

# The Global Virtual Museum of Information Science & Technology: Tacking up the Challenge

ifip International Communities of Invention and Innovation

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# HMR project

 $\hfill\square$  An independent research project, since 2006

- Detailed technical investigation, rebuilding
- Teaching, exhibits and events
- Linked to the Museum of Computing Machinery of the University of Pisa

### $\square$ Some results

- Rediscovering and rebuilding of the Macchina Ridotta
- Set-up of "From Arithmometer to PC", a permanent exhibition on personal computing machinery
- Experiments with a Computer History KB





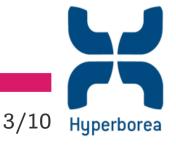


Software solutions for cultural heritage

- Descriptive models, analysis and consulting
- Integrated archive management systems
- Digitisation, indexing, cataloguing and search tools
- Online access to cultural heritage resources

### Some customers

- Italian Ministry of Cultural Heritage
- Archives (Venice, Florence, Turin, Siena, Milan...)
- Museums (MART, MAXXI...)







Huperborea

#### □ Global Virtual Museum of IST

- Global, as it collects all (relevant) collections
- Virtual, in nature, not a virtualization of a Museum
- Does not substitute the real Museums
  - Focused on information, all of it
  - Adds value for keepers, researchers and visitors
- An international community effort
- □ As far as we know, to this extent, a novelty





### The Knowledge Base

- Manages all the information: pieces, models, scientists, inventors, investors, companies, versions, components, software, documentation, media, references...
- Virtually joins all collections
- □ Completely different from usual cataloguing
  - Still based on flat indexes of objects
  - Suffering of separation, duplication, inconsistencies
- □ As far as we know, to this extent, a novelty





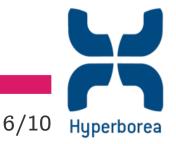


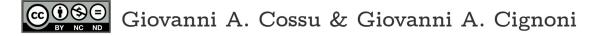
### □ An IT solution for IST history

- Actually, IST is just a case study
- The idea is general, can be applied to other fields
- But they are domains outside our expertise

Besides the nice recursive application

- It may be a relevant contribute to the whole cultural heritage management
- And it will be nice to be "the first" :)







#### Once KB and consortium are up and running

D Museums gain in efficiency

- The KB is their new cataloguing tool
- Keepers and researchers just do their job
- In an enhanced way, KB shared and peer reviewed

□ Services, to build virtual/enhanced exhibitions

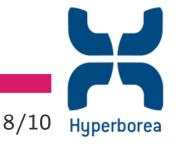
Policies for IPR depending on use







- Lot of work, but just will and effort
- Ontology definitions
  - Sort of an OO hierarchy of objects and relations
  - Science already did it for many natural domains
- □ Technical infrastructure
  - Not trivial, but much more complicated things exists
- Populating the KB
  - Mainly by controlled importations







- Ambitious challenge
  - But actually just a ignition problem
- Partners needed
  - Some leading scientific institutions
  - Some important collections
  - Technical ones are not a problem
- Once KB & authority are set up
  - The others will follow







## □ CULT-COOP-09-2017, RIA

 European Cultural Heritage, access and analysis for a richer interpretation of the past

## □ CULT-COOP-06-2017, RIA

- Participatory approaches and social innovation in culture
- □ Opening October 4; deadline February 2 2017

