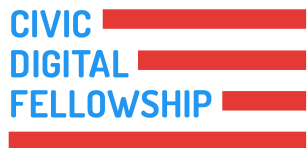# CHARTING A STRATEGIC WAY FORWARD FOR NCATS DATA SCIENCE

National Center for Advancing Translational Sciences (NCATS)

Christine M. Cutillo, M.M.C.i. — Data Science Lead, OD

CIVIC DIGITAL FELLOWSHIP

NIH

MAIA MATERMAN
Olin College
CS + Human Centered Design

THE CHALLENGE

imbalance in resources applied to different informatics efforts

no training for staff who are data science novices

hard to get projects across the finish line

lack of data lifecycle / management policy at NCATS

building the plane as we fly it mentality

sharing of resources or lessons comes up more ad hoc.

prioritization is nonexisten

so many different collaborative platforms -- - annoying!

considerations about value to public or

papers and projects aren't disseminated effectively

need for a project at a given time

need more proper documentation for tools

usability feel secondary sometimes

Silos, silos,

lack of standardization of coding and data practices

thinking of IT/informatics as an unlimited resource

staff are overburdened and burnt-out

no coordination of current IT resources

It is difficult to know the process and how to get help

Need: Overarching Strategy for NCATS Data Science

THE METHOD

Assess → Ideate → Focus → Commit → Act → Learn → (Living Vision)
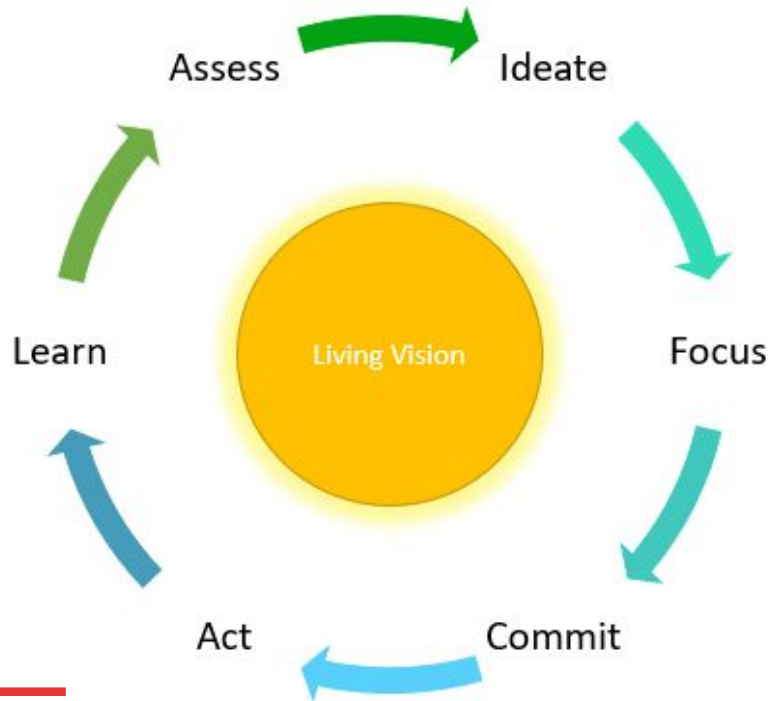
& **"You can't improve what you can't measure"**

THE PROCESS

Understand our Portfolio → Visualize our Portfolio → Understand Us → Move Us Forward → Get Feedback → Follow our Progress

UNDERSTAND OUR PORTFOLIO

171 projects initially identified
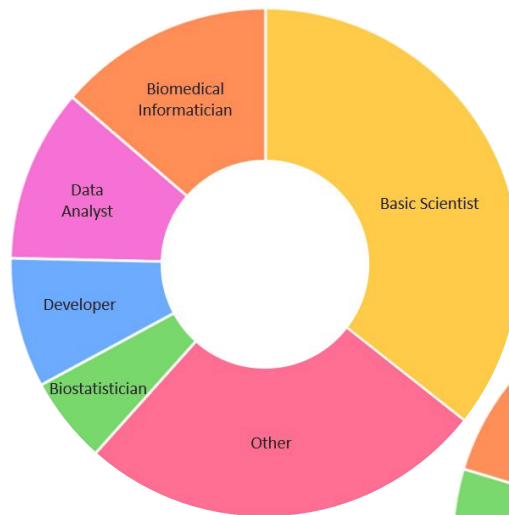
20 interviews over 6 days

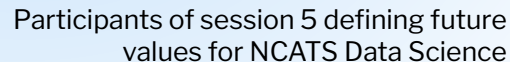**54 projects detailed & inventoried**
via survey

VISUALIZE OUR PORTFOLIO

- Allowed us a greater understanding of our portfolio

- Will serve as a foundation for future tracking dashboard

Left: Breakdown of Records by Intended End User

Right: Breakdown of Records by NCATS Topics Addressed

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UNDERSTAND US

Participants of session 5 defining future values for NCATS Data Science

UNDERSTAND US

"lots of tech expertise at NCATS"

"lack of success is not a failure"

"culture of 'yes' let's try this!"

5 strategizing sessions
70+ people from across NCATS

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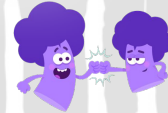
MOVE US FORWARD

Impactfully
Innovative

Sustainable

Inclusive,
Equitable and
Diverse

Transparent,
Open and
Communicative

GET FEEDBACK

I think that's right ▓▓. I interpret this to mean "solution driven" "data-driven" and "focused" based on the conversation I attended.

November 30, 2020, 12:22 PM

Would impact fit with innovative and cutting edge?

November 30, 2020, 10:25 PM

What does this mean? Is this where data-driven lives? I really hope we at NCATS are using the data to make decisions rather than just making pretty dashboards or images for journal covers.

November 24, 2020, 1:47 PM

And should this be a value rather than a vision pillar?

November 30, 2020, 11:11 PM

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FOLLOW OUR PROGRESS

Monthly Check Ins

Community Building

Update Surveys

FOLLOW OUR PROGRESS

Monthly
Check Ins

Update
Surveys

Community
Building

**Quarterly
All Hands**

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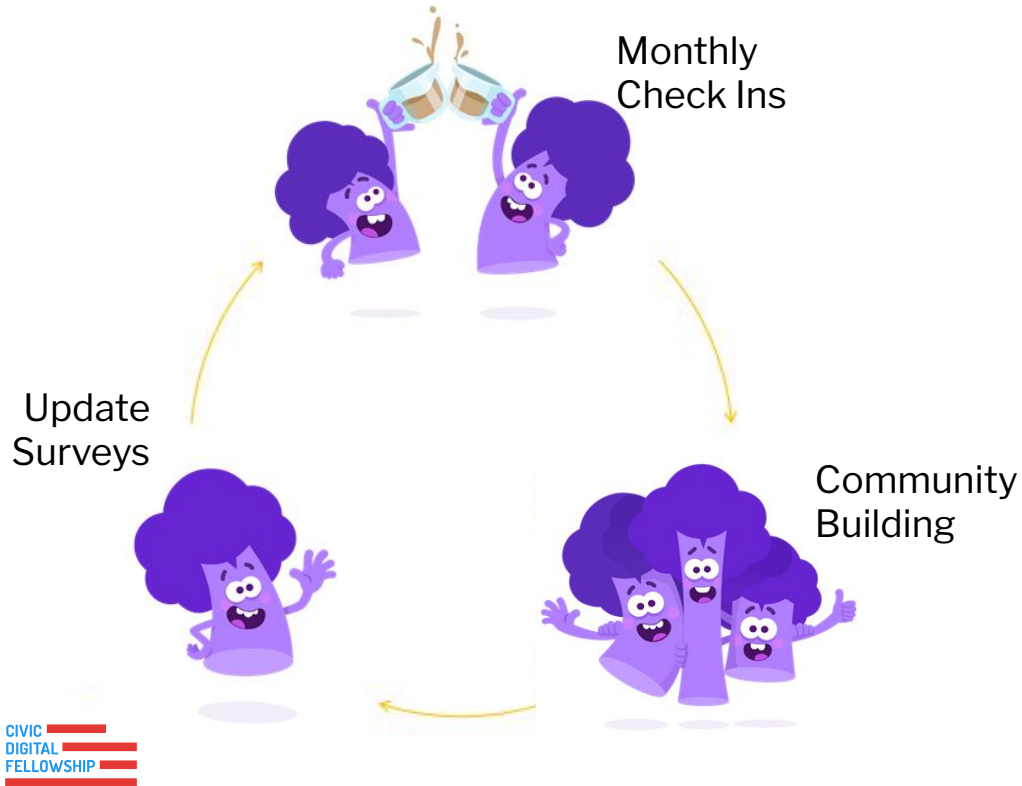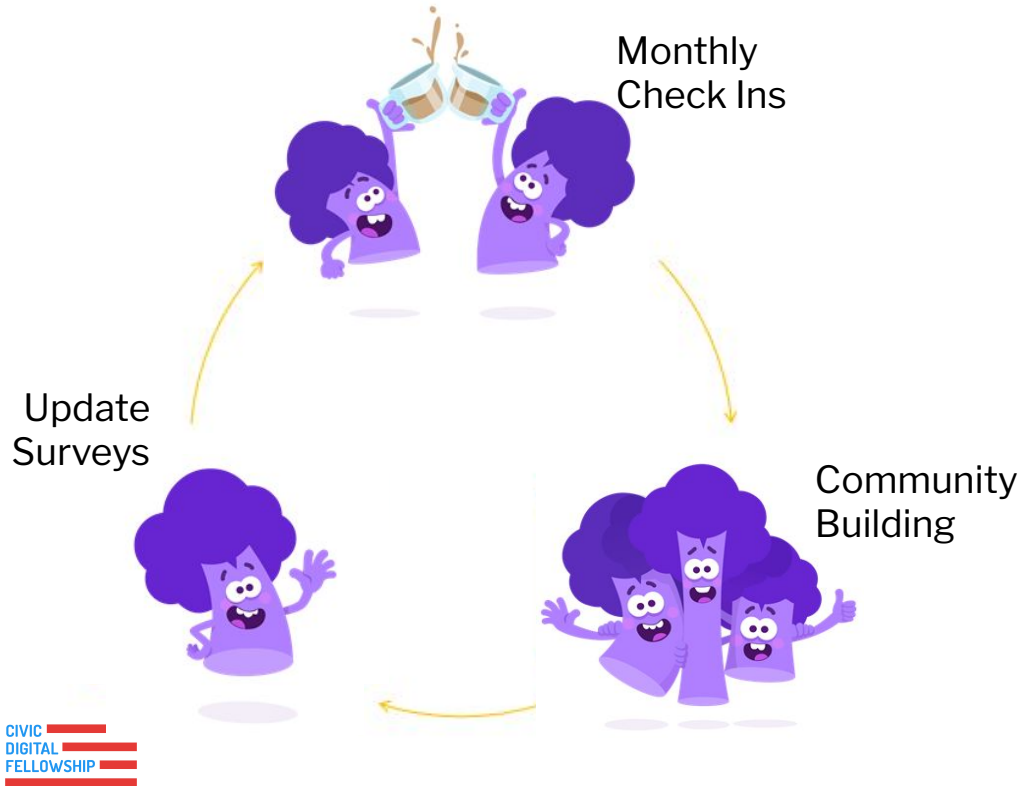
THE IMPACT

Inventory

Strategy

Processes

→
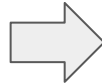
Empowerment, Foundation, & Community!

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NEXT STEPS

Short Term:

- Implementing *New Project* and *Update* workflows
- Creating *Strategy* and *Project Tracking* dashboard infrastructure
- Continuing to *Inventory*

Longer Term:

- Align around strategy and engage with NCATS Data Science community month over month and year over year!

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THANK YOU!

To so many people…

Christine Cutillo

Jess Mazerik

Rachel Dodell, Chris Kuang and Ariana Soto

Song Hia

Joni Rutter and Kyle Brimacombe

Everyone in NCATS Data Science