

ass system for managing official Government content, which will
A world class system for **managing** official **Government content**, which will **verify and track** versions,
l track versions, assure **authenticity**, **preserve** content, and provide
assure **authenticity**, **preserve** content, and provide **permanent access**.
t access. A world class system for **managing** official **Government content**, which will **verify and trac**
versions, assure **authenticity**, **preserve** content, and provide **permanent access**.
an integrated digital content management system

FDsys
an integrated digital content management system

U.S. Government Printing Office / Harris Corporation

The Future Digital System: Progress and Plans for the GPO's State-of-the-Art Digital Archive

AIIM Conference and Expo -- Boston

April 18, 2007

John Faure, Harris FDsys Chief Software Architect
Vinnie Ferrando, Harris FDsys Chief System Engineer
Mike Wash, GPO CTO

GPO Mission

- To provide the three branches of the Federal Government with expert publishing and printing services.
- To provide perpetual, free and ready public access to the printed and electronic information published by the Federal Government, in partnership with Federal Depository libraries.
- To distribute, on a cost recovery basis, printed and electronic copies of information published by the Federal Government.

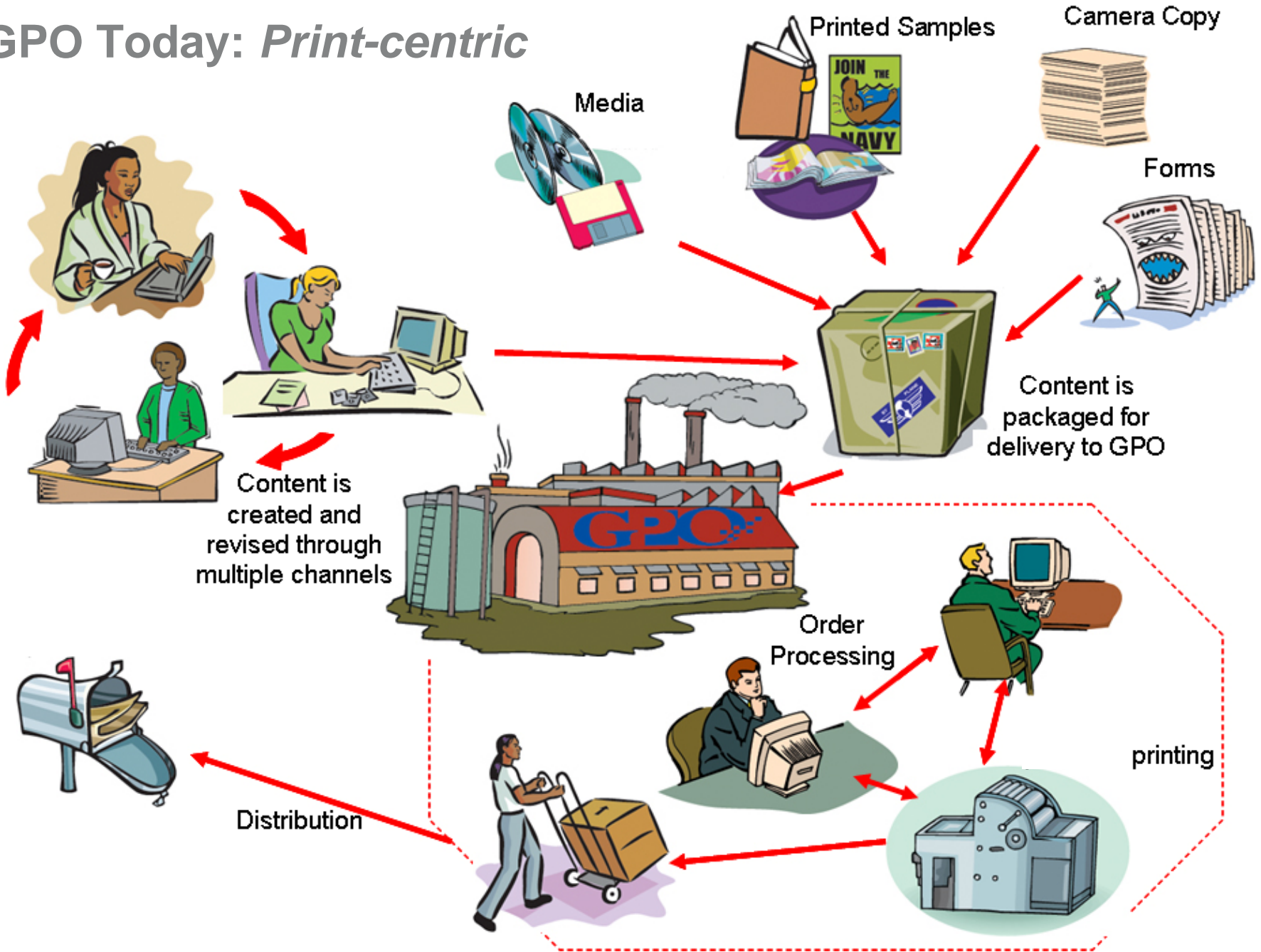
Challenges to meeting the Mission

- Access to government published information is now widely expected to be electronic.
- Digital information needs to be authentic and verified to be the correct version.
- Digital information needs to be available for access almost immediately.
- Information needs to be preserved, making it available for generations to come.

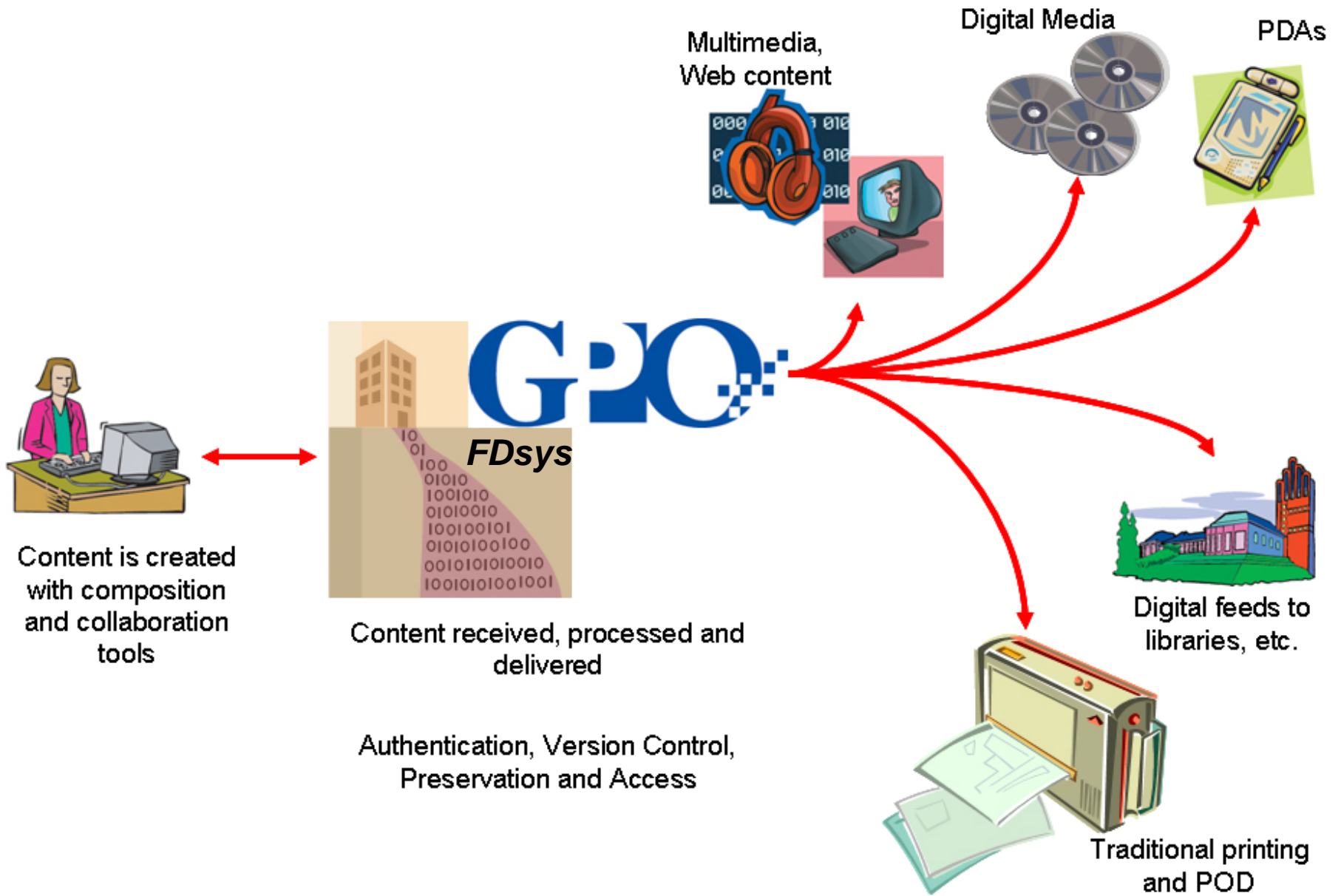
Transformations at GPO

1. Deploying new information technology systems
 - A new information infrastructure is required to replace legacy systems and applications.
2. Moving to a Content-centric model
 - GPO has historically been print-centric. To effectively achieve our mission today and in the future, we need to be content-centric.
3. Restructuring around business units

GPO Today: *Print-centric*



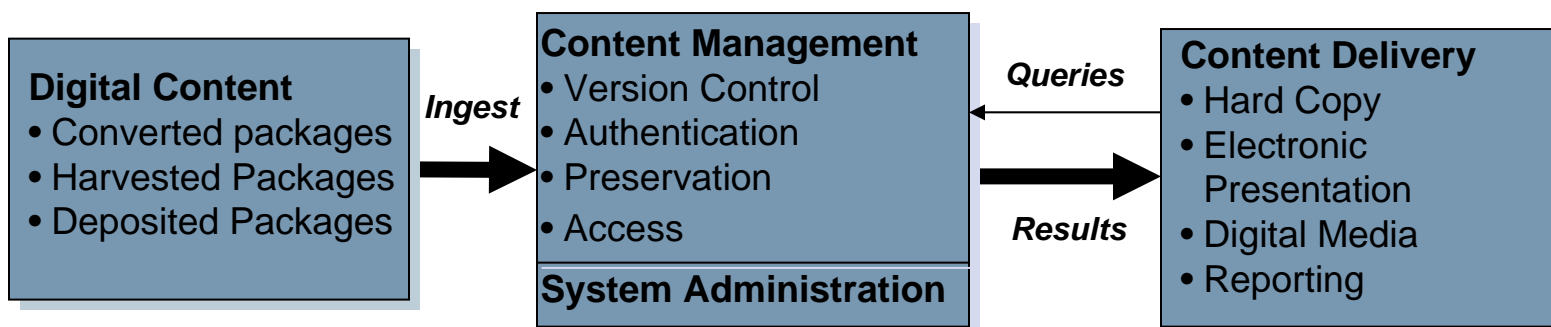
GPO Future: *Content-centric*



Content-centric Solution: FDsys

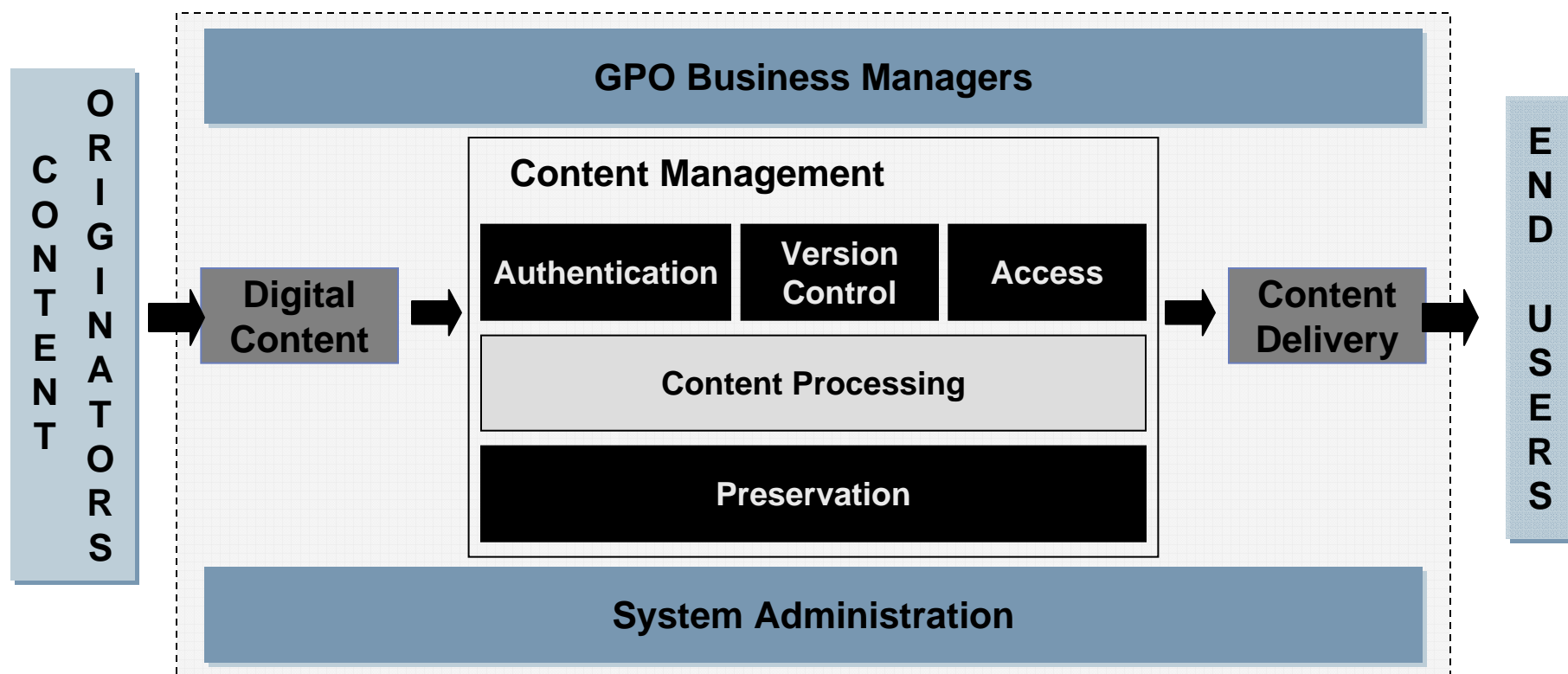
- FDsys will automate the collection and dissemination of electronic information from all three branches of government.
- Information will be:
 - permanently available in electronic format
 - authenticated and versioned
 - accessible for Web searching, viewing, downloading, and printing
 - available for conventional and on-demand printing

FDsys Functional Reference Model



FDsys Framework

System is structured around the Open Archival Information System (OAIS) reference model



OAIS Background

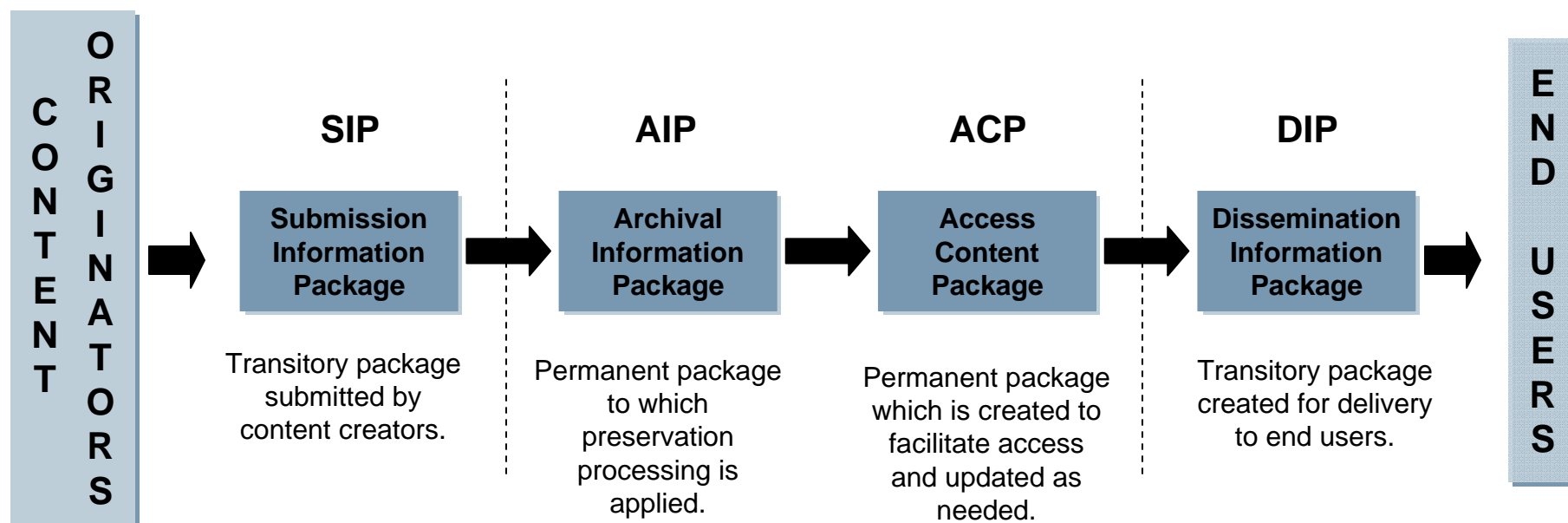
- A domain-neutral reference model with characteristics broadly applicable to the management of any information over time.
- Provides a framework for achieving the scalability, extensibility, and interoperability
- Using the OAIS as a reference model is the start of the process of defining what is necessary to achieve GPO's strategic objectives

OAIS Fundamentals

System structured with information packages, contains metadata and content.

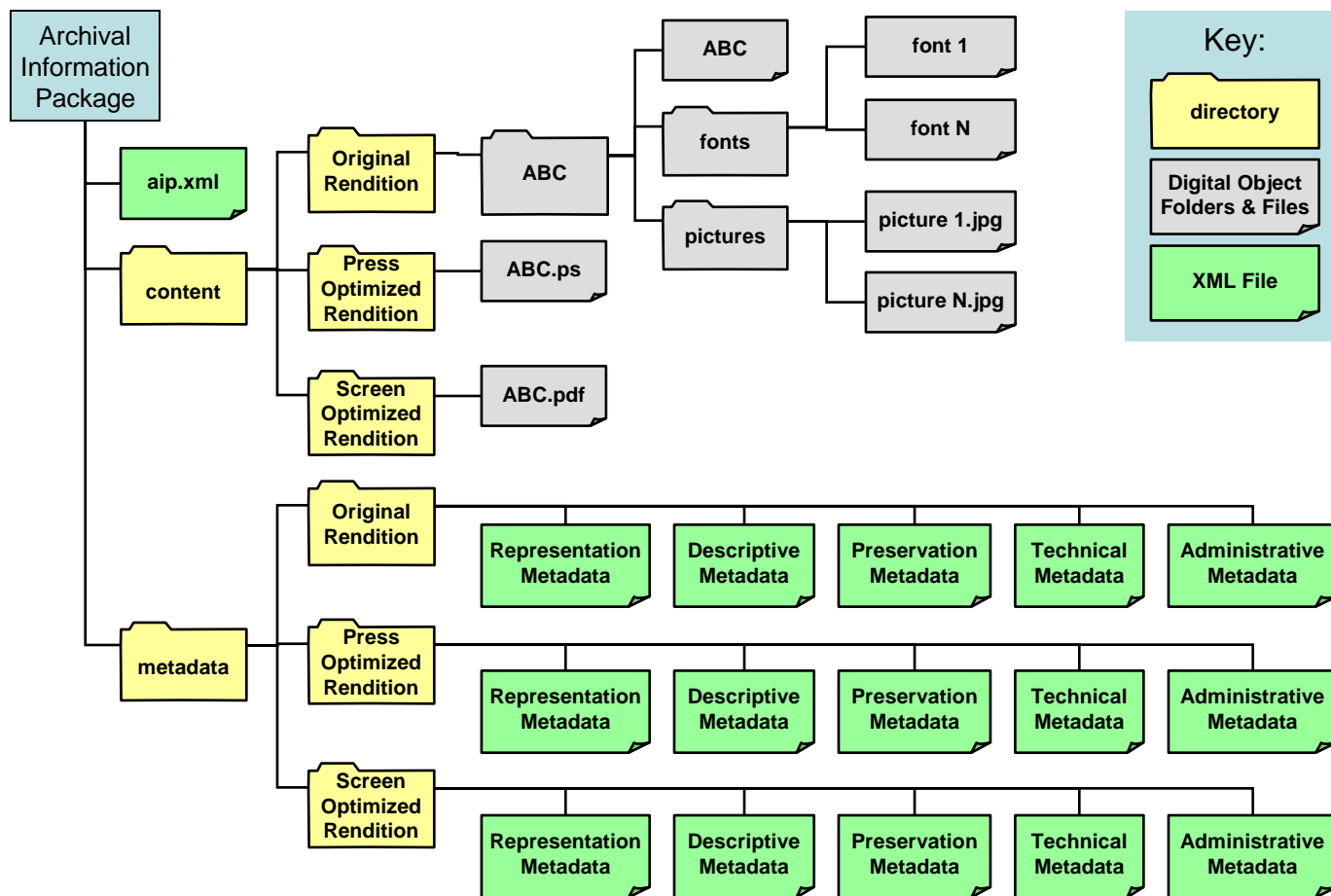
- Submission Information Packages (SIP)
 - Transitory object which, once ingested, becomes the Archival Information Package (AIP)
- Archival Information Packages (AIP)
- Dissemination Information Packages (DIP)
 - Created to satisfy a user request for a specific rendition or presentation of the content

Information Package Processing

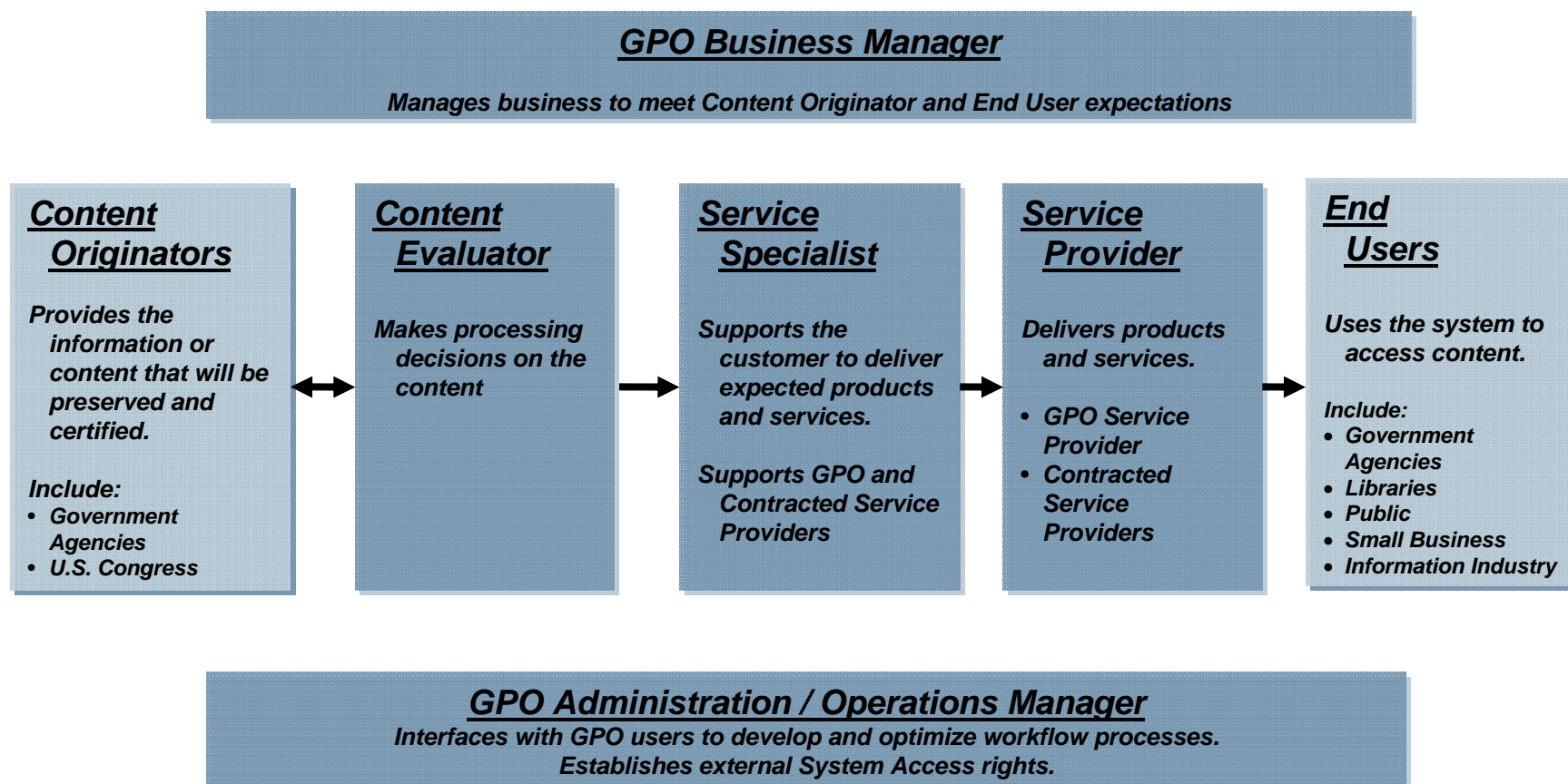


GPO added the Access Content Packages (ACP) to facilitate efficient and effective public access and utilizes a Work In Process (WIP) store to support Content Originator's efforts to create SIPs.

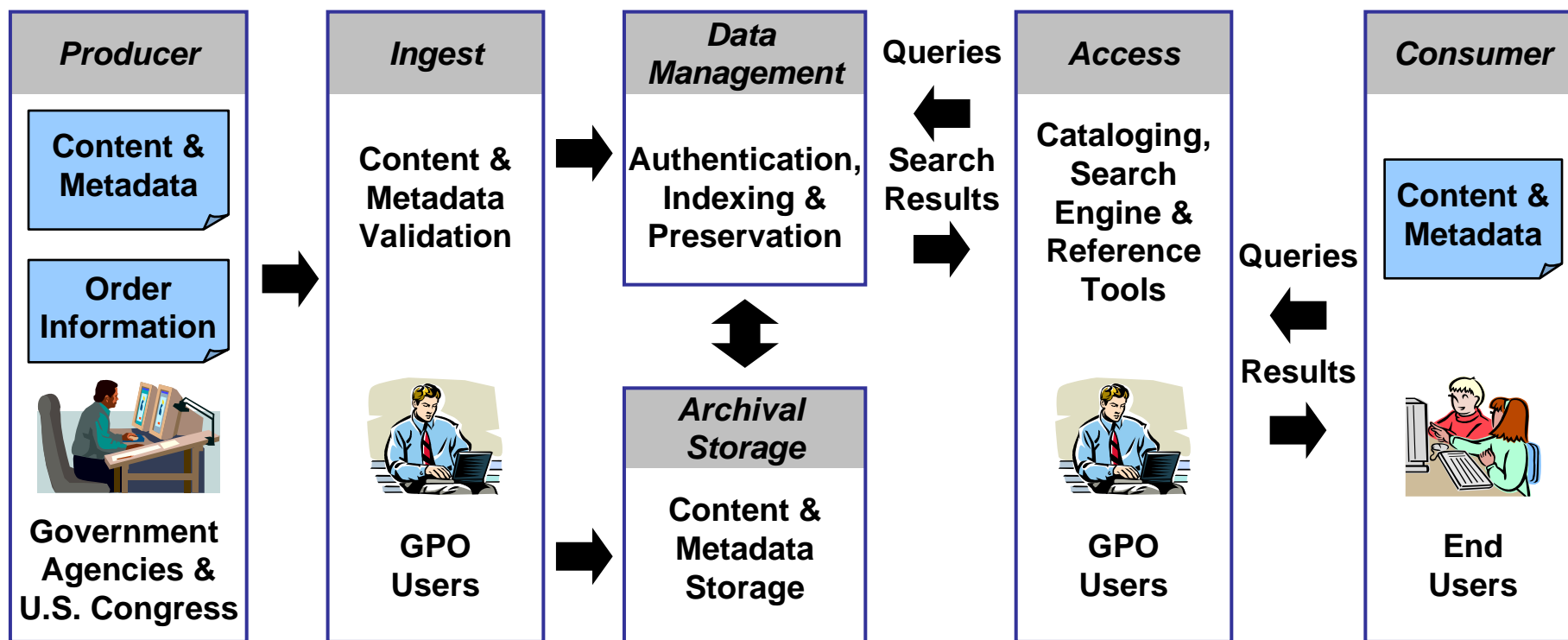
Representative AIP Structure



GPO User Class Model

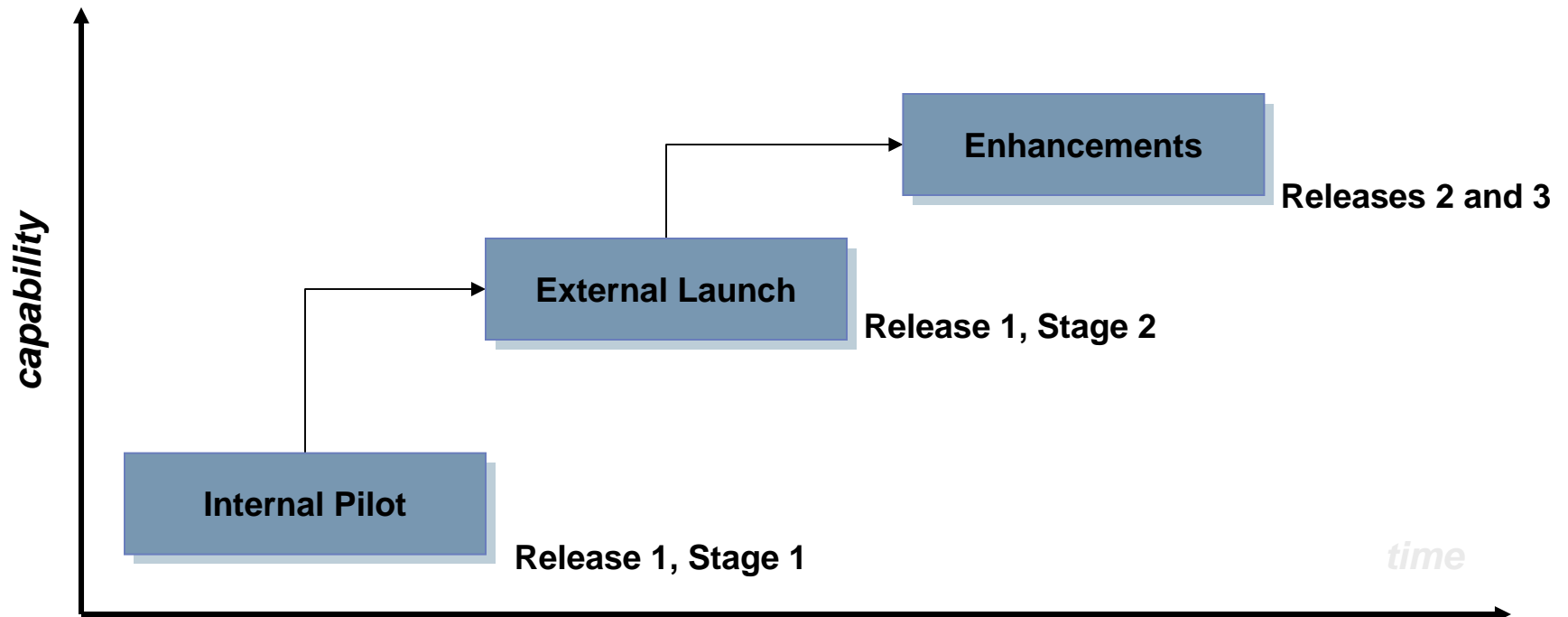


How FDsys Works



FDsys Development

Incrementing capability over time



FDsys is being deployed in multiple Releases over the next 2 years.

FDsys Release Schedule



Release 1:

- Accept digital information from all three branches of the Federal Government
- Replaces GPO Access
- Information storage to support permanent public access
- Authentication of information received and delivered
- Version tracking of publications



Release 2 and 3:

- Preservation processing of information to support access into the future
- Information harvesting tools to collect information on agency websites
- Automated version tools
- Extended storage to support harvested and legacy publications as required.
- Enhanced information authentication



Summary

- A comprehensive system to support GPO's mission to *Keep America Informed* is being developed
- Content will be managed around the themes of *authentication, version control, preservation and access*
- The new system will be developed and deployed without a disruption in operations at the agency
- Core functionality is expected to be complete in 2007

Additional Information

Program documentation is available on the GPO website:

www.gpo.gov/projects/fdsys.htm