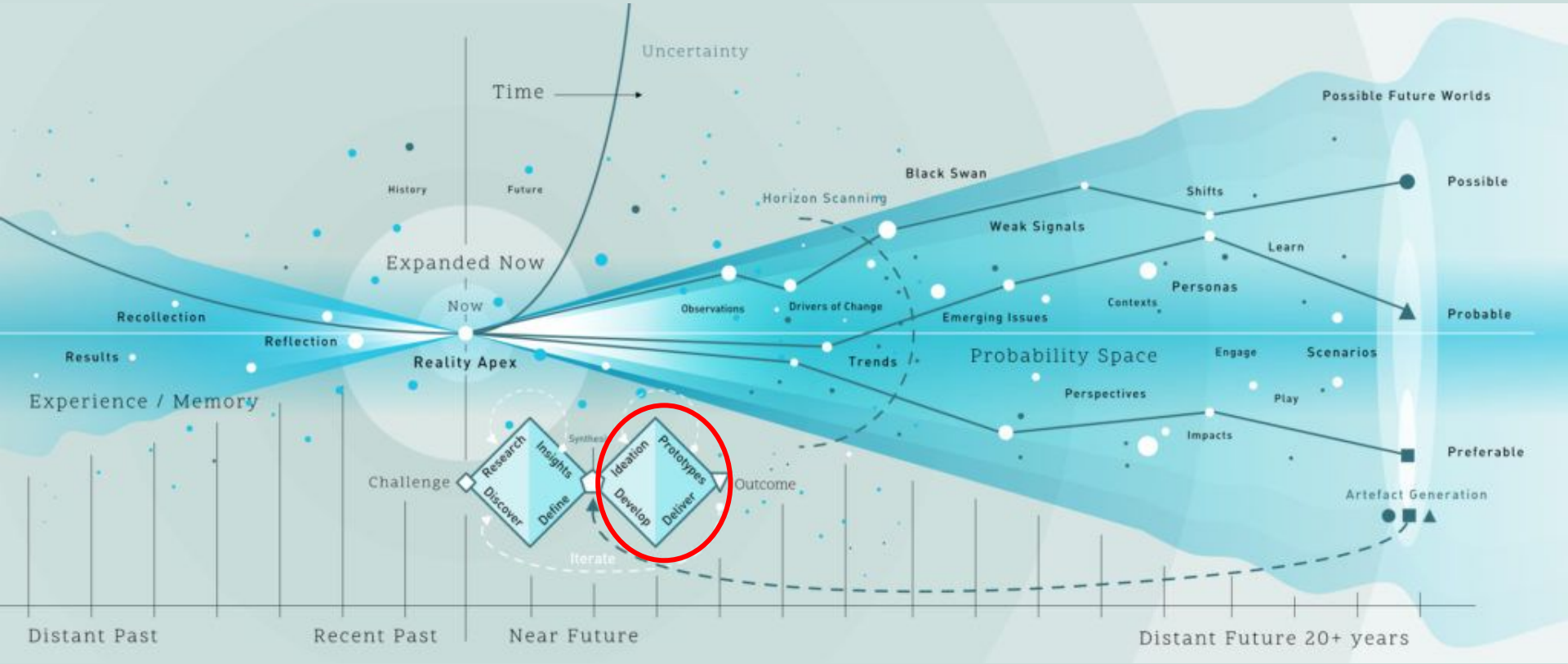
Voice of the Employee

3

Operational Excellence

Service Insights


Uncertainty
Time
History
Future
Expanded Now
Now
Recollection
Reflection
Results
Reality Apex
Experience / Memory
Horizon Scanning
Black Swan
Weak Signals
Observations
Drivers of Change
Trends
Emerging Issues
Shifts
Learn
Personas
Contexts
Engage
Scenarios
Perspectives
Play
Impacts
Probability Space
Possible Future Worlds
Possible
Probable
Preferable
Artefact Generation
Challenge
Research
Insights
Discover
Define
Synthesis
Ideation
Prototypes
Develop
Deliver
Outcome
Iterate
Distant Past
Recent Past
Near Future
Distant Future 20+ years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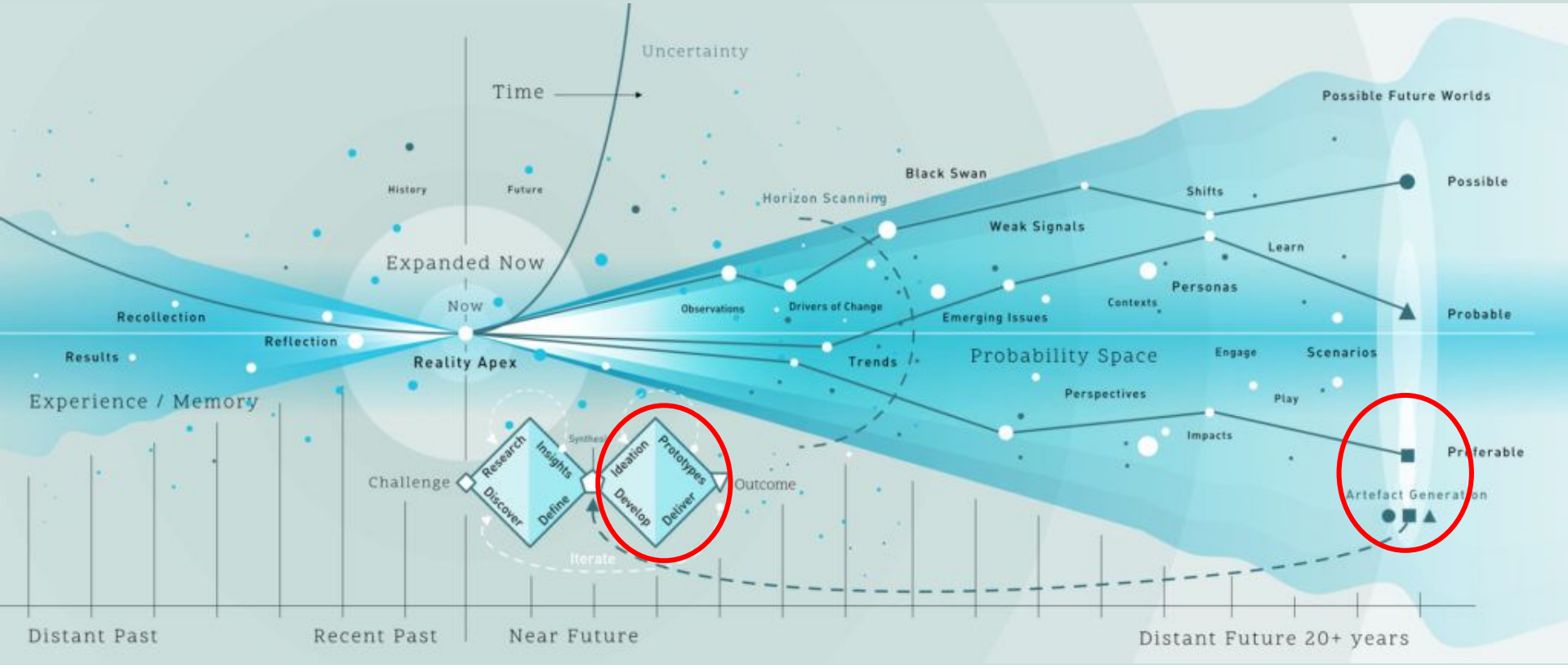
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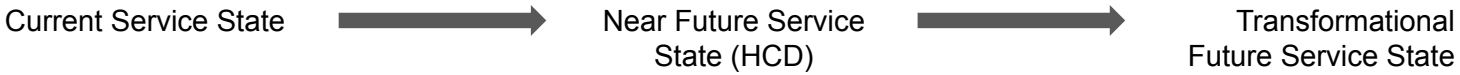
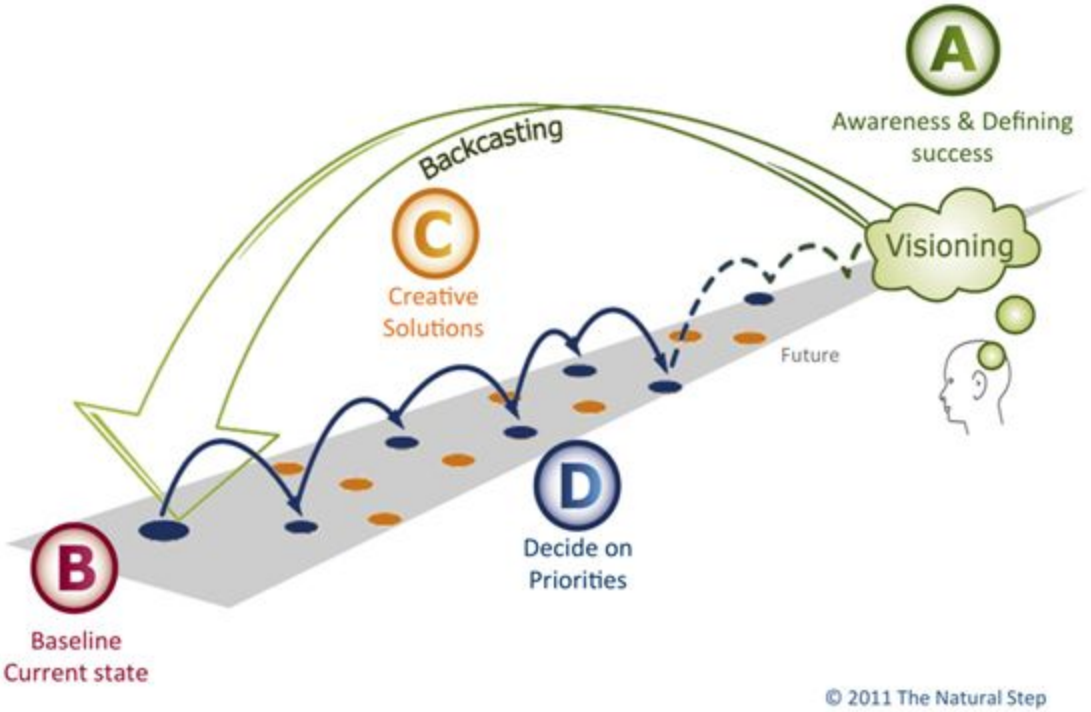
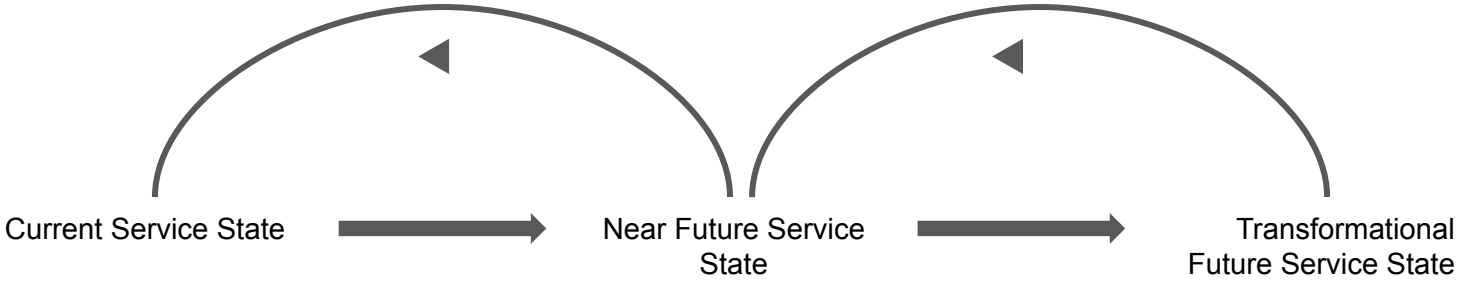

Current Service State
Near Future Service State (HCD)
Transformational Future Service State


A
Awareness & Defining success
Backcasting
C
Creative Solutions
Visioning
Future
D
Decide on Priorities
B
Baseline Current state
© 2011 The Natural Step


Current Service State
Near Future Service State
Transformational Future Service State

Service Metrics

METRICS

Measuring the Experience

1

CX Metric

Measure of Customer Experience

2

EX Metric

Measure of Employee Experience

3

SI Metric (I - Index)

Measure of Service Health

Metrics

CX

- Customer Satisfaction
- Customer Effort Score
- Net Promoter Score
- Customer churn
- Customer retention
- First Response Time
- Ave. Resolution Time
- Customer Lifetime Value (CLV)
- etc.

EX

- Job satisfaction
- Employee engagement
- NPS, internal referrals
- Employee churn
- Employee retention
- Employee productivity
- Employee absenteeism
- Recognition frequency
- Wellness
- Employee-rated websites
- Promotions
- Equity
- Training Participation
- Avg Recruitment Time
- etc.

SI

- Cost per transaction
- Completion rate
- Adoption, uptake, thruput
- Operating Cash Flow
- Net Profit Margin
- First Response Time
- Ticket Resolution Time/vol
- Conversion rates
- Service goals
- etc.

SBIR/STTR

Small Business Innovation Research / Small Business Technology Transfer

Advanced Search

Site Solicitations Awards

CX = 9.2 What's this? EX = 9.4 What's this? SI = 8.2 What's this?

HOME ABOUT SBIR/STTR SOLICITATIONS SCHEDULE & AWARDS HANDBOOKS RESOURCES CONTACT US

2021 ONE-ON-ONES

PHASE II SEQUENTIAL

RESOURCES: COVID-19

SUCCESS STORIES

GETTING STARTED

Getting Started: Interactive Participation Guide

New to SBIR or STTR? In the process, but need additional information?

The interactive participation guide helps you navigate through all parts of the SBIR/STTR process

Go to the Guide


SBIR/STTR
Small Business Innovation Research / Small Business Technology Transfer
Advanced Search
Site
Solicitations
Awards
CX = 9.2 What's this?
EX = 9.4 What's this?
SI = 8.2 What's this?
HOME
ABOUT SBIR/STTR
SOLICITATIONS
SCHEDULE & AWARDS
HANDBOOKS
RESOURCES
CONTACT US
2021 ONE-ON-ONES
PHASE II SEQUENTIAL
RESOURCES: COVID-19
SUCCESS STORIES
GETTING STARTED
1 Learn
2 Prepare
3 Apply
Getting Started: Interactive Participation Guide
New to SBIR or STTR? In the process, but need additional information?
The interactive participation guide helps you navigate through all parts of the SBIR/STTR process
Go to the Guide

EX = 8.1

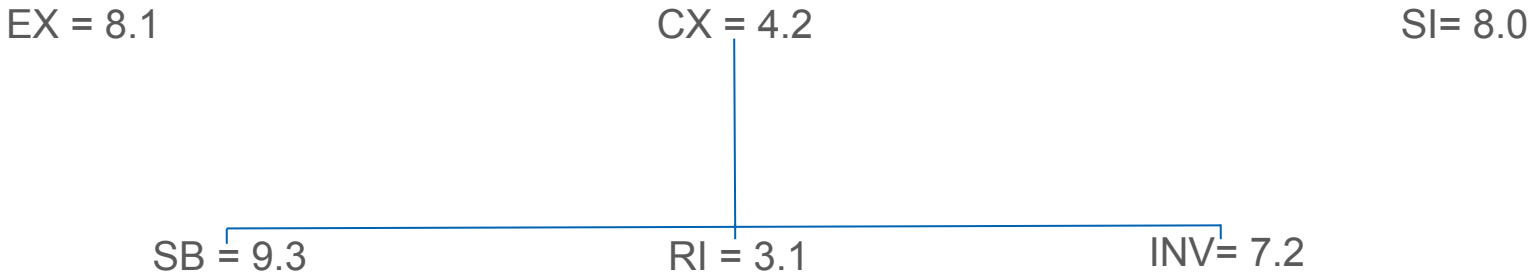
CX = 4.2

SI= 8.0

EX = 8.1

CX = 4.2

SI= 8.0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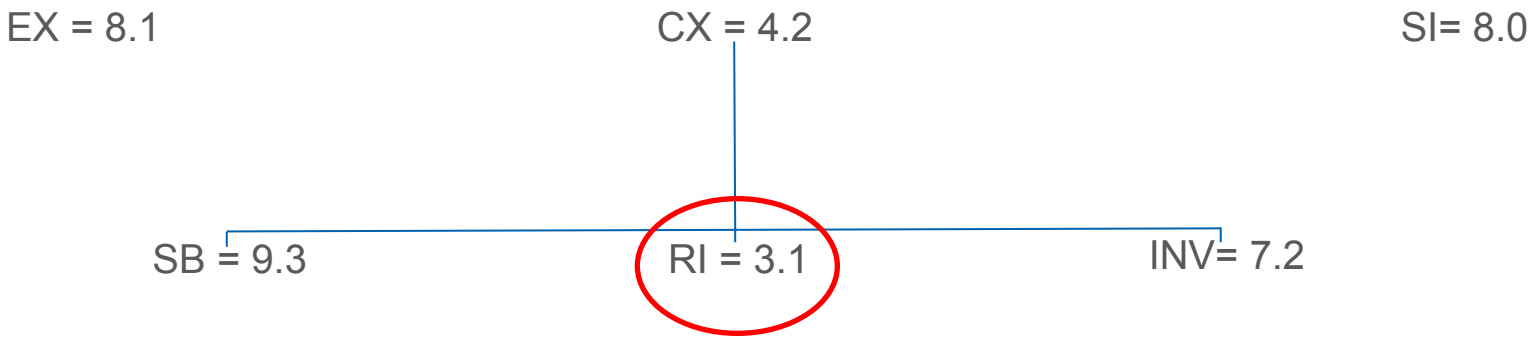
CX = 4.2
SI= 8.0
SB = 9.3
RI = 3.1
INV= 7.2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SI= 8.0
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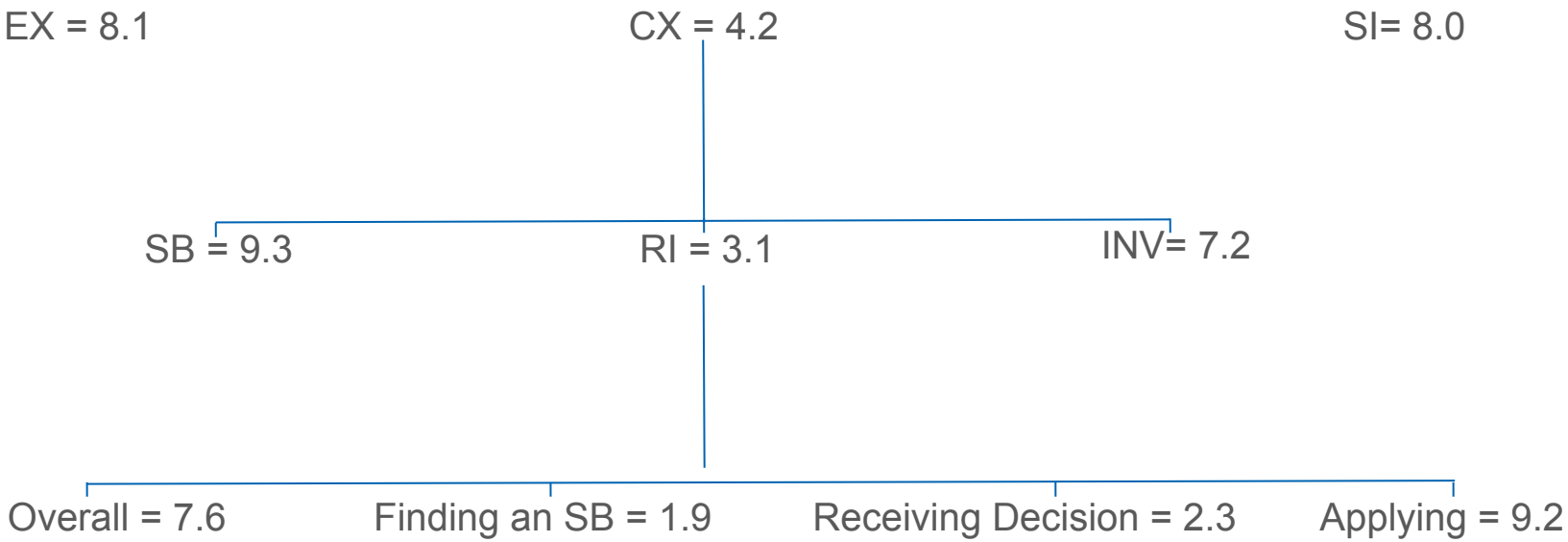
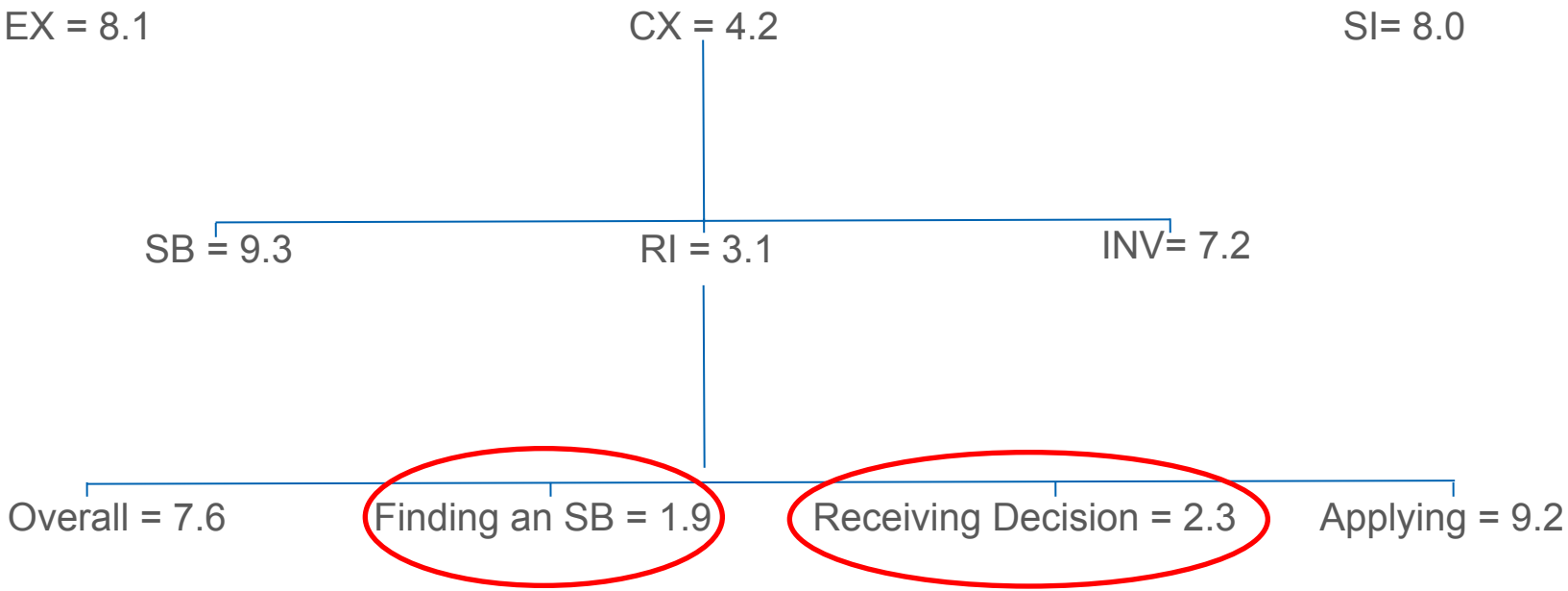

EX = 8.1
CX = 4.2
SI= 8.0
SB = 9.3
RI = 3.1
INV= 7.2
Overall = 7.6
Finding an SB = 1.9
Receiving Decision = 2.3
Applying = 9.2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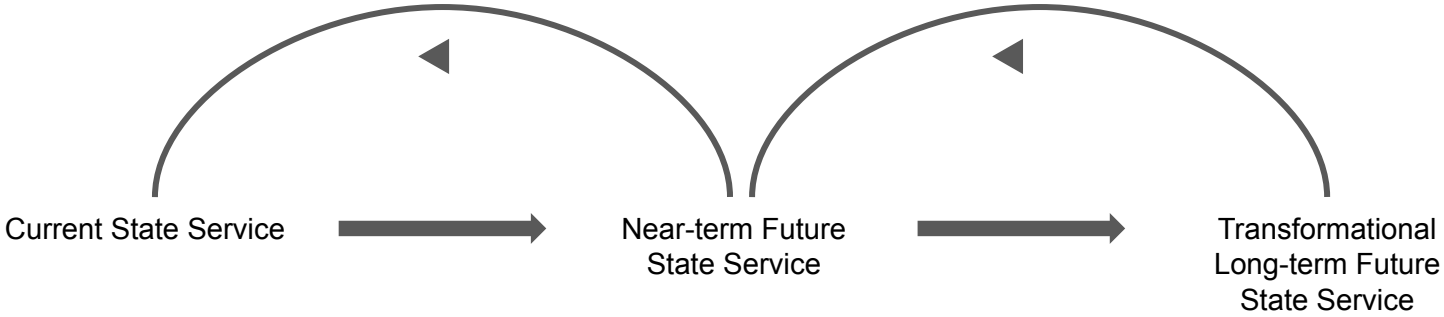
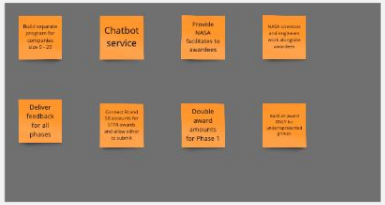
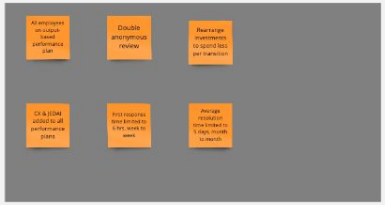

Current State Service
Near-term Future State Service
Transformational Long-term Future State Service

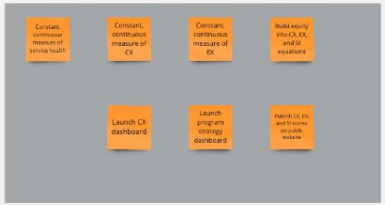
LTFS: Horizon 3
disrupt current ways of working, create new services & preferred future, follow trends
(5-20 yrs)

MTFS: Horizon 2
automate current ways of working, nurture emerging products & services
(2-5 yrs)

NTFS: Horizon 1
simplify current ways of working, address current needs & defend current model
(0-2 yrs)







CUSTOMER EXPERIENCE

EMPLOYEE EXPERIENCE

OPERATIONAL EXCELLENCE

NEW SERVICES

LTFS: Horizon 3
disrupt current ways of working, create new services & preferred future, follow trends (5-20 yrs)

MTFS: Horizon 2
automate current ways of working, nurture emerging products & services (2-5 yrs)

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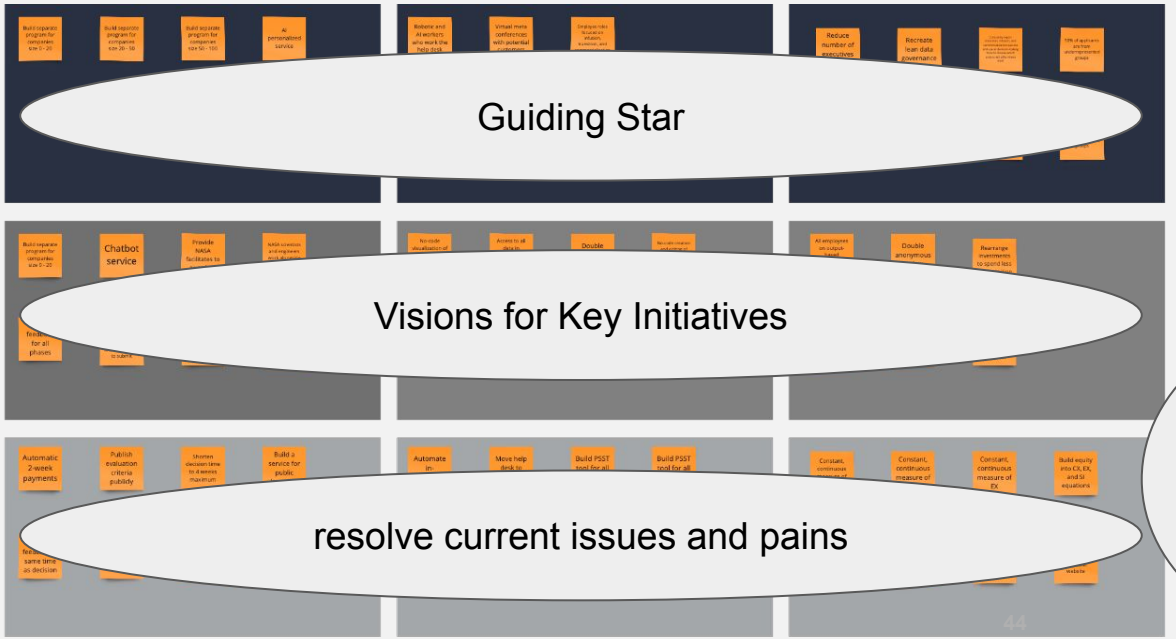


Design System for Services

U.S. Web Design System

A design system for the federal government.

DESIGN SYSTEMS

UI Components

Sometimes known as a pattern library, these are reusable UI elements and associated code that brings consistency across your site.

Design Principles

A set of guidelines that define how your organisation approaches designing online experiences. They are a framework for decision making.

Content Guide

A set of guidelines for content creators which help ensure consistency in tone of voice across your website.

Service Manual

Documentation covering digital governance and how digital projects are managed.

Traditional Components of a Design System

- Component library
- Pattern library
- Styleguide

Components of a Robust Design System

- Component library
- Pattern library
- Styleguide
- Design tokens
- Brand values and philosophy
- Vision/mission or purpose
- Design principles
- Content guide (voice, tone, vocab, grammar, style)
- Accessibility guidelines
- Brand Identity (libraries of color, fonts, images/sounds)

Design Systems Approach to Service Design

Modular service moments

Service principles

Templates

Style guide

Accessibility guidelines

Service vision and mission

Etc.

Common customer journeys

Service values

Service scripts

Voice and tone guide

Equity guidelines

Etc.

Service Kickoff

Inception

NASA SBIR/STTR Revamped

Draft the Current Problem Statement

Problem Statement for SBIR/STTR

*We have observed that **SBIR/STTR** isn't meeting*

- *The communication needs of users*
  - *Communication for & between employees*
  - *User communication needs at interaction points*
  - *Customer communication needs & missing interaction points*
  - *Communication between employees & customers*
  - *User needs for timely communication*

USERS AND PROBLEM FIRST

Problem Statement for SBIR/STTR

*We have observed that **SBIR/STTR** isn't meeting*

- *The data and reporting needs of users*
  - *Customer requirement to report data*
  - *Employee need to find, collect, analyze transition, DEIA, and other data*
  - *Employee need to report data to SBA, NASA, etc.*
  - *Investor needs for tech data access & visibility*
  - *Employee need to self-service data (timeliness)*

Problem Statement for SBIR/STTR

*We have observed that **SBIR/STTR** isn't meeting*

- *Growth needs of external customers*
  - *Need to understand growth opportunities*
  - *Need to find growth opportunities*
  - *Commercialization needs*

Problem Statement for SBIR/STTR

*We have observed that **SBIR/STTR** isn't meeting*

- *User needs for usability and simplicity*
  - *Need to be efficient*
  - *Need to be autonomous*
  - *Desire to have a satisfactory experience*

USERS AND PROBLEM FIRST

Problem Statement for SBIR/STTR

which is causing

- *Fewer new applicants & applications, reducing diversity due to difficulties and failures to submit applications & length of time to award*
- *Slower responses to government stakeholders and lack of understanding of success due to difficulty generating reports*

Problem Statement for SBIR/STTR

which is causing

- *Reduction in number of volunteers due to inaccuracy, time delays, and stress for employees*
- *Lower transition rates and investors going elsewhere*

USERS AND PROBLEM FIRST

Problem Statement for SBIR/STTR

How might we improve so that the SBIR/STTR service is more successful based on

- *The ability for self-service reporting*
  - *Reduced number of custom report requests*
- *Easily understandable information for the end users*
  - *CX metric*
  - *EX metric*

USERS AND PROBLEM FIRST

Problem Statement for SBIR/STTR

How might we improve so that the SBIR/STTR service is more successful based on

- *Defined service for public & private investors*
- *Transition success*
  - *Definition of transition*
  - *# of transitions*
  - *Defined service for public & private investors*

Problem Statement for SBIR/STTR

How might we improve so that the SBIR/STTR service is more successful based on

- *Efficiency and performance at scale (elasticity of system to handle program needs)*
  - *Reduced time per visit per user spent in EHB*
  - *Reduced Help desk tickets*
  - *Faster help desk response time*

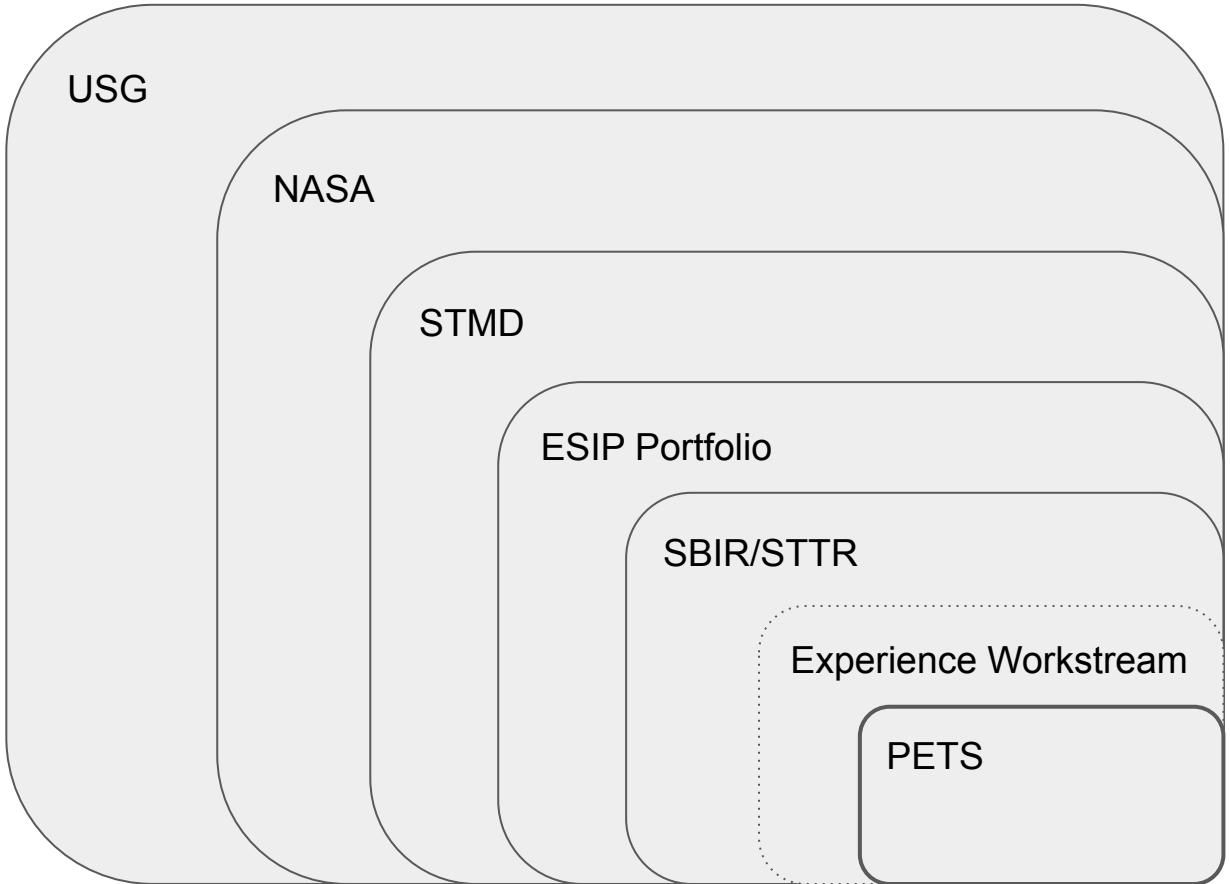
USERS AND PROBLEM FIRST

Service Vision

Program Vision

PRODUCT VISION

Set Product Vision



SBIR/STTR 2022 Strategic Plan

VISION
A world where any entrepreneur can benefit humanity

MISSION
Empowering all small business communities to imagine, build, and utilize revolutionary technologies to drive NASA and the national economy to reach new heights

CORE VALUES
- Customer-Focused
- Teamwork & Collaboration
- Commitment to Success

Goal 1	**Positive Return on Investment**	Demonstrable positive ROI for all SBIR/STTR investment vehicles supporting scientific & technological innovation.	**Objective 1.1** **Approval of a clear definition of "return on investment" the Program seeks for all phases to help target data gathering efforts.**	**Objective 1.2** **Increase by XX% the amount of program data that is used for regular program analysis to facilitate strategic and operational data-driven decision making across the program.**
Goal 2	**Equitable Access & Diverse Representation**	Equitable access for all relevant innovators through increasing diverse representation to create richer SBIR & STTR portfolios.	**Objective 2.1** In Phase I, increase the percent of women-owned small business awardees by 3 to 5 percentage points and minority-owned small business awardees by 2 to 3 percentage points to bring the mix of awardees closer to their representation in their industries.	**Objective 2.2** 100% of all SBIR/STTR Program initiatives implement appropriate strategies for addressing DEIA relevant impacts to ensure continual incorporation of DEIA principles into program operations. **Objective 2.3** Shift variance in selection rates to no less than -1% of the population for underrepresented applicants to increase equity within the RevSel process.
Goal 3	**Exemplary Service for Awardees**	An exemplary service providing access to the critical non-monetary support that every awardee needs to successfully progress/transition technology into use.	**Objective 3.1** Achieve reported awardee satisfaction ratings of XX% for quality & sufficiency of the technical support and knowledge sharing provided by NASA for all awardees to support effective award execution.	**Objective 3.2** Define all existing non-technical resources and implement 1 new/major improvement to non-technical offering that will help awardees continue to grow and succeed as a business.

Vision Exercise

SERVICE VISION

Connect diverse and representative small businesses and researchers to NASA PMs and other investors and provide technical and financial support to fulfill NASA technology gaps, stimulating the economy and facilitating commercialization and NASA infusion.

USERS AND PROBLEM FIRST

Service Positioning Statement

For Innovators
Who are looking for financial and technical support
SBIR/STTR is a technology development and assistance and small business-researcher matching service
That allows innovators to apply for and engage with non-dilutive funding and support for commercialization

Unlike traditional investment opportunities that require equity/debt and commercial proof of concept

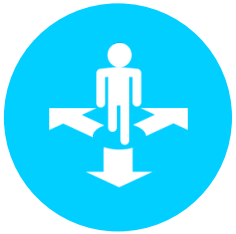
Our service is completely non-dilutive, uniquely supportive, and R&D friendly

For Investors
Who have technology gaps appropriate for SBs/RIs to address
SBIR/STTR is a technology marketplace
That enables the investors to find, track, and transition into use technologies of interest
Unlike the SBA service that shares data from other databases
Our service provides more current and detailed information on the technologies

USERS AND PROBLEM FIRST

Service Values

Service Values



Experimentation

Approachability

Flexibility

Reliability

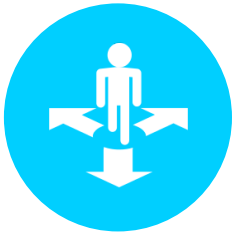
Empathy

Transparency

Efficiency

Connection

Service Values



Impact

Visibility

Data Accessibility

JEDAI

Service Excellence

Forward Thinking

USERS AND PROBLEM FIRST

Service Principles

Service Principles

1. Ensure justifiable award decisions
2. Make data-driven decisions
3. Pursue value
4. Design for transitions
5. Seek equity & diverse representation
6. Prioritize the experience
7. Be efficient and help users be efficient

USERS AND PROBLEM FIRST

Service Strategy

1/ Vision Board

Vision Board: Target Groups

- Customers
  - Entrepreneurs
  - Researchers
  - NASA PMs
  - OGA PMs
  - Private Investors
- Employees & volunteers

Vision Board: Needs

- Need to request funding to mature a technology (SBC)
- Need to find a partner to work work on technology (SBC, RI)
- Need to find a market (SBC, RI)
- Need to grow business and commercialize product (SBC, RI)
- Need to find technologies funded by NASA (other investors)
- Need to find, develop & infuse technologies that team doesn't have time or funds or skillset to produce (NASA PMs)

Vision Board: Service

Proposal submission and management service and researcher-firm matchmaking service providing

- Non-dilutive funding
- Technology marketplace
- With current and detailed information

Vision Board: Business Goals

- Increase DEIA
- Connecting small businesses and researchers to NASA
- Reduce paperwork burden
- Make information more readily available to employees, small business, and research institution customers
- Transition Success
- Defined serviced for public and private investors
- Easily understandable information
- Ability for self service reporting
- Efficiency and performance at scale

Vision Board: Competitors

- SBA (investors)
- AFWERX (researchers, businesses)
- ESIP SpaceTech Grants
- ESIP Prizes & Challenges
- OGA SBIR/STTR
- NSF SBIR

Vision Board: Revenue Streams

- Government appropriations

Vision Board: Cost Factors

- Develop & service infrastructure
  - $6 mill – PETS
  - $3 mill - EHB O&M
- Market & Sell
  - labor hours
  - travel limited by travel budget (from ops budget)

Vision Board: Channels

- Outreach events (conferences, etc.)
- Newsletters / Bulletins
- Targeted outreach
- Creating online community of former, current, potential participants
- Coordination with OGAs
- RFIs
- Roundtables
- Webinars
- Leveraging personal networks
- SEO (natural and paid)

Vision

What is your motivation for creating the product?
Which positive change should it bring about?

Connect diverse and representative small businesses and researchers to NASA PMs and provide technical and financial support to fulfill NASA technology gaps, stimulating the economy and facilitating commercialization and NASA infusion.

Target Group

Which market or market segment does the product address?
Who are the target customers and users?

Customer users
Diverse entrepreneurs and innovators
Researchers
Entrepreneurs
NASA PMs
OGA PMs
PIs
Employee users
SBIR/STTR employees & volunteers

Needs

Which problem does the product solve?
What benefit does it provide?

Need to request funding to mature a technology (SBC)
Need to find a partner to work work on technology (SBC, RI)
Need to find a market (SBC, RI)
Need to grow business and commercialize product (SBC, RI)
Need to find technologies funded by NASA (other investors)
Need to find, develop & infuse technologies that team doesn't have time or funds or skillset to produce (NASA PMs)

Product

What product is it?
What makes it stand out?
Is it feasible to develop the product?

EHB 2.0 & Website
Proposal submission and management tool
Researcher/Firm Matchmaker
R&D friendly
Technology Marketplace
Non-dilutive funding
Current & detailed info

Business Goals

How is the product going to benefit the company?
What are the business goals?

Increase DEIA
Connecting small businesses and researchers to NASA
Reduce paperwork burden
Make information more readily available to employees, small business, and research institution customers
Transition Success
Defined serviced for public and private investors
Easily understandable information
Ability for self service reporting
Efficiency and performance at scale

Competitors

Who are your main competitors?
What are their strengths and weaknesses?

Competitor
Strength
Weaknesses
SBA (investors)
info from all agencies
not very detailed
not always current
arivale (researchers, businesses)
Form cross-functional team
Not sure of AFWERX weakness
ESIP SpaceTech Grants
No contractual requirements
Less money
ESIP Prizes & Challenges
No contractual requirements
Usually only win once? (infrequent)
OGA SBIR/STTR
1 and

Revenue Streams

How can you monetise your product and generate revenues?

Government Appropriations

Cost Factors

What are the main cost factors to develop, market, sell, and service the product?

Develop & service → digital services & O&M procurement costs → $6 mill, $3 mill

Market sell → labor hours, travel limited by travel budget (from ops budget)

Channels

How will you market and sell your product?
Do the channels exist today?

Outreach events (conferences, etc.)
Coordination with OGAs
Webinars
Newsletters / Bulletins
RFIs
Leveraging personal networks
Targeted outreach
Roundtables
SEO (natural or paid)
Creating online community of former, current, potential participants

Design Systems Approach to Service Design

Modular service moments

Service principles

Templates

Style guide

Accessibility guidelines

Service vision and mission

Etc.

Common customer journeys

Service values

Service scripts

Voice and tone guide

Equity guidelines

Etc.

SERVICE DESIGN SYSTEM

Style Guide

Voice, Tone, & Style

Business casual

Flexible

Simple

Direct

Helpful

Clear

Assistant (not authority)

Personal government

Service-oriented

Public-centered

Inspirational

Pioneer

Aspirational

Facilitator (not commander)

Dress

- **Default to business casual for greatest flexibility**
- **When in Room Rule** - We dress casually for casual events and conferences. We dress semi-formally for semi-formal events and conferences. We focus on fitting in and meeting people where they are.
- **We dress for approachability** - we can be slightly more casual than others if it invites people to talk to us. We are never more formal than the average attender of an event.

Language, Words

- **We use plain, simple language** - We define words that are not simple if we plan on using them multiple times

- **We use service-oriented language** - We convey that we are there or here to serve the public and customers. We use language that implies helpfulness and assistance.

- **We use pioneering and aspirational language** - Fitting with our agency, we use language that conveys the immensity of the challenge before us and our confident optimism in pioneering new journeys across the solar system and universe.

SERVICE DESIGN SYSTEM

Access Guidelines

Access(ibility) Guidelines

1. **Define accessibility** (and disability) **locally, contextually and design for it**.

2. **Pursue access first, and accessibility will follow**. Otherwise, we create accessible products for white men.

3. **Design for intersectional accessibility**.

4. **Build qualitatively representative participatory design teams with diverse abilities.**

Access(ibility) Guidelines

5. **Accessibility is everyone's job.**
6. **Use plain language.**
7. **Provide alternatives**.
8. **Include redundant modalities**.
9. **Build in customization, robustness, and flexibility**.
10. **Minimize errors**.
11. **Provide feedback**.
12. **Test all service interactions for access** (and accessibility).
13. **Conduct access** (and accessibility) **audits**.
14. **Define for sustainability** (W3c sustainability guidelines).

SERVICE DESIGN SYSTEM

Equity Guidelines

Equity Guidelines

1. **Prioritize multiple ways of knowing and expertise** beyond mainstream, institutional knowledge (relational, community, embodied, intuitive, spiritual, aesthetic, energetic, lived experiential, etc.)
2. **Use Radical Participatory Design** (RPD). Move beyond research participants. Even if the design team has the capacity, build a team with “non-designers”.
3. **Build qualitatively representative RPD teams**.
4. **Seek intersectional representation on RPD team**.
5. **Utilize rotational co-facilitation**.
6. **Build both customer and employee participatory teams**.

Equity Guidelines

7. **Include women's colleges in gender equity goals.** Pursue gender equity across both small businesses and research institutions.
8. **Seek gender, service** (military), **and racial equity with investors as well as innovators**. Innovators from underutilized groups are more likely to invest in innovators from underutilized groups.
9. **Use a systems approach**. We must look beyond currently available innovators and work on systems that produce innovators from underutilized groups.
10. **Utilize participatory budgeting and participatory policymaking**.

SERVICE DESIGN SYSTEM

Healing-centered Guidelines

Healing-centered Guidelines

1. **Prioritize pluriversal trauma work**.What trauma and healing are changes depending on the worlds people inhabit and their ways of being. Define both for each group and let that guide the design.

2. **Prioritize the physical and emotional safety of the public.**

3. **Be consistent, clear, predictable, transparent.** People who have experienced trauma have often experienced internal and external unpredictability which can lead to hypervigilance and paranoia. Being consistently clear and transparent can provide a feeling of safety and reduce anxiety.

Healing-centered Guidelines

4. **Embrace plurality**. Each individual and group can experience trauma in different ways, at different times, triggered by different things, in varying degrees. As much as like to generalize and identify trends, we expect and embrace individuality in experience and trauma.

5. **Prioritize healing**. Trauma-informed approaches tend to focus on trauma. While design and research is not intended to cause healing, design your design and research work so that it *can* be a site where healing begins or occurs in part.

Healing-centered Guidelines

6. **Cede power while customers and the public assume agency**. In our work, the customers should have the agency to change our analysis, synthesis, storytelling, to stop an interview or activity, to withdraw, to pause, to control the narrative. Too often, agency has been stripped from them as a large component of traumatic experiences.

7. **Openly collaborate with the public**. We don't research and design for them. They have agency. We work alongside them in equitable co-leadership.

Healing-centered Guidelines

8. **Embed empathy through RPD**. We do not chase or pursue empathy. It lives on our team through customer or public team members who ground our healing-centered work.

9. **We remove friction that prevents people from getting the help they need while adding friction to protect people.** We are always equipped with referral services when needs go beyond our capabilities. And we maintain privacy.

Healing-centered Guidelines

10. **Practice pluriversal hope**. Our service should always meet people where they are. It does not have to infuse hope into people without hope. It should not make them more hopeless, and it should acknowledge their feelings and state (which can be hopeless), as some people completely do not resonate with messages of hope. Others can be quite grateful for hopeful messages. We walk this fine balance.

SERVICE DESIGN SYSTEM

Modular Service Moments

Modular Moments

Finding out about a (follow-on) solicitation

Decision to apply or not to apply

Proposal submission

Receiving decision

Assignment of technical monitor

Service Design System

Modular Moments

Learning about programs for underutilized populations

Learning about awardees from underutilized populations who won awards

Conversing with an awardee from specific population

Finding out about a (follow-on) solicitation

Decision to apply or not to apply

Proposal submission

Receiving decision

Assignment of technical monitor

Finding out about a solicitation

1. **Include information on award size or amount.**
2. **Include information on follow-on awards and their amounts.**
3. **Include date of upcoming relevant solicitations within the next 6 months.**
4. **Direct to NASA SBIR webpage with solicitation information**. This aids their research before they decide to invest
5. **Offer to answer question or share answers to FAQs**.
6. **Direct to special programs, if applicable.**
7. **Connect to past winners.**
8. **Share examples of past winners with the same profile as company.**

Decision to Apply or not to Apply

1. **Hold Q&A sessions for solicitations.**
2. **Mark each solicitation as primarily focused on infusion, commercialization, or both equally.** This helps companies save time by not submitting a proposal for a topic that is not aligned to their goal.
3. **Provide information on transitions rates.**
4. **Provide information on percentage of proposers that are granted an award.**
5. **Match investors to SBs, when possible.**
6. **Match RIs with SBs.**

Proposal Submission

1. **Show progress.**
2. **Allow submitters to save their work and progress.**
3. **Use form fields (avoid pdf uploads)**
4. **Minimize steps to submit.**
5. **Build forgiveness into process.**
6. **Show the current state.**
7. **Clearly show errors.**
8. **Allow RI or SB to submit.**

Receiving a Decision

1. **Provide decision within 6 weeks.**
2. **Always include feedback.**
3. **Include information for next solicitations.**
4. **Include information on how to protest.**

Assigning a Technical Monitor

1. **Provide information on frequency, duration, and expectation of technical monitoring.**

2. **Provide definition of success for the ward.**

3. **Share ways to escalate information beyond the technical monitor if you feel there is a conflict of interest.**

Learning about Programs for Specific Populations

1. **Specifically mention the various underutilized communities in which we focus.***

2. **Talk about the specific programs or targets for each.**

***Small Businesses** - Hubzone, VOSB, SDVOSB, WOSB, BOSB, IOSB, LOSB, AOSB

***Research Instititutions** - Women's Colleges, HBCUs, PBIs, TCUs, NANTIs, HSIs, ANNHSIs, AANAPISIs

Learning about Programs for Specific Populations

1. **Connect applicant to community of awardees.**

2. **Give examples of awardees from the same underutilized population as the interested applicant.**

3. **Connect to specific awardees from the same underutilized population as the interested applicant.**

Learning about Awardees from Underutilized Populations

1. **Connect applicant to community of awardees.**

2. **Give examples of awardees from the same underutilized population as the interested applicant.**

3. **Connect to specific awardees from the same underutilized population as the interested applicant.**

Connecting with Awardee from Underutilized Populations

1. **Awardee shares why they applied.**
2. **Awardee shares their experience.**
3. **Awardee shares lessons learned and tips.**
4. **Awardee shares why they have applied multiple times.**

Common Scripts

Script #1: Opportunity

NASA's Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (STTR) offers financial assistance from $150,000 for an initial award to $2.5 million awards for later phases as well as technical assistance to awardees. SBIR awards are for small businesses and STTR awards are for collaborations between small businesses and research institutions. The awards help you further develop your technology so you can commercialize it or infuse it into a NASA mission or a project at another government agency. We specifically work to improve the percentage of Hubzone, veteran-owned, women-owned, and minority-owned businesses and minority-serving institutions we fund. You can talk with us or read more about these programs.

Script #2: Special Programs

NASA SBIR/STTR has a range of programs that focus on different initiatives. Our Ignite program specifically focuses specifically on commercialization of more advanced technologies. We provide business assistance through our TABA program and customer discovery and marketing assistance through I-Corps. We also focus on women-owned, veteran-owned, service-disabled veteran-owned, Hubzone, and minority-owned small businesses and also have programs for minority-serving institutions. You can talk with us or read more about these programs.

Script #3: Community & Intro to Awardees

We have an online community of awardees, previous applicants, and prospective applicants. You can talk with us about the community and join the group.

We can also introduce you to awardees who are Hubzone, veteran-owned, service-disabled veteran-owned, minority-owned, or women-owned small businesses or research institution awardees that are women's colleges or minority-serving institutions. Let us know if you would like an introduction.

Script #4: Experience of Awardee from Underutilized Population

I first applied . . . We decided to apply because . . . Our experience with the program was . . . We decided to apply again because . . . We decided not to apply again because . . .

We learned a few lessons through the process. . .

Script #5: Explanation of Decision Process

We use mixed criteria based on technical merit of the proposal and achieving mission or programmatic objectives. We score each proposal individually through different reviewers. We then use a statistical process to form different combinations of proposals that would sum up to the available money we will award. Each combination is called a portfolio. We give each portfolio an overall technical score based on the individual technical scores. We also give each portfolio an overall programmatic score based on how well the portfolio meets various programmatic objectives. We then choose the best portfolio based on that. We do provide feedback but remember there may be nothing wrong technically with the proposal. We simply are also trying to build a portfolio of technologies that meet NASA's needs.

Script #6: Extra Services for Recent Awards

Please don't forget that we offer other programs and assistance like the I-corps program to assist you with market research and customer discovery or the TABA program to provide various types of business assistance. Based on your recent award, you are eligible for . . . . Please let me know if you need assistance applying and follow the instructions to apply for . . .

Script #7: Extra Services for Upcoming Award

Please don't forget that we offer other programs and assistance like the I-corps program to assist you with market research and customer discovery or the TABA program to provide various types of business assistance. Based on your eligibility to apply for follow-on funding, you are eligible to also apply for . . . . Please remember to indicate your interest in applying for the extra services when you submit your application for follow-on funding. Let me know if you need assistance applying.

Script #8: Follow-on Support

We have other awards to continue developing your technology. You won a . . . award, and we have further awards such as . . . . to help you further your technology before infusion or commercialization to increase the likelihood it is commercialized or infused. Please seriously consider applying again. Remember, the application due date is . . . .

Script #9: Cross-over from NASA

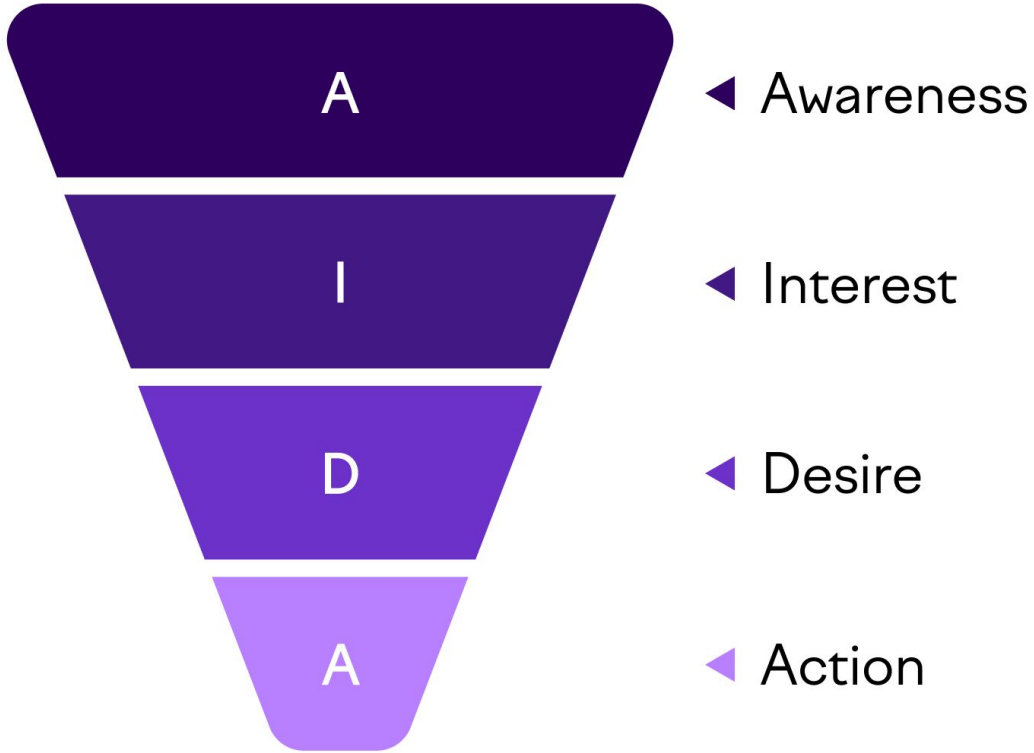
Additionally, OTHER agencies have NASA SBIR/STTR awards to continue developing your technology. You won a NASA award, and you have option of pursuing further awards with us or with other agencies to help you further your technology before infusion or commercialization and to increase the likelihood it is commercialized or infused. SBA allows companies to switch between agencies as they progress from Phase 1 to Phase 2 and onward. Please seriously consider applying again. SBA lists all the SBIR and STTR programs so take a look at their list to make sure you apply to the programs best positioned to use your technology, including us.

Script #10: Cross-over to NASA

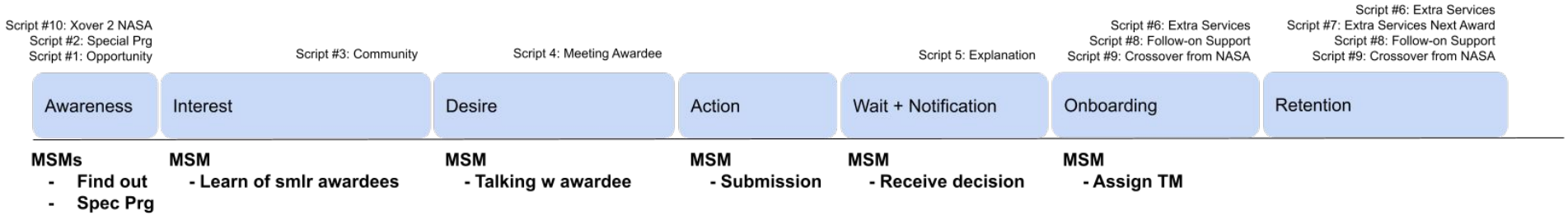
We have NASA SBIR/STTR awards to continue developing your technology. You won a . . . award from . . . department/agency, and we have the ability to give you further awards such as . . . . to help you further your technology before infusion or commercialization and to increase the likelihood it is commercialized or infused. SBA allows companies to switch between agencies as they progress from Phase 1 to Phase 2 and onward. Please seriously consider applying again. Remember, the application due date is . . . .

Common Journeys

The AIDA Model



Applying Journey



Reapplying Journey