

# **E-KNOWNET**

# **DESIGN AND PORTAL**

# **ARCHITECTURE**


Athens, September, 2008



# EXHIBITION AND COLLECTION MANAGEMENT SYSTEMS




# Museums and science centers

- Museums and science centers use open source platforms for
    - Collections and exhibitions management
    - Creation and publishing exhibits
  - These platforms combine features from
    - Digital asset management systems
    - Exhibitions and collections management systems
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- Main requirements of the e-KNOWLEDGE portal
    - Transformation of raw digital object into educational objects
    - Authoring process for the creation of collections and exhibitions
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# Open-source initiatives

- Detailed analysis of open-source initiatives that allows
    - management of digital objects
    - the creation and publishing of exhibitions
  - OpenCollection
  - Omeka
  - OpenExhibits
  - Pachyderm
- 



# Evaluation of open-source platforms

- A number of criteria were defined based on
    - e-KNOWLEDGE user needs
    - Best practices
  - An open source platform that covers e-KNOWLEDGE requirements
    - Omeka
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# Omeka platform

- Main features

Adaptable themes

Exhibit building

Tagging

RSS feeds

User Management

Drop box plug-in

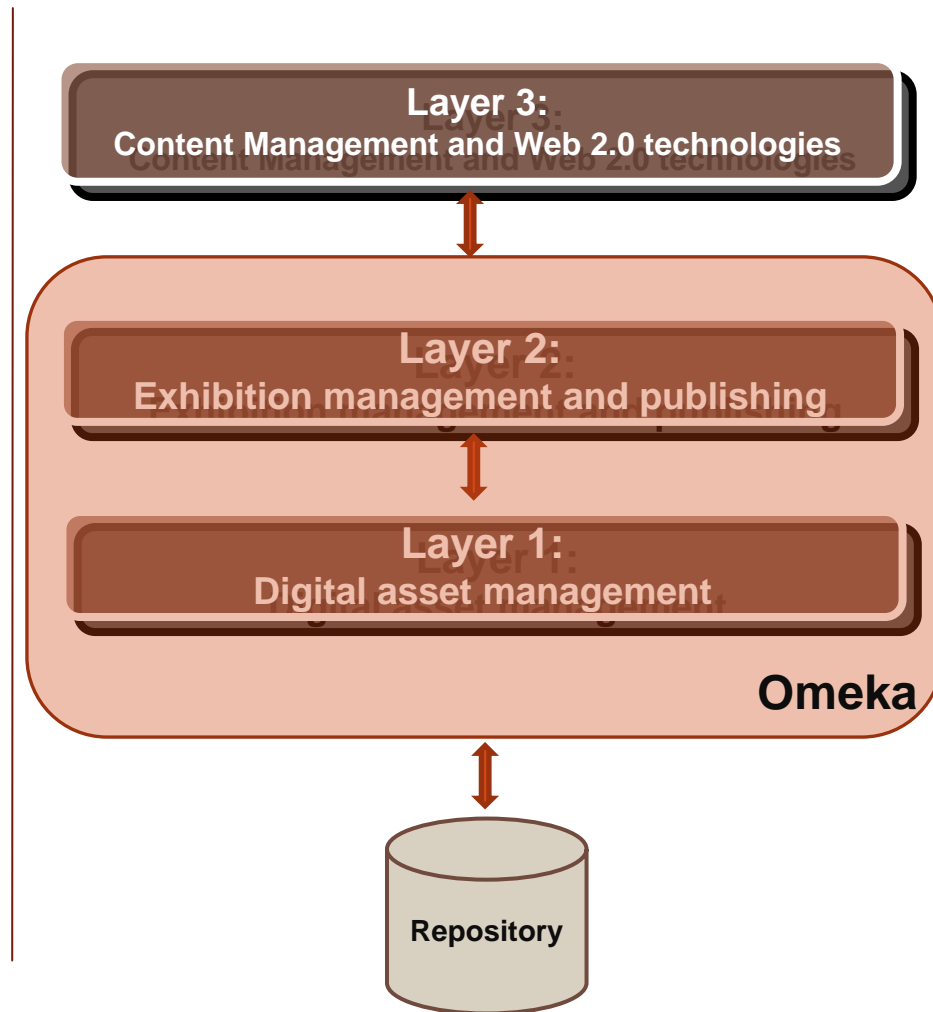
Contribution plug-in

Geolocation plug-in

Site notes plug-in

# Omeka and e-KNOWNET platform

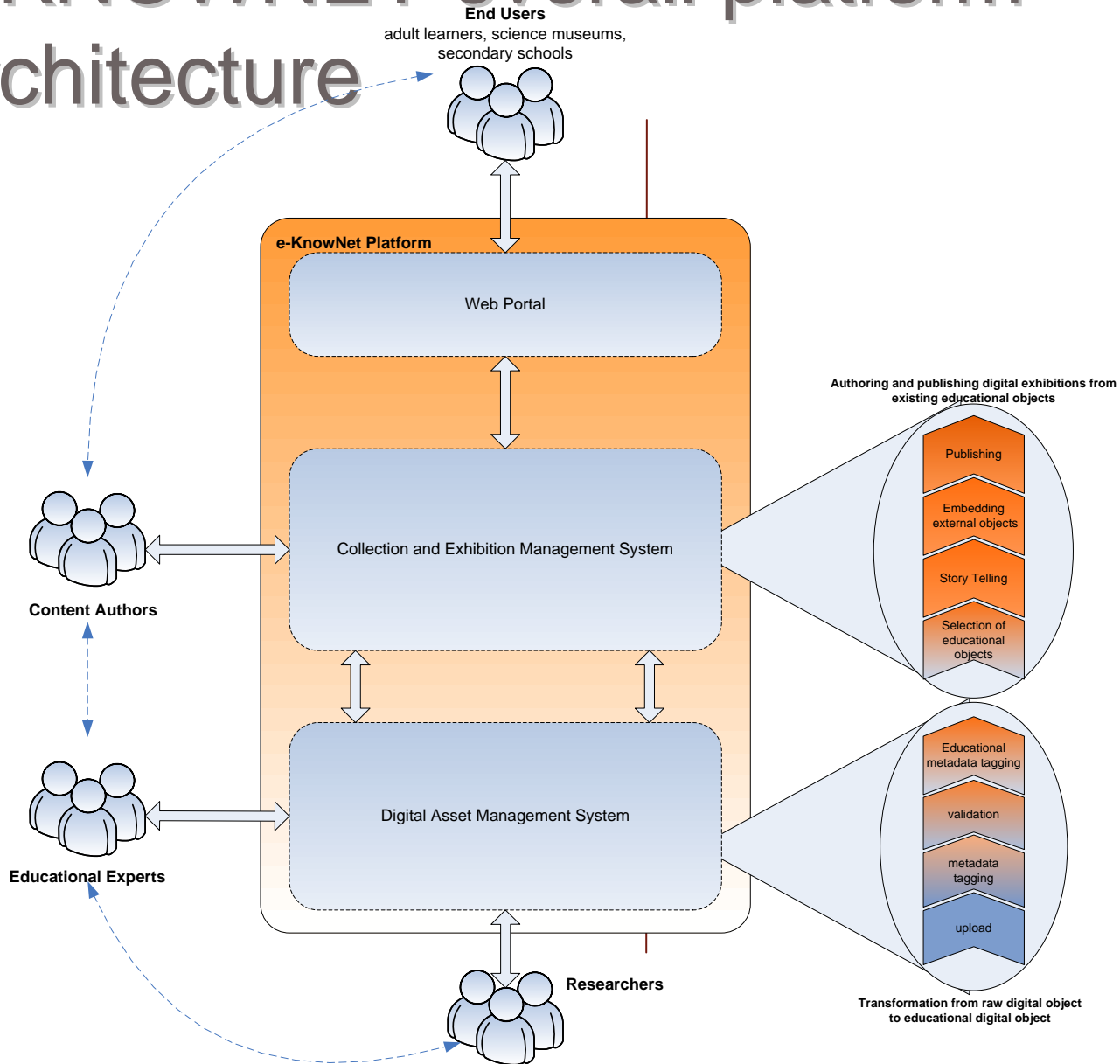
- Application layers of the e-KnowNet portal

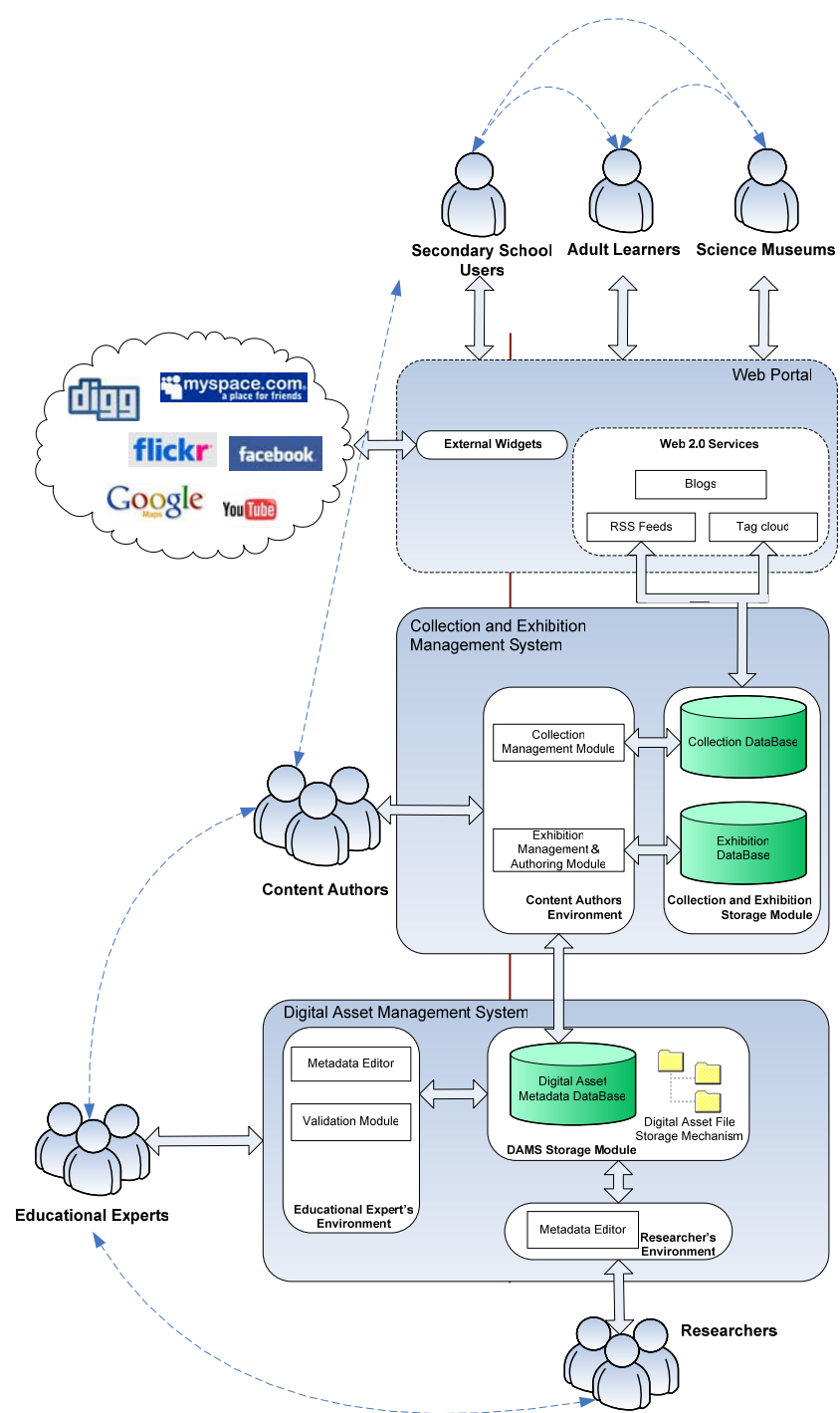




# E-KNOWNET PLATFORM ARCHITECTURE

# e-KNOWNET overall platform architecture







# OPERATIONAL MODELING



# Operational Modeling

## Main objective


- Define the platform's functionality
- Current approach is focused on exhibit management and publishing procedures

- Indicative scenarios presented here
  - Add digital object
  - Build and publish a digital exhibit
- Full list of scenarios of e-KNOWLEDGE portal
  - After further analysis of user requirements

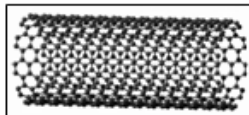


# Scenario 1: Add digital object


I have recently published an article in the topic of nanotubes and I would like to upload a figure showing the results of this work along with a short description



**Researcher**

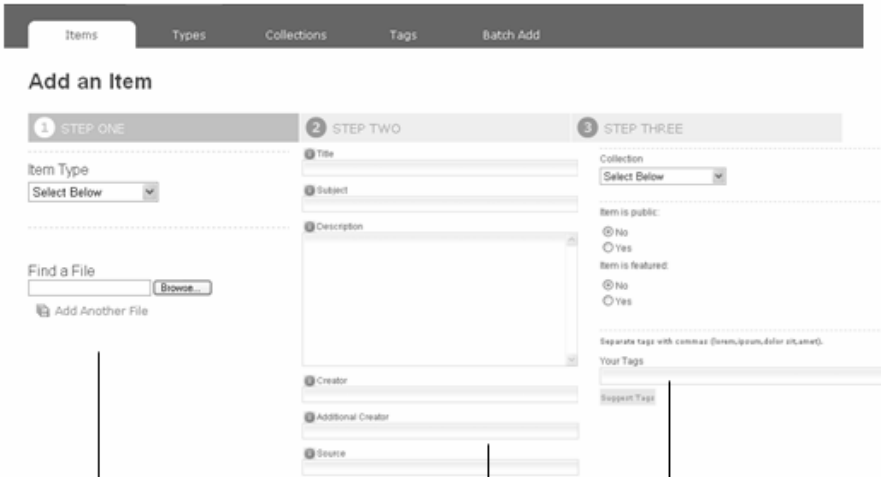


**Figure**



**Short description**

The researcher logs into the system and clicks on the "Add item" button



**Add an Item**

1 STEP ONE

Item Type  
Select Below

2 STEP TWO

Title  
Subject  
Description  
Find a File    
  
Creator  
Additional Creator  
Source

3 STEP THREE

Collection  
Select Below

Item is public:  
 No  
 Yes

Item is featured:  
 No  
 Yes

Separate tags with comma (item,topic,author,site,etc).

Your Tags

He uploads the figure file

The system provides a form for describing the metadata of the object

The researcher is able to edit the metadata of the object that he uploaded and review objects that were uploaded by other researchers

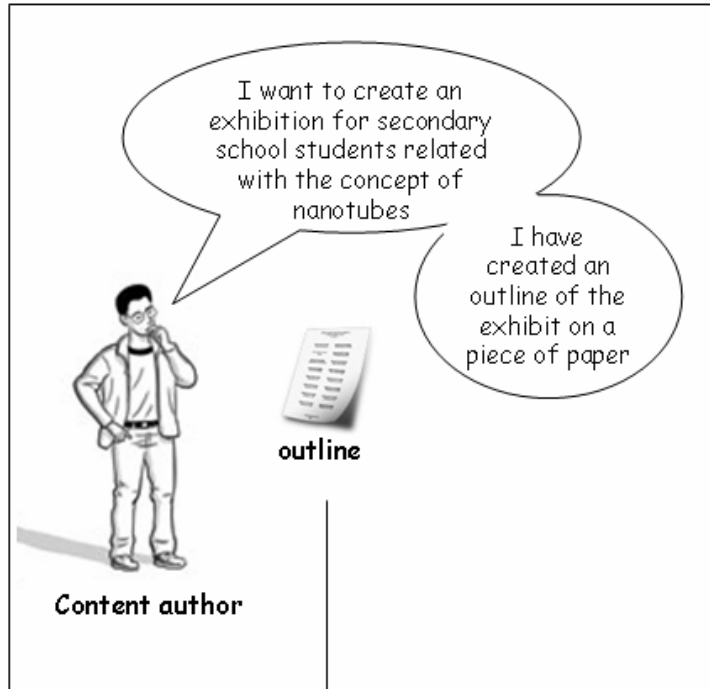
**Browse Items (10 items total)**

Search Items

List View Detailed View

ID	Title	Type	Creator	Date Added	Public	Featured	Edit?
1							

# Scenario 2: Build and publish a digital exhibit



According to the predefined exhibition structure, content author determines the different sections of the exhibition. For each section he enters the title, the url and the number of pages.

Content author logs into the system and he visits the exhibitions section. After clicking the "Add exhibition" button, he inserts basic information for the exhibit such as title, short description and keywords.

Dashboard Archive Exhibits Users Names Settings Site notes

Exhibits [Add an Exhibit](#)

ID	Title	Tags	Theme	EDIT	Delete?
1	Tobacco Advertising, 1890s-1920s	tobacco, advertising		[Edit]	[Delete]

**Add Exhibit**

Exhibit Title

Exhibit Slug (no spaces or special characters)

Exhibit Credits

Exhibit Description

Exhibit Tags

Exhibit is featured:  No  Yes

Exhibit is public:  No  Yes

Exhibit Theme

Section Title

URL Slug

or


Pages in This Section

To reorder pages, click and drag the page thumbnail to the left or right.


	1	[Edit]	<input type="button" value="Add a Page"/>
		[Delete]	

# Scenario 2: Build and publish a digital exhibit

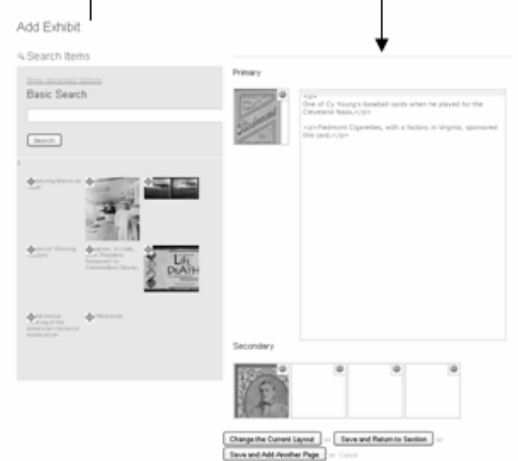
Content author can select from a number of different layouts for each section of the exhibit.



Layouts




He can search and select the most suitable objects for the specific section of the exhibit



The screenshot shows the 'Add Exhibit' interface. On the left, there is a 'Basic Search' box with a search button and a list of search results. On the right, there is a 'Primary' section with a large text area and a 'Secondary' section with three small image thumbnails. At the bottom, there are buttons for 'Change the Current Layout', 'Save and Return to Section', and 'Save and Add Another Page'.

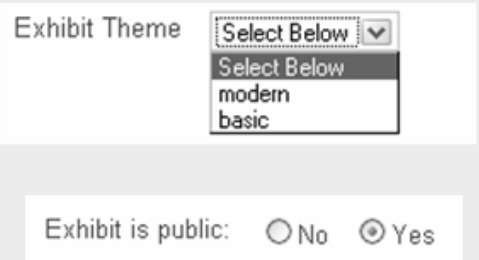
Upon the selection of the objects he writes the story for each section of the exhibit.



The illustration shows a man kneeling next to a tablet, pointing at it. An arrow points from the tablet to a large text area on the right, which contains a sample text block: "All of Cu Young's baseball cards when he played for the Cleveland Indians, 1951-1952. A set of 100 cards, with a folder in original, sponsored by the Indians."

He selects a theme (template) for the exhibit that is more suitable for the target group. Finally he publishes the exhibition.

Exhibit Theme



The screenshot shows the 'Exhibit Theme' selection interface. It features a dropdown menu with the text 'Select Below' and a downward arrow. The dropdown menu is open, showing three options: 'modern', 'basic', and 'basic'. Below the dropdown menu, there is a section for 'Exhibit is public:' with two radio buttons: 'No' and 'Yes', where 'Yes' is selected.