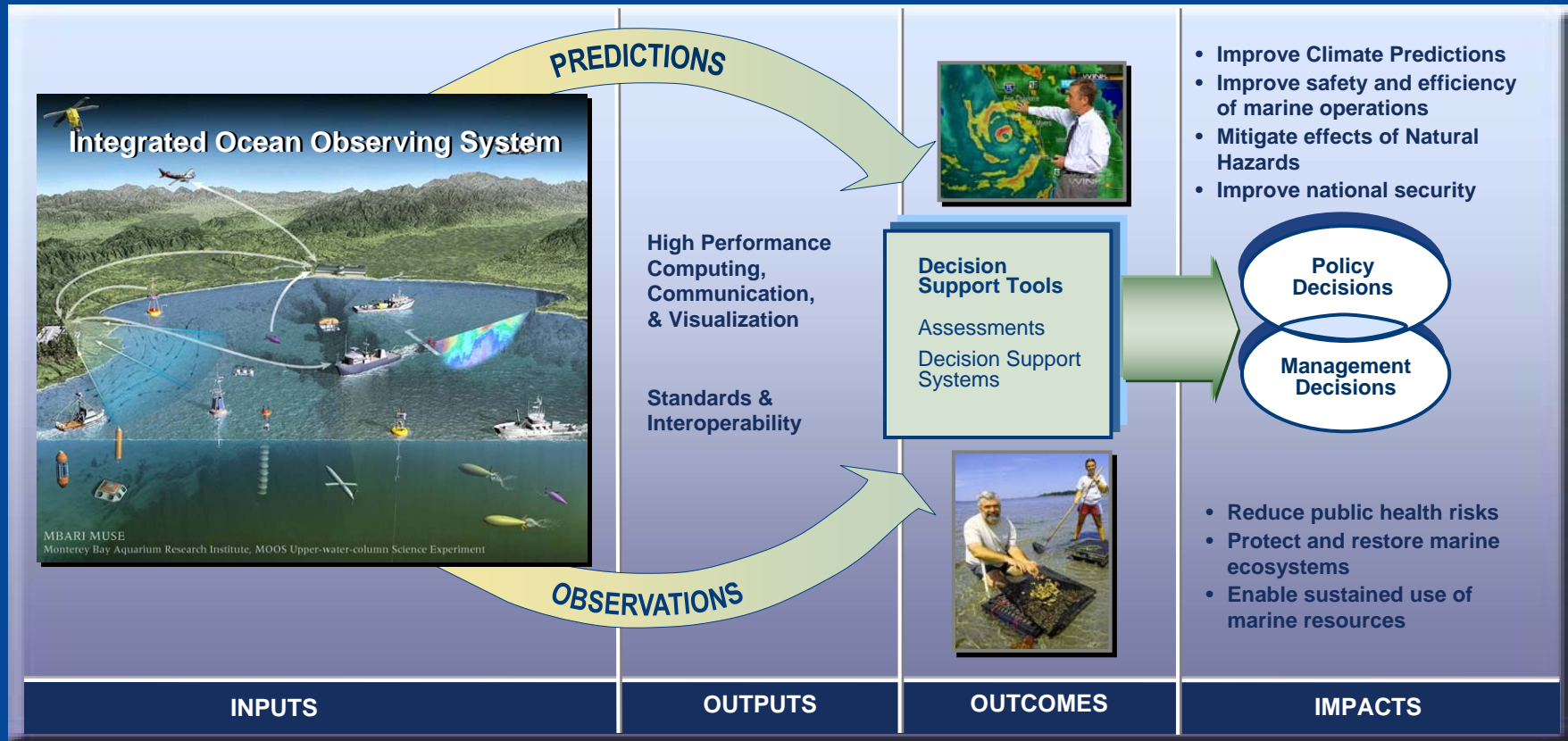


IOOS Cyberinfrastructure



Krish Narasimhan
FL COOS Caucus 6
June 19, 2006





- Diverse Set of Stakeholders
- Diverse Set of Legacy Systems
- Diverse Set of End Users
 - Providers
 - Consumers
- No Streamlined Funding Structure
- No Streamlined Governance Structure
- Very Broad Goals and Objectives



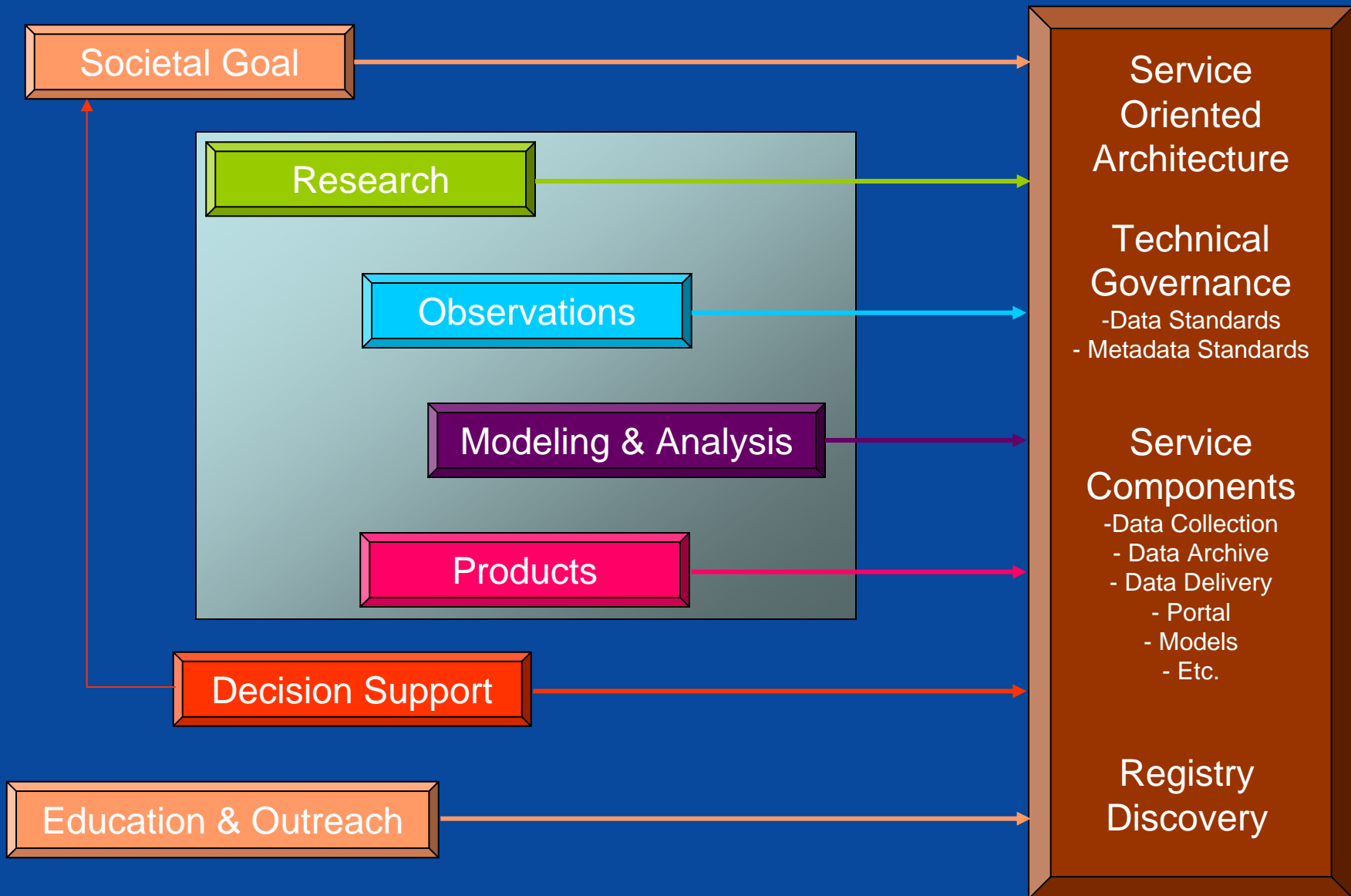
- Ease of Use
- Ubiquitous Access
- Open System
- Ease of Integration of Existing Systems
- Incremental Implementation
- Modular Implementation
 - Local, State, Regional, National
- Ease of Introduction of New Systems and Technologies
- Ease of On-going Maintenance

What's the Solution

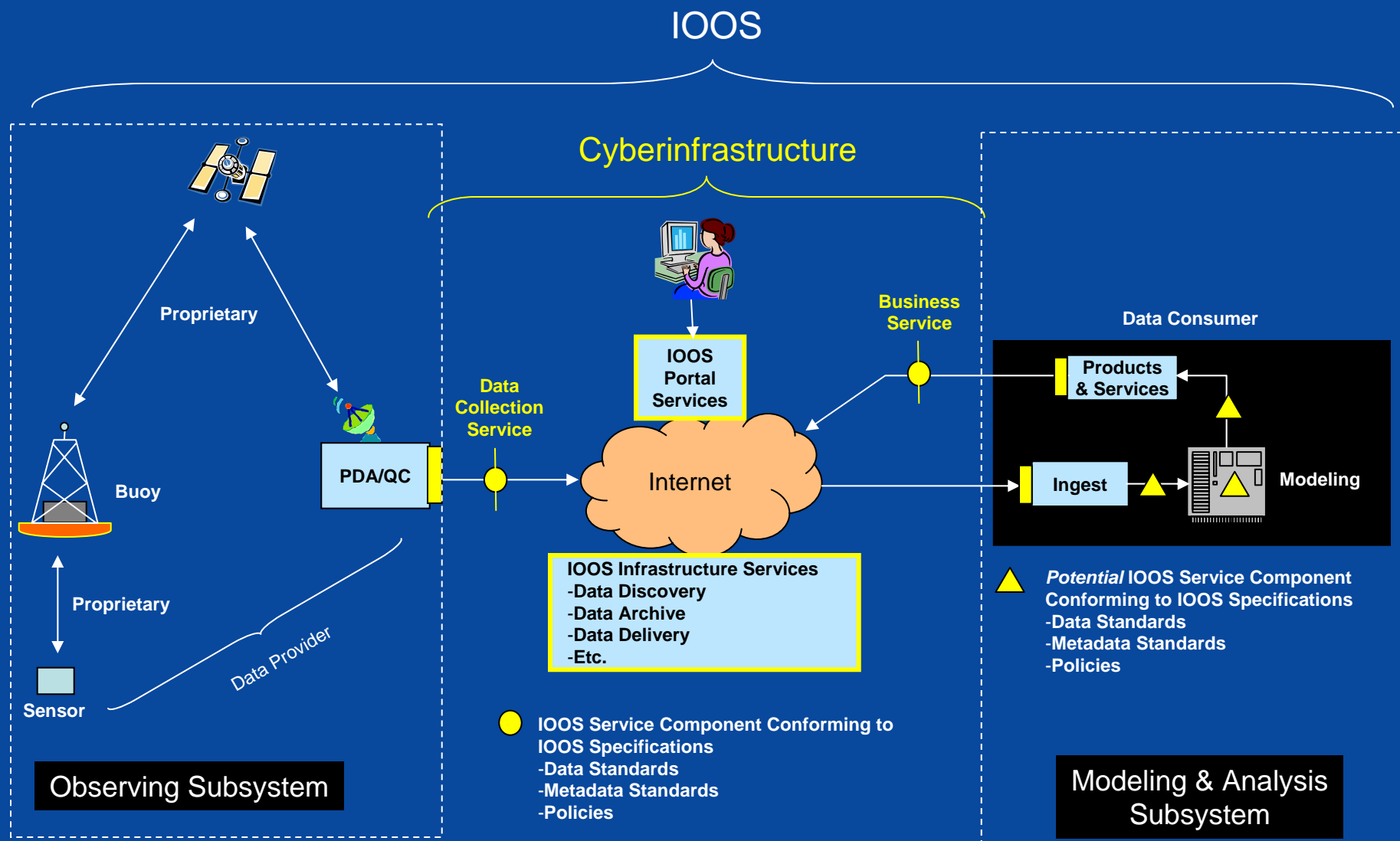


- Service Oriented Architecture
 - Loosely coupled Operational Considerations
 - Supports a Federated Environment of ‘Stove Pipes’
 - Does not demand a radical change in the way business is conducted today within a stove pipe
 - Enables efficiency within a stove pipe
 - Tightly coupled Technological Considerations
 - Done at the right level
 - Metadata & Data
 - Enables Interoperability
 - Enables Scalability and Extensibility
 - Enables modular integration of stove pipes

The End-to-End Picture



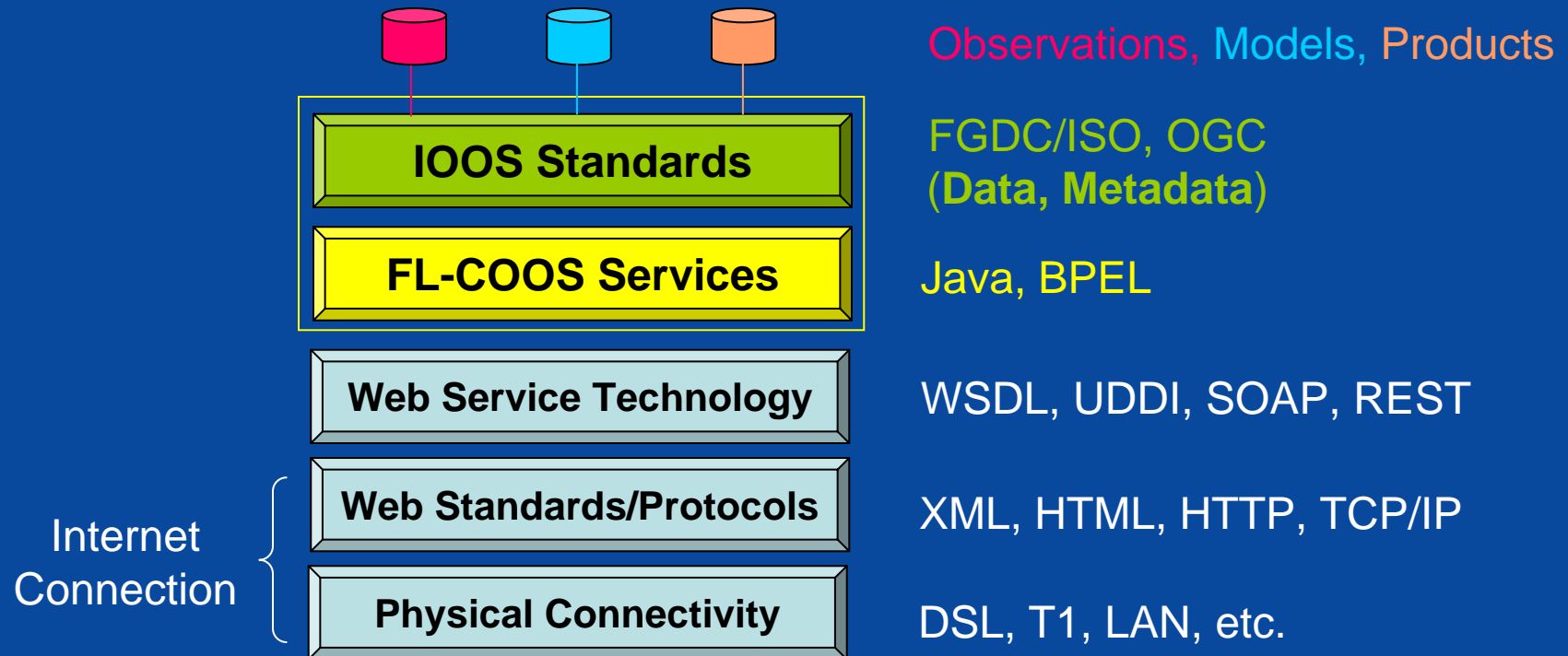
IOOS Cyberinfrastructure Illustration



Service Component



ISO-OSI Stack Representation



Well Defined, Published Interfaces with Contracts