Project Achievements

CELTIC Telecommunication Solutions

New Audiovisual Indexed Media Platform and search engine for UGC enhancement

MediaMap

MediaMap aims at promoting new collaborative audiovisual production services using the network as a federative channel. The project includes new concepts using semantics and ontology elements adapted to the audiovisual world in order to create a high level contextual search engine and a new audiovisual web portal.

Main focus

MediaMap aimed at developing innovation in the area of audiovisual content productions circulating on the Internet for TV channels as well as for Web 3.0 sites.

MediaMap focused on 3 closely linked services in AV production:

♦ Create a new and efficient collaborative production service for all users mixing professionals and non-professionals,

♦ Produce new tools allowing to dramatically increase the editorial and technical quality level of amateurs' UGC (User Generated Content),

♦ Provide a new experience of viewing content exploiting the content richness by the use of semantic metadata.

The first part of the solution consists in creating a new wrapper for AV production that includes not only video, audio and metadata elements, but also a description of the structure of the movie, the editorial intentions, targeted metadata, the realization method, etc.

The second part of the solution is in giving a collaborative access to this new container through a "documentary bus" relying on a network's infrastructure. It is an Open Semantic Bus based on the ISO OAIS (Open Archival Information System) standard, which is dealing with the functional specifications of a production / broadcast model that allows retrieval, transaction, exchange, etc. of a self-described content.

Approach

At the heart of MediaMap is the pre-indexation of contents: describing it before producing it, allowing its conservation and re-use before filming. This indexation is semantic and goes from a new networking audiovisual production platform (camera, ingest tool) to enriched publication portals enhanced throughout by a semantic search engine.

In a first step, the project provided the Unique Semantic Entity's format as a framework that ensures the transportation of the wrapped content all along the semantic bus.

In addition, it has developed three components enabling the production of User Generated Content of high editorial quality: the network camcorder, the camera mate and the ingest platform. Each are designed to load and translate the USE, towards guidance and process control for the content production

MediaMap

Project ID: CP5-014

Start Date: 1 September 2008

Closure date: 1 June 2011

Partners:

Belgavox, Belgium

Exalead, France

Memnon, Belgium

RTBF, Belgium

Solution 2.0, Belgium

UTC/CRNS, France

Vitec Multimedia, France
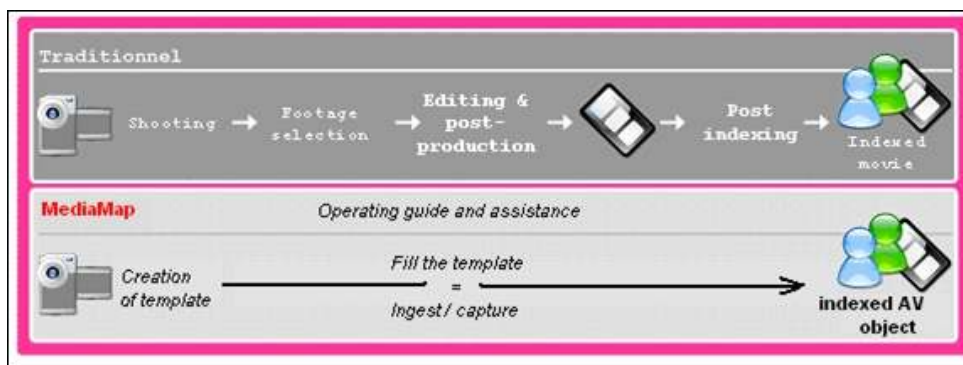
VRT, Belgium

Co-ordinator:

Olivier Guye

Vitec Multimedia, France

E-mail: olivier.guye@vitecmm.com

Project Website

www.celticplus.eu/projects/celtic-projects/call5/MEDIAMAP/mediamap-default.asp

Traditionnel: Shooting → Footage selection → Editing & post-production → Post indexing → Indexed movie

MediaMap: Operating guide and assistance — Creation of template — Fill the template = Ingest / capture → indexed AV object

In a last step, the project demonstrated an Open Semantic Bus based which is delivering a repository with a semantic search engine connected to this semantic bus to store the entities created by the MediaMap project.

Achieved results

The major project results are:

♦ A new data model structure with semantic metadata and ontological approach: the Unique Semantic Entities in the new Open Semantic bus. Implementation with AXIS, definition of its semantic structure, in order to improve collaborative mode.

♦ A new interactive networking camcorder, with an ingest platform and a camera mate (for the implementation of the use with a PDA when shooting with a regular camera), in order to create new writing methods. Note that this development makes the camcorder to be considered as a network terminal and collabora-
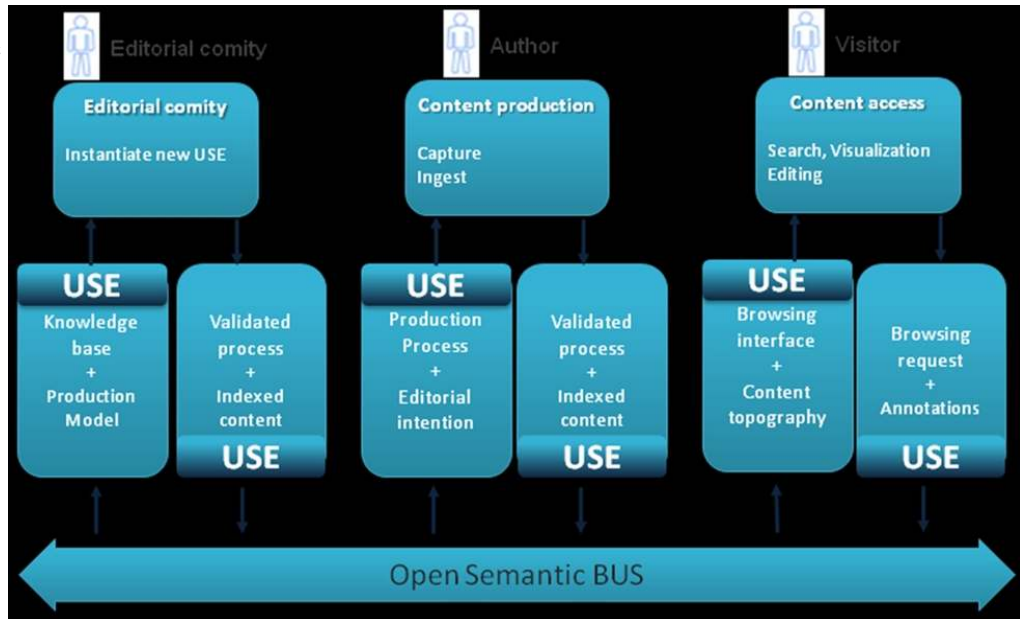
tive tool and not simply a stand-alone AV recorder.

♦ A validated use case: an innovative web portal with established ergonomics thanks to the semantic search engine in order to create new content consumptions.

Several scientific articles have been published in different international conferences and the project

results have been promoted in several international workshops. Two start-ups have been launched for starting the exploitation of part of the results in cooperation with the project consortium.

Impact

Important impacts of MediaMap include the increased quality of non-professional productions, the increase of the efficiency of research and sustainability of archives, the improvement of the collaborative workflow, and the reuse and visibility of contents. The personalisation of information

will be at the heart of MediaMap with its concept of territory; the user will see the content depending on his being, his role, his skills, and the terminal he's employing at each moment and place of the open semantic bus.

Another important impact is to introduce MediaMap's European method for imposing a new workflow for audiovisual productions to the relevant standardization committees.

Besides getting technical knowledge and experience on collaborative production and publishing and viewing content, the expectation of the project is also to have positive effects on content creation and social networks.

Last important aspect of the project: new hardware equipment like camcorders will allow new industrial development in Europe.

About Celtic

Celtic is a European research and development programme, designed to strengthen Europe's competitiveness in telecommunications through short and medium term collaborative R&D projects. Celtic is currently the only European R&D programme fully dedicated to end-to-end telecommunication solutions.

Timeframe: 8 years, from 2004 to 2011

Clusterbudget: in the range of 1 billion euro, shared between governments and private participants

Participants: small, medium and large companies from telecommunications industry, universities, research institutes, and local authorities from all 35 Eureka countries.

Celtic Office

c/o Eurescom, Wieblinger Weg 19/4, 69123 Heidelberg, Germany

Phone: +49 6221 989 405, e-mail: office@celtic-initiative.org

www.celtic-initiative.org