structured & shared knowledge, information technologies and the economy of cataloguing

XXVI Conference of the Italian Association of Scientific Museums
Trieste, November 16-18, 2016
the context and the general idea
HMR: an independent project

hacking the macchina ridotta
experimental archeology of computer science
technology & history

since 2006
exhibitions
dissemination
teaching
simulators
computing history knowledge base
information technologies for computing history
an new approach to cataloguing (and not only)

a paradigm shift
union of collections
pieces and related facts
chains of relations
views and perspectives
CHKB: a subproject of HMR

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an example

S. Jobs
Apple
S. Wozniak
C. Peddle
Byte Cover

R. Wayne
Apple I Man
MOS 6502

1976 Apple-1
1975 KIM 1

Apple-1 @ Bolaffi
KIM-1 @ OldCompOrg
computing history is a case study
moving from sparse data to a shared KB
is significant and viable for many domains

relations for a KB in, say, natural history :) 
species, genus, family, order, class, phylum...
geographical habitat, ecosystems... 
behaviours, food chains...
explorers, scientists...
economic considerations

unused technologies are missed opportunities

knowledge management – not just data
cooperation & sharing

free a keeper for research

focus on pieces in the collection
easier identification of pieces
a single source of reliable information
community and peer review
CHKB: the prototype
a single cooperative KB

an access to many collections (and not only)
one KB out of many independent collections
privacy and digital rights concerns

as a web application
PostgreSQL
PHP 5 on Apache server
Bootstrap – Javascript + CSS framework
hmr.di.unipi.it/CHKB.html
basic records, CR & TR

catalogue record
related only to the piece edited by keepers

technical record
related to “classes” hardware, software...
edited and peer reviewed pointed by CRs
contents for cataloguing
mugshots of pieces
digital copies (sw, doc)

additional contents
related images
technical documents
advertising
cameos in movies
other records, PR & CoR

people
scientists & engineers
entrepreneurs
notable users

companies
makers
producers
adopters
peer review of contents

editors
- an open group of users
- edit TRs, PRs, CoRs

reviewers
- accept proposals
- designate editors
- assign editing tasks
- review TRs, PRs, CoRs
summing-up

full exploitation of available technologies
   beyond cataloguing standards
   and local projects
   able to free resources
   and ease research

future work
   further development of the prototype
   populate the KB
   an EU project – fingers crossed :)

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