

## Advancing and Mobilizing Citizen Science Data through Integrated Sustainable Cyber-Infrastructure



docker API PLATERED

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### We power citizen science projects all over the world

7, 828 people

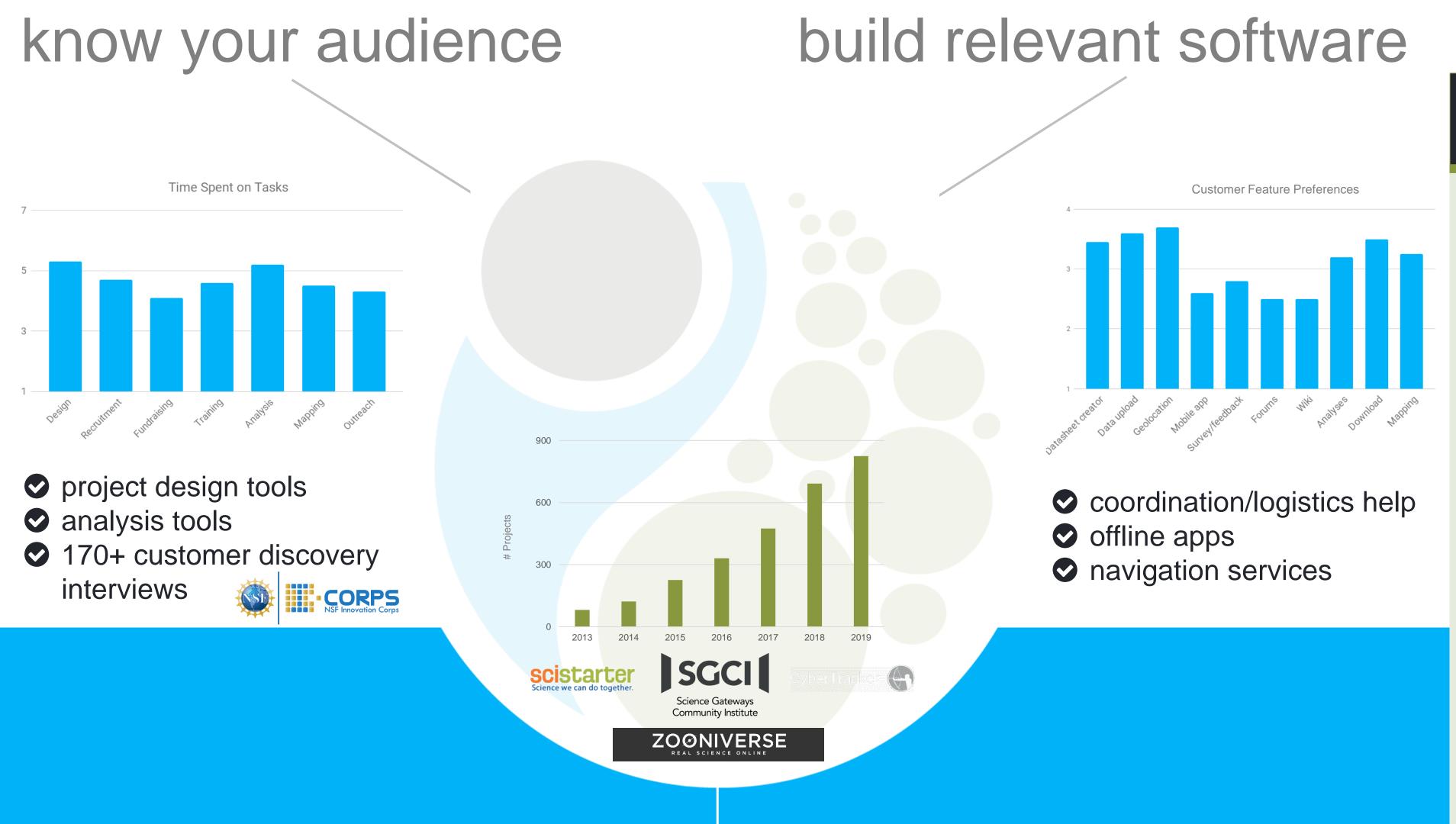
850 projects

1,090,405 data points 71,412 locations

3,232 protocols

#### Project Overview

- Open-source global citizen science support platform
- Communities create their own projects in a do-it-yourself (DIY) approach: they define what they wish to measure, how they measure it, and build customized datasheets for real-time data entry online and via mobile apps
- Saves projects costs and hassles associated with creating their own front- and back-end systems and custom apps
- Provides integrated suite of volunteer management, data exploration, communications, and data visualization tools for real-time trends, relationships, and comparisons
- Supports structured data rigorous protocols for observing natural phenomena that follow experimental designs enabling rigorous statistical scientific comparisons
- Facilitates sharing of protocols, measurements, and data for meta-analyses via cyberinfrastructure interoperability



partner for sustainability

#### Results & Progress

- Moved CI system to cloud for scalability amazon of the state of the st
- Adopted fully open source stack
- Created REST APIs & Docker container for portability
- Created universal data collection mobile app (beta)
- Converting code to modern frameworks 

  React Native
- Integrating CitSci.org with the Zooniverse
- Developing plug-ins for stakeholder databases
- Creating embeddable widgets datasheet integrations
- Created and taught citizen cyber-science grad course
- Increasing datasheet flexibility (comments in margins)
- Adding icon-based collection: cybertracker integration

#### Goals

- Broaden the inclusivity, accessibility, relevance, and reach of citizen science (CS)
- Improve CS software and data usability, scalability, interoperability, relevance, rigor, and sustainability
- Mobilize CS data to enable cross-discipline research and meta-analyses
- Protect participant privacy & provide flexible choices for project governance and data privacy options
- Elevate the value of CS software and data

# Integrations & Interoperability Scistarter Science we can do together diversify participants recruit volunteers why? real-world use cases & needs

#### Future Directions

