



Building an Interprofessional Literature Review Service Using a Service Framework and Design Thinking

The Team

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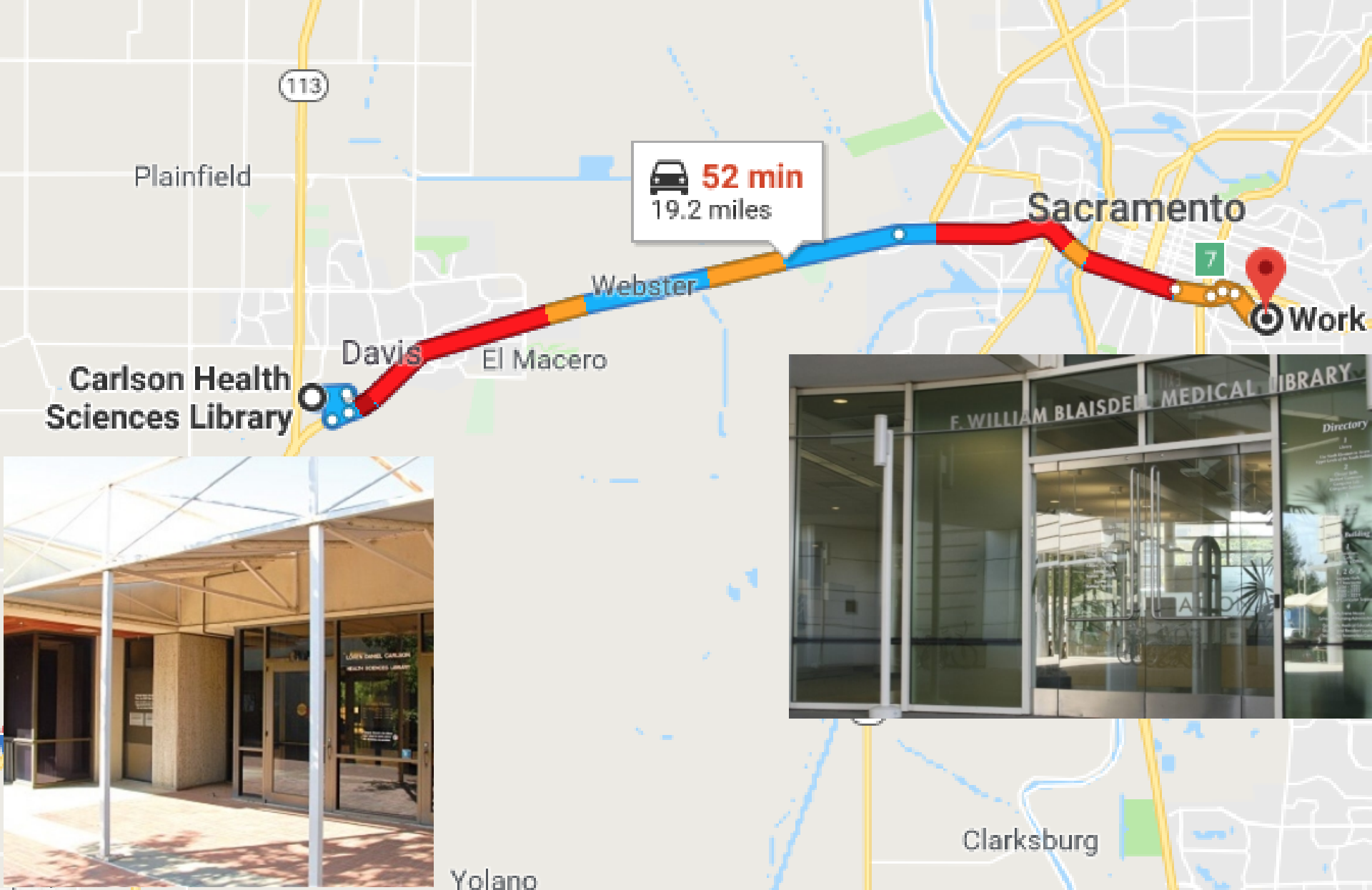
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Background



Why?

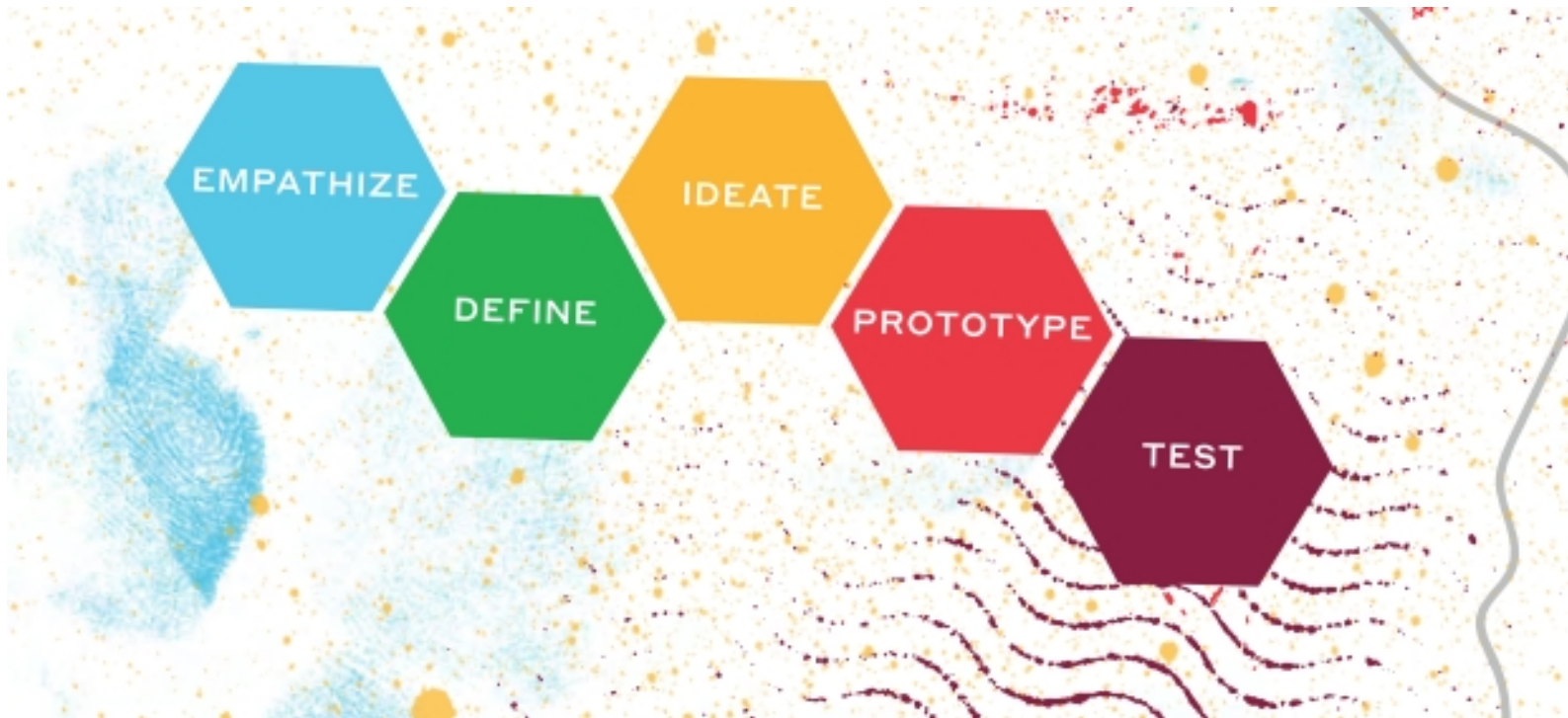
- Formalize a service point around work we're already doing
- Build in a way to assess the work we do on systematic reviews (e.g., time, production of end product, level of collaboration)
- Create a service framework and process to use again in the future (e.g., bibliometrics services, others)





Our Development Process

Overarching Approach: Design Thinking



Step 2 – Information Gathering

- Models of interdisciplinary systematic review services
- Barriers/facilitators – what does & doesn't work
- Library needs (e.g., software, people, training, etc.)
- Program/service evaluation
- Service models (e.g., cost/no-cost, searches only, authorship, etc.)
- Marketing and web presence







Step 3 – User & Library Needs

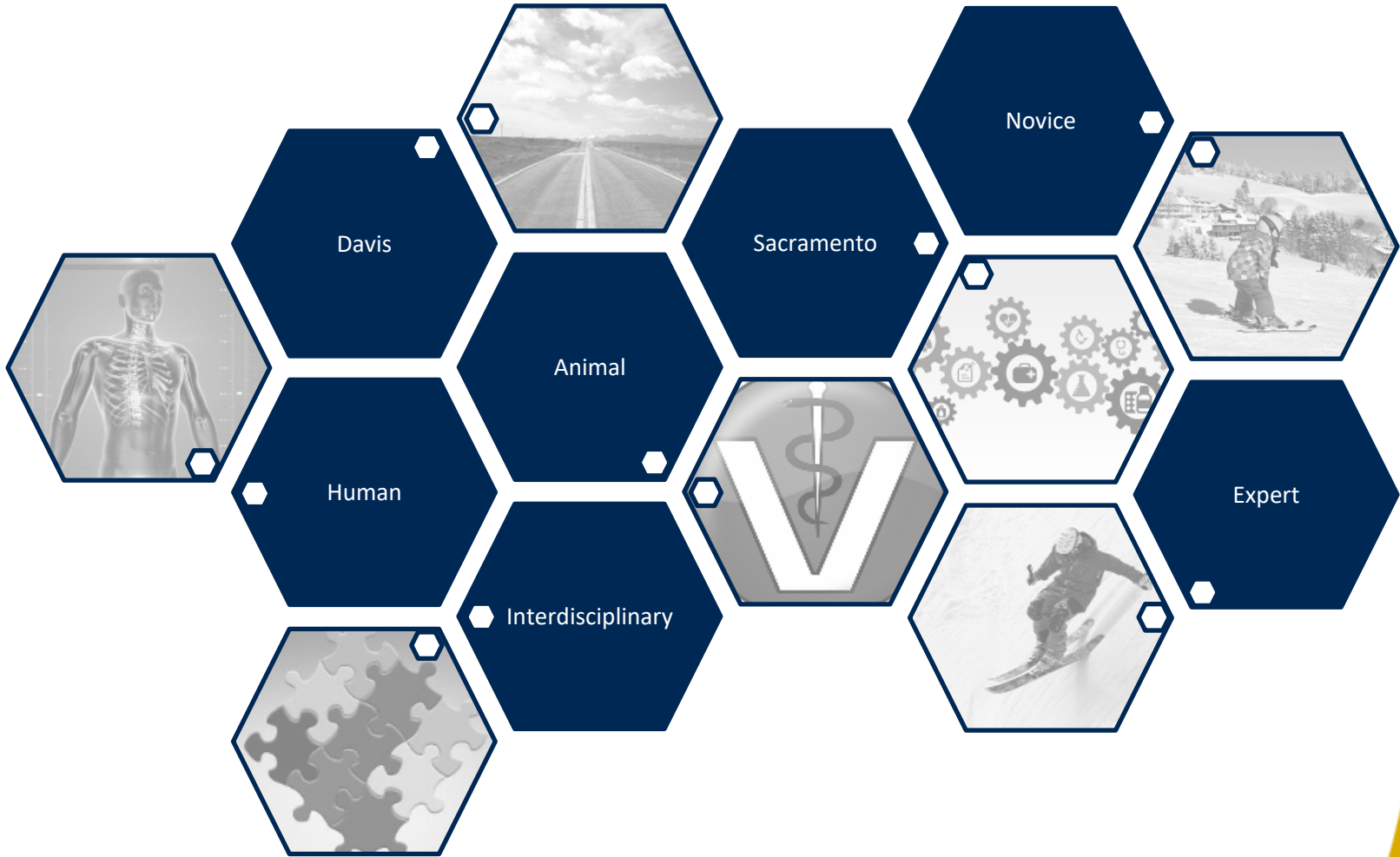
Empathize

- Personas
- User stories
- Librarian stories
- Interviews

Goal: understand needs of the people who will use and deliver the service

User Stories Brainstorm Document

User	What they want/scenario	Potential library challenges	Potential library actions
 Faculty member knowledgeable about and experienced with systematic reviews, with a clear & focused question and predefined inclusion/exclusion criteria	<ul style="list-style-type: none"> - help with advanced searches in multiple databases - do they want help with methods section/main article? 	<ul style="list-style-type: none"> - time to execute the searches - how do we figure out who takes the review (how to divide incoming work) - will we deliver - EndNote files if computer doesn't support EndNote? - Grey literature - Interdisciplinary /collaborative esp. w public health 	<ul style="list-style-type: none"> - assign librarian - librarian plan w/faculty - discuss co-authorship, if applicable - searches executed - delineate agreed services (just searches? searches and citation wrangling, etc. - discuss Software - are they using EndNote, Covidence, Distill, SUMARI? (Will/can we support this now, later?) - tracking the reviewer so we can keep track of how many, what kind, topics of reviews (how will we do this?)
 Medical student told by faculty member to "go to library and have them help you do a systematic review" <ul style="list-style-type: none"> - no team - unfocused question - no idea what a systematic review really is 	<ul style="list-style-type: none"> - to do what faculty member suggested - a full systematic review - TODAY! 	<ul style="list-style-type: none"> - time - "caught in middle" - deliver disappointing news 	<ul style="list-style-type: none"> - offer "types of reviews" article as discussion point ("Typology of Reviews") - suggest a discussion with faculty member - help with focusing a question to discuss with faculty member - offer resources on web re. "what is a systematic review?" etc. - teaching opportunity
 Resident or fellow with 1-2 yrs for a scholarly project. Wants to do a systematic review. Does not have a team but does have a focused question.	<ul style="list-style-type: none"> - they have limited time frame - they have project in mind - lack of a team problematic 	<ul style="list-style-type: none"> - explain/document resource of "what is a sys rev" (e.g., you can't do one by yourself) 	<ul style="list-style-type: none"> - have set of resources available - articles/videos/etc - to support their setting up the review and coming back when ready, journal guidelines, PRISMA flow sheet, handout for finding full text, handout for importing to other databases, description of more common other reviews (e.g., scoping, mapping, etc.)
 Non-affiliate. "Someone" wants us		<ul style="list-style-type: none"> - does the PI need to be affiliated with UC Davis? - see these situations where we might help someone 	<ul style="list-style-type: none"> - say no, with a rationale - refer them to their own institution's librarian (if applicable)



Step 4 – Service Framework

Define

Components:

- Service name
- Service description
- Service delivery
- Budget
- Service evaluation
- Sunsetting

Service Framework Brainstorming FINAL

Service Name

- Proposed names for the service:

Systematic Review Service

Service Description

- Purpose/overview of service – what is it?

This is a service for literature reviews that follow specific methodology or guidelines that require documentation of reproducible search strategies across multiple databases, yielding comprehensive retrievals to reduce bias and/or using appraisal. For example, systematic reviews with or without meta-analysis for journal publication, policy analysis, comparative effectiveness research, scoping reviews, health organization studies and projects (e.g., WHO, Gates Foundation, CHBRP, clinical pathways, others). Literature reviews of other types are not included in this service and will be handled as usual.

Reference and definition of systematic review:

From [Ulman, L. S. \(2011\). Systematic reviews and meta-analyses. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 20\(1\), 57.](#)
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024725/>. "Systematic reviews differ from traditional narrative reviews in several ways. Narrative reviews tend to be mainly descriptive, do not involve a systematic search of the literature, and thereby often focus on a subset of studies in an area chosen based on availability or author selection. Thus narrative reviews while informative, can often include an element of selection bias. They can also be confusing at times, particularly if similar studies have diverging results and conclusions. Systematic reviews, as the name implies, typically involve a detailed and comprehensive plan and search strategy derived a priori, with the goal of reducing bias by identifying, appraising, and synthesizing all relevant studies on a particular topic."

Also see UCSD Libraries web guide on systematic reviews:

<https://www.library.ucsdavis.edu/guide/systematic-reviews/#what-is-a-systematic-review-2>

- What need does it fill?

This service will normalize and standardize the intake process for reviews of this nature. It will also allow for better tracking of these types of reviews, which are very time and labor intensive for librarians. Lastly, it will allow us to spread the work according to expertise, interest, and available time.

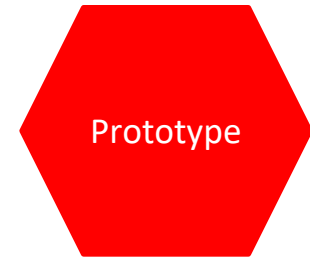
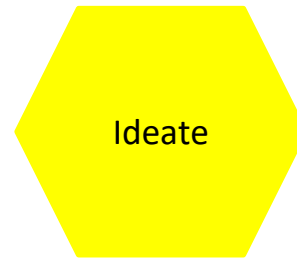
- Who is the audience? Be specific, who is most likely to use this service?

UC Davis affiliates (e.g., current faculty, students, researchers with a documented ucdavis.edu email address) - a UC Davis affiliate must be an active member of the review team and serve as the main point-of-contact on the project (exceptions will be considered on a case-by-case basis).

- How will people use the service?

When contacted for a "systematic review" or "literature review", librarians will ask requestors to fill out an intake form (or fill it out on their behalf). That form will help us

Step 5 - Prototype



- Collaborative brainstorming and discussion on all service aspects
- Software demos (e.g., SUMARI, Covidence, DistillerSR), inviting users to participate
- Web page revisions
- Intake form
- Tracking considerations
- Feedback

SUBJECT GUIDES

Systematic Reviews

by [Bruce Abbott](#), [Amy Studer](#), [Nicole A Capdarest-Arest](#), [Megan G. Van Noord](#), [Erik Davis Fausak](#) — March 14, 2019



Courtesy of the National Library of Medicine

This guide provides an overview of the systematic review process, definitions, best practices related to database selection, developing and documenting the search strategy, and managing publication citation data. Resources and strategies for finding existing systematic reviews are also included.

Are you looking to collaborate with a librarian on a systematic review? Complete our [intake form](#) to request a consult.

Step 6 - Test

Test



Consultations and collaborations on systematic review projects are provided for current members of the UC Davis community (e.g., current faculty, students, researchers with a verified ucdavis.edu email address). A member of the UC Davis community must be an active member of the review team and serve as the main point-of-contact for the project.

Please complete this form to the best of your ability before scheduling a consultation with a librarian related to a systematic review, as this will help us plan the meeting. By "systematic review," we mean reviews requiring a systematic, reproducible, documented approach to the literature search.

For more information on systematic reviews as you complete this form, please refer to our [online guide](#).

For more information on different types of projects related to literature reviews, please refer to [resources about review types](#). If you wish to consult a librarian for another type of review project or consultation that is *not* a systematic review, please [contact your librarian](#) directly.

Your name (last, first):

Feedback

- Excitement for meeting software needs
- Increase in number of requests
- Knowledge of library as a resource for the process
- Peer support within the library

“I'm really happy to see Davis moving forward with a more streamlined system. Very cool!”



Step 7 – Continuous Redesign

- Tracking reviews across 2 campuses
- Software solutions
- Forms and processes that work for us as well as larger Library



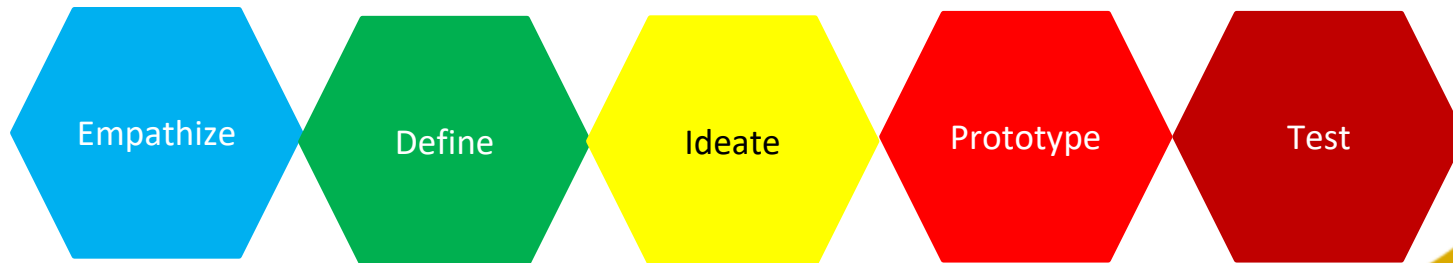
Conclusion



Work In Progress

What worked best

- ✓ Design thinking approach can be useful way to build a service
- ✓ Framework to hone in on service definition
- ✓ Human-centered
- ✓ All ideas worth discussing
- ✓ Flexibility and new ideas are key



Tips

- Resource (online): “[A Virtual Crash Course in Design Thinking](#)”
- Seriously consider all input (both internal and external)
- Use frameworks to build services

Name	Characteristics	Marketing
Purpose	Resources	Training
Needs	Timing	Tools
Audience	Location	Budget
Usage	Restrictions	Evaluation

Questions?

Contact us:



