

An Open and Interoperable Platform for the Observation and Evaluation (Benchmarking) of Digitization Projects. Case Study: 1st Benchmarking Practice in Greece.

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1. Introduction

The need to co-ordinate digitization policies and programmes across Member States can be encouraged through building a platform for improved collaboration between countries in terms of exchanging "good practices". Benchmarking is a key element of this process. Benchmarking is not a purely statistical exercise. Qualitative and quantitative benchmarking is and will be widely used in the eEurope Initiative 2005 "An Information Society for All" and the EUROSTAT service, giving an insight in significant aspects of many European issues.

Benchmarking is not aiming at developing direct or measurable comparisons between projects and policies. It aims to facilitate the identification and dissemination of best policy and practice across the EU, while taking into account the need for adaptability to different national contexts. The benchmarking exercise will provide insights into how national digitization policies may be improved and made more effective.

The creation of a benchmarking methodology for digitization policies is a complex and difficult goal to be achieved. This goal gives rise to two main difficulties, the creation of an open benchmarking model and the creation of a platform for implementing the benchmarking practice. This article presents an open model and an interoperable technological platform for benchmarking. In addition, the first benchmarking practice on digitization policies and projects in Greece, is briefly presented. The benchmarking practice took place as part of the actions of the National Representatives Group and especially of the Benchmarking Workgroup.

2. The Benchmarking Model

The benchmarking model was originally created, analysed, refined and finally published by the Benchmarking Workgroup of the National Representatives Group. This model, proposed by the Commission to member States, is a qualitative one: the main task is to encourage the exchange of good practice as part of a continuous process of improvement. Also, it considers, at a preliminary stage, a comparative framework for quantitative measures.

The benchmarking model is based on a list of indicators, which are categorized according to the main themes of digitization (management, technical issues, etc.). The indicators were discussed, finalized and endorsed by the National Representatives Group.

A detailed description for the benchmarking model can be found at:
<http://www.cordis.lu/ist/ka3/digicult/benchmarking.htm>

3. An open and interoperable Benchmarking Platform

Generally, statistics soon become outdated and indicator measurements must be available quickly. To improve the speed and quality of the process, an interoperable technological platform for efficient, quick and web-based benchmarking is proposed. The technologies used to implement the platform are mainly Internet based.

The person completing the form is using the Web Browser to contribute to the benchmarking process. The benchmarking interface is user-friendly, designed from scratch to allow inexperienced users to interact with the system.

The tool for data collection is the on-line questionnaire. The on-line questionnaire is in fact the benchmarking model, the main themes and indicators, translated into a web-based format:

- An expert supports the process by providing the benchmarking model.
- The on-line questionnaire is connected with a relational database, which holds all the data inserted by the person completing the benchmarking form.
- Each authenticated user may create, view, edit or save a questionnaire.
- The relational database of the questionnaires is connected with the user database. A person has the ability to log on to the system and view his completed questionnaires at any time.
- Data are analyzed with customizable analysis tools that support the automatic generation of benchmarking reports and statistical results.
- The graphs, statistical pies and reports are generated dynamically during the completion of the questionnaire. This reduces significantly the time for data analysis and report generation.

The platform is embedded into a web-portal, that provides other useful information and services, which is available for further reviewing and testing at the web address <http://www.hdpweb.org> (English language is available).

4. Results

The aforementioned benchmarking model and technological platform were used and tested during the first benchmarking practice on digitization policies and projects in Greece.

The evaluated projects are directly or indirectly related to the digitization of the Hellenic Cultural Heritage. Projects that are aiming at developing the necessary infrastructure for digitization (networks of cultural organizations, museum intranets, digitization software and hardware, etc.) were also included. Totally **34** projects have participated at the benchmarking process. A significant amount of data was collected. Totally **101** on-line questionnaires were filled, from which **34** were selected as appropriately answered.

The projects are not all coordinated from Greek institutions and organizations. There is a number of projects in which Greek organizations are participating as content and / or technology providers.

It was observed that most institutions filling the questionnaire were not willing to provide specific financial data. The projects are funded mainly by the European Union and the responsible Greek Ministries.

The institutions completing the questionnaires were not aware that they were taking part in a benchmarking practice. That led to broad participation, but had the side-effect of poor completion, especially for the quantitative indicators.

Some institutions that were aware about the benchmarking process were more willing to dedicate time and effort for completing the questionnaire.

The institutions completing the benchmarking forms have agreed the questionnaire information to be publicly available.

Summary of Results

Digitization projects were rated on the main themes of digitization defined at the benchmarking model, namely Management, Funding, Technical / Content Issues, Productivity, Human Resources, Services / Impact and Priorities.

Management

Most of the digitization projects (42%) claim to have clearly defined outcomes. The majority of the projects (50%) are evaluated, as they progress, by end users to ensure that they deliver the desired outcomes. In addition they are peer reviewed and evaluated on completion. Management (50% of projects) is undertaken by a dedicated person who reports to a committee mandated by the governing body, with external representation. A management committee on a regular basis formally reviews the work plan of the 39% of the projects and the reports are made publicly available.

Funding

Most of digitization projects (66%) have a confirmed funding stream but few (8%) have a strategy for sustainability and commercial exploitation of results. The cost estimates for digitization is mainly based upon a small pilot study. Private sector funding is encouraged, but there is no specific incentive (26% of the projects).

Technical / Content Issues

The digitization projects (50%) claim to use technical standards for interoperability, decide on the standards that will be implemented and ensure that the implementation of the standards is mandatory. The metadata standards for content are used at a percentage of 36% of the digitization projects. Most of the projects (40%) have left the question about awareness of Intellectual Property Rights issues unanswered. Multi-linguality is insufficiently treated, 47% of the projects only translate the web site of the project in one or more languages and 40% of projects left the question unanswered.

Human Resources

The workforce development is one of the main drawbacks of the digitization projects in Greece. Most projects (45%) have left the question, "is clear provision made for workforce development", unanswered. 26% of them have only a general (and not specific and clearly stated) objective about "reskilling the sector".

Services / Impact

The content is used efficiently to create new user-focused services, new learning resources and training material but not to create new sustainable employment positions in the content-holding institutions. The content increases the job opportunities only for the employees already working for the content-holding institutions (39% of the digitization projects).

Priorities

The content selection criteria are mainly based on a formal review process, involving specialist expertise, requirement assessment, and production of formal reports.

The full benchmarking report can be found at:

<http://www.hdpweb.org/modules.php?name=Questionnaire&op=report>

5. Future Perspectives

The technological platform should be optimized. Proposed optimizations are:

- The design and implementation of a more generic system, which will be able to incorporate any benchmarking model. This could be achieved through a tool for the benchmarking model insertion, to be used by the benchmarking experts.
- A form for collecting comments about the benchmarking model, the platform and the practice in general should be included in the model. This will provide useful feedback from the end-users.
- A comprehensive feasibility study about the implementation of a distributed repository should be completed. The study should include the issues of development of regional repositories per member-state, repository synchronization, multilingualism, etc.

6. Special Thanks

Special thanks to all the members of the Benchmarking Workgroup and the National Representatives Group for the useful documents, support and fruitful cooperation.

7. HPCLab and HDC


The High Performance Information Systems Laboratory – HPCLab



The HPCLab (<http://www.hpclab.ceid.upatras.gr>) is operating since 1984 as a research laboratory at the University of Patras in Greece. The cooperation of the laboratory with the Hellenic Ministry of Culture has been very important. As part of this cooperation the laboratory has / had undertaken the role of the consultant of the ministry in technological and informatics areas, while it has developed many systems and applications. Also as part of this cooperation the laboratory has access to high value cultural content for use in research and non-commercial purposes. Amongst several European and National R&D projects, the HPCLab has recently developed for the National Digitization Project (<http://www.hdpweb.org>), the official Web Portal for the Hellenic Ministry of Culture (<http://www.culture.gr>), the Acropolis of Athens CD-ROM, the 3D Reconstruction of Parthenon etc.

The Hellenic Digitization Committee – HDC

The HDC has been formed in October 2001, by the YP.PO/DEE/749 decision of the Minister of Culture. Participants in HDC are, representatives from several Directorates of the Ministry that are related with digitization, the Special Secretariat for the Information Society, Cultural Heritage S.A., the Intellectual Property Organization and Rectors or University representatives, University Laboratories and Institutions that specialize in digitization technologies. The HDC acts as a consultant to the Minister of Culture. It plays a master role, it decides on policy and practice issues, it publishes relevant directives, it suggests the up-taking of ministerial decisions and the promotion of the required legislation, it decides on the appropriateness of funding relevant proposals to the Ministry and, in general, intervenes into all issues that have not strictly technological nature, but have cultural importance and pertain to the responsibilities of the Ministry of Culture. The Director of the High Performance Information Systems Lab is the president the HDC.

8. Screenshots


Hellenic Digitization Committee

Select Interface Language:



Welcome Tsolis_Dimitris!
Home · Your Account · Questionnaire · Top 10 · Contact
June 14, 2002

Main Menu
• Home
• HDC
• EU and Digitization
• Hellenic Digitization Network (HDN)
• Greek digitization Projects
• All about digitization
• Digitization and the Greek Presidency
• Digitization and the Olympic Games of Athens 2004
• Digitization & IPR
• National policy on digitization

Options:
• Submit a new questionnaire
• View and/or edit previous submissions
• Questionnaire instructions
• Benchmarking Report

Questionnaire
for Digitization Projects

On behalf of the Hellenic Digitization Committee,

The most important objective of the Questionnaire is to collect information about projects, which are directly or indirectly related to the Digitization of the Hellenic Cultural Heritage. The questionnaire supports the goals of two main initiatives:

1. The Hellenic Digitization Project of the Hellenic Ministry of Culture.
2. The Coordination of National Digitization Policies in a European level. The questionnaire results and analysis will produce a report that will be submitted to the European Union. We are apologizing in advance for the use of the English language.

Important Notice: The collected information is considered as sensitive and private and will not be published without authorization from the organization completing the questionnaire or the organization responsible for the implementation of the project which the questionnaire is referring to.

Attention Please: The person/organization should complete one questionnaire for every different project. The person completing the form is recommended to be adequately experienced in the detailed elements of each project.

For more information and support please contact with the High Performance Information Systems Laboratory:

Questionnaire
It is required to login before filling the questionnaire. If you are not logged in you can do so [here](#).
If you are already logged in please [fill the questionnaire](#).

