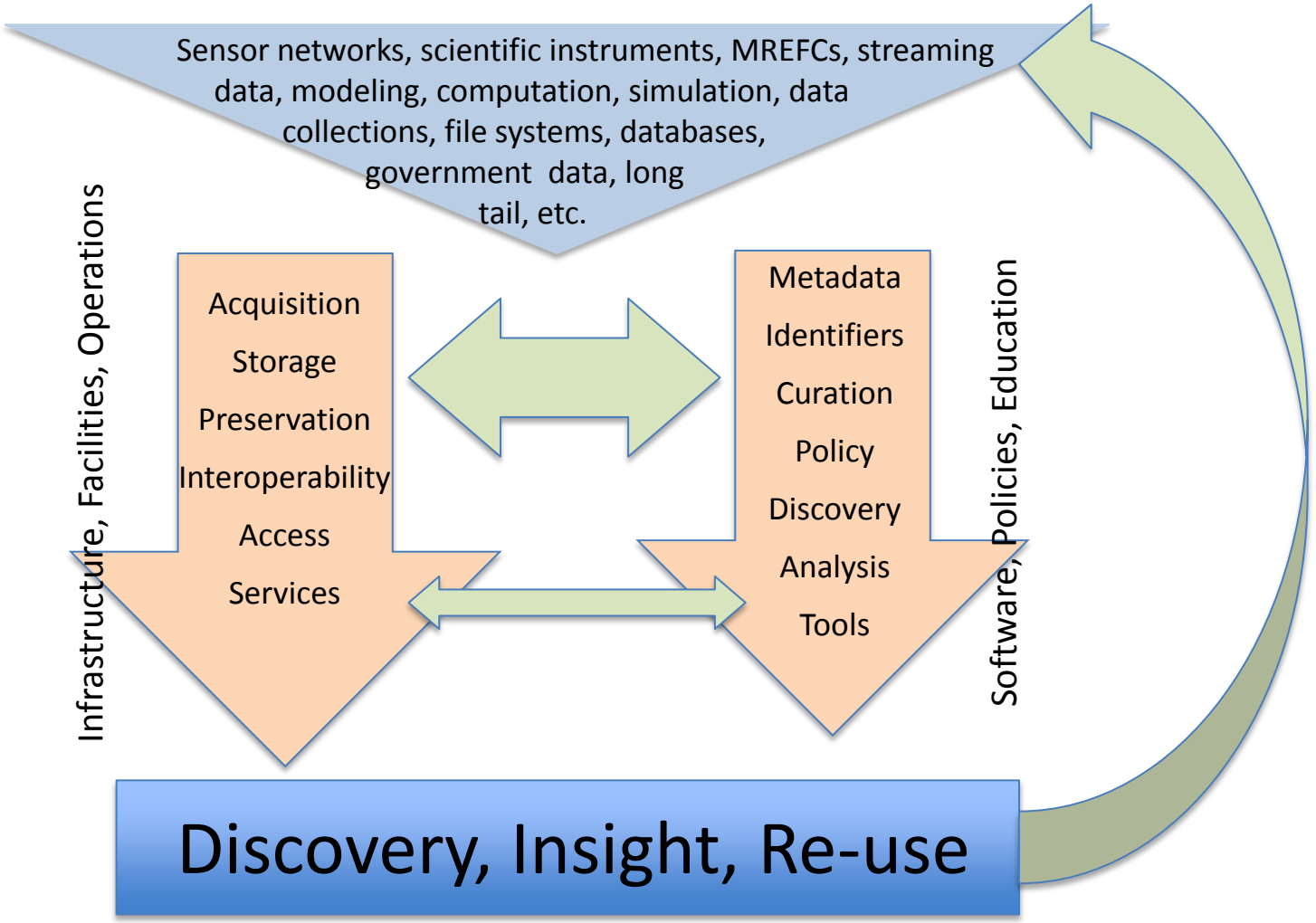
Threats to Establishing a Global **Data** Research Infrastructure

- Not understanding the importance and full impact of data for next century science and education
- Not understanding the urgency to address and create a global data infrastructure now
- Relying on additional workshops, conferences, committees and so forth to study and provide more recommendations
- Waiting for standards to be approved to enable data sharing, interoperability and support the entire data life cycle

Components for an International Data Infrastructure



Identify Owners and Assign Responsibility

- Data generation, data integrity
- Content, citation
- Acquisition, persistent identifiers
- Metadata, provenance
- Curation, including what should be retained
- Preservation and storage
- Policy, access, usage authorization
- Incentives, sharing, credit

What Needs to be Provided?

- Storage facilities, repositories, networks
- Data services (access, security, trust, discovery)
- Tools, analysis applications, modeling, compute
- Technology refresh and data replication processes for sustainability
- In brief, how do we create a vibrant international data research economy?

One Suggestion– start thinking about:

Data as a Service (DaaS)

Data Web Forum

- The DWF will facilitate the exchange and interoperability of data across disciplines and national boundaries by producing high quality, relevant technical documents that influence the way people store, use, and manage data.
- Linking top-down governance model with bottom-up IETF model to catalyze the launch of this community-based activity
  - Top-down focus on policy, permission . . .
  - Bottom-up focus on operations, services . . .
- Initial discussions are being explored

Thank you