

DATA.GOV

What does geodata.gov mean to data.gov?



# Target Conceptual architecture

Data.gov

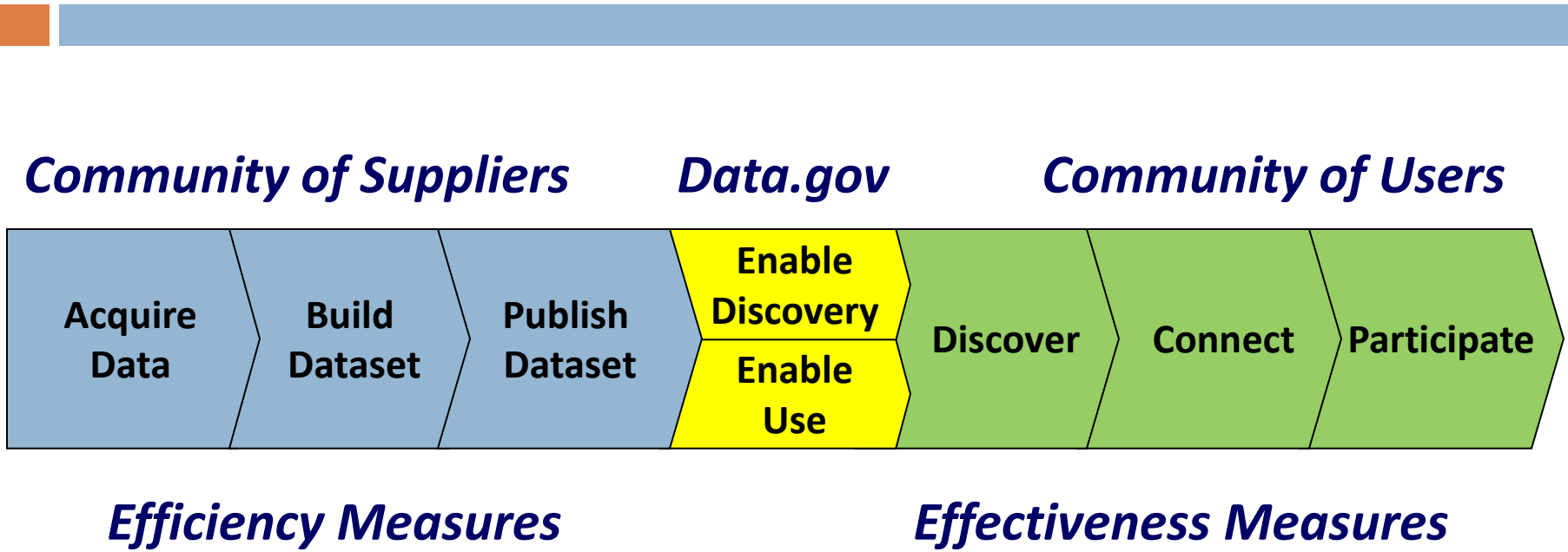
# Administration's Objectives

- ◆ *A government that is:*
  - ◆ **Transparent**
    - ◆ Promotes accountability
    - ◆ Provides information for citizens on what their government is doing
  - ◆ **Participatory**
    - ◆ Agencies encouraged to provide citizens opportunities to participate in policy making
    - ◆ Agencies encouraged to solicit ideas from citizens about how to improve those opportunities
  - ◆ **Collaborative**
    - ◆ Use innovative tools to enable collaboration across and at all levels of government

# Architecture Principles (Community Market Principles)

- **Increase the usage of data.gov which will drive greater contributions from data suppliers.**
  - Improve performance on supply side
  - Preclude leveling off of supplier contributions
- **Communities of Use are self organizing and the trend is towards “push” models:**
  - Enabling users where they do their work and are comfortable and tools to use in their context or organization
  - Search Enablement – catalog, spatial, federated, Easy Access – Data Downloads, Map Services, Notifications
  - Data Users/Shoppers search for thematic content first supported by location or time, authority or quality and finally its structure or packaging
- **Communities of Supply are not self organizing and the trend is towards “pull” models:**
  - Need to identify and develop targeted communications
  - Require strong communication and investment to create buy-in
  - They need supplemental ways to be harvested to get their content

# Data.gov Value Network Model



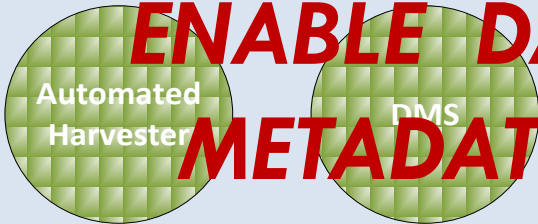
## *Service Architecture:*

*Metadata Aggregation and Syndication*

*Infrastructure and Platform Services*

# Target Data.gov with Web 2.0 and Geospatial Enhancements

## Data Management Services



- Foster Supplier Relationships
- User Driven Publishing Rules for Data and Services
- Privacy and Security

## Catalog Services



- Expose Catalog for Distributed Search and Metadata Services
- Manage Catalog
- Enable Dimension Search by Domain, Temporal, Spatial, and Role
- Trend and Cross-Reference User Assistance
- Mapping Keyword Patterns to Current Buzz
- Working With High-End Search Engines

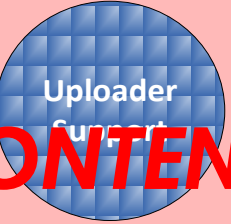
**ENABLE DATASET DISCOVERY  
METADAT AGGREGATION -  
SYNDICATION**



## Platform Services



- Geospatial Application Services
- For Uploaded Datasets
- Popular Flavors: WMS, WCS, WFS, REST, SOAP, KML, SIF, Explorer



- Hosts Datasets
- Uploader Tool With Policy and Standard Support



- For Uploaded Datasets
- Accessible From Data.gov or Other Sites
- (Not Clip & Ship)



- For Suppliers and Users to Discover Projects Planned or in Work
- Mitigate Data Duplication

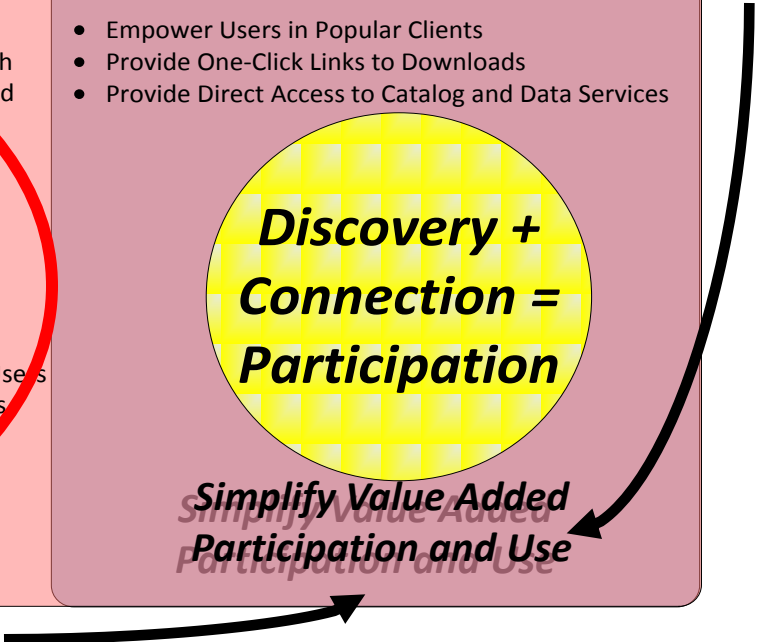
**ENABLE CONTENT**

**Discovery +  
Connection =  
Participation**

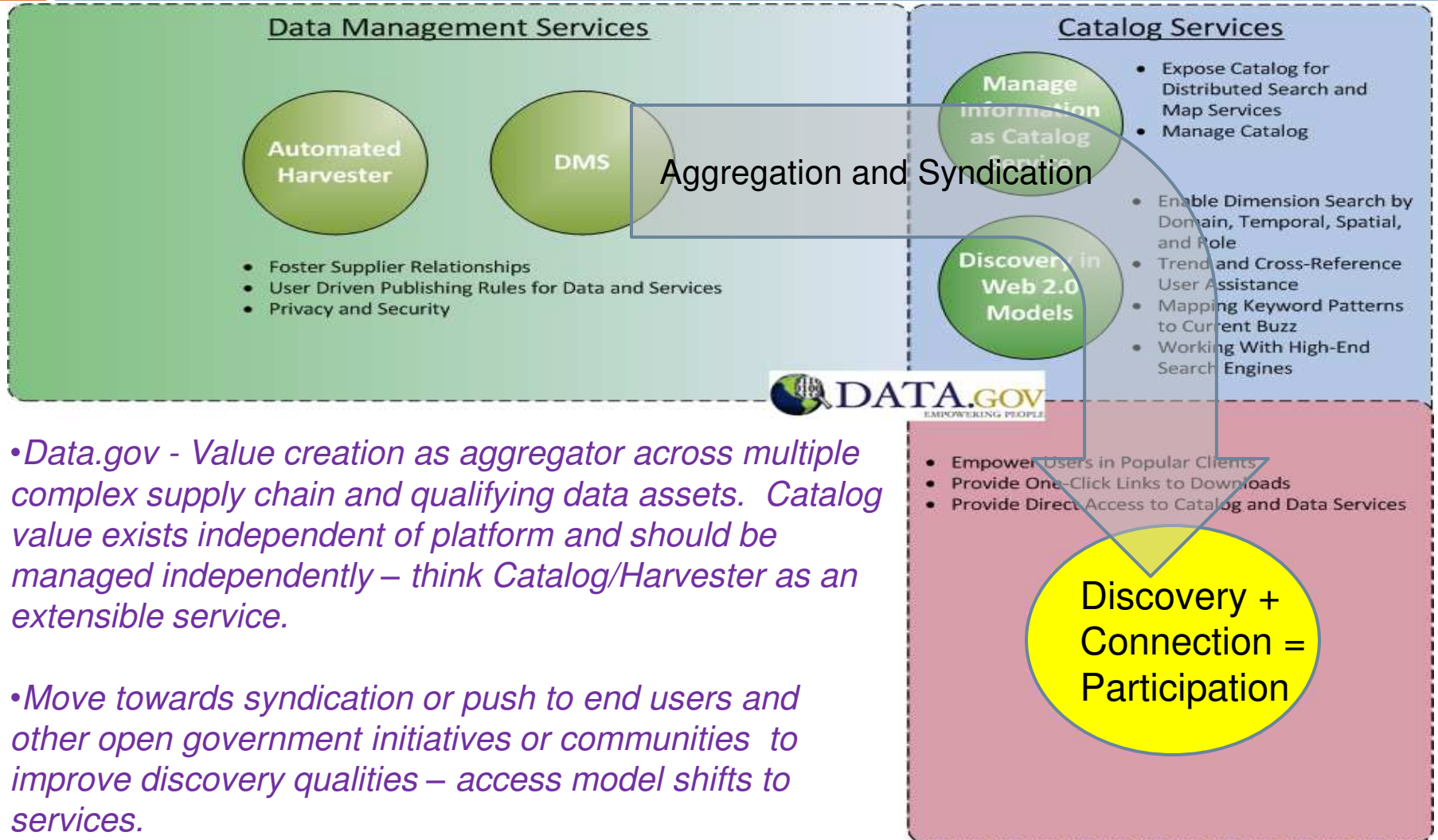
*Simplify Value Added  
Participation and Use*

Organize, Qualify & Enable

Provide Platform and Infrastructure Services to



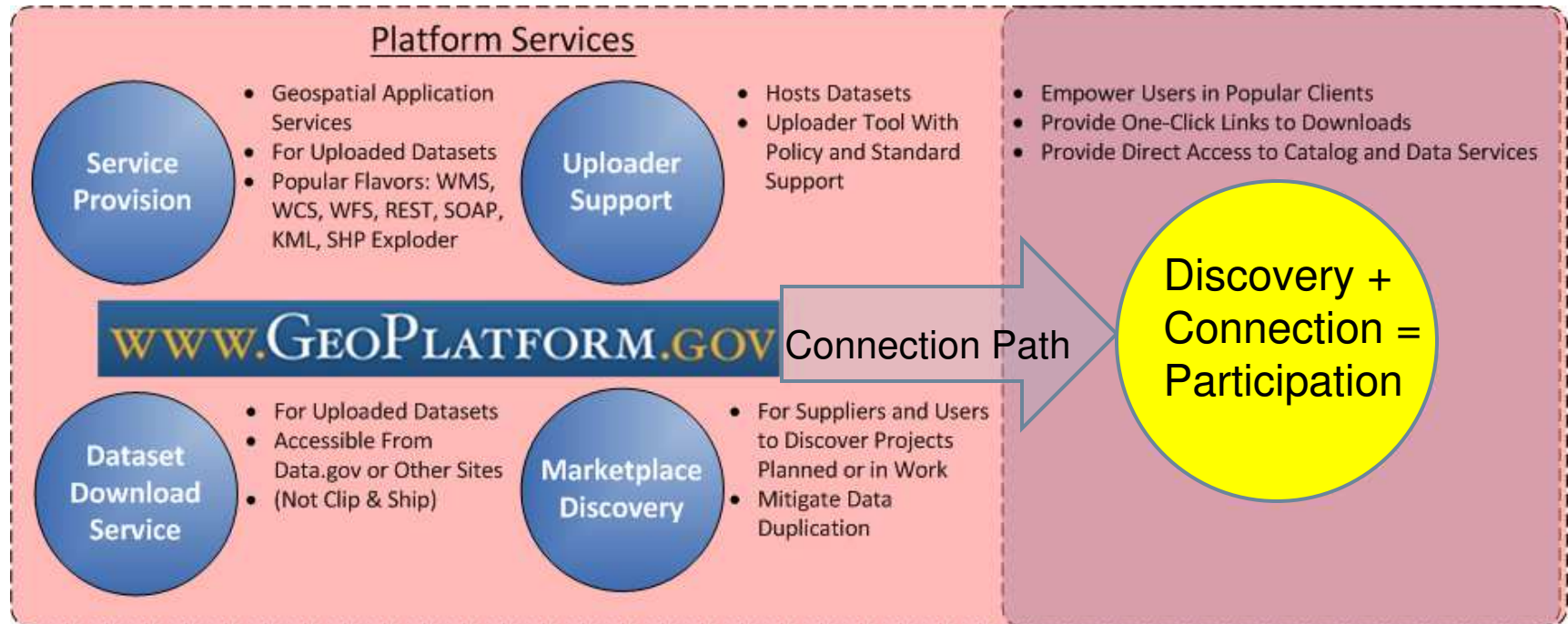
# Enabling dataset Discovery



• *Data.gov - Value creation as aggregator across multiple complex supply chain and qualifying data assets. Catalog value exists independent of platform and should be managed independently – think Catalog/Harvester as an extensible service.*

• *Move towards syndication or push to end users and other open government initiatives or communities to improve discovery qualities – access model shifts to services.*

# Enabling Content Use



*• Initial platform scope – function of geodata.gov and data.gov catalog requirements. Not intended to be full geo-platform but ensure existing delivery and service needs are transitioned. Full geo-platform will follow business case*

*• Provide “connection” and delivery improvements to geospatial datasets*

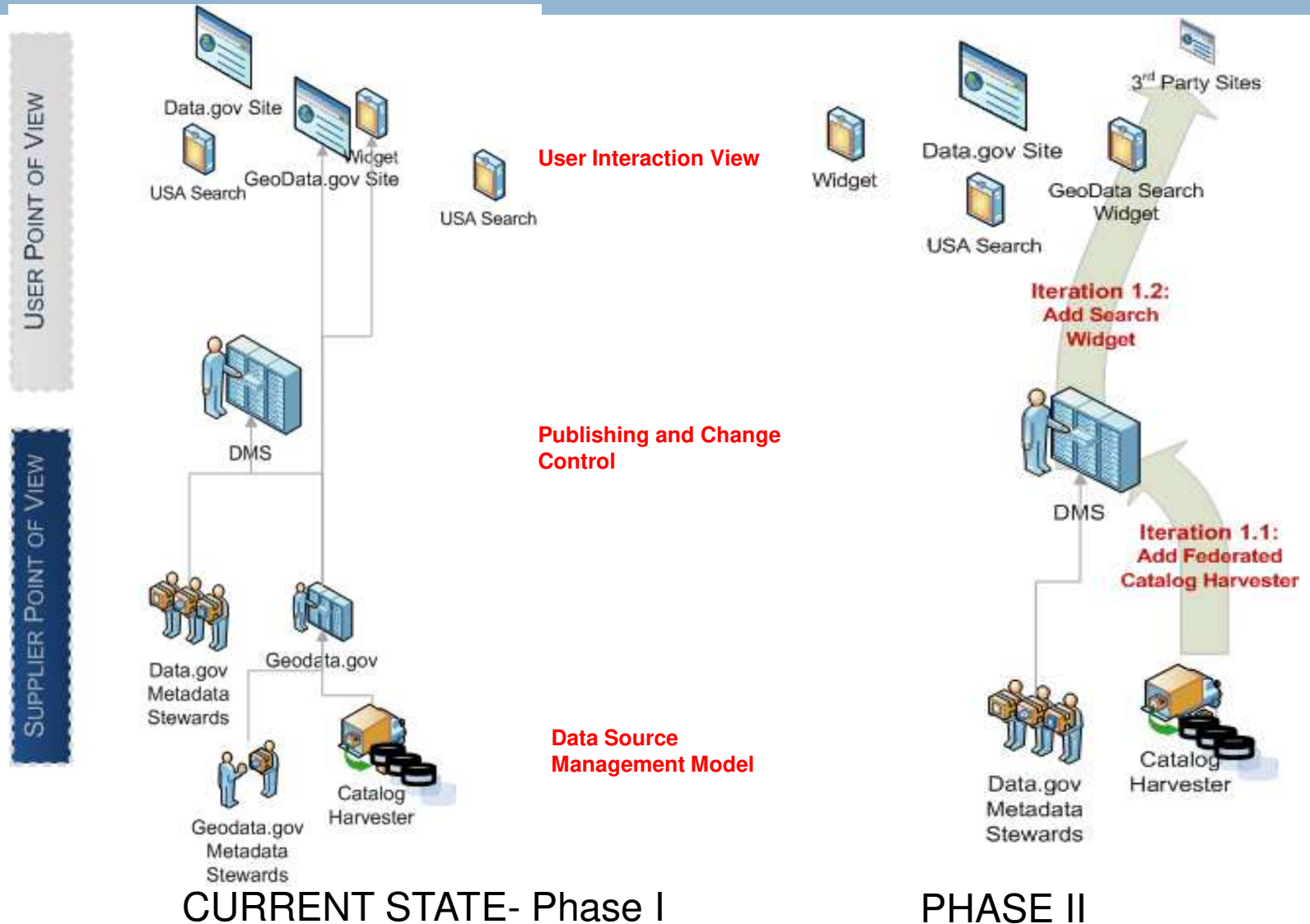




# Transition Strategy

Geodata.gov Implications

# Major changes moving from Current State to Phase II – 3 – 4 months



# Benefits Transition

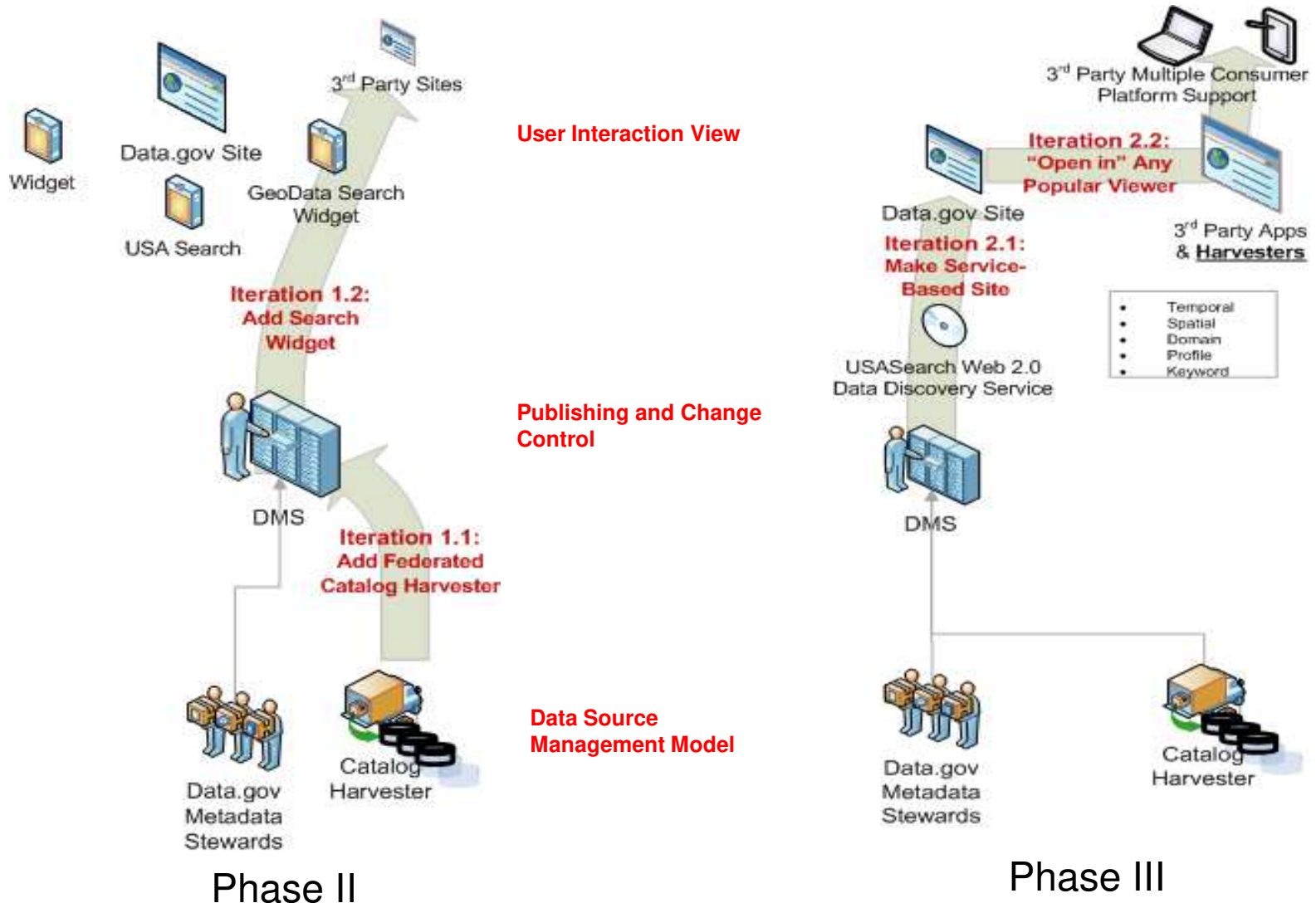
- Reduction in number of operational sites and portals
  - The current architecture has 2 Flagship Single Sites – Legacy Geodata and new data.gov.
- Aggregation: Automation and simplification for metadata publishing for Community of Supply
  - Implement automated harvester and reduce manual data management
- Discovery: Search:
  - Development of spatially smart search widget for end user environments to tap data.gov

# Major changes moving to Phase III

## 3 months

USER POINT OF VIEW

SUPPLIER POINT OF VIEW



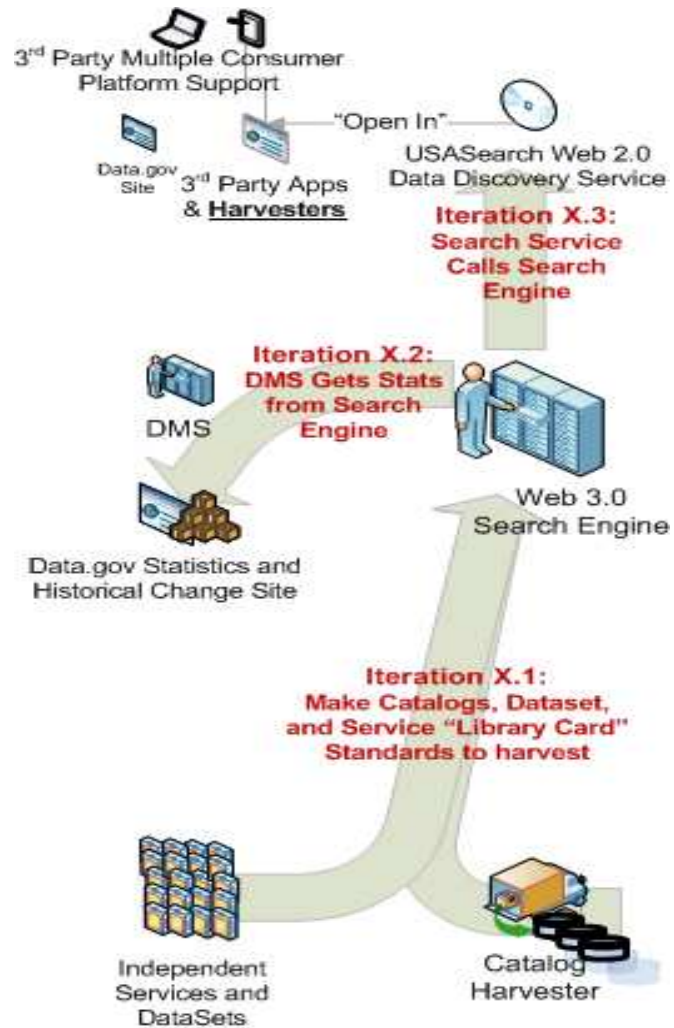
# Benefits Transition to Phase III

- Enable Discovery - build data.gov as a service:
  - Catalog as Data service
  - Catalog as a Map Service
  - Catalog - Federated and Distributed Searches
  - Harvestable catalog to support community specific or open government environments
- Enable dataset services by creating hooks to open datasets/services in user preferred data and map viewers

# Futures and Trending - Concepts

USER POINT OF VIEW

SUPPLIER POINT OF VIEW



Future Phase

# Future Benefits:

- **To increase automatic and direct harvesting of suppliers contributions with mainstream search engines taking advantage of search engine:**
  - ▣ Migrate Search Requirements to popular Search engines – disintermediation of the aggregated catalog model
  - ▣ Develop mining hook of search engines to store stats, links in DMS for reporting
  - ▣ Have Service call Search Engine results instead of DMS for run-time search



# Discussion and Questions

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