OPS user research plan: View a CAN

Round 1: November 2021

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Research plan

Goals

- Research goals
  - Test our hypotheses for the scenarios in which a user would log into OPS and view the CANs they manage
  - Describe the tasks or questions that they would use this view to complete or answer
  - Identify gaps in the information we plan to provide
  - Identify the hierarchy of importance of the information displayed
  - Identify potential changes to our current designs
  - Identify the ways in which these users needs for these views differ from those of the budget team

- Strategic goals
  - Follow through on what was promised in OPS announcement
  - Start conducting research with staff outside the core OPS team, get input and feedback from users who manage CANs
  - Test scheduling / recruiting approach

Method/Format

- 30 minute 1:1 sessions
- Video call to allow screen sharing

- Show wireframes of “View a CAN” interfaces, describe features, and ask questions to get users’ reactions and ideas, as well as to test our hypotheses
- Optional: Separate Menti poll that can collect responses from a broader swath of users?

Participants

- 3-4 CAN Leads
- All 4 Division Directors

Timeline

- 1 week to recruit/schedule
- Conduct sessions over the course of several weeks, given the holidays
- 1 week for analysis / synthesis

Framing/Introduction

- [Explain why we’re here, what we’re interested in] (e.g., We’re looking into how we can best display information about a CAN so that you can quickly and easily pull what you need to know in order to manage your CANs.)
- We’ve created some wireframes in order to.... [Explain what a wireframe is, how we use them to provoke feedback and resolve questions we have, why we’re talking to them.]

Research questions

- Can you tell us a little bit about your responsibilities as they pertain to CANs?
- *[Show 2 wireframe options for looking at an individual CAN, briefly walk through what the major sections are]*
  We have a hypothesis that you might use a view like this in a few different scenarios:
  1) You’d want to look at the current FY’s budget
  2) You’d want to look ahead at a few FYs to plan budgets/projects
  3) You’d want to look at all or a subset of FYs (past, present, future) in order to get a cumulative summary of the CAN
    - Can you confirm/correct our hypotheses?
- What are your reactions to the 2 different versions we showed you?
    - Location of the evergreen CAN info
    - Always showing the current FY
    - Pre-set views or build-your-own
    - Other

- If you were to use one of these views of the current FY budget, what tasks would they help you to perform, or what questions would they help you answer?
    - What tasks or questions would you have that these views don't help you with?
- If you were to use one of these views of future FY budgets, what tasks would they help you to perform, or what questions would they help you answer?
    - What tasks or questions would you have that these views don't help you with?
- If you were to use one of these views of all the FYs, what tasks would they help you to perform, or what questions would they help you answer?
    - What tasks or questions would you have that these views don't help you with?
- We'd like your feedback on the information we're considering providing for each FY of a CAN:
    - Which of these would you keep and which would you remove? Does that depend on the task?
    - Is there anything you would add?
    - What order do you want to see the fields in? Does that depend on the task?
    - Which of these is most important to you?
- How many years do you want to see as a default?
- When would you see yourself doing each of the following? How likely are you to do each?
    - Sorting
    - Filtering
    - Changing the order of columns
    - Exporting
    - Analyzing data (calculating sums, differences, averages, etc)
        - Where do you want to see Totals
        -
- What, if anything, would you change about this view to make it more useful for you?
- Anything else you think we should know about?
- If they bring up a need for a list of CANs, ask: What would you like to see? What would you expect?

Materials

- 2 wireframe options
    - Separate pre-set views to toggle between
    - Build your own view
- Stickies with possible data to display

Research protocol

Before session

- Open relevant docs:
  User research notes: View a CAN OPS user research: CANs (11/2021) Mural
- Set up notes doc and confirm notetaker
- Check if they participated in PA research and if so, read notes, copy any relevant notes to the research notes doc, including their introduction

Introduction / Session framing

- Welcome
  - Thank you for taking the time to talk with us today!
  - [Introduce self and others on the call.]
  - Confirm audio is working well
- Session framing
  - *Project:* As you know from Emily's email and our presentation at the All Staff meeting last month, we're working with OPRE to begin work on a new system to replace MAPS, which we're calling OPS (OPRE Portfolio management System). The goal is for OPS to improve upon and expand MAPS current capabilities.
  - *Current phase:* While we have gathered a lot of information about MAPS' challenges and opportunities [note: thank them if they were part of PA research], and have articulated a high-level vision for OPS, we're now getting into the work of figuring out just how to deliver on that vision concretely.
  - *This session:* As I mentioned in the email asking for participation, we asked to talk to you because we are starting with CANs and wanted to talk to folks that are Division Directors or CAN Leads. We started with CANs because they are the foundation for anything to happen — if there's no money, nothing can happen! One of the high-level user needs we're trying to meet is to provide functionality that will replace at least some of the spreadsheets we heard folks have to maintain.
- Format & documentation
  - Over the next 25 mins, we would like to show you some very early designs of how you could view a CAN in OPS. We'll walk you through them and be interested in getting your reactions and questions. We also have some specific questions we'd like to ask to better understand how you might use something like this.
  - We are not recording this meeting, but we will be taking detailed notes. The raw notes will only be made available to the project team. We'll synthesize what we hear from all the folks we're talking to and use that to iterate on these designs.

    - Please note, these are *very early designs*. We call them 'wireframes' — we use them to provoke feedback and answer questions we have. Everything is still up for discussion. The more candid and direct you can be with your feedback the better.
- Questions
    - Let us know at any point if you have any questions or concerns.
    - Do you have any questions for us or anything we should know before we dive in?

Wireframe explanation

Alternate the order in which the layouts are shown. Share screen, confirm they can see it.

- 3 tab layout
    - The screen you see here is an idea for what it could look like to view information for a particular CAN.
        - At the top, you can see some general, evergreen information about the CAN that shouldn't change FY to FY. There's the Name (which is a combination of the CAN number and its nickname), a more plain language name for it, CAN purpose, Arrangement type, and Funding Source.
        - In this bottom section, you can see FY-specific information. For each year, there's some information you can see. *Name/explain fields*.
        - We have a hypothesis that it would be useful to see information for this year, but also for future years and all years. That's what these tabs are for. Future years would show the current FY and any future FYs there is data for. All FYs would show you the entire history and future.
- 2 tab layout
    - In this alternative layout, the current FY information is displayed at the top next to the evergreen info.
    - The alternate Future and All FYs views are below.
- Both layouts show the same information, just organized differently.

Questions

- Any immediate reactions/questions/things you'd like to see in more detail?
- What are your reactions to the 2 different layouts we showed you?
- We have a hypothesis that you might use a view like this in a few different scenarios:
  1) You'd want to look at the current FY's budget
  2) You'd want to look ahead at a few FYs to plan budgets/projects

3) You'd want to look at all or a subset of FYs (past, present, future) in order to get a cumulative summary of the CAN

  - Can you confirm/correct our hypotheses?
  - What tasks would each view help you perform or what questions would they help you answer?
  - What tasks or questions would you have that these views don't help you with?
  - Is there a different view you'd like to see (different # of FYs, or different fields)?
- We'd like your feedback on the information we're considering providing for each FY of a CAN:
  - Total FY Funding, Funding available, Funding pending, Potential additional funding, Amount planned, Amount spent
  - Which of these is most important to you?
    - Total Funding vs Available Funding
    - What should we call "Amount planned" vs. "Amount spent"
  - Which of these would you keep and which would you remove? Why?
  - Is there anything you would add?
  - What order do you want to see the fields in? Does that depend on the task?
- We've included a "Totals" row on the views with more than one FY — do you see that being useful? Are there other calculations you'd likely be doing?
- What, if anything, would you change about this view to make it more useful for you?
- What else would you need to be able to stop using spreadsheets?
- If they bring up a need for a list of CANs, ask: What would you like to see? What would you expect?
- Anything else you think we should know about?

Wrap up

Thank you so much for your time today! This has been really helpful.

- Is it okay if we follow up with you if we have any questions when we review our notes?
- Would you like to be included in future rounds of research?
- Any questions or comments for us?

Changes to protocol made over the course of conducting the sessions

Changes to wireframes

- Significantly simplified the wireframes after the first session so that there was less to cover and the difference between the two layouts was only whether they could see the current FY all the time or not.
- Put the wireframes in [a deck] to make it easier to show them to participants; went over to the Mural when we needed to zoom in.

- Showed the wireframes in different order with different participants

Changes to questions

- Questions added
    - “Can you explain what you understand each of the funding data fields to mean?”
        - Ensured that we knew what they thought each meant when we heard their reactions to their importance
        - Helped us understand where our mental models differed
- Questions omitted
    - “Which of these is most important to you: Total Funding or Available Funding?”
            - Based on participants’ understanding of the different data we were providing, the question became less relevant.
    - “What else would you need to be able to stop using spreadsheets?”
        - Only came up with a few participants directly.

Recruiting

Approach

- Shared research plan and identified appropriate participants in collaboration with Product Owner and Executive Sponsor: CAN Leads, Division Directors, and Deputy Division Directors
- Product Owner told them to expect an email from 18F to participate in sessions
- Emailed initial message to entire group
- Plotted responses in a spreadsheet (OPS Research session scheduling) and assigned to maximize the number of participants and ensure we didn’t have too many sessions each day
- Sent calendar invitations with Google Meet video conferencing links
- Sent follow-up messages to confirm invitations were sent and to thank participants

Communications

- Initial outreach message (below)
- Reminder on Nov 8 to send availability
- Thank you to all on Nov 9 confirming that invitations have been sent
- Thank you to all participants on Nov 19 after sessions were conducted

    Good afternoon,

My name is Julia Lindpaintner, and I'm reaching out on behalf of the 18F team supporting the work to design and develop OPS, as Sheila promised. You're receiving this invitation to participate based on your experience managing CANs. We would like to schedule 30 minute 1:1 sessions in the next couple weeks to show you some preliminary designs and learn more about what would assist you in your work. We're hoping to speak to folks from across all divisions.

We may not be able to speak with everyone in this round, but rest assured that there will be more opportunities in the future. If you are willing and able, please reply indicating all of the times within the following windows that you might be available. We'll look at responses and try to accommodate as many sessions as we're able to.

Week of November 8
- Tues 11/9 1-3pm ET
- Wed 11/10 12:30-1:30 ET

Week of November 15
- Mon 11/15 1-3pm ET
- Tues 11/16 10-11:30am ET and 1-3pm
- Wed 11/17 10am-12pm ET
- Thurs 11/18 10-11:30am ET
- Fri 11/19 1:30-3pm ET

Many thanks in advance for your participation!

Julia

Synthesized learnings

About our approach

- Recruiting was seamless; OPRE staff are extremely responsive and it was fairly easy to deconflict and find a time for everyone who was able to volunteer.
- We debriefed as a group after the first session and made significant changes to the wireframes.
- We could have easily talked to each participant for more than 30 mins, but we wouldn't have been able to meet with as many participants. As a first exercise, it was useful to err on the side of more sessions to follow through on the promise that there would be opportunities for OPRE staff to weigh in, but we did have to change our wireframes to

limit and focus the scope of feedback. In the future, fewer longer sessions will likely be preferable.

About the wireframes

- Generally reactions were positive; seemed like an improvement and offered functionality that MAPS does not
- All participants wanted to drill down to the project-level information, the details underlying the top-level CAN numbers
- Current vs. Future vs. All FYs
  - Current is most useful and should be omnipresent
  - Future FYs is helpful if estimated/anticipated funding can be populated for planning purposes
  - All FYs seemed meaningfully less useful than Future FYs
- Info provided and naming
  - Most consistently named thing missing is “amount unspoken for,” that is, the amount of funding that has not been allocated to a project in the spending plan (many folks interpreted “$ available” as this)
  - “$ available” and “$ pending” misinterpreted by several; seems less important for Directors/Deputy Directors
  - For “Amount Spent” — Generally “obligated” seems more useful than “invoiced for” at the CAN level

Summarized answers to our questions with direct quotes

- **What are your reactions to the 2 different layouts we showed you?**
  - More participants preferred the 2 Tab view because it allowed the current FY information to be “front and center” and ever present, but several commented that the 3 Tab view felt “cleaner”

- **We have a hypothesis that you might use a view like this in a few different scenarios — confirm or correct:**
  1) You’d want to look at the current FY’s budget
  - Yes, getting numbers for the current FY is usually the focus.
    - “It provides info about where we currently are. Usually when I’m going to MAPS for info, it’s useful for info about where we currently are.”
    - “The focus is almost always on the current FY.”

  2) You’d want to look ahead at a few FYs to plan budgets/projects
  - Yes, it’s helpful to see estimates for future funding and any planned spending for a CAN.

        - “Most useful to me is the amount planned and balance — what’s the difference between expected funding and amount planned — just to have a sense of how much wiggle room we have in the budget for future years.”
        - “Sometimes we have to look into future years if we have a project with future service components.”
        - “Also as we get close to the next FY, I need to be able to see projections.”

3) You’d want to look at all or a subset of FYs (past, present, future) in order to get a cumulative summary of the CAN
    - Occasionally, but not a priority.
        - “I don’t look back that often as much as where we are and where we’re moving ahead.”
        - “Interesting to see all FYs, but I don’t think I'd use it very often.”
        - “All FY is where I’d go to get past numbers, but that’s less common.”

- **Can you explain what you understand each of the funding data fields to mean?**
    - *Total FY funding — All the funding for a CAN in a given FY*
        - Generally interpreted correctly as the “amount we’re getting in our CAN this FY”
    - *Funding available — The portion of total FY funding that is ready to spend*
        - Generally misunderstood to mean the funding that has not yet been allocated to projects, the “amount I have to play with”
        - One participant interpreted it the way we intended
            - “Helpful to be able to see the Funding Available, because right now Sheila has to email us to tell us when this happens. This would let me see for myself.”
    - *Funding pending — The difference between Total FY funding and Funding available*
        - Generally not understood; confusing.
    - *Potential additional funding — Funding that is not yet confirmed, generally something CAN lead rather than budget team would know*
        - Generally interpreted correctly and considered useful, as long as it could be edited by CAN leads, not only budget team
            - “Could be something in a bill in congress or another office might be planning”
            - “The potential additional planning, that amount is something that someone would enter because they knew conversations were going on but it would not calculate into the total until it’s officially available? That seems really helpful”

- *Amount planned — Amount that has been allocated to be spent on projects*
    - Generally interpreted correctly
        - “To me that’s what’s in the funding plan”
        - “Amount currently in the system allocated to different lines and projects. Projects we’re planning to award, costs we’re planning to pay for.”
- *Amount spent*
    - Confusion around whether this meant ‘amount obligated’ or ‘amount invoiced,’ but overall preference for ‘amount obligated’
        - “Amount spent is obligated. I want to know when Sheila has pushed all the buttons and sent all the money and I don’t need to worry about it anymore.”
        - “I would have thought Amount Obligated would make more sense than Amount Spent.”

- **What should we call “Amount planned” vs. “Amount spent”?**
    - ‘Amount planned’ is okay as is
    - ‘Amount spent’ should be ‘Amount obligated’ rather than ‘Amount invoiced’
        - “I’d want to know [amount invoiced] at the project level, not at the CAN level.”
        - “Don’t need ‘amount invoiced’ at CAN level, makes sense at project level”

- **Which of these would you keep and which would you remove? Why?**
    - Generally all the fields other than “Amount pending” seemed valuable, but the way the numbers were presented was confusing
        - “Maybe some rearranging so that it’s clear that the amount spent is a subset of the amount planned.”
        - “Some definitions for some of the terms would be really useful.”
    - “I really like the Comments section. A note could say ‘budget line is here, but need to remove it/get more money’”

- **Is there anything you would add?**
    - Difference between Amount planned and Total FY funding would be useful
        - “I want to know how much is already tied up vs is free if we have another project we want to do.”
        - Is there a place to explain the difference between what we have plans for vs what we have funded?

        - “Could you add Amount Unplanned? I want to see how much we have that we can use for something else. It will tell me we’re not in the red, in one glance.”
    - Fees
    - Make it possible to change the columns for the future/all FY tables
    - Ensure that totals are automatically calculated from the budget lines

- **We’ve included a “Totals” row on the views with more than one FY — do you see that being useful? Are there other calculations you’d likely be doing?**
    - The Totals row is not essential at the CAN level, but may be helpful at times.
        - “Yes, it's helpful to have that bottom line. I think that’s really cool.”
        - “Total across years seems more useful for a project than for a CAN. I can’t think of a time when I needed to pull up the total for the CAN across all years.”
        - “It’s probably only once a year or something that I need that.”

- **What, if anything, would you change about this view to make it more useful for you?**
    - See the project-level information
        - “I’d generally go to the more specifics, which I assume would be another screen, that would show me all the items there?”
        - “How do we get to the project list? The numbers that are underlying this?”
        - “It’s the project-by-project individual budget lines within a fiscal year that’s more challenging, that I have a higher need for.”
        - “Does this page link to actual projects? Would you be able to nav from this page to which projects are exercising options from there?”
        - “For that FY, the full project list. The planned, the spent. Under Planned, I’d see every single project that has money planned for the FY. Project Name, CAN, Need By Date, Amount, Fees, Total -- all by budget line. Same for Spent.”
        - “I definitely think being able to link to these projects but on those projects being able to get a description of the project very quickly.”
        - “If there were some kind of updates...idk at what frequency...but sometimes I email asking about the status of certain things on a project. Like content status: what tasks are you guys working on? What are the deliverables that are coming up? Are you on schedule?”
    - Help understanding how the numbers related to each other
        - “Too many numbers and they are not agreeing”
    - Ability to edit certain fields as CAN leads

        - “To be able to edit Potential additional funding, comments/notes”
        - “That Date field is also extremely useful. A record of who wrote the comment would also be useful.”
        - “CAN Leads and Division Directors would be the ones who have a better sense of this. Budget Team doesn’t, though they do want to know this. I see this as being helpful for me if I can have control over it.”
    - Estimated funding for future FYs
        - “What I would show is, let’s say at baseline that you typically get X every year. So I’d expect to see that in the Total FY funding for all the out years.”
    - Different views of the data
        - “Sometimes I look at past FY and estimates for future FY in smaller buckets than the overall CAN but not in the weeds of the individual contracts -- more like X amount on grants, X amount on admin costs, etc -- seeing that would be a helpful tool.”
    - Link staff to projects
        - “tag projects with team to see how much $ is committed to each team so we can be strategic and equitable”
    - Visual cues / alerts for updates and status indicators
        - “The Budget Team is constantly changing the numbers because shared costs change, tells us in an email or spreadsheet, but still need to go back to my own spreadsheet”
        - “This will tell me whether the CAN is in the red”
    - Use OPS for planning, ‘playing’ with potential budgets before finalizing
        - Why I’ve found I need a separate spreadsheet: MAPS shows what we’ve all decided we’re doing. But there’s also this planning piece, and getting to shift things around to see how the math comes out. It would be nice to have that ability to play around in the system. ANd then if everyone signs off, for that to be signaled in the system.
        - “Staff don’t want to go through the process of asking budget team to update MAPS until they’ve played out, so I track that offline.”
        - Ability to look at different scenarios without having it loaded into the system, which requires the budget team and becomes this whole process.

- **If they bring up a need for a list of CANs, ask: What would you like to see? What would you expect?**
    - Useful for looking at portfolios of work that span multiple CANs
        - “Being table to look at the Head Start portfolio across multiple CANs would be useful”

        - “If it was all one, if the fiscal year was the same but each row was a different CAN, for all the CANs that fall under the Head Start umbrella.”
        - [in terms of content:] “Yeah, same stuff - I’d want to know total funding expected, available funds year to date, potential additional amount of spending planned, and the amount obligated.”
    - Useful for navigating to the right CAN
        - “I’d want to see all the Home Visiting together. There are a lot of CANs that are related. I can never remember which one is which. So I go into MAPS and open one, realize that’s not the right one, try another, etc. But if I could see a list of all of them, that would help me select the right one. Would be nice to not have to see everyone else’s CANs, just to make it easier to find mine”

- **Anything else you think we should know about? Any questions?**
    - There may be pushback from more established users of MAPS
        - “People who have been here for a long time don’t want to be forced into a standardized box that makes them change the way they do things. That’s a current that cuts across a lot of things in our organization. New people don’t care how things are done and just want a template.”
    - Different info is relevant for past, current and future:
        - “All the fields don’t matter for the future, either. All that matters is what’s planned.”
    - CAN numbers may change even though they are for the same thing
        - “HPOG and Welfare Research, CAN [number] has changed several years ago, congress changed how they give money”
    - There’s some confusion around how funds for research and staffing are distinguished and how shared project costs work
        - “Our funds can sometimes be used for staffing and research. How MAPS is set up now is the funds get split into different pots of money (CANs), one for staffing and one for research. But they are actually one pot of money? I don’t quite know how that actually works.”
        - “distinction between fixed OPRE costs vs. shared project costs would be nice”
        - “estimated shared costs to also be reflected for future FYs”

Takeaways for future iterations

Overall

- Integrate project level information in the next iteration rather than revising the current wireframes
    - We learned that without that, the CAN view will be of limited value
    - The project level information will add significant complexity
- Continue to plan for flexibility to allow users to see the data that is most relevant to them through filtering/grouping features

Layout

- Keep CAN info section small
- Keep Current FY omnipresent (as in 2 Tab layout)
- Try breaking down funding sections to distinguish the numbers that are about incoming funds and the numbers that are about planning
- Explore ways to make it easier to see all the top line data for the previous year and the next year
- Explore how comments will be shown when there are multiple / comment history
- Consider separating the "summary" views ("Future FYs" and "All FYs") from this CAN view depending on the complexity introduced by the project level information

Content

- In future sessions ask more about the CAN info section and confirm it covers necessary fields as this wasn't commented on much in this round
    - Specifically probe on "Funding source" — should it be "Partner"?
- Funding-related data fields
    - Keep 'Total FY funding'
    - Remove or make less prominent 'amount available/pending;' potentially rename
    - Keep 'Potential additional funding;' make clear that it's editable
    - Keep 'Amount Planned;' potentially rename 'Amount in Spending Plan"
    - Add field for difference between total funding and amount in spending plan (possibly called 'funding remaining')
    - Change 'Amount Spent' to 'Amount Obligated'
- Revisit label "CAN Lead" — sometimes CANs have a lead in OPRE and a partner office
- In Comments section, add 'commenter' to track which user left each comment
- Remove 'Totals' for CAN level data
- For future FYs, indicate "estimated" or "expected" for total FY funding to help users plan ahead

- Keep export feature