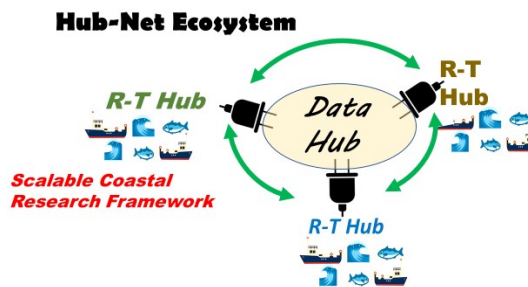**THE DATA HUB**
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Chicago CoPe Session

Overview

As part of a "Hub-Net ecosystem" where "Regional+Thematic Hubs" are fed by "Scalable Research for Coastal Communities," the centralized Data Hub would serve as a catalog to house original data as well as link to external original data and external secondary data sources. This data hub would be open and available to the public in an accessible, user-friendly format with metadata and visualization components.

Reasoning/Support

The Data Hub would act as a clearinghouse for data collected from Regional+Thematic hubs, allowing for shared access across all users, including research communities, publics, and government agencies. The Data Hub would be designed using an inclusive and recursive agile development approach, ensuring usability by the various stakeholders.

The Data Hub would be developed so that the public would not only have access, but also the ability to conduct analyses and contribute results. This would create "co-ownership" of the data hub, increasing its impact as people value what they build.

The structure of having a centralized Data Hub increases data collection competence, leading to best practice in data collection as well as data verification. The Data Hub allows for both standardization and comparability of data.

Impacts/Value

Including metadata which provides essential context and aggregation of data, the Data Hub ensures usage by not only researchers across disciplines, but also ensures its applicability in the real world by engaging all of its stakeholders. This accessibility facilitates individual citizens utilizing the data as well as large-scaled citizen science projects.

By creating this clearinghouse for data, it allows all stakeholders easy access to a wide range of information. Designed to be easily searchable and bookmarkable, the various users could customize their interface as well as explore the information collected. This structure would allow for a wider and deeper range of stakeholder to benefit.

The collection of data from the Regional+Thematic hubs creates a web of data, demonstrating connectivity between research and disciplines. This Data Hub amplifies the impact of data collected and not yet analyzed. This aggregation of data would drive new refined research and application questions by motivating new data collection through the identification of gaps in knowledge. The visualization components would highlight dissonance in data that encourages further testing and questioning amongst the Regional+Thematic hubs.

Structure

The structure for the Data Hub would need long term commitment and funding to design a system that could support a constant feedback loop with Regional+Thematic hubs as well as researchers and other stakeholders.

Staffing needs would include a data librarian and support staff as well as data security specialists. Science translators and designers would be integral to broaden access and easy

interaction between the data and all stakeholders, recognizing not all products are necessarily digital.

A stakeholder advisory board and constant feedback with the Regional+Thematic hubs continually grounds the data hub to the needs of the coastal communities and science.