PERICLES
Promoting and Enhancing Reuse of Information throughout the Content Lifecycle taking account of Evolving Semantics

CHALLENGE
Change has become a paradigm of our age. Its acceleration, its non-linearity, its unpredictability give ever more importance to questions of preservation of information in a way that it can be understood, retrieved and re-used throughout changing environments. PERICLES addresses the challenge of ensuring that digital content remains accessible in an environment that is subject to continual change.

OBJECTIVES
1. Enable trusted access to digital content that is complex, heterogeneous, interconnected, and subject to change, and to facilitate continued understanding and reuse of those objects across all phases of the lifecycle.
2. Evaluate our approaches, processes and tools against requirements and user communities in different application domains, including science and media case studies.
3. Facilitate sustainability and exploitation of project outputs by building communities of practice, engaging in standardisation activities and with the commercial sector.

RESEARCH GOALS
- Model resources in preservation environments (content, metadata, processes, users, and policies)
- Develop analytical methods for identifying and capturing preservation-related information from digital content and its environment
- Adapt and extend preservation and lifecycle models to address the evolution of digital ecosystems and their dependencies

MODEL USE CASE
Focus on digital artworks and other digital media from Tate’s collections. For example:
- Interactive software-based installations.
- Digital video, audio and animation.
- Burn-digital material from artists’ estates and from institutional records.

SCIENCE USE CASE
Focus on space science data originating from the European Space Agency and International Space Station. This includes:
- Engineering documentation
- Operational data including telemetry and telecommands.
- Scientific data, accepted raw data, and then processed to include the information from the instrument calibration.

PARTNERS
- King’s College London (UK) - Coordinator
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- Information Technologies Institute (Greece)
- Delft University of Technology (Netherlands)
- Georg-August-Universität Göttingen (Germany)
- The University of Liverpool (UK)
- Space Applications Services NV (Belgium)
- Xerox SAI (France)
- The University of Edinburgh (UK)
- TALOS (Spain)
- Belgian User Support and Operations Centre (Belgium)

PERICLES will take a preservation by design approach
Involves modeling, capturing and maintaining detailed and complex information about digital content, the environment in which it exists, and the processes and policies to which it is subject.

PROJECT STRUCTURE

PROJECT MANAGEMENT
WP1 Management

RESEARCH AND PROTOTYPE DEVELOPMENT
WP2 Case studies: user requirements and evaluation
WP3 Modelling resource dependencies in evolving ecosystems
WP4 Capturing content semantics and environment
WP5 Managing evolving preservation ecosystems
WP6 Architecture and design practices
WP7 Integration and testbeds

ENGAGEMENT AND IMPACT
WP8 Training
WP9 Dissemination
WP10 Exploitation

COMMUNITIES OF PRACTICE
In addition to the in-depth case studies, Communities of Practice will provide coordination points for seeking input from external groups, for promoting the findings of the project, and for extending collaborations to new communities.

APPLICATION DOMAIN-BASED COMMUNITIES
- Science and engineering
- Media and art
- Archives and other memory institutions

ENABLER-BASED COMMUNITIES
- Facilities and operations centres
- Data infrastructure technology R&D
- Policies and standards
- Business and sustainability

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