

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



*International Communities
of Invention and Innovation*

*WG 9.7 – History of Computing Int. Conference
NYU Tandon School of Engineering
25-29 May 2016*

- 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

- 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...)

- 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
- 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