BRICKS EU Project
Building Resources for Integrated Cultural Knowledge Services
Overview

DELOS WP 7: Digital Library Evaluation

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Agenda

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¶ The vision

¶ BRICKS' definition

¶ Goals

¶ The BRICKS temple

¶ Services

¶ Actors and users

¶ BRICKS' success indicators

Project details

- EU funding program: 6th FP
- Thematic area: Digital Libraries Services
- Duration: 42 months
- Budget: 12,2 Mega Euro

- **COORDINATOR:** ENGINEERING Ingegneria Informatica (IT)

- **CORE PARTNERS:**
Fraunhofer (D)
Consorzio Pisa Ricerche (IT)
Austrian Research Centre (A)
Consiglio Nazionale delle Ricerche (IT)
University of Sheffield (UK)
University of Athens (GR)
Scuola Normale Superiore di Pisa (IT)
Ecole Polytechnique Federale de Lausanne (CH)
University of Florence-MICC (IT)

Project details

BRICKS
Building Resources for Integrated
Cultural Knowledge Services

- **CONTENT PROVIDERS**
    - Museum of Cycladic Art (GR)
    - Austrian National Library (A)
    - European Museum Forum (UK)
    - Uffizi (IT)
    - Vatican City State
    - Schoenbrunn Castle (A)
    - Russian Cultural Heritage Network (RU)

- **CULTURAL HERITAGE MINISTRIES**
    - Italian Ministry of Culture (IT)
    - Re:source (UK)

- **Technical and Cultural SME**
    - Oxford Arch Digital (UK)
    - Canoo (CH)
    - Studio Azzurro (IT)
    - Sistemi informativi Srl Liberologico (IT)
    - Polydisplay (NO)

The vision

→ **Cultural side**

• Great part of data related to cultural contents belong to the EU public sector information: they can be part of a European Cultural Memory

• The European memory is:
  – trans-national
  – wide-spread
  – not local based.

• All these data can compose a European Cultural memory, that is fully distributed and spread-out wide European countries.
(an Early Cycladic Art piece was produced in ancient Greek fifty centuries ago, but was used as inspiration by an Italian artist, Modigliani, living in Paris, five millenniums later)
(Roman age archaeology is not Italian, it' is European)

→ **ICT side**

• The emerging technologies for the content interoperability and management make possible to create a common layer which can enable data and technologies taken from different cultural sources to be combined into added value products and services.

BRICKS' definition

- System? Institution? Repository? It can be all of them

- It's more than Digital library, as it also involves Museums and Archaeological sites
→ can a single approach be extended to 3 different cultural institutions?

- It's a service-oriented and collaborative space:

  ➢ to share knowledge and resources in the Cultural Heritage domain

  ➢ to improve knowledge and good practices on ICT and Cultural Heritage domain

- It really tries to manage cultural diversity because:

  ➢ it is EU wide
  ➢ it covers the entire cultural distribution chain

Goals

THE INTEGRATED APPROACH

• integrating many European Cultural Objects and Content from different countries, as well as different typologies of competencies and background (research, business, technology, art and culture)

• develop open source and open access web platforms and architecture:

> ➤ for sharing services among Community members
> ➤ for stimulating collaboration among members

• use **web services** and **web semantic** to make ITC applications talking to each others
• **re-use and integration of results** achieved by Partners as new tools for the Community

The BRICKS temple

Develop an effective **sustainability model**

ROOF
the exploitation area

PILLARS
the application services
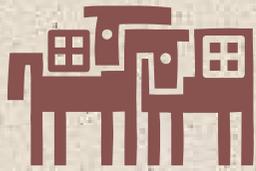
Developing the **right value added services**:
- Access to Culture
- Management of Culture
- Creation of Culture
- Digital text

Build an open **infrastructure** for services development and data interoperability
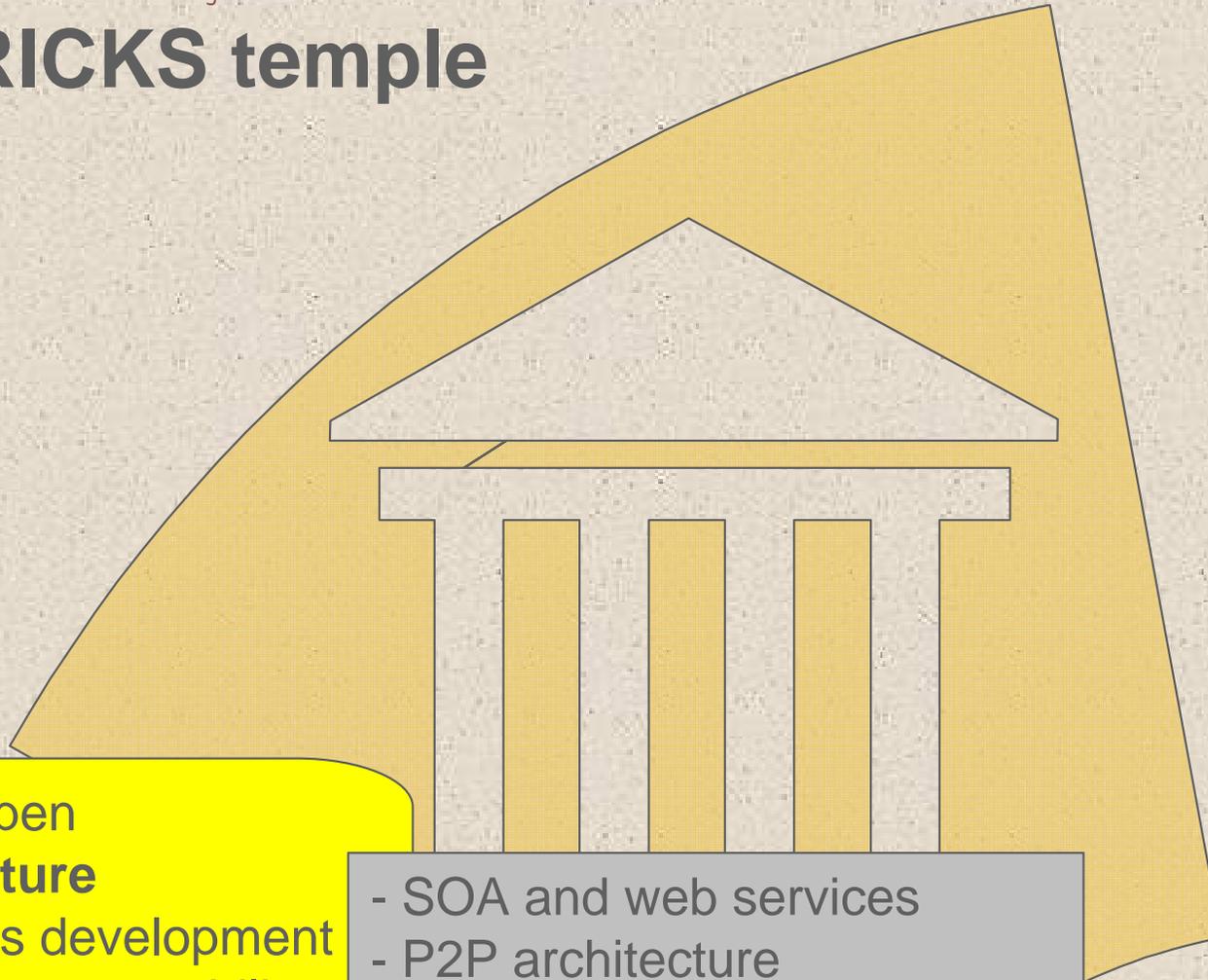
FOUNDATION
the infrastructure area

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The BRICKS temple

Build an open
infrastructure
for services development
and data interoperability

- SOA and web services
- P2P architecture
- BRICKS Nodes
- BNodes package (JavaVM, Tomcat, Axis, Zope)

The BRICKS temple

Pillars Description

ARCHAEOLOGICAL SITE

Goal: to improve the access to a distributed knowledge in **digital distribuited archaeological context**

Target users: Researchers and professionals, Cultural associations and Universities

SCRIPTORIUM

Goal: to facilitate fruition and management of **distributed digital texts** (historical documents)

Target users: Universities, Cultural research centres, Libraries and Archives.
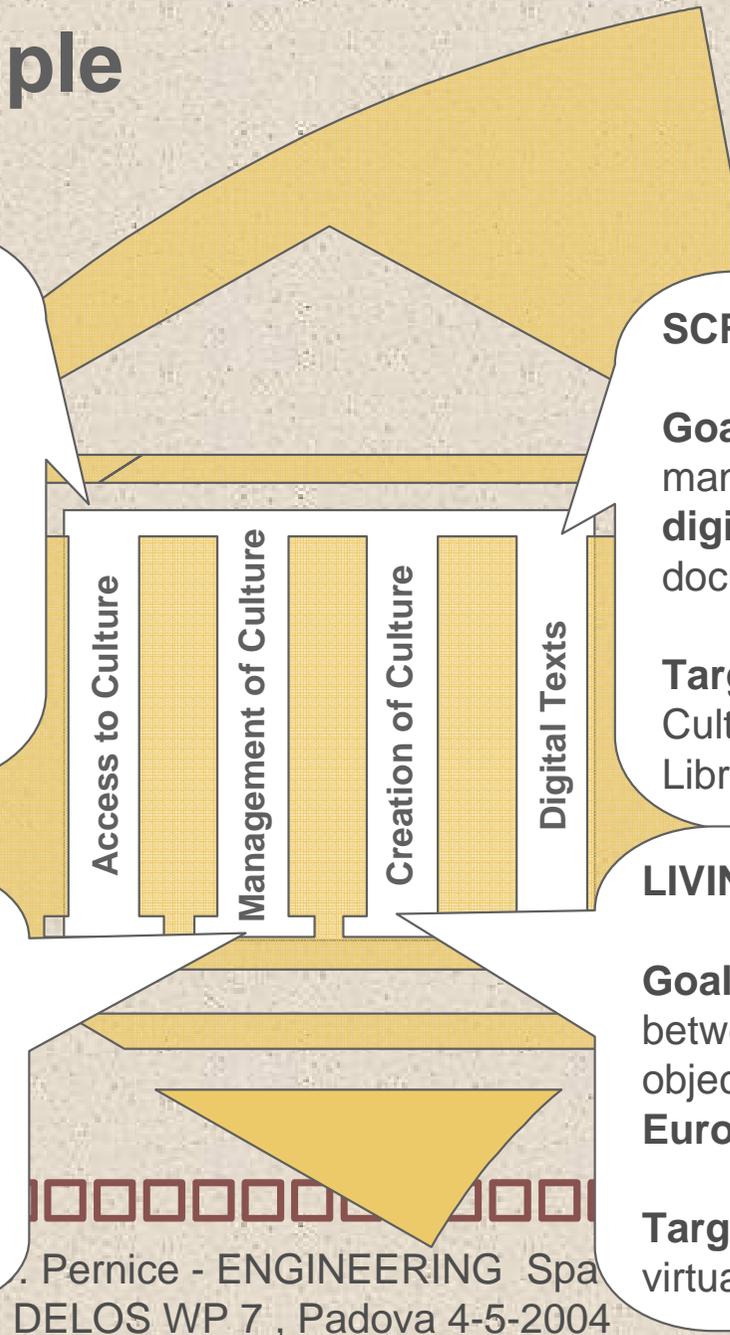
S&M MUSEUMS

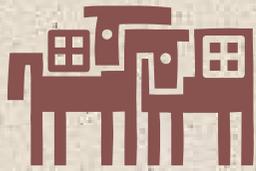**Goal**: to improve knowledge and good practices on **Museums Management**

Target users: Small and Medium Museums

LIVING MEMORY

Goal: to facilitate interaction between users/visitors and art objects in order to create a **living European memory**

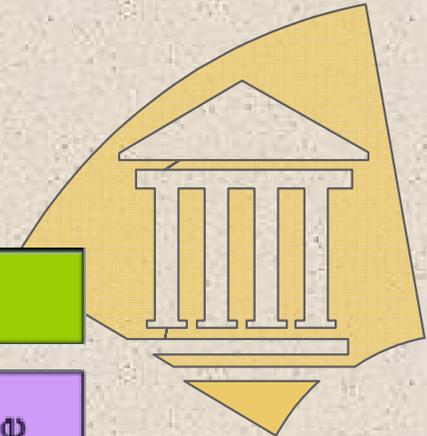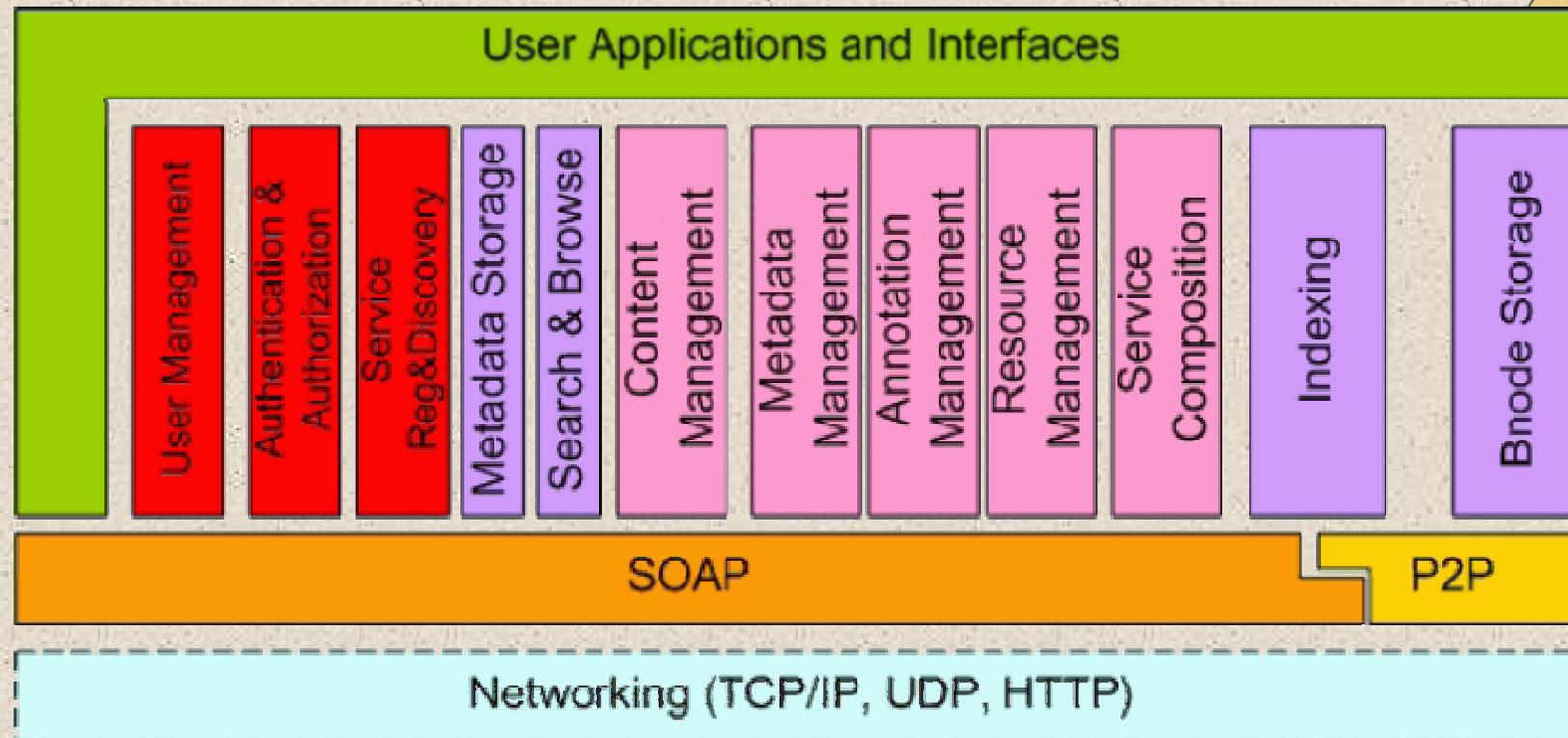**Target users**: visitors of real and virtual exhibitions

Access to Culture

Management of Culture

Creation of Culture

Digital Texts

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Services

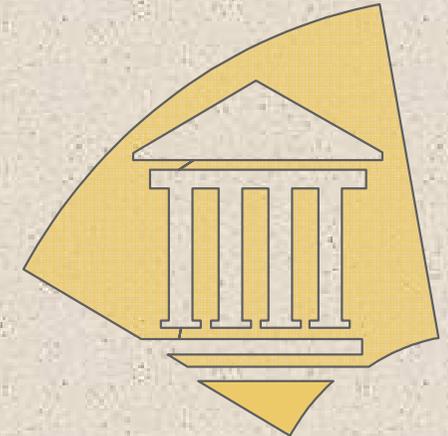**FOUNDATION LEVEL: core and basic bricks**

PILLAR LEVEL

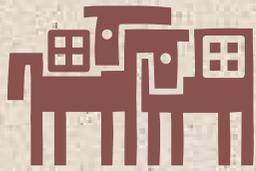Partners define services according to their user scenario and user needs
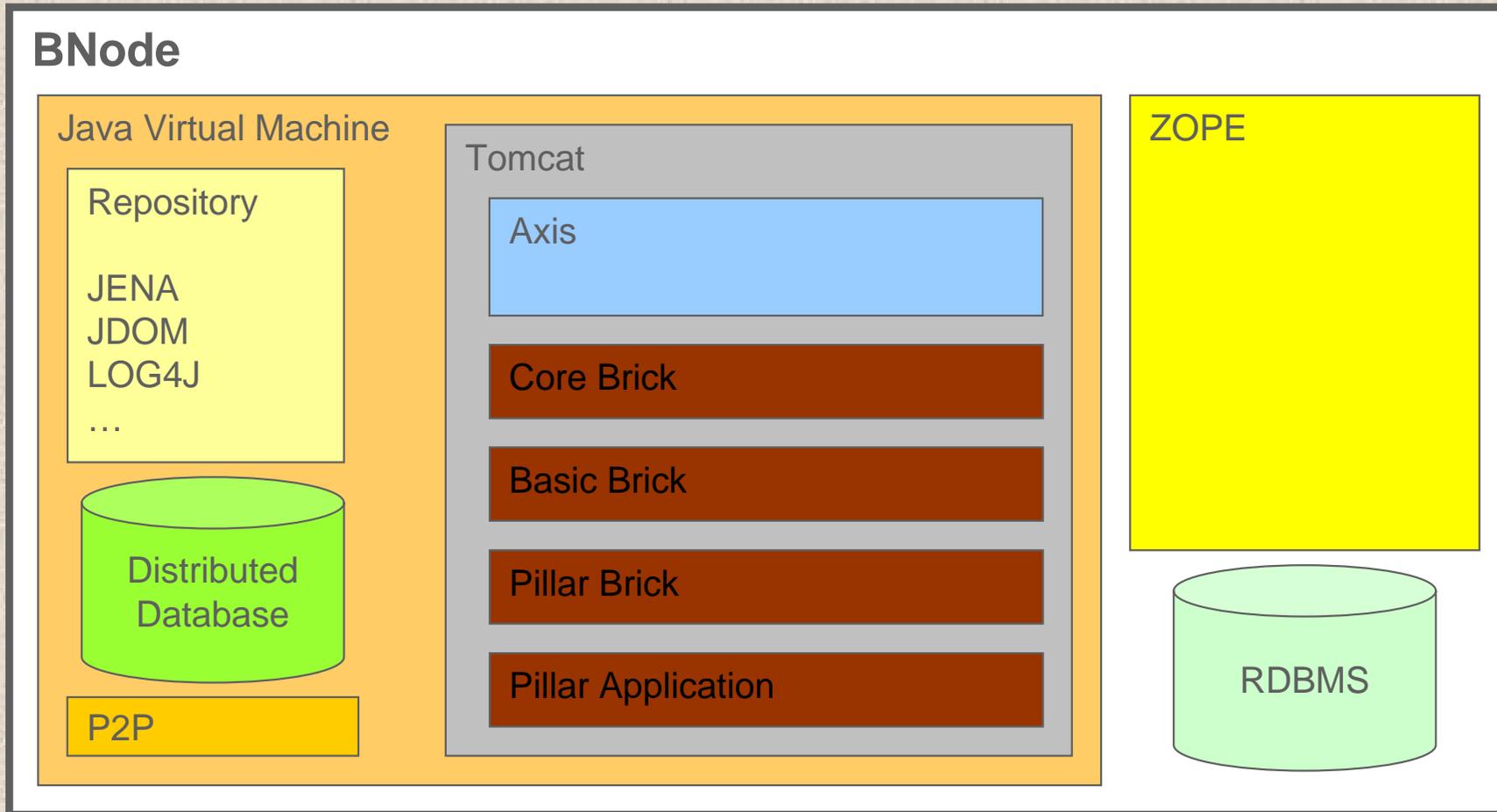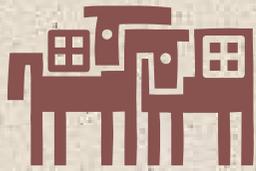
Services

Pillars applications

• What's the difference between an Application and a Brick?

> • **Core Brick**: must appear on every BNode
> • **Basic Brick**: must appear at least once in a BRICKS network
> • **Pillar Brick**: a function that can be conveniently encapsulated as a web service, but is (at present) only required by one application (the associated Pillar). May eventually become a Basic Brick.

> • A Pillar Application is the entire code base necessary to carry out the Pillar Use Cases. It consists of:

> > • application code
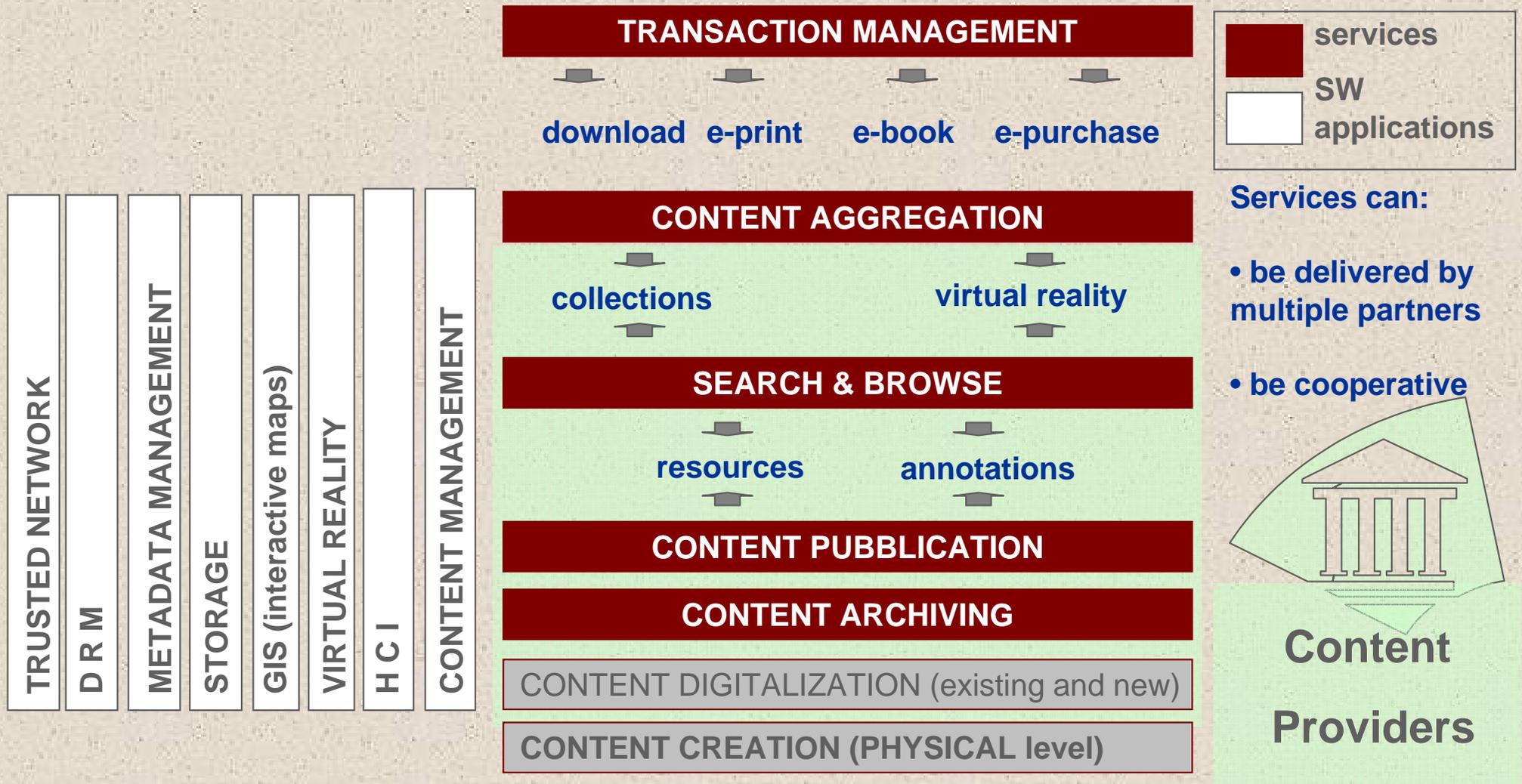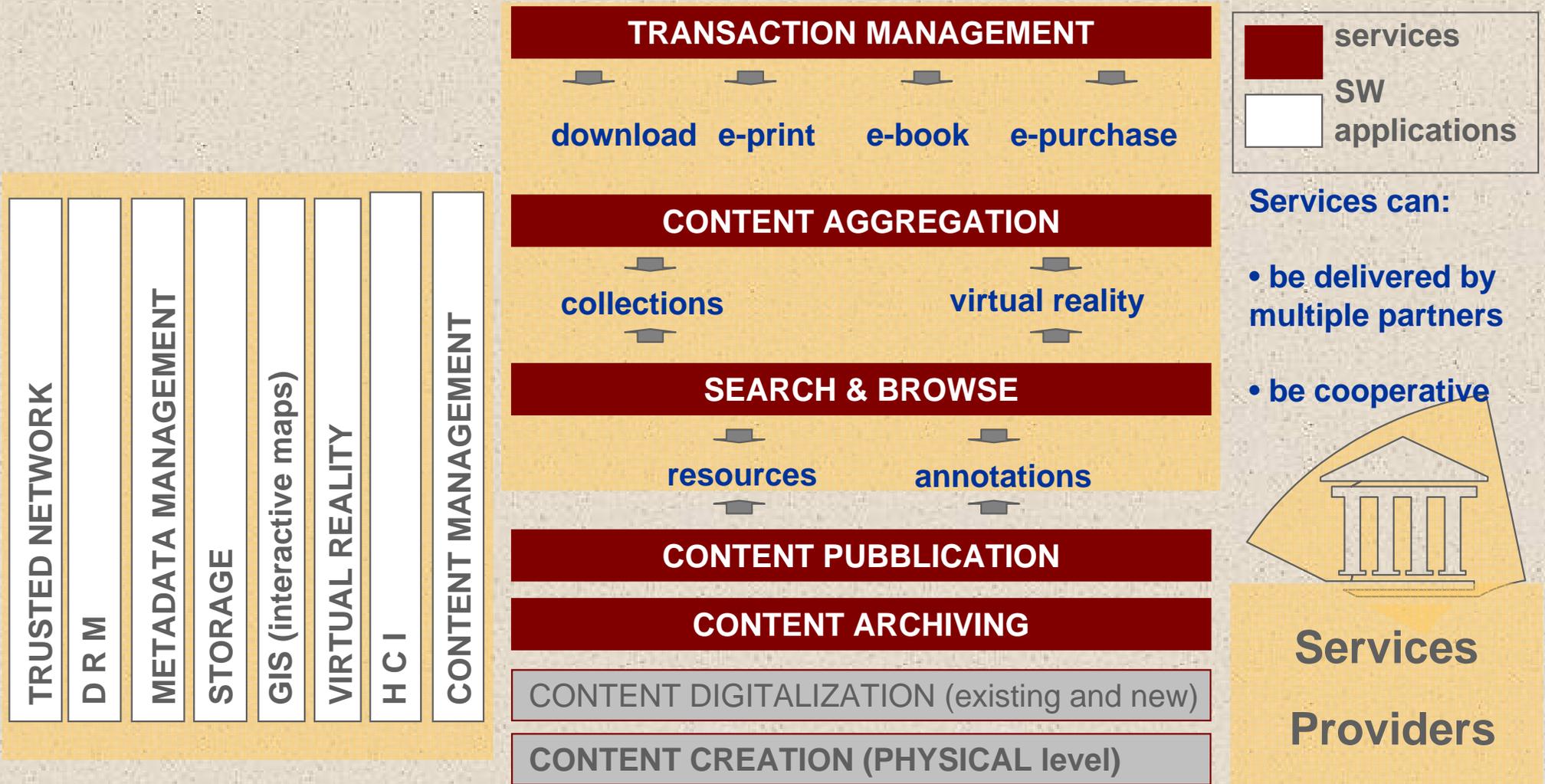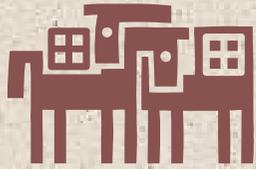> > • function libraries
> > • user interface

Services

BNode

Java Virtual Machine

Repository

JENA
JDOM
LOG4J
…

Distributed Database

P2P

Tomcat

Axis

Core Brick

Basic Brick

Pillar Brick

Pillar Application

ZOPE

RDBMS

Services

TRANSACTION MANAGEMENT

download   e-print   e-book   e-purchase

CONTENT AGGREGATION

collections   virtual reality

SEARCH & BROWSE

resources   annotations

CONTENT PUBBLICATION

CONTENT ARCHIVING

CONTENT DIGITALIZATION (existing and new)

CONTENT CREATION (PHYSICAL level)

TRUSTED NETWORK | D R M | METADATA MANAGEMENT | STORAGE | GIS (interactive maps) | VIRTUAL REALITY | H C I | CONTENT MANAGEMENT

services

SW applications

Services can:

• **be delivered by multiple partners**

• **be cooperative**

Content

Providers

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Services

BRICKS
Building Resources for Integrated
Cultural Knowledge Services

	services
	SW applications

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Services

Providers

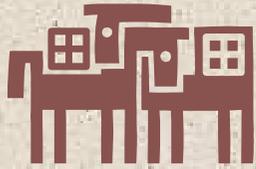# Actors and Users

CH Institutions and Companies are internal consumers exchanging services

services can be common to many Bricks Partners
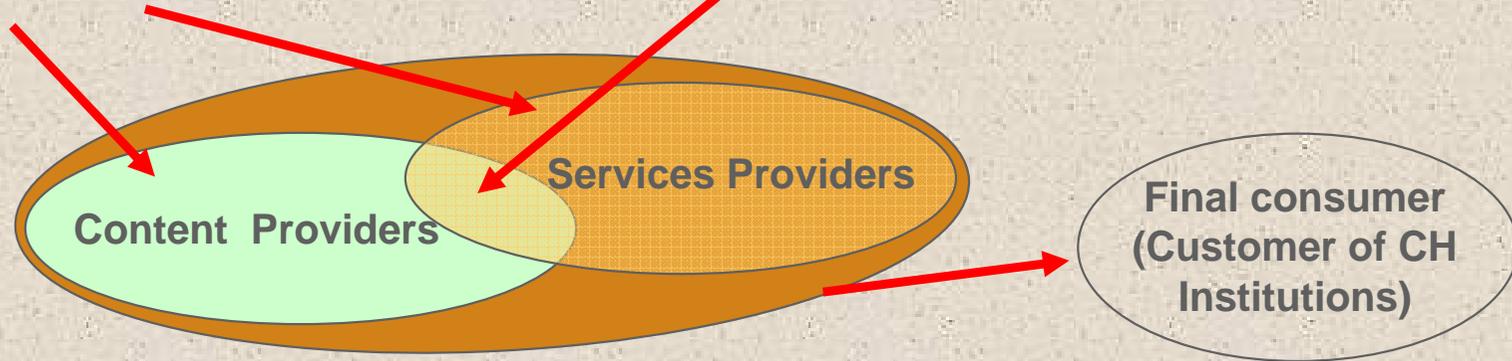
Content Providers

Services Providers

Final consumer (Customer of CH Institutions)
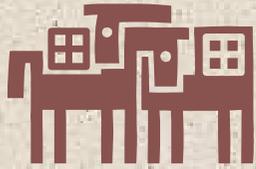
BRICKS' success indicators

• **Still little has been done to define testbeds and metrics for evaluating applications scenario**

• **BRICKS heterogeneity makes hard to define them, due to:**

➢ many different applications
➢ many different actors
➢ different target
➢ many different needs

→ **BRICKS Pillars can be considered as testbeds**

BRICKS' success indicators

• **Success indicators vary according to the Project Mgmt structure**
(Board of Directors and Workpackage)

• **Classification in four categories**

1. **T** - Technical
2. **I** - Innovation
3. **C** - Content & Culture
4. **V** - Valorization

• **Measurements methodologies and goals have to be set out**

- **Q** - Quantitative
- **R** - Report (quali-quantitative)
- **I** - Interviews and user interaction analysis
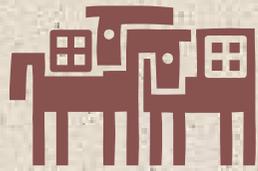- **D** - Documentation
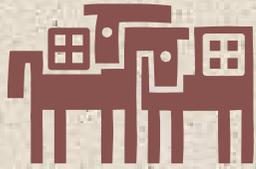
Technical Indicators

	way of measure	target
• State of the art monitoring (projects, papers etc) *projects and publications considered*	• Q – D	• > 20
• No. Technical reposts produced	• Q	• > 10
• No. of user interviews for the specifications	• Q	• > 30
• % of services developed	• Q	• > 80%
• % of services used *quality of service selection*	• Q	• > 80%
• No. of demonstration and prototype produced *valorise contribution and system capabilities*	• Q	• > 5
• User interface satisfaction	• I	• > 75%
• Integration with Universities	• Q, R	• > 10

Need to be exploded to build up an evaluation approach

Innovation Indicators

	way of measure	target
• User manuals and documentation	• D	• as foreseen
• Integration of different application scenarios	• R	• A1Y
• Achievement of user requirements	• R - I	> 10
• Guidelines accepted by cultural institutions	• Q - D	• > 3
• Technical standard accepted	• Q - D	• > 3
• Integration with other initiavives *Workgroups, NoE*	• Q	• > 5
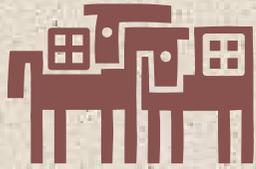
Content and Culture

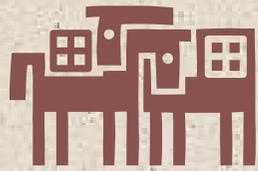|	way of measure	target
• Quantity of integrated digital content	• Q - R	• A1Y
No. of user interactions with the system	• I - R	• A1Y
• Analysis of value created for the user *economic impact of BRICKS for cultural institutions*	• R	• A1Y
• No, of BRICKS partners integrated into the system *acceptance of the system*	• Q – D	• > 15
• % of user involvement in specifications definition?	• Q - D	• > 75%
• Multimedia and content demonstrations? *valorise contribution and system capabilities*	• Q	• > 10
• Publications in Cultural domain	• Q	• > 5

Valorisation indicators

	way of measure	target
• No. of attendees at training *Interest of partners and users in BRICKS' results*	• Q	• > 50
• Hours of training provided	• Q	• > 200
• Press echoes *all over Europe*	• Q	• > 20
• No. of conferences, expo and joint events	• Q	• > 15
• Dimension of the Community	• Q	• > 100
• Investments estimation to enlarge the Community *valorise contribution and system capabilities*	• Q - R	• > A1Y
• Web site click-stream analysis	• Q - R	• > A1Y
• Co-operation with other projects	• Q - R	• > 10
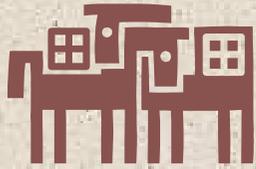
Q & A

Thanks very much for your attention

www.brickscommunity.org

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