



MediaCampaign – Discovering, inter-relating and navigating cross-media campaign knowledge

MediaCampaign's scope is on discovering, inter-relating and navigating cross-media campaign knowledge. A media campaign is a collection of advertisements semantically belonging together, across different countries and different media. The project's main goal is to automate to a large degree the detection and tracking of media campaigns on television, Internet and in the press.

Impact

For the pilot system developed within the project we will focus on a concrete example for a media campaign: advertisement campaigns. An advertisement campaign consists of a number of single advertisements ("creatives" in business jargon) on the same product issued in different media and/or countries. For example a new car model is introduced into the market, then the campaign for this introduction will include all creatives issued for this car model in different media such as press, TV and Internet. The system will be designed in such a way that it can be also extended later on to monitor and analyze also other campaigns such as political campaigns. Hence a major technical objective is to design the system architecture as flexible as possible by using well defined interfaces and utilizing standards for all components where possible.

MediaCampaign results will lead to new business cases in media monitoring and analysis, and positively impact the European media monitoring sector. In support of this goal, the project will address the following objectives:

- Modelling the knowledge present in campaigns and their related business and social processes;
- Analysis of tele-visual and image-based media streams and parallel focussed web analysis to extract features related to campaigns of all types;
- semantic combination of multi-modal analysis results in order to detect new creatives;
- Delivery of the campaign data in an end-user pilot prototype.
- Fusion of the diverse evidence from the different media and different analysis methods, with innovative methods to exploit their complementarity.

MediaCampaign main innovation

Within the project we target the media press, TV and Internet. Within this media up to four modalities will be analyzed and combined (image, video, text, audio) and three languages – German, Dutch and English - shall be covered.

Scientifically MediaCampaign will discover three main innovations as given below.

Ontology for cross-media modelling of media presence and campaigns

Media Presence and Campaign Ontology (MEPCO) will be defined, allowing for modelling of media campaigns, including media presence information. MEPCO will have a general cross-media level, extended with fine-grained specifications for the different media. Overall, the project will exploit the advantage of the Semantic Web technologies to model, manage, query and navigate within multi-dimensional information spaces with non-linear dimensions.

Semantic cross-market product data interlinking

Due to cultural differences and national market specifics similar or analogous products are branded and marketed differently across the countries. This will be handled through semantic representation and mapping of brand and product related data (catalogues, feature-related terminology, etc.). MEPCO will allow for extension with domain ontologies specific to particular markets and cross-linking artefacts (e.g. products) between those.

Identification & tracking of new media campaigns in different media and countries

This will be realized by combined multimodal analysis of the media content (text, audio and video), usage of a semantic media store to consolidate and query the analysis results and all the related materials, and detection and tracking of campaigns based on heuristic patterns and statistical analysis of "popularity" timelines and "media distance" metrics.

Benefits

MediaCampaign aims to offer cost reducing and efficiency enhancing solutions by automating the currently mostly manually performed media monitoring process as much as possible.

Primarily targeted end-users are Media Information Firms active in the advertising, news and music information markets, that capture, monitor, archive, and analyze media information to serve clients' needs. The system will provide:

- Enhanced productivity – fewer operators are required per monitored channel
- Greater information accuracy
- Shorter time-to-information
- Re-purposing of information and content
- Creation of new business opportunities

The results of the project can likewise be easily used in similar applications, for instance analysis of Socio-Economic campaigns, political campaigns, anti-drug campaigns or Public Relation. In the latter case, applying the same approach as for the new campaign, media monitoring companies will try to identify specific pattern of information, like the positive/negative mention regarding any entity (a company, a politician or a football player), using similar information already classified and stored in a repository. Together with the positive/negative mention, they can classify the context where the mentions appear.

MediaCampaign's result so far

The following results have been achieved within the first seven months of the project duration:

- first design of Media Presence and Campaign Ontology (MEPCO). Find out more about MEPCO on the public MEPCO design portal: <http://ontofile.sirma.bg:8080/MEPCO>
- related standards study in connection with ontologies (<http://www.gate.ac.uk/mediacampaign/live/resources/publicdeliverables/MC-D32-ONTO-04-MEPCO-Design.pdf>)
- selection of test material for the first MediaCampaign prototype
- definition of user requirements
- implementation of first analysis prototypes (enhanced similarity matcher for press recognition, prototype for jingle recognition, speech-to-text prototype and a text analysis prototype.)
- design of system architecture

Find out more about one of the expected exploitable results of MediaCampaign in the area of press media monitoring: <http://www.gate.ac.uk/mediacampaign/live/index/opportunitiesforindustrialpartners.html>

More details

- [Project Presentation](#) (PDF)
- [Project Brochure](#) (PDF)

- [Project Fact Sheet \(PDF\)](#)
- MediaCampaign public [website](http://www.media-campaign.eu) (<http://www.media-campaign.eu>)

MediaCampaign's upcoming work

Within the next 12 months two important milestones of MediaCampaign project will be completed. The first milestone (October 2006) will be the overall specification of the system, consisting of the final system architecture, the user requirements, first prototypes of the analysis systems, the selection of the test material to be used for the first prototype and the initial design of the MEPCO ontology for campaign detection. The second milestone is expected to be completed in May 2007 and will be the first integrated MediaCampaign prototype. This prototype shall detect new creatives and campaigns within the media Press, Internet and TV.

Administrative Details

MediaCampaign (IST FP6-027413) is a Specific Targeted Research Project (STREP) of the European Union's 6th Framework Programme. The project addresses the strategic objective 'Semantic-based knowledge and content systems' of the IST Workprogramme 2004.

MediaCampaign project started on 1 April 2006 and will finish on 30 September 2008 (duration 30 months).

The total budget is 4,203,180 Euro (2,475,000 Euro funding), and 418 person months in total.

Eight partners (4 R&D and 4 industrial) from five European countries are involved in the project.

List of participants

JOANNEUM RESEARCH Forschungsgesellschaft mbH (A)	http://www.joanneum.at/iis
Nielsen Media Research (UK)	http://www.nielsenmedia.co.uk
University of Sheffield (UK)	http://www.sheffield.ac.uk
Sirma Group Corp (BG)	http://www.ontotext.com
HS-Art Digital Service GmbH (A)	http://www.hs-art.com
Softeco Sismat SpA (I)	http://www.softeco.it
University of Twente (NL)	http://www.ewi.utwente.nl
Netherlands Organisation for Applied Scientific Research (NL)	http://www.tno.nl

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Events in connection with MediaCampaign

- November 2006 - International Semantic Web Conference: *Athens, GA, USA - 5th-9th November*, <http://iswc2006.semanticweb.org>
- **Podrebragy, Czech Republic - 2nd-6th October 2006:** Tutorial "Human Language Technology for knowledge Aquisition for the Semantic Web" copresented by the [University of Sheffield](#) and [Ontotext](#) / [ekaw2006-tutorial](#)
- Herwig Rehatschek, Michael Hausenblas, Georg Thallinger, Werner Haas: "Cross Media Aspects in the Areas of Media Monitoring and Content Production". Proceedings of LREC 2006 workshop on "Crossing media for improved information access", Genoa, Italy, May 2006, pp. 25 - 31.
[<http://www.gate.ac.uk/mediacampaign/live/events/conferencesandworkshops/MC-JRS-06-Paper-LREC-CameraReady.pdf>]

- Herwig Rehatschek: "MediaCampaign - Discovering, Inter-Relating And Navigating Cross-Media Campaign Knowledge". Proceedings of the International Workshop on the integration of knowledge, semantics and digital media technology (EWIMT), ISBN-0 86341 595 4 / 9780863415951, London, November 2005, pp. 335 - 336.
[http://www.gate.ac.uk/mediacampaign/live/events/conferencesandworkshops/pos05127iis_mc_v5.pdf]