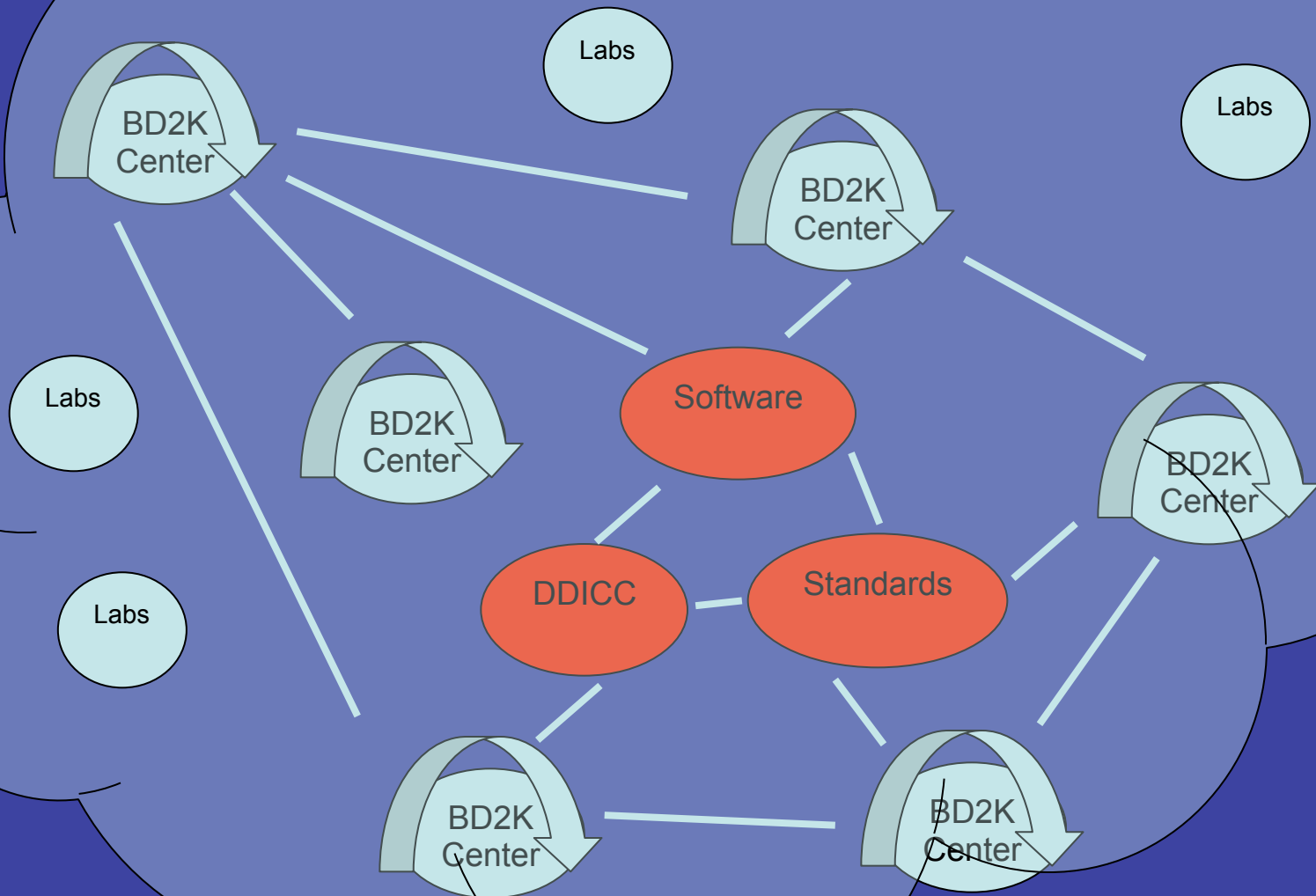
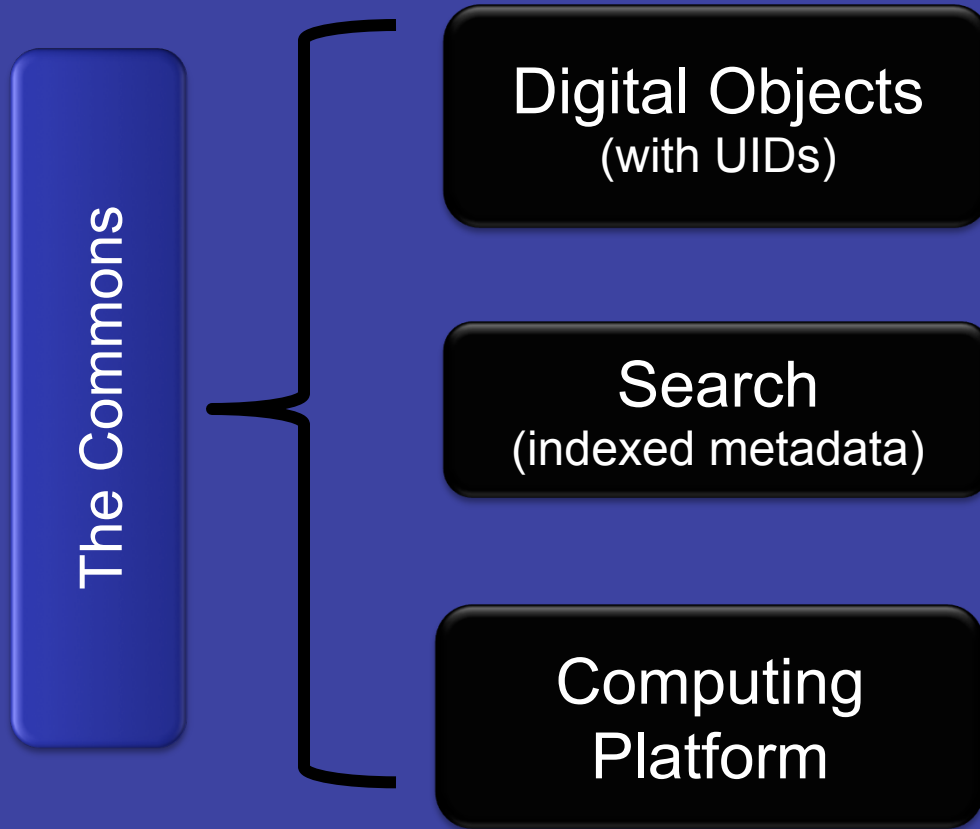


# Infrastructure - The Commons



# The Commons

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Vivien Bonazzi  
George Komatsoulis



# The Commons: Compute Platforms

## The Commons Conceptual Framework

### Public Cloud Platforms

- Google, AWS (Amazon)
- Microsoft (Azure), IBM, other?

### Super Computing (HPC) Platforms

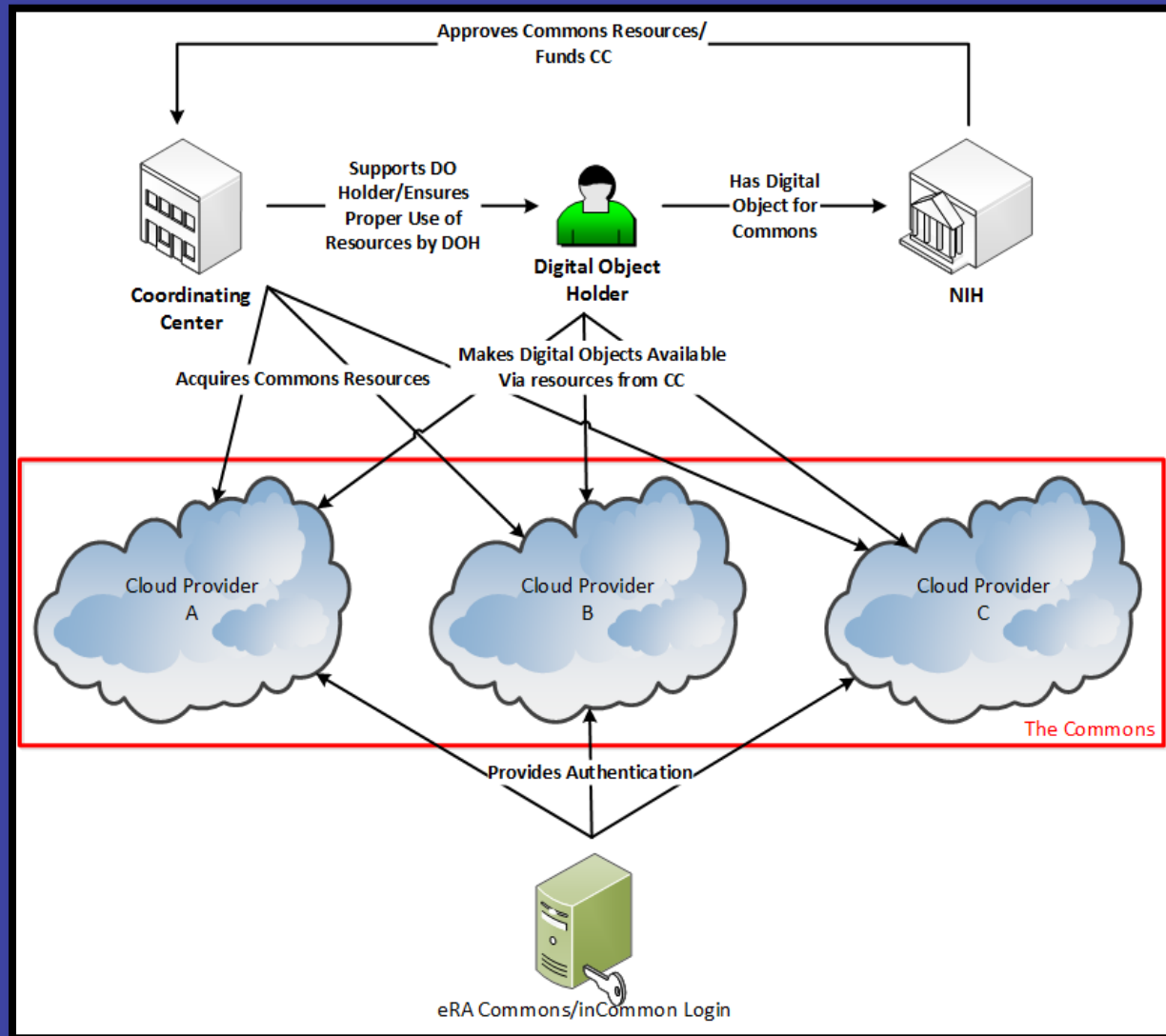
- Traditionally low access by NIH

### Other Platforms ?

- In house compute solutions
- Private clouds, HPC
  - Pharma
  - The Broad
  - Bionimbus



# The Commons: *Business Model*



[George Komatsoulis]



# Potential Advantages of this Model

- Cost effective - Only pay for IT support used
- Drives competition – Better services at lower cost
- Data sharing - Drives science into the Commons
- Facilitates public-private partnership
- Scalable to most categories of data expected in the next 5 years.



# What does it mean to be conformant?

- Minimum set of requirements for
  - Business relationships (reseller, investigators)
  - Interfaces (upload, download, manage, compute)
  - Capacity (storage, compute)
  - Networking and Connectivity
  - Information Assurance
  - Authentication and authorization
- Still need to work out details of how to manage approval of conformance
- A conformant cloud  $\neq$  an IaaS provider
- Draft specification out for comment among vendors

