BRICKS

Building Resources to Integrated Cultural Knowledge Services

GLOBAL FORUM 2003
Rome, November 6th

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Project Identity Card

- Project Acronym: BRICKS - *Building Resources for Integrated Cultural Knowledge Services*
- Project instruments: IP (EC VI FP)
- Thematic area: Digital Libraries Services
- Duration: 42 months (start date 01/01/2004)
- Budget: 14 Million Euro

Consortium (1/3)

- Coordinator:
  - **Engineering** - Ingegneria Informatica (IT)
- Technological/Scientific Members:
  - **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)

Consortium (2/3)

- Content providers
  - European Museum Forum (UK),
  - Uffizi Museum (IT),
  - Vatican Secret Archives,
  - Schoenbrunn Castle (A),
  - Russian Cultural Heritage Network (RU),
  - Museum of Cycladic Art (GR),
  - Ostereichische National Bibliothek (A).
- Cultural Heritage Ministries
  - Italian Ministry of Culture (IT),
  - Belgium Ministry of Culture (BE),
  - Resource (UK)

Consortium (3/3)

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

Main Issues

- The **IP goal**: Design, develop and maintenance a services oriented shared **European Digital Memory**
- The **Main Objective**: set up an open infrastructure for the Interoperability of Digital Content and Aggregation of Cultural Services
- The **Pragmatic Approach**: re-use and integration of EU-projects results (existing services) by mean of an open and distributed framework and a collaborative infrastructure
- The **Technological Aspects**: information integration, content interoperability, collaborative systems, web services, emergent semantics

European Cultural Memory

- Great part of data related to cultural contents belong to the **public sector information**: *they must be part of the European electronic marketplace*.
- **The European memory is trans-national** - not local-: *the European Cultural Memory is fully distributed trough European countries*.

An example: *an Early Cycladic Art (c. 3200 – 2000 B.C.) was produced in ancient Greek fifty centuries ago, but was used as inspiration by an Italian artist (Modigliani) living in Paris, five millenniums later*

More examples...

Roman age archaeology is not Italian, it is European

… as Gothic is not French or German, it is European

All these are bridges to unify and develop the *European Digital Memory*

Scenario

- During the last two millenniums the Europeans have developed a huge variety of Cultural Objects (art-facts, paints, sculptures, archaeological and architecture site,...)
- In the last century a lot of information and content on Cultural heritage have been produced and stored in textual, magnetic and electronic formats (movie, book, database, libraries, ecc.)
- In the last decade many projects have been conducted, delivering many sw-based services to manage these data..

*The challenge is now to build a **common platform to unify and preserve** the access to all these data...*

Goal

... through the integration of services enabled by a ***scalable common infrastructure for***
DIGITAL EUROPEAN MEMORY

- **DEM** will be an open source architecture where to share knowledge and content
- **DEM** will exploit results from other project by modern SW technologies
- **DEM** will enable interoperability, not just for Content, but also for the services (with Web Services approach)

Core Objectives

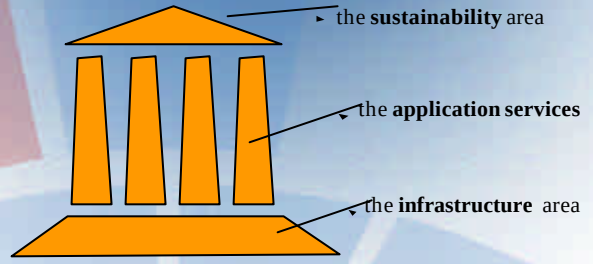
➲ *what we intend to build*: an **open, distributed and safe infrastructure**

➲ *how we are going use it*: **four main instances** of usage to demonstrate the value creation for the users.

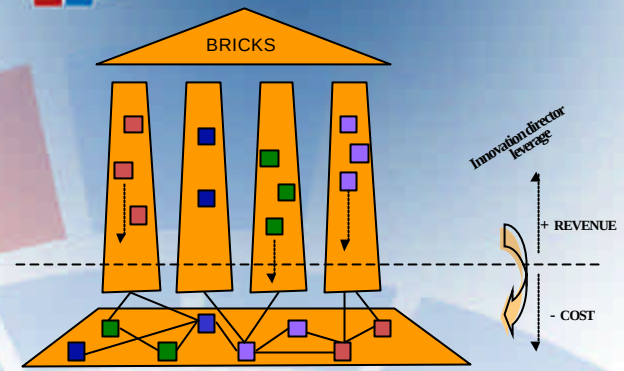
➲ *who will pay for*: define the **right business model** for future sustainability

"Greek Temple" metaphor

In order to illustrate these three areas and their relationships, ***the Greek temple metaphor*** is adopted:



The *"bricks"*



Test beds

- Four main application scenarios (pillars) are initially foreseen:
  - **Access to Culture** : reconstruction of Knowledge
  - **Management of Culture** : Small and Medium Museums
  - **Creation of Culture** : living memory
  - **Digital Texts**: scriptorium
- Other pillars could be added using BRICKS standard infrastructure in a *"Plug and Play"* mode

Application scenarios

- **Reconstruction of Knowledge**
  - Target users: Researchers and professionals, schools, Cultural associations, University Professors, exhibit curators
  - Application goal: Design a Pilot to integrate the access of distributed knowledge on Digital Cultural Content
  - Business Model: B2E
- **Small and Medium Museums**
  - Application goal: to improve and distributed knowledge and good practices on Museum and Culture Management
  - Target users: Small and Medium Museums
  - Business Model: B2B

Application scenarios

- **Living Memory**
  - Application goal: to facilitate interaction between users/visitors and Multimedia Art Objects in order to create a living European memory
  - Target users: general public, visitors of real and virtual exhibitions
  - Business Model: B2C
- **Scriptorium**
  - Application goal: Facilitate fruition and management of Distributed Digital Texts
  - Target users: Scientific professionals: Universities, Cultural research centres, libraries and archives.
  - Business model: B2B

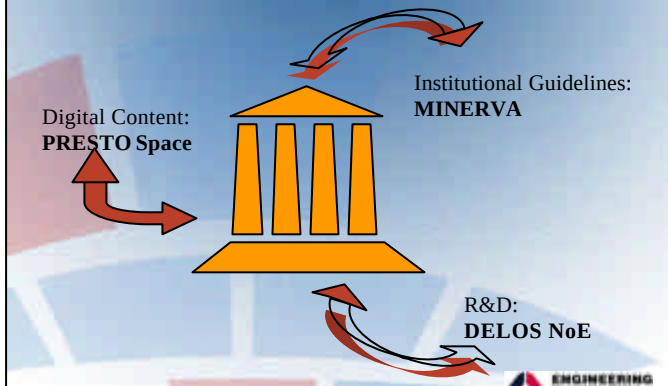
Innovation Issues

- BRICKS employ a **service-oriented approach**, focusing on the right added value for the user, in contrast to the traditional content-oriented approach
- BRICKS relies on a **distributed open infrastructure** , in order to reduce the cost of development and deployment of new services by maximising the re-use of existing results, and to reduce maintenance costs by eliminating the need for a centralised organisational and/or technical infrastructure.
- BRICKS sees **global semantics** as an **evolutionary process**, emerging from local interactions and agreements in order to overcome linguistic and ontological barriers and realise a shared knowledge space.

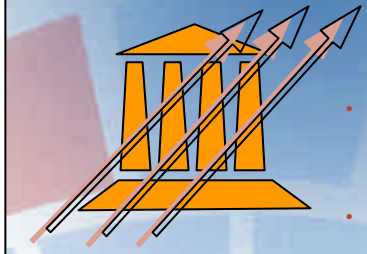
The "Bricks" Community

- BRICKS Community members
- Soprintendenza per le province di Pisa , Livorno, Lucca e Massa Carrara (IT),
- Soprintendenza di Pompei (IT),
- UNESCO (INT),
- Gakujoken-Japan Ministry of Education,
- Developing Jewish Networking Infrastructure (ISR),
- Technische Universitat Berlin (DE),
- National Library of South Africa,
- The Fitzwilliam Museum - Cambridge University (UK),
- Scandinature New Media AB (SW),
- Collezione Gori - Fattoria di Celle (IT)
- ... and many others

Bricks synergies



Project Vertical Themes



- **Open source in the Cultural Heritage Context**; How manage the open source approach in the Cultural heritage context ?
- **The evolution of Business organisation**: Virtual Organisation vs. Traditional Business Organisation
- **Creation of Culture** : Art, Technology and Culture; what possible integration ?


BRICKS
Thanks
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