

NSF SBIR Kickoff Synthesis

Problems

- Low awareness
- Unclear about eligibility
- Takes too long
- Difficult to apply

Cumulatively, these negatively impact the ability to capture more high-quality applicants...

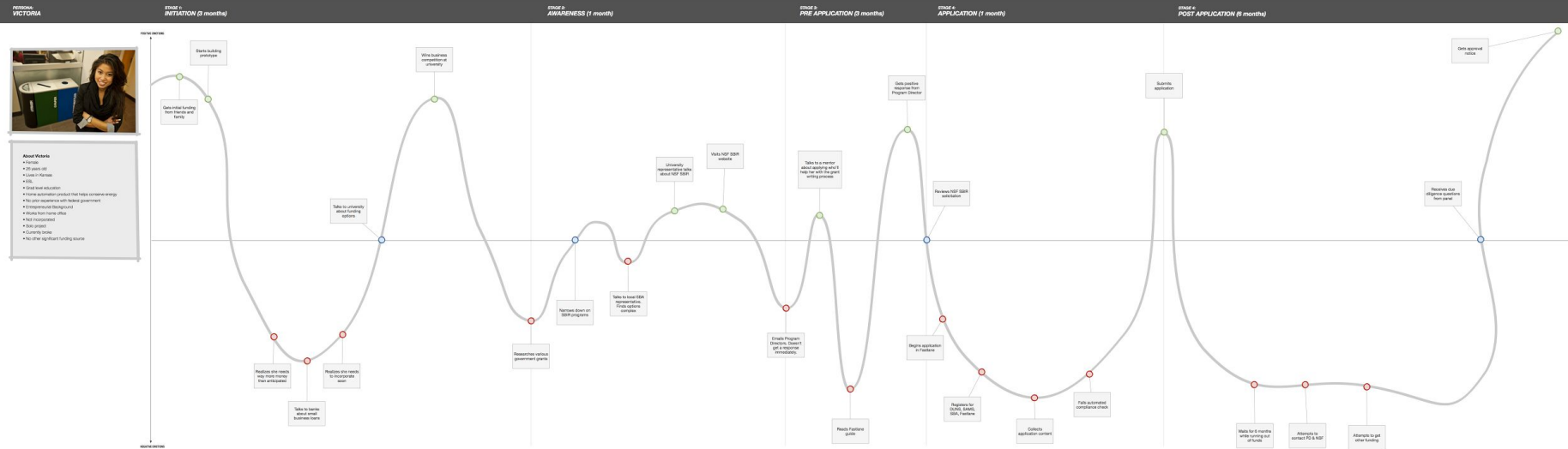
How do we improve deal flow?

Customer interviews

- Confirmed that submitting an application (FastLane) is a pain point. Confusing language and lack of clarity about expectations (what and when) were most cited as issues with the process.
- Services (webinars, I-Corps, roadshows) offered by NSF SBIR were valued by applicants but weren't easily discovered
- Similar to your survey findings, most participants discovered the grant through word of mouth, usually through universities.

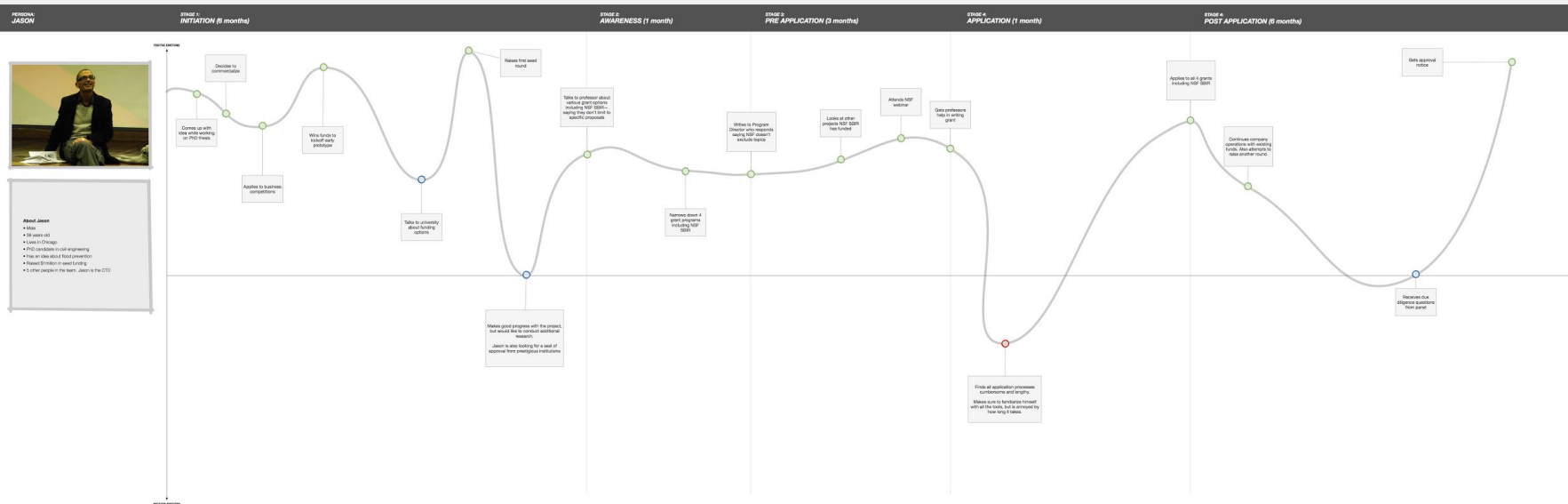
Customer journey: Kickoff

JOURNEY MAP— TARGET APPLICANT CONDENSED (KICKOFF)



Customer journey: User research

JOURNEY MAP— USER RESEARCH



Context for product-market fit

- VCs and “Silicon Valley types” account for the bulk of the thought leadership on early-stage startups and consequently create market expectations for seed/early stage funding
- FastLane is a known pain point but is outside of the team’s control.
- The bi-annual application schedule further shrinks the opportunity to capture the addressable market at the right time.
- The bulk of SBIR content is concentrated around the grant application

Customer engagement lifecycle

1
Awareness

2
Learn

3
Participate

4
Fundraise

5
Proselytize



Customer engagement lifecycle

1
Awareness

2
Learn

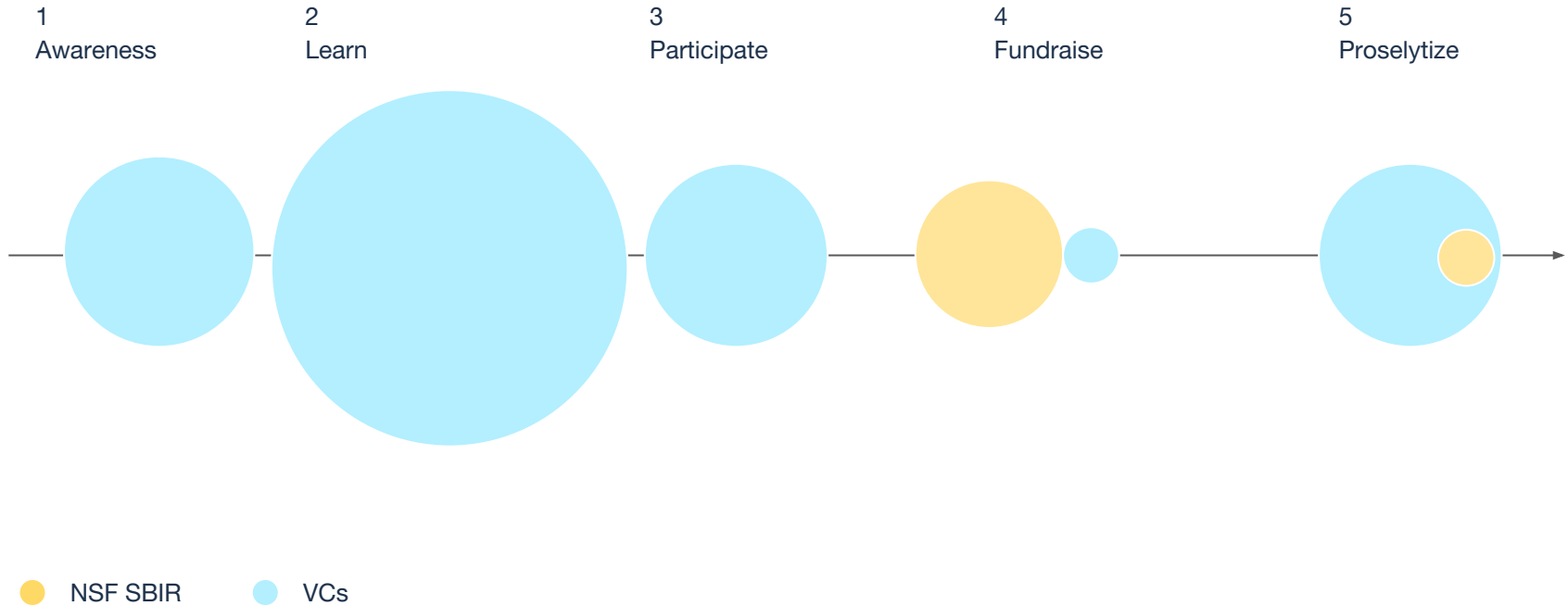
3
Participate

4
Fundraise

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Proselytize



Customer engagement lifecycle



● seed funding
Search term

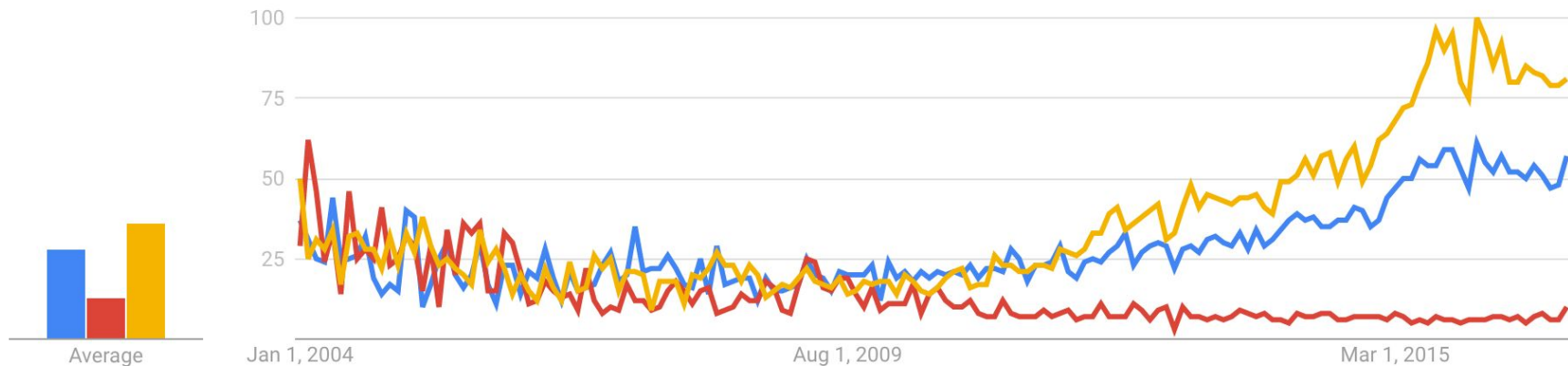
● SBIR grant
Search term

● startup fundi...
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Interest over time ?

⋮



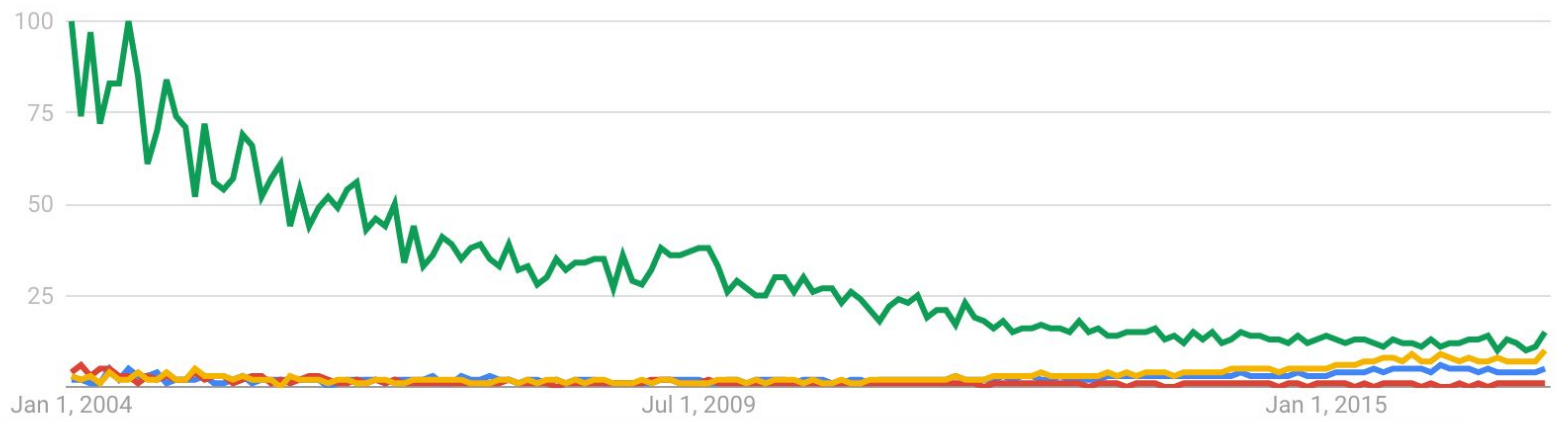
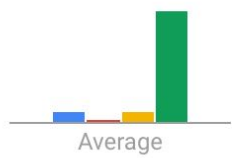
● seed funding
Search term

● SBIR grant
Search term

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Search term

● SBIR
Search term

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Now what?

Design principles



Be human

Shift from transactional to human-centric; Shift from “bureaucratic” jargon and “legalese” to plain language



Be inclusive

Accessible;
Recognize diversity



Connect

Build lines not dots;
Encourage “collisions”, a “network”



Walk the walk

Show, don’t just tell

Opportunity areas

- Brand development: “What are we?” (positioning) and “Who are we?” (identity)
- Customer development at the early stages of the engagement lifecycle
- Probe into value opportunities (Business Model Canvas)

Validate the riskiest assumptions first before optimizing.

Business Model Canvas

<https://app.mural.ly/t/gsa6/m/gsa6/1481216470706>

Journey Maps

JOURNEY MAP— TARGET APPLICANT (KICKOFF)

PERSONA:
VICTORIA



About Victoria

- Female
- 26 years old
- Lives in Kansas
- ESL
- Grad level education
- Home automation product that helps conserve energy
- No prior experience with federal government
- Entrepreneurial Background
- Works from home office
- Not incorporated
- Solo project
- Currently broke
- No other significant funding source

STAGE 1:
INITIATION (3 months)

STAGE 2:
AWARENESS (1 month)

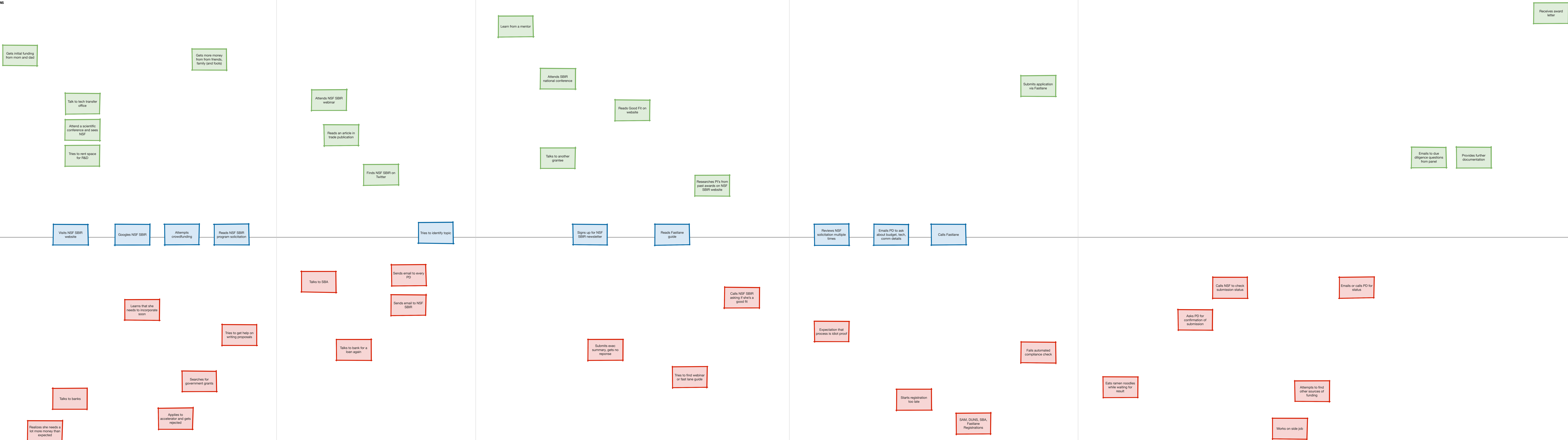
STAGE 3:
PRE APPLICATION (3 months)

STAGE 4:
APPLICATION (1 month)

STAGE 5:
POST APPLICATION (6 months)

POSITIVE EMOTIONS

NEGATIVE EMOTIONS



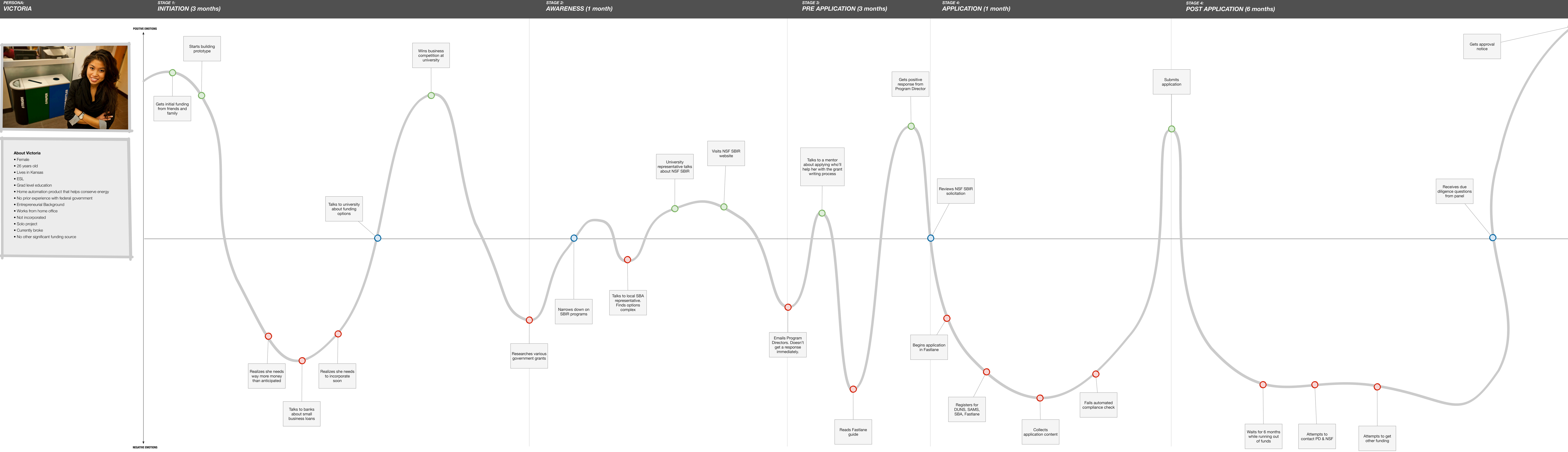
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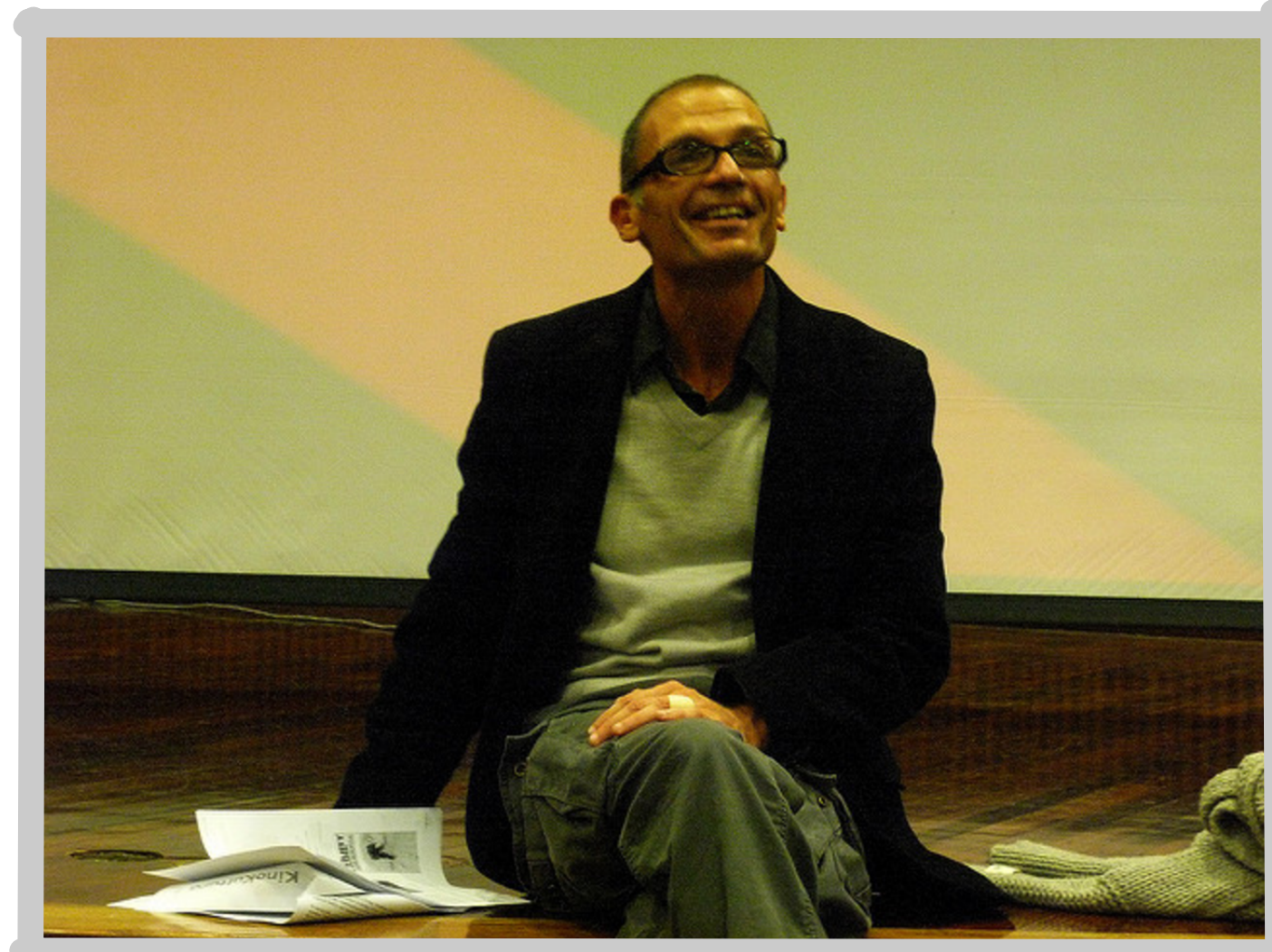
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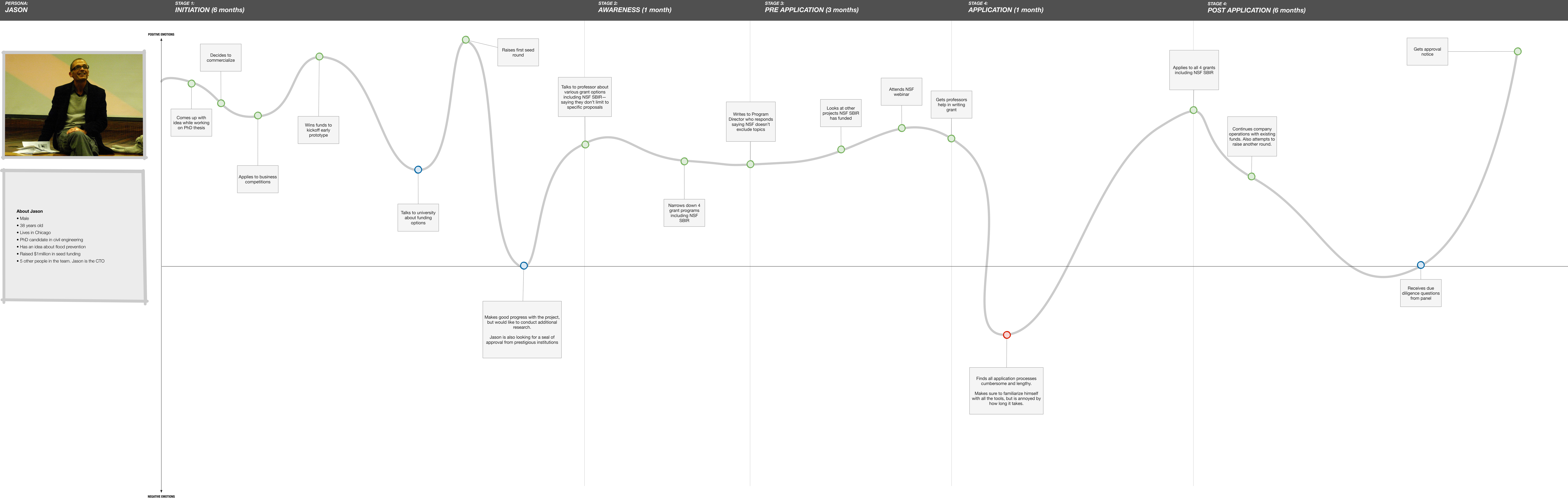
JOURNEY MAP— USER RESEARCH

PERSONA:
JASON



About Jason

- Male
- 38 years old
- Lives in Chicago
- PhD candidate in civil engineering
- Has an idea about flood prevention
- Raised \$1million in seed funding
- 5 other people in the team. Jason is the CTO



Customer Interviews Synthesis

Customer interview synthesis

Methodology

We conducted meetings with past and recent applicants to learn more about their goals, needs and expectations. We interviewed 8 customers—past grantees and applicants from the June cohort who were in varying phases of the application timeline. Participants varied from CEOs, professors, researchers, and technical managers who mostly had a strong academic background and self-identified as entrepreneurs. Some were applying for the first time, while others had applied multiple times.

Summary of findings

Customers had positive connotations and positive communications with the NSF SBIR program. Relationships with PMs had a strong positive impact as well as webinars and iCorp.

“...the magic nugget is to call your program manager and have a conversation with them”

“Feedback from PM is most helpful. Past experience was strong help.”

“Q&A at iCorps were crucial.”

The non-dilutive funds that had almost no constraints on how the grant could be spent were highly appealing to applicants. Often the “seal of approval” of the NSF added further appeal to applicants.

“...ability to use it on personnel in addition to the research”

“NSF as a partner in science communication is very helpful...”

The program was often discovered by word-of-mouth and in mostly academic settings.

“...found about NSF SBIR program from advisors in school”

“when i joined as a post doctorate I was looking for all possible federal grants. That’s the first time I got to know about the STTR.”

“Post doc and academy vaguely aware. NYC has a SBIR grant writing program.”

Most customers felt that they engaged with a lot of “bureaucratic language”. The voice of the application process varied and was accompanied by complicated jargon. Many users felt that examples would help as well as experience in previously applying.

“Lot of unnecessary learning. Many abbreviation. Painful for people who use the tool once. It’s optimized for people who use it every day”

“There is a lot of bureaucratic language.”

"Language is difficult and too specific "
"Too much to read; not enough explaining."

The length of time of the post application process was prevalent in all the interviews. The six-month turnaround time was seen as too long in the life of a startup. Also, the lack of communication during this time period was discouraging to users.

"No sense of how long things would take. No sense of timeline."
"The process is too long in a small business lifetime."
"6 months is a lifetime. Companies can change or not exist in that timeframe."
"Another one is that there is a gap, a time gap between the phase I and Phase II. for example even with our project between Phase I and Phase II there is [...] 9 months of gap there. I'm still not sure what to do during that gap."
"...not in direct contact with NSF last 6 months"
"In terms of other sources of funding, you don't come to NSF for funding because it's too slow."

Although the non-diluted reward offering was seen in a positive light, the size of the grant elicited an opposite response.

"The size of the grant is not sufficient for high-risk research for the time frame given"
"No small business can survive on the program"
"SBIR [is used] as additional income not as primary funding."
"Requires additional sources of funding in addition to the NSF grant."

Identified themes

Language, time, and money offerings bubbled to the top of areas of improvement. Customers raised concerns about the "bureaucratic" and "legalese" voice in the language. An echoed theme was a desire to have well organized, concise, and helpful content to help everyone in the process and brand awareness. Content inventory, as well as an accessible and unified voice, would be a strong and low-impact element, with a high return, that would be an insightful and straightforward aspect to validate. Customers had common unfavorable feedback in response to the length of time in the application process. More discovery and interviews around application timeframe and financial offerings to determine the vast intricacies and stronghold of high dependencies would be ideal.