

Visions for Best Practices

OceanObs'19 paper

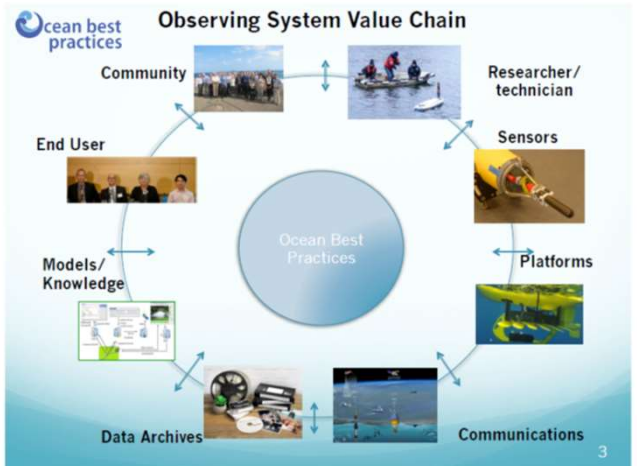
Jay Pearlman and BPWG Team
Interoperability Workshop, Brest
October 12 2018



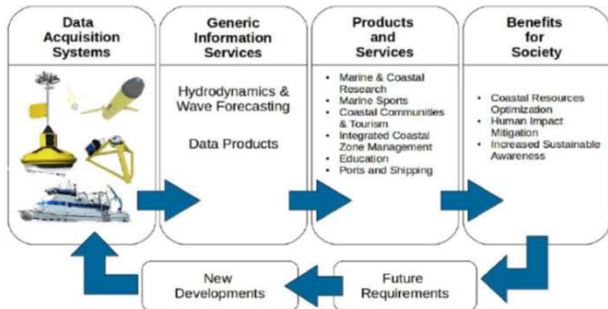
Ocean BP Definition

- A community best practice is a methodology that has repeatedly produced superior results relative to other methodologies with the same objective.

To be fully elevated to a best practice, a promising method will have been adopted and employed by multiple organizations.



Extended Value Chain



Looking to the future



Enhancement in HW, SW, Communications, data and human factors will Impact observing systems and Ocean Best Practices

- Mass-produced sensor technology (e.g. mobile phones)
- Miniaturization
- Autonomous vehicles
- High energy batteries
- Intelligent networking
- Machine-machine systems
- Linked data
- Cloud Computing
- Big Data
- Handling of video with AI
- FAIR
- Semantics/ontologies
- DOIs/ORCHIDS
- Citizen science
- cross-community work
- Culture evolution
- Advanced User Interfaces



The Changing Environment and Impacts

- Using Information technology
- Evolving best practices
- Adaptability to technology evolution
- Accelerated adoption of Best Practices
- Inclusiveness – domain, geographic, sectors, etc
- Connectivity across the value chain

Participating Organizations and Programs

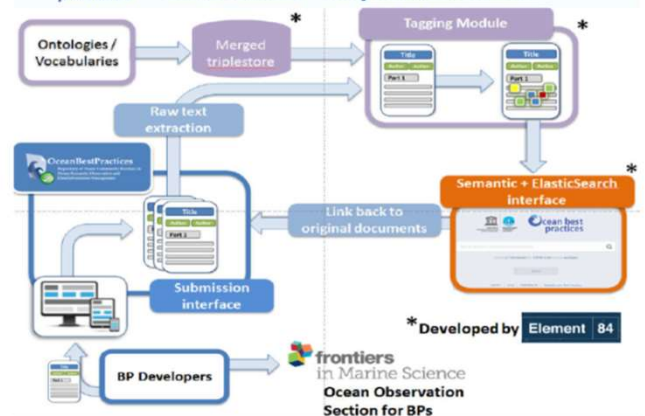


I said,...You said

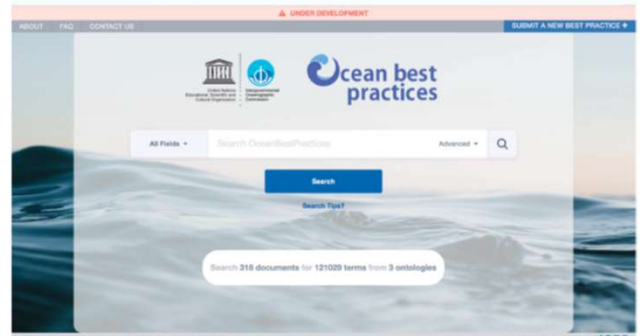
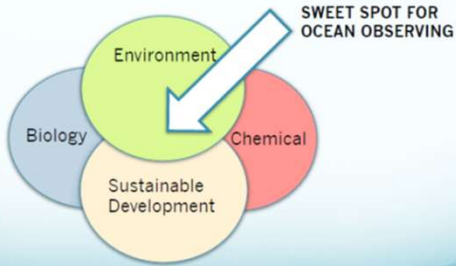
A screenshot of the Ocean Best Practices website interface. It shows a search bar, a list of search results, and a detailed view of a document titled 'My BP' with 'Part 1' highlighted. A network diagram of nodes and connections is overlaid on the right side.

Ontologies link the document to wider knowledge, making it ready for machine discovery and access

Semantics - Implementation

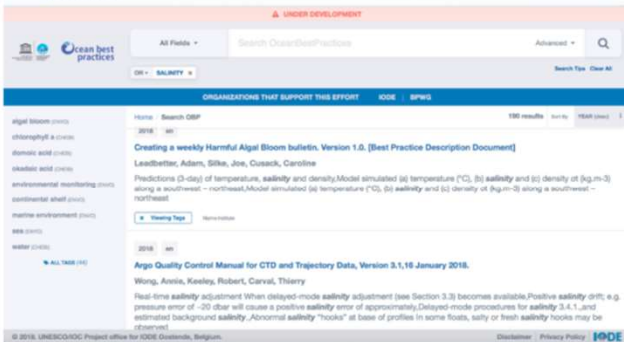


Speaking Clearly



Toward customized/tailored access through dynamic dashboards

Discovery and Access



Identify and bundle cutting-edge technologies in a user experience which supports natural human interaction and creativity

Harmonization of Procedures



Provide support for Harmonization of Procedures and tools using OBP-R as a base and developing the BPs Quality System that would be run by GOOS Panels and Others

Peer Review Process

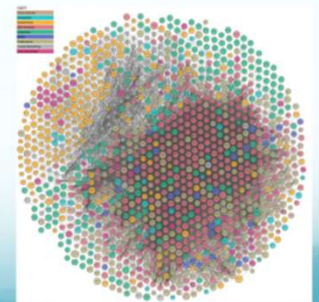


- Open access
- Open process review
- Linked to the OBP-R

Linked Data Model for Best Practices??

Linked Data is about using the Web to connect related data that wasn't previously linked, or using the Web to lower the barriers to linking data currently linked using other methods.

When I get back information about a person, it's not just got somebody's height and weight and when they were born, it's got relationships. With the other thing that it's related to is given or has one of those names that starts with HTTP.



Linked Methodologies

Linked Data is a method of publishing structured data so that it can be interlinked and become more useful through semantic queries. It builds upon standard Web technologies such as HTTP, and URIs, but rather than using them to serve web pages for human readers, it extends them to share information in a way that can be read automatically by computers.

