

Executive Summary of

## Deliverable 15.6

## Final dissemination and exploitation report

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The deliverable describes the Dissemination and Exploitation activities carried over the four years of the project.

Critical to the success of X-Media was the effective communication and dissemination of results and the promotion of the usage of the project outputs to a wider audience, outside the Consortium. In this sense, the project delivered:

- High quality research output in terms of contributions to workshops, conferences and journals; at the end of the 4<sup>th</sup> year we have published 17 journal papers, 94 conference papers, 1 book, 9 workshops and several dozens of demos. A book to disseminate the final results is in preparation.
- Innovative knowledge management technologies and methodologies in multi- and cross-media environments; the technologies concern the acquisition and capture of knowledge (developed as part of WP3, WP5, WP6, WP7 and WP8), and the knowledge lenses developed as part of WP4.

Knowledge created by means of RTD activities and especially the possibilities and opportunities arising from the creation of an integrated technology actually only truly make sense if an adequate critical mass of parties becomes aware and convinced about them. For this reason we have identified:

- the audience beyond the Consortium and in particular both potential users and other researchers;
- the conditions for use of project outputs.

The target audience for dissemination and exploitation was mainly:

- The Knowledge Management scientific and industrial communities; to this end we have addressed e.g. the Conference on Business Information System, and journals such as the Journal of Intelligent Manufacturing.
- The Semantic Web scientific and industrial communities; we have published at all the major conferences in the field: the European Semantic Web Conference, International Semantic Web Conference, Asian Semantic Web Conference, the World Wide Web Conference, IJCAI, ESTC, etc. as well on major journals like the Journal of Web Semantics.
- The manufacturing industry as main target of the applications and testbeds developed in the project; we have written papers and given presentations, for example the paper published on the Journal of Intelligent Manufacturing.
- Venture capitalists and investors in the field of advanced technologies as main targets for exploitation of the most innovative parts of the technology; we had meetings with major venture capitalist where we have presented the technology developed;
- Standardization bodies related to the fields of Semantic Web, especially for the parts related to the extension of existing standards to support project related activities.
- Other EU projects; natural collaboration via several partners has occurred with the NEON, ACEMEDIA, WeKnowIt and SmartProducts projects. Moreover, X-Media has had a leading role in the CHORUS+ Coordination action, which aims at creating the conditions of mutual information and cross fertilisation between the FP7 projects, More specifically, CHORUS+ objectives are to support the integration and strengthening of the European Research Area by stimulating interaction and co-ordination on an EU level, in the area of Audiovisual search engines and extend cooperation to Asian countries. CERTH has been a leading

partner in CHORUS+. Moreover, our contribution to the standardization bodies of Semantic Web and multimedia analysis has also taken place through our participation in the related scientific competitions like TRECVID2009 and VideoOlympics 2009

Content exploited and disseminated covers an ample spectrum:

- Project main goals and objectives and research agendas, as well as updates on development; we have sponsored several international conferences and events (full list below), we have distributed leaflets to all the major conferences (including ISWC/ESWC 2007, 8 and 9) and given invited talks (see section on invited keynote speeches; important for EU dissemination was the talk given at the open day "Call 3 in Motion", organized by INFSO.E2 Content and Knowledge, European Commission, Luxembourg, December 2007);
- Material for training; we have given several tutorials at all the major conferences (ESWC, ISWC, ASWC, etc.) and Summer Schools (SSSW06/07/08/09, SSMS08/09, etc.);
- Technology investment opportunities, novelty issues, etc. (e.g. the open day at ESTC 2009);
- Single technologies: one patent on Hybrid Search has been submitted and one on Terminology Recognition is under submission.

Dissemination activities were centred mainly on raising awareness and knowledge, solution and technology transfer. Different activities were implemented for different target groups (e.g. industry and academia), as they differ in terms of literacy, cultural background and nature of objectives. Therefore the consortium implemented a range of dissemination activities and vehicles adapted to the characteristics of diverse, targeted audiences, such as:

- Seminars, Conferences and Journals: papers and presentations;
- Participation in major industrial events with presentations (several conferences including European Semantic Technology Conference in Vienna in 2007, 2008 and 2009), tutorials (Norwegian Semantic Days) and with dissemination material (several events). Booth presentations were a vehicle of dissemination and exploitation as well (ESTC 2009);
- Workshops were organised to invite the international community to discuss issues of interest for the project; Example is the SemSearch workshop, now at its third edition;
- Public Relations events: we have organised an open day/dissemination event targeted to industrial users at the European Semantic Technology Conference 2009 in December in Vienna;
- More than 20 potential Users' Focus Groups were organised at Rolls-Royce and Fiat to disseminate project results and foster exploitation;
- Events organised by the European Commission (e.g. the already mentioned "Call 3 in Motion" event in Luxembourg).

The Web was a main dissemination vehicle; we have created a Web site including an internal intranet for the project participants (K@ developed and hosted by Quinary) and an external web for visitors (x-media-project.org hosted by Sheffield).

Also the distribution of a considerable part of the software as open source, helped disseminate project results towards interested users and potential uptaker of the technology. At this point in time more than 25 software packages have been released. Some of them have reached a very high level of uptake. For example the SimMetric

Library is currently the most downloaded distance metric library on the Web, with over 30,000 downloads and an average of 700 downloads a month for the last year from prime site (SourceForge.net) and over 18,000 more from six other known mirror sites<sup>1</sup>.

Fallout from the project happened very early as by-products. An example was the creation of K-Now Ltd in Sheffield, a spin-off company of the University of Sheffield who is commercialising X-Media technologies in the area of corporate search, knowledge capture by distributed communities and similarity matching (the later ones used mainly for spend analysis in large corporations). Current customers are – among others - Rolls-Royce, KPMG, Deloitte, Schroeders Bank, Coles, Adelie, Associated British World Foods, Granger, Silver Spoon, Allied Mills, Ryvita Jordon, GAME, Allied Bakery, Kew Gardens

A number of concrete actions were done by the consortium as a whole in order to promote exploitation. Among these we can list;

- joint development and support of the X-Media architecture (lead by Quinary), with commitment from the consortium to make the infrastructure available for exploitation and dissemination;
- joint development of a public use case (covered in WP19, Bike Brakes) to help disseminate the X-Media technology and approach.

## 1.1 Exploitation Means and Target Audience

Commercial impact of X-Media is expected first of all for technical domains such as the manufacturing industry, the automotive and the aerospace domain. The support of engineering processes (maintenance, design, manufacturing, competitor analysis) is a major category for X-Media-based solutions.

Exploitation paths are described below for the industrial partners. They include:

- direct usage of project results by end user's organization (Fiat Group and Rolls-Royce) in new projects and activities; for example, Rolls-Royce is currently investing around £1m in funding a follow-up of some of the X-Media technologies in order to reach the Technology Readiness Level 7 which is a legal requirement for use in an aerospace company.
- spin-off of derived technology whole or parts from the industrial and academic partners. We already mentioned K-Now as spin-off of University of Sheffield, the industrial partners detail their plans in the sections below.

<sup>&</sup>lt;sup>1</sup> A comparison with download figures of SimMetrics's bigger competitor software, SecondString, shows how Second String total 7,000 downloads since 2004 and how its rate of downloads and usage has dropped since the release of SimMetrics.