



EPOCH

The European Network of Excellence on the Applications of
Information and Communication Technology to Cultural Heritage

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Information Communication Technologies for the Research and Dissemination of Cultural Heritage – the Epoch project



What is EPOCH

EPOCH is a Network of Excellence under
FP6 dealing with ICT (Information &
Communication Technologies) Applications to
Cultural Heritage

- ◆ Kick-Off: April 2004
- ◆ End of EC funding: March 2008
- ◆ Partners: more than 80, from most of the
European countries, but also from USA,
South Africa, Australia, and the Far East

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Distribution of Partners in Europe



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Mission

To deliver a clear **organisational and disciplinary framework** for increasing the effectiveness of work at the interface between **technology** and the **cultural heritage** of human experience represented in monuments, sites, museums and historic landscapes.

This framework encompasses **all the various work processes** and flows of information from data recovery and management to preservation, education and dissemination.

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Goals

- ◆ Foster integration
 - Stimulate cross-fertilization between humanities and technology
 - Integrate research teams
 - Create an integrated toolkit
- ◆ Create a joint research infrastructure
 - Define research and dissemination standards
 - Create a holistic approach to CH dissemination
- ◆ Spread excellence
- ◆ Provide a training framework
- ◆ Raise citizen's awareness towards CH

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Domains of Activity

- ◆ Field recording and data capture
- ◆ Data organization and standards
- ◆ Management and preservation
- ◆ Reconstruction and visualization
- ◆ Heritage education and communication
- ◆ Competence building
- ◆ Sustainability of heritage projects

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EPOCH's Community

- ◆ EPOCH is now starting to create a wide community of **Affiliated Partners**, i.e. institutions – mainly from the heritage sector – which will:
 - Provide needs, requests, input on priorities
 - Avail of tools and other benefits
 - Establish further partnerships on specific issues and fund raising
- ◆ Focus is on Europe, but non-Europeans are welcome with the same status

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EPOCH: an overview

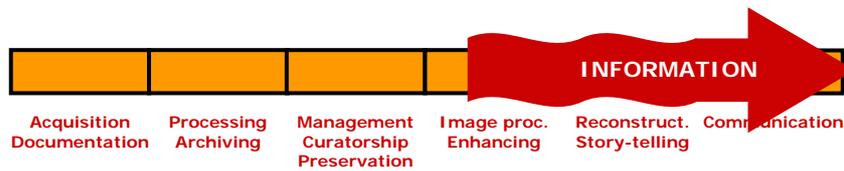
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The pipeline

The key concept is the **pipeline**:

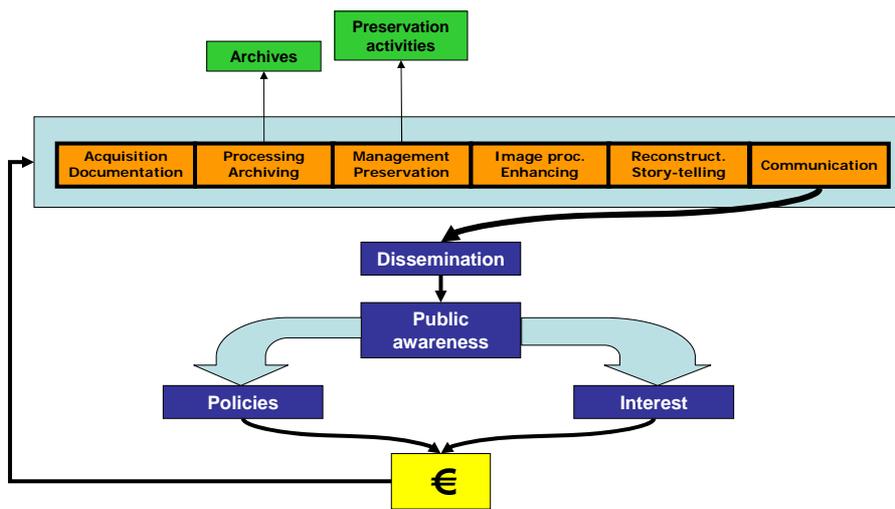
- ◆ An integrated system of CH research and dissemination using ICT
- ◆ Produce valuable cultural communication by processing data with ICT



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There is no sustainable preservation without exploitation



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Analysis of stakeholders' needs

- ◆ Collect needs from heritage professionals, managers and policy makers about the needs of museums, monuments, sites and landscapes.
- ◆ In general they concern
 - Preservation
 - Public interpretation (vs. presentation)
 - Involvement of visitors, local communities, stakeholders
 - Cost efficient, long life-cycle, effective, sustainable, open projects
 - Cross-cultural, multilingual, localized applications

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Analysis of stakeholders' needs

- ◆ Archaeology needs
 - Improve efficiency of field recording
 - Tools for stratigraphy analysis and interpretation
 - Tools for object analysis and interpretation
 - Tools for underwater archaeology
 - Interpretation management (storage, uncertainty, update)
 - Interoperability of databases (ontologies, standards)
- ◆ Sites and landscapes need
 - Presentation outdoors, portable, at distance, augmented - virtual
 - Authoring tools linked to research activities
 - Combination site - museum
 - Good ways to show past societies
 - Sound

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First results

- ◆ Landscapes need
 - Visualising landscape evolution
 - Virtual access for associative cultural landscapes (preservation, intangible heritage)
 - Improved, integrated tools for recording, visualisation and presentation of large cultural and natural sites
- ◆ Historic Towns & Regions need
 - Non-invasive presentation tools (outdoor, mobile, augmented, contextual)
 - Central node systems for cities/regions
 - Efficient/open modeling and creation of cityscapes
- ◆ Monuments need
 - Efficient modeling for restoration, preservation, presentation
 - Structured models from unstructured recorded data

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First results

- ◆ Museums need
 - Mostly solutions to structural problems
 - Training & first-line consulting
 - Cost-efficient, effective, reliable open solutions
 - Solution-driven, simple tools
 - Usability & accessibility (laws and guidelines)
- ◆ General needs
 - Optimal match need - technology
 - Training (also on standards and guidelines)
 - Technology thesaurus
 - Social software & special needs
 - Data life cycle - data migration/integration
 - Digitisation of archives (OCR for old text)
 - Good support of optimal software

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Training and dissemination

- ◆ Course organization and support
 - Courses organized in Europe
 - Scholarships for attending
 - Agreements with national and international institutions for joint activities
- ◆ Regional workshops
 - In Europe – at national level
 - In the world – for wide regions – especially where research agreements with EU are in force, or there exist specific cooperation programs; or availing of bi-lateral cultural agreements
 - For example: India, Central America & Caribbean, Southern America, etc.
- ◆ Publications
- ◆ Presentation at conferences and exhibitions

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Showcases

- ◆ EPOCH has developed demonstration showcases where available technology is applied to significant case-studies
 - Technology is available for free
 - Consultancy may be available for free in significant cases
 - Training is provided for free
 - Data must be ready for use

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Showcases coverage

	Data Collection	Data analysis & organisation	Collection integration	Interpretation & reconstruct.	Storytelling & Exp. Assembly	Communication & Applications
1	X	X				
2	X	X				
3		X	X			
4			X	X	X	X
5				X	X	X
6					X	X
7					X	X
8					X	X

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