

18F Path Analyses

Outcomes & Process

Overview

1/ Sample past projects

DOS - USKPA Diamonds project

CMS Advanced Planning Document

Modernization

2/ Army ARL PA - What to expect

1/ Department of State Diamonds


THE PROBLEM

The Kimberley Process (KP) unites industry, federal agencies and civil societies in reducing the flow of conflict diamonds. State and the US Kimberley Process Authority manage a system that ensures rough diamond exports comply with the KP.

The system had fallen into a state of disrepair and had not received updates in 9 years.

18F worked with State and USKPA to set a vision for the product and implement the most necessary repairs.

Outdated site...

**UNITED STATES KIMBERLEY PROCESS AUTHORITY**

licensee login | admin login

[Log off](#)
[Add new licensee](#)
[Licensee list](#)
[Reports](#)
[Register sold certificate](#)
[Cert lookup](#)
[Void certificate](#)
[Archived Reports](#)

Reports

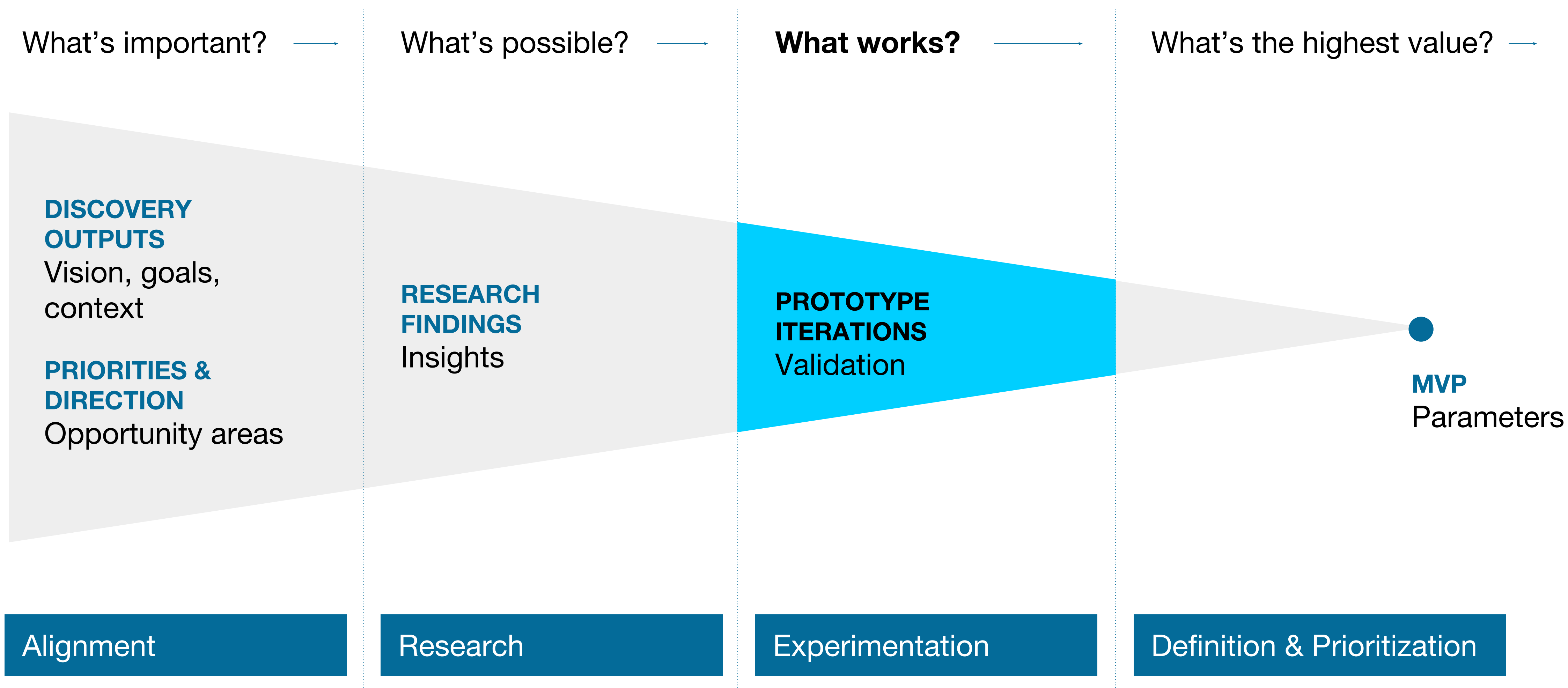
Select:

From: Jan 01 2009 to: Jan 01 2009

2009 Display

Save Excel

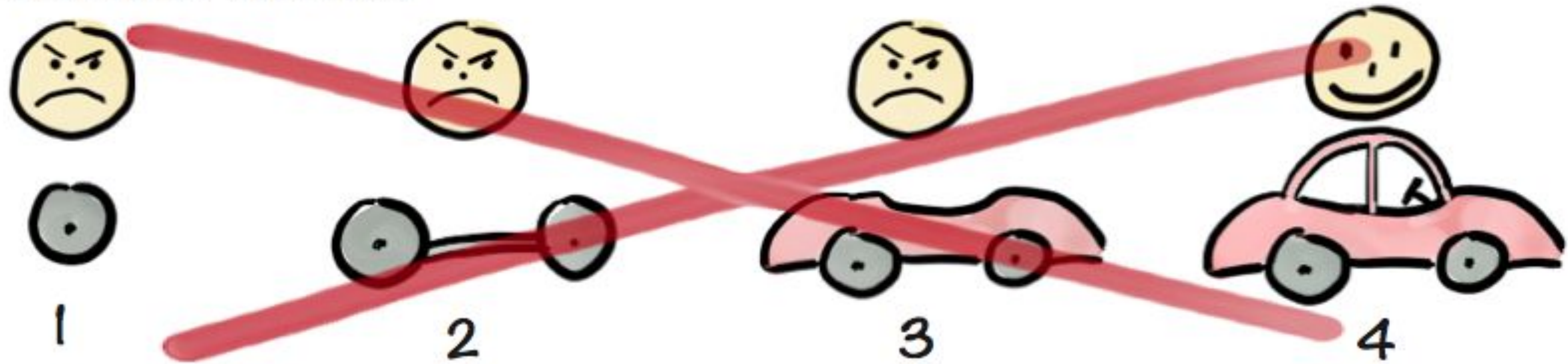
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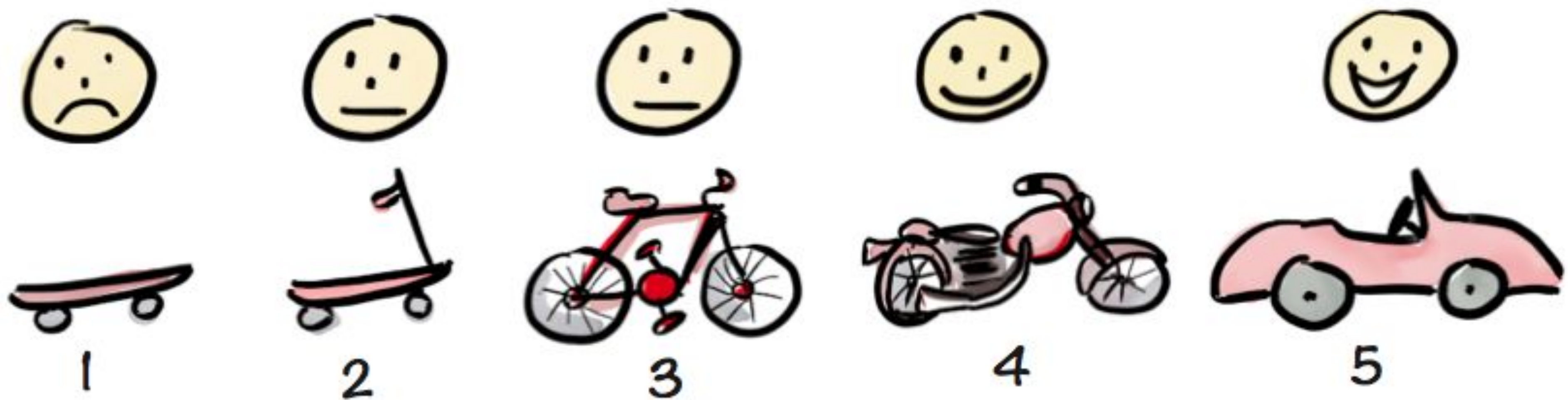
The team constantly improved a usable product, that was used by its target audience the whole time.

Addressing a need, not a feature.

Not like this....



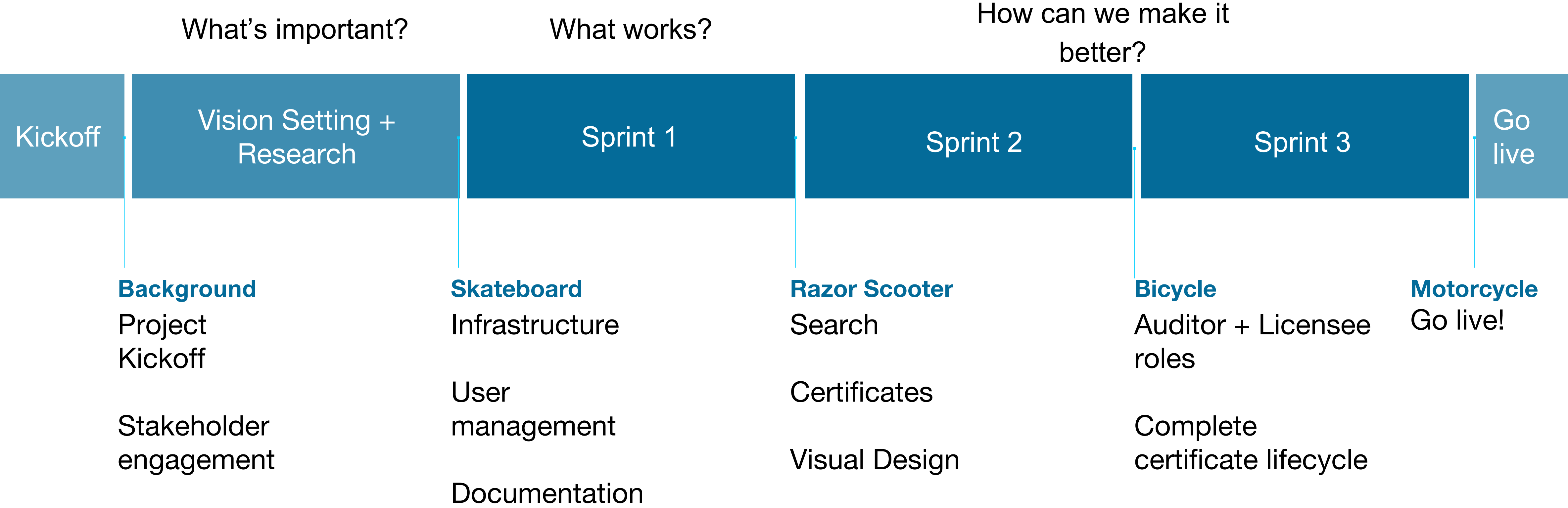
Like this!



18F quickly worked to...

- Create a product strategy
- Ensure highest user needs were met
- Test and iterate in increments using open source and modern development practices
- Share our work and progress every two weeks
- Address data integrity, security, infrastructure issues

Timeline and approach



REDESIGNED SITE



Merriweather bold
for headers

Merriweather regular sub

Source sans pro regular for body copy. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud.

Secure, official, trustworthy,
current, authority

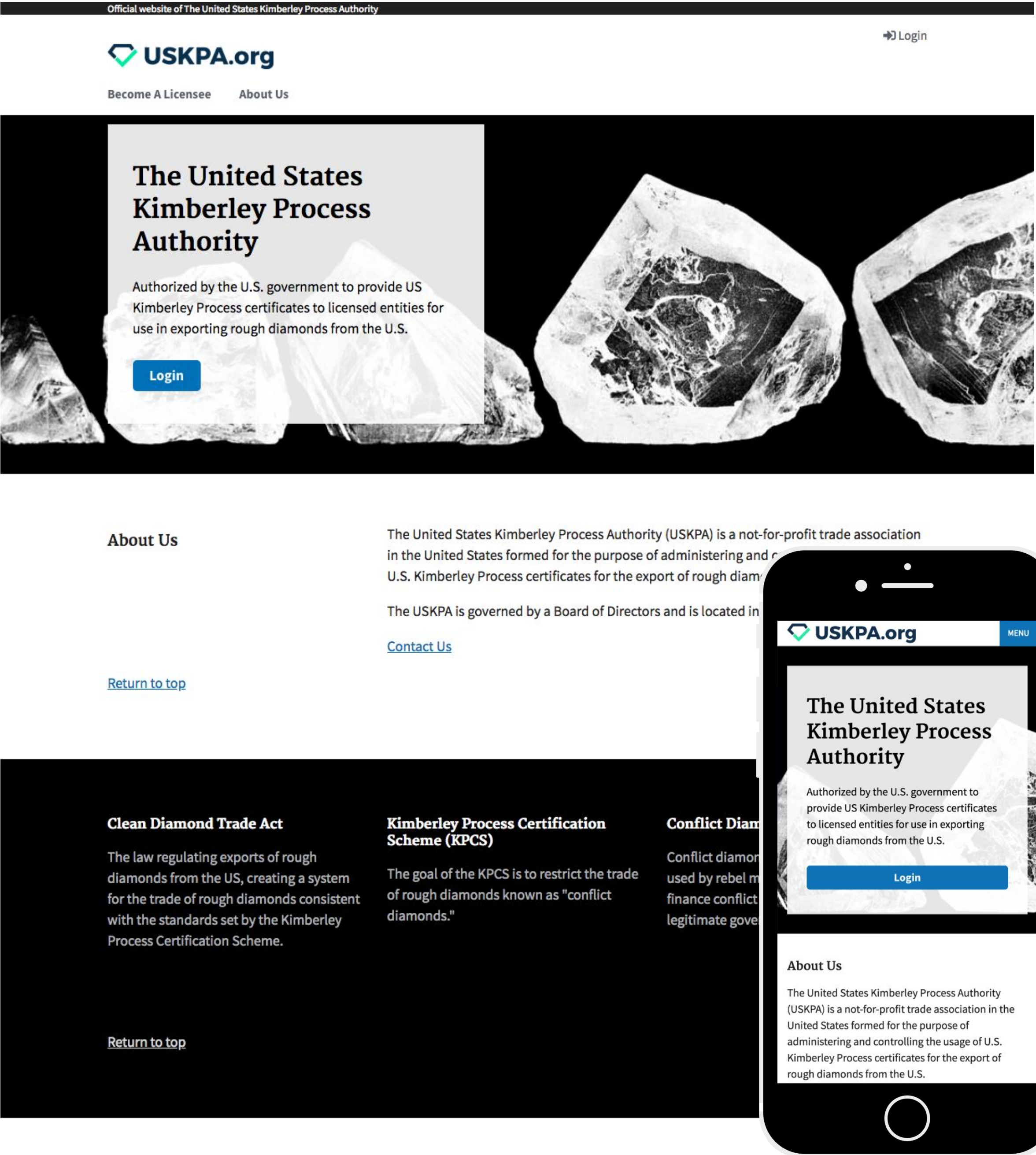
Range one



Range two



Highlight



1/ CMS Advanced Planning Document Modernization

THE PROBLEM

Medicaid programs are federally funded and implemented at the state level. So are the IT systems that drive these programs. The funding process is mediated through APDs (Advanced Planning Documents).



This process is a huge pain

- States have multiple APDs/year
- It's slow; states plan for ~6 months
- They email docs back and forth
- Numbers are checked manually

THE PROBLEM: HOW FUNDING REQUESTS ARE MANAGED

Often 100+ pages, with dozens of pages of accounting that has to be checked by hand.

<i>Health Information Technology Implementation Advanced Planning Document (HIT IAPD) Template</i>	
OMB Approval Number: 0938-1088	
TABLE OF CONTENTS	
SECTION I – EXECUTIVE SUMMARY	<u>Page</u> 3
SECTION II – RESULTS OF ACTIVITIES INCLUDED IN PLANNING ADVANCED PLANNING DOCUMENT (P-APD), INCLUDING SMHP	3
SECTION III – STATEMENT OF NEEDS AND OBJECTIVES	3
SECTION IV – STATEMENT OF ALTERNATIVE CONSIDERATIONS	3
SECTION V – PERSONNEL RESOURCE STATEMENT	4
SECTION VI – PROPOSED ACTIVITY SCHEDULE	5

THE VISION

A single portal for State, Federal, and associated partners to request, review, and respond to submissions from the State.

Vision

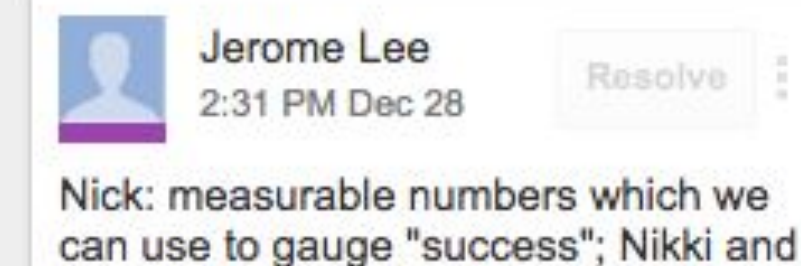
The system will serve as a singular portal for State/Federal/associated partners to request, review, and respond to submissions from the State. This project will make the APD process faster and more consistent, help CMS better track and improve internal APD processes, and ultimately help states do great IT work and fulfill their program goals.

6 month mission

- show enough to get more funding, continue the work
- create something that is useful for states
 - improve the way they submit APDs to CMS
- create something useful for feds
 - improve the way that analysts review APDs
 - improve the way that analysts comment on APDs
 - improve the way that analysts track APDs

Goals

#	pri	goal	measure(s)
1	1	System complies with federal and CMS standards	<ul style="list-style-type: none">• # of WCAG passes/failures• # of violations of Standards and Conditions
2	1	APD submissions are administratively complete	<ul style="list-style-type: none">• % completeness of submissions regarding regulatory components required for HITECH (histogram or average completeness)
3	1	Supporting documents, procurements, and APDs can be viewed together	<ul style="list-style-type: none">• usability test findings• abandon rate• dwell time on individual components
4	1	The scope of the proposed project is clear, and analysts can determine whether or not it fits within the scope of HITECH	<ul style="list-style-type: none">• usability test findings• # of review cycles to approval
5	1	CMS analysts can provide feedback on submissions and ask for additional information	



Outcomes, not requirements



Naretakis commented 23 days ago

Member



Use cases have been shared with CMS APD team. Expecting to have consolidated feedback by 3/22/18



Naretakis commented 15 days ago

Member



@lauraponce @quarterback Use-Cases and their basic flows have been updated. Low priority pass to you to make sure these make sense and will be useful.



Naretakis assigned **quarterback** and **lauraponce** 15 days ago



lauraponce commented 15 days ago

Member



Just read through the use cases and this all looks great. It's so helpful to have this outlined.



quarterback commented 14 days ago

@Naretakis This is very helpful!

Client = partner



Nicolas Aretakis 10:49 AM

uploaded this image: **Oh yeah! Feeling good:** ▼

Dashboard [Documentation](#) [Updates](#) [Status](#) [Contact](#) [Log out](#)

[Overview](#) / [sandbox-hhs](#) / [nicolas.aretakis](#) /

HITECHHELLO [RUNNING](#) [Open app](#) [Restart app](#)

Usage and allocation

Instance memory used	Instance memory allocation
<div><div></div></div> 16 MB 240 MB available	256 MB
Instance disk used	Instance disk allocation
<div><div></div></div> 141 MB 883 MB available	1 GB

Instances
1
Instance applies to memory and disk

Total memory used
16 MB 9 GB quota
Total disk used
141 MB

1 1

**Prototyping
in the cloud**

Aretakis, Nicolas J. (CMS/CMCHO) <Nicolas.Aretakis1@cms.hhs.gov>

Mar 29 (13 days ago)



to CMS-testers, laura.ponce, Nikki, me, Jerome

Greetings State Testers,

We are continuing our efforts to improve the HITECH APD process and improve our early prototypes based on stakeholder **feedback**. We will be attending the Health IT Connecting conference in Baltimore next week and would like to connect with any state staff who might also be attending. If you are not attending, don't worry, we'll have more opportunities to do virtual testing in the near future.

We have identified some possible workshop sessions where we'd like to get **feedback** on current designs and continue to refine and improve based on your **feedback**. Please fill out this [Google Form](#) with your availability, or reply back to me and we will reach out with more info on the space/room we have available.

- 4/5 Thursday 11:50–12:30 ET
- 4/5 Thursday 2:45–3:45 ET
- 4/6 Friday 8:45–9:45 ET
- 4/6 Friday 11:00–11:30 ET

We really appreciate your time. Feel free to reach out if you have any additional questions!

Thanks in advance,

Nick Aretakis

Health Insurance Specialist

Centers for Medicare & Medicaid Services

☎: 303.844.7117 | ✉: Nicolas.Aretakis@cms.hhs.gov

Involving users early

THE PRODUCT

States can track all of their APDs in one place

The image displays two overlapping web application interfaces. The background interface is the 'State Dashboard', which features a dark blue sidebar on the left with a map of California and navigation options under 'Documents' (Open existing: 2018 CA IAPD-U, 2017 CA IAPD-U, Contract 1, Contract 2, Contract 3, Contract 5; Create new: IAPD-U, Contract). The main content area of the State Dashboard includes a 'Current statuses' section with a table listing '2018 IAPD-U', 'Contract 1', 'Contract 2', and 'Contract 3', each with a 'Sub' status and a date. A 'Recent activities' section is also visible. The foreground interface is a browser window titled 'CMS :: HITECH :: APD' showing the 'My Dashboard' page. This page has a teal sidebar with 'California APDs' and a list of '2019, 2020 CA APD' entries. The main content area of the browser window includes a 'My Dashboard' heading, a descriptive paragraph about using the eAPD, and a 'California APDs' section with a 'Create new' button and two document entries titled 'HITECH APD for FFY 2019, 2020'.

State Dashboard

Log out

Current statuses

Sort by: Recent Filter by: All

Recent activities

Filter by: All

Documents

Open existing

- 2018 CA IAPD-U
- 2017 CA IAPD-U
- Contract 1
- Contract 2
- Contract 3
- Contract 5

Create new

- IAPD-U
- Contract

2018 IAPD-U Sub 03/25

Contract 1 Sub 03/25

Contract 2 Sub 03/25

Contract 3 Sub 03/25

California APDs

- 2019, 2020 CA APD
- 2019, 2020 CA APD
- 2019, 2020 CA APD

My Dashboard

Use the eAPD to build and manage your state's Advanced Planning Documents. Follow the instructions to enter relevant information. Save your work in progress and come back to a draft at any time. Each APD your state creates in the eAPD will be listed here for you to review or edit. To submit an APD, open it and select Save as PDF, then send the document to CMS just like you've done before.

California APDs Create new

HITECH APD for FFY 2019, 2020

HITECH APD for FFY 2019, 2020

IAPD-U 2018 Due in 8 days

THE PRODUCT

Submissions are the same from state to state

The screenshot displays the '2018 California HITECH APD' submission interface. On the left is a dark blue sidebar with a map of California at the top. Below the map, the sidebar contains several expandable sections: 'Program Summary', 'Results of Previous Activities', 'Program Activities' (which is expanded to show 'Activity List', 'Activity 1', and a list of sub-items including 'Short Activity Summary', 'Activity Description', 'Goals and Objectives', 'Alternative Analysis', 'Personnel Resources', 'Non-personnel Costs', 'Cost Allocation and Other Funding Sources', 'Activity Schedule', and 'Standards and Conditions'), 'Proposed Budget', 'Assurances and Compliance', and 'Executive Summary'. The main content area has a top navigation bar with 'My Dashboard', 'Help', and 'Log out' links. Below this, a breadcrumb trail reads 'Program Activities > Activity 1'. A 'Short Activity' summary box is partially visible. The central part of the page is titled 'Program Activities' and includes a description: 'Explain the goals, timelines, and costs associated with each activity. Activities are narrowly scoped bodies of work that comprise the APD as described within the Program Overview section.' Below this is an 'Activity List' section with instructions to 'List as many activities as necessary to cover all scope related to this APD.' It provides examples of activities and a blue callout box explaining that 'Program administration pertains to implementing the EHR Incentive program itself, including state and contractor costs associated with operating EHR incentive program and SLR enhancements/upgrades. All APDs must provide activity details for program administration.' A list item '1. Program Administration' is shown with radio buttons for 'HIT' (selected), 'HIE', and 'MMIS'. A yellow 'Add activity' button is at the bottom of the list. At the very bottom, a dark blue footer bar shows the breadcrumb 'Program Activities > Activity 1: Program Administration (HIT)' and an upward arrow.

THE PRODUCT

Budgets are generated programmatically

Two-year budget* FFY 2017 - FFY 2018

Quick view: [FFY 2017](#) [FFY 2018](#) [Two year total](#)

	FFY 2017			FFY 2018			
	Total computable	Federal share	State share	Total computable	Federal share	State share	Total c
HIT activities							
Project state staff	\$2,456,324	90%	\$1,400,000				
Non-personnel	\$4,321,111	75%	\$2,456,324				
Contracted resources	\$2,456,324	50%	\$2,456,324				
Resource 1	Total \$9,000,432		\$6,552,172				
Resource 2	\$3,678,543		\$2,456,324				
Subtotal contractors	\$2,456,324		\$1,400,000				
Subtotal HIT	\$2,456,324		\$2,456,324				
MMIS activities							
HIE activities							
Project state staff	\$2,456,324		\$1,400,000				
Non-personnel	\$2,456,324		\$2,456,324				
Contracted resources							

CMS :: HITECH :: APD

https://hitech-apd.app.cloud.gov/apd#activities-list

CALIFORNIA
2018 HITECH APD

State Profile Contact Information

Program Summary

Results of Previous Activities

Program Activities

Activity Schedule Summary

Proposed Budget

Summary Budget Table

Federal share by FFY Quarter

Incentive Payments by FFY Quarter

Assurances and Compliance

Executive Summary

Certify and Submit

Save APD

Save as PDF

Summary Budget Table

This table itemizes the costs for each activity by federal fiscal year (FFY). The table breaks out the total share, federal share, and state share. Amounts are calculated automatically.

		FFY 2019			FFY 2020			FFY total		
		Total	Federal	State	Total	Federal	State	Total	Federal	State
HIT activities										
Project state staff	+	\$1.6M	\$1.44M	\$160,000	\$1.64M	\$1.48M	\$164,000	\$3.24M	\$2.92M	\$324,000
Contracted resources	+	\$2.46M	\$2.22M	\$246,312	\$2.55M	\$2.29M	\$254,781	\$5.01M	\$4.51M	\$501,093
Non-personnel	+	\$4.32M	\$3.89M	\$432,111	\$1.99M	\$1.79M	\$198,753	\$6.31M	\$5.68M	\$630,864
Subtotal	+	\$8.38M	\$7.55M	\$838,423	\$6.18M	\$5.56M	\$617,534	\$14.6M	\$13.1M	\$1.46M
HIE activities										
Project state staff		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contracted resources		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Non-personnel		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MMIS activities										
Project state staff		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contracted resources		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

*HIT activities in the table are at the 90/10 level. To view other

Sites we've launched

<https://www.everykidinapark.gov/>

<https://www.fec.gov/>

<https://www.uskpa.org/>

<https://www.usaspending.gov/#/>

<https://openforest.fs.usda.gov/christmas-trees/forests>

Many more examples of past work

<https://18f.gsa.gov/what-we-deliver/>

2/ Army ARL PA:

What to expect

18F Foundational ideas



Agile development supports these approaches and builds software with less risk



Product thinking keeps us constantly moving toward the right outcomes



User-centered design helps us understand where to go and why



DevSecOps helps us build robust solutions that we can constantly test — and update



Agile contracting lets us make sure that we're working collaboratively with the right vendors

Rough Timeline

Week 1-2	Weeks 3-4	Weeks 5-6	Weeks 7-8
<ul style="list-style-type: none">● Kickoff● Plan research● Conduct initial research	<ul style="list-style-type: none">● Conduct more research● Discuss initial findings● Revise problem focus if needed● Mid-project check-in	<ul style="list-style-type: none">● Finish research● Analyze and discuss findings● Incorporate team feedback● Develop, discuss, prioritize recommendations	<ul style="list-style-type: none">● Incorporate team feedback● Final presentation

We are here.

Sprint ceremonies

How we stay in touch and communicate with the team and stakeholders during a sprint

Here's an example of a two-week sprint schedule (typical in development; we can condense it to one week)...

	Monday	Tuesday	Wednesday	Thursday	Friday
Sprint 1	Sprint 0 review	Sprint 1 planning	Daily standup	Daily standup	Daily standup
	Sprint 0 retro				
	Daily standup	Daily standup	Daily standup	Daily standup	Daily standup
				Sprint 2 grooming	
Sprint 2	Sprint 1 review	Sprint 2 planning	Daily standup	Daily standup	Daily standup
	Sprint 1 retro				
	Daily standup	Daily standup	Daily standup	Daily standup	Daily standup
				Sprint 3 grooming	

Sprint planning

Purpose

Review previous and outstanding tasks; negotiate a sprint to-do list

What happens

Team prepares by bringing sprint goal and task ideas; team asks questions to understand priorities; team negotiates a sprint to-do list

Duration

~One hour for a one-week sprint

Outputs

Sprint goal; sprint to-do list

Daily standup

Purpose

Surface and remove obstacles

What happens

Each team member answers the questions:

- What did you do yesterday?
- What will you do today?
- Are there any obstacles in the way?

Duration

Not more than 15 minutes daily

Outputs

List of obstacles to remove; potential list of more in-depth conversations to have

Sprint review or “Weekly check-in”

Purpose

Showcase completed work to stakeholders, build buy-in

Duration

~1 hour

What happens

Team demonstrates completed work to stakeholders and users

Outputs

Actionable feedback from stakeholders and users

Sprint retrospective

Purpose

Team reflects and can adjust practices as needed

Duration

~1 hour

What happens

Team reflects on what worked during the sprint (from a process perspective), and what could be improved

Outputs

Process experiments to try

Thank you

Contact andrew.dunkman@gsa.gov,
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eleni.gesch-karamanlidis@gsa.gov

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