

# MOVING

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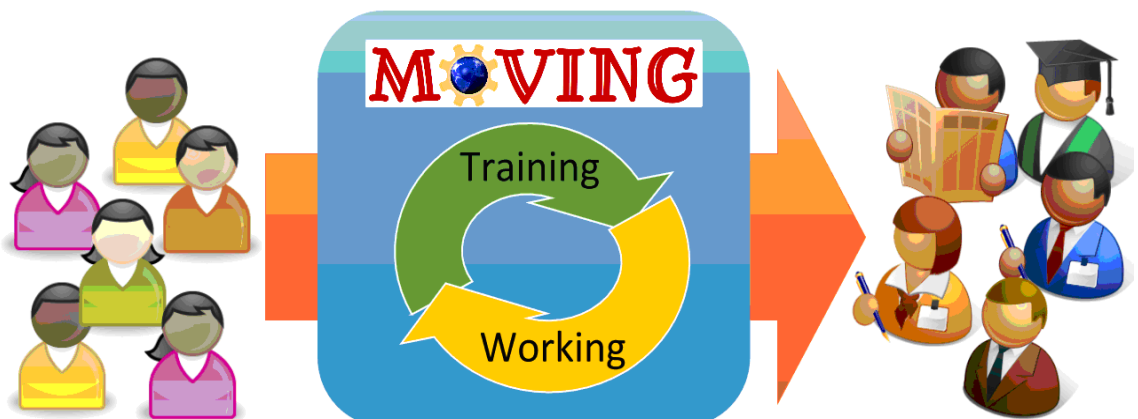
## Welcome to our first Newsletter

We would like to welcome you to the first issue of the MOVING Newsletter.

We aim to inform the community, our readers and supporters of what has been achieved and produced during the course of the project. In this first issue, in pages 1 and 2, we outline the concept and the approach taken in MOVING and how our platform tackles all parts of an e-learning system. Some first results of the project, as well as information on selected dissemination activities that took place in the first six months of the project, are presented in pages 2, 3 and 4. Since this is our first newsletter, we conclude in pages 5 and 6 with a short presentation of each MOVING partner and the project's details and contact information.

## What is MOVING?

MOVING is a three-year "Research and Innovation Action" that started in April 2016 and is implemented by a multinational consortium. MOVING's goal is to develop an innovative training platform that will enable people from all societal sectors (companies, universities, public administration) to fundamentally improve their information literacy by training how to use, choose and evaluate data/text mining methods in connection with their daily research tasks. We argue that this type of information literacy is important for one to become a data-savvy information professional, and will have a decisive impact on the innovative capacity of the European society.



### TARGET GROUPS

- Young researchers
- Compliance officers
- Public administrators
- EU citizens/residents

### MOVING PROVIDES WITH

- Training and working w.r.t. data-intensive research tasks
- User guidance for self-reflection

### PROJECT OUTCOMES

- Data-savvy information professionals
- Knowledgeable society

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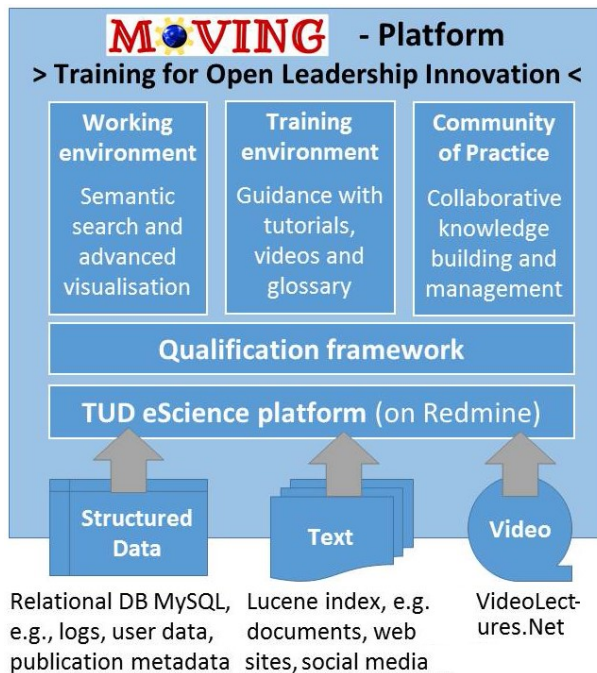
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The  
architectural  
diagram of the  
MOVING  
platform and  
its three key  
areas

# MOVING concept and approach



The MOVING project will train people to cope with the large amount of Internet-based information they are faced with as part of their daily professional duties. The core challenge of our current knowledge society is not the access to information itself, but whether people have the ability to manage this information in a professional way. Responding to this challenge, the project will develop the open, innovation training platform "MOVING", which will serve as:

a) **A working environment** for the quality and usability analysis of large text collections and free online contents with data mining methods, equally open to people from science, public administration and business.

b) **A training environment** with information, training and exchange offers in the broad field of digital information management.

c) **A community of practice** where people can exchange ideas on problems, share solutions and experiences with each other.

## Tools - Demos - Results

### EconBiz RecSys tool

"EconBiz  
RecSys",  
a publication  
recommender  
system for  
Economists

This is a tool developed by MOVING partner ZBW that delivers recommended scientific papers in economics, based on what a user tweeted about. It profiles papers as well as tweets using our novel method HCF-IDF (Hierarchical Concept Frequency Inverse Document Frequency). HCF-IDF extracts semantic concepts from texts and applies spreading activation based on a hierarchical thesaurus, which is

freely available in many different domains. Spreading activation enables to extract relevant semantic concepts which are not mentioned in texts, and mitigates shortness and sparseness of texts. The novel HCF-IDF method demonstrated the best performance in a larger user experiment published at JCDL'16. In the web-accessible demo of the EconBiz RecSys tool, you may compare the two different con-

figurations, i.e. HCF-IDF using only titles of papers and HCF-IDF using both titles and full-texts of papers. Different from the traditional methods, HCF-IDF can provide competitive recommendations already using only titles. You can access the tool at:

<http://amygdala.informatik.uni-kiel.de/Demo/TwitterAccount>

# Online demo for lecture videos



MOVING partner CERTH released an interactive online demo linking lecture videos, using general purpose concepts that were produced from textual analysis of their transcripts, with non-lecture videos, using their visual analysis results

such as automatically detected shots, scenes, and visual concepts. You can access the demo at: <http://multimedia2.itit.gr/moving-project/lecture-video-linking-demo/results.html> (best viewed with Firefox).

**The interactive online demo for lecture videos**

# Participation in the TRECVID benchmarking activity



MOVING, via its consortium member CERTH, successfully participated in the Ad-hoc Video Search (AVS) and event-based annotation (MED) tasks of TRECVID 2016. The AVS task attempts to model the end-user video search use-case, where the user is looking for segments of video containing persons, objects, activities, locations, etc. and combinations of the former. The experi-

ments this year were performed on a set of Internet Archive videos totaling about 600 hours of video duration, and using 30 different queries. Our fully automatic runs performed very well in this challenging task, compared to the runs of the other participating institutions from all over the world. Specifically, our best run was ranked 2nd-best, achieving an inferred average precision of 0.051 (compared to 0.054 reached by the best-performing participant in the fully-automatic category, and 0.040 reached by the 3rd best-performing one). Interestingly, our fully automatic runs also

compared favorably to the manually-assisted runs that were submitted to AVS: with an inferred average precision of 0.051, our best fully automatic run also outperformed the runs of all but one participant in the manually-assisted run category. We also had very good results in the event-based annotation task (MED), where we tested our machine learning techniques for video annotation, using a variable number of training samples. Our participation in the AVS and MED tasks this year was jointly supported by MOVING and by another H2020 EU project, InVID.

# Communication and Dissemination activities

## Interview about MOVING to ZBW-mediataalk

Prof. Dr. Ansgar Schrep illustrated the project details for ZBW-mediataalk, a blog about technologies, services and innovations for libraries and media companies. For more details please fol-

low the link:

<https://www.zbw-mediataalk.eu/2016/07/science-2-0-research-project-moving-big-data-analyses-for-non-computer-scientists/>



**ZBW's interview about MOVING**

*Participation in  
the 13th  
European  
Semantic Web  
Conference*

## Successful participation in ESWC 2016



The MOVING project participated with an own presentation in the EU Project Networking Ses-

sion at ESWC on Wednesday, June 1st, 2016. In total 14 EU projects participated in the session. For MOVING several highly relevant connections not only to other projects but also to further potential industry partners were made. During the session, early prototypes of the MOVING pro-

ject on the video analysis services, a scientific paper recommender and the MOVING platform based on TU Dresden's eScience platform were presented. For more details please follow the link: <http://2016.eswc-conferences.org/program/eu-project-networking-session>

You can get access to the full paper text at: <https://zenodo.org/record/61520#.V-D4uTW9Hao>

## Recent and upcoming events



CERTH is going to present in ACM Multimedia 2016 a new transfer learning approach that leads to better concept-based video annotation than existing state-of-the-art methods.

TUD participated in the international European doctoral summer school in Linz, Austria (<http://www.edu-tech.eu/?pid=49>) and in the first Asian summer school in Yogyakarta, Indonesia (<http://icvet.uny.ac.id/node/350>), where Prof. Dr. Thomas Köhler presented the MOVING project.



ZBW gave a presentation at the JCDL' 2016 of a novel HCF-IDF profiling method that will be used in the MOVING platform. Titles of scientific publications are sufficient to achieve competitive recommendation results when employing this novel method. You can get more information about this paper at: <https://zenodo.org/record/61391#.V-D4XzW9Hao>



CERTH presented at the ICIP 2016 conference a new machine learning method that takes the input data uncertainty into consideration during training. This method is applicable for various video understanding problems such as video event detection and video aesthetic assessment. You can get access to the full paper text at: [https://zenodo.org/record/159236#.V\\_eSGcm9Hao](https://zenodo.org/record/159236#.V_eSGcm9Hao)

TUD presented at the International Science 2.0 conference the MOVING project. You can get more information about this presentation at: [https://www.open-science-conference.eu/wp-content/uploads/2016/05/09\\_Herbst\\_Koehler\\_Scherp\\_-\\_Data\\_driven\\_online\\_research\\_Potential\\_specifications\\_in\\_relation\\_to\\_our\\_needs.pdf](https://www.open-science-conference.eu/wp-content/uploads/2016/05/09_Herbst_Koehler_Scherp_-_Data_driven_online_research_Potential_specifications_in_relation_to_our_needs.pdf)



PBF presented at the ICMFII' 2016 conference an application of a roadmapping methodology to establish a strategic plan for an innovative knowledge repository that could provide dynamically updated economic information, online courses and other data. PBF also illustrated an example of building an exploitation strategy for the digital platform of MOVING.



TUD presented at the International Science 2.0 conference the MOVING project. You can get more information about this presentation at: [https://www.open-science-conference.eu/wp-content/uploads/2016/05/09\\_Herbst\\_Koehler\\_Scherp\\_-\\_Data\\_driven\\_online\\_research\\_Potential\\_specifications\\_in\\_relation\\_to\\_our\\_needs.pdf](https://www.open-science-conference.eu/wp-content/uploads/2016/05/09_Herbst_Koehler_Scherp_-_Data_driven_online_research_Potential_specifications_in_relation_to_our_needs.pdf)

*The MOVING  
consortium  
participated in  
a variety of  
national  
and  
international  
conferences,  
workshops  
and summer  
schools*



# MOVING consortium - who we are



**Centre for Research & Technology Hellas (CERTH)**, is the only research centre in Northern Greece and one of the largest in the country. CERTH participates in this project through **Information Technologies Institute (ITI)** with the **Multimedia Knowledge and Social Data Analytics lab (MKLab)**, with experience and scientific expertise in collection, indexing and mining of multimedia and social network data from heterogeneous Internet sources. <http://www.iti.gr>



**EY (Ernst & Young)** is one of the largest privately-held firms providing accounting, tax, transaction and advisory services. EY has more than 700 offices providing auditing and accounting services in 140 countries with worldwide 145.000 professionals (auditors, tax advisory professionals, transactions specialists and advisers). <http://www.ey.com/Home>



**Technische Universität Dresden (TUD)** is a leading university in Germany and one of 11 German universities that were identified as "University of Excellence" in 2012. TUD participates in this project through the **Media Centre (MZ)**. MZ lead by Prof. Kohler covers specialists for the areas of information and computer science, audio-visual media, didactics, psychology and business engineering. <https://tu-dresden.de>



The **Know-Center (KC)** is Austria's centre for data-driven business and big data analytics. KC conducts application-oriented research in cooperation with other academic institutions and with companies. KC participates in this project through Ubiquitous Personal Computing group which researches computer-supported working and workplace learning, and the Knowledge Visualization group which develops visual analytics methods for exploration and interactive analysis of large repositories. <http://www.know-center.tugraz.at/>



**Institut Jozef Stefan (JSI)** is the leading Slovenian research institution covering research in natural sciences, life sciences and engineering. JSI participates in this project through the **Centre for Knowledge Transfer in Information Technologies** which specializes in the areas of research results dissemination and eLearning. The centre is well known by portals: VideoLectures.NET, ScienceAtlas.ijs.si and IST-World.Org. <https://www.ijs.si/ijsw/JSI>



**Leibniz Information Centre for Economics (ZBW)** is a public research institute and has a high-tech information infrastructure, conducting research in computer science and related areas and develops technologies for operating the IT infrastructure for its own library, which is the world's largest specialist library for economics. ZBW participates in this project through The research group **Science2.0** which focus its research on Big Data and Science 2.0. <http://www.zbw.eu/>



The **University of Manchester (UMAN)** is the largest single-site university in the UK, with the biggest student community. UMAN participates in this project through the **Bio-Health Informatics Group** which carries out research on the development and application of complex artefacts such as ontologies for the health and life sciences. <http://www.manchester.ac.uk/>

The MOVING consortium consists of public and private partners ; in total, 9 academic, industrial, and research organizations from Greece, Germany, Austria, Slovenia, UK, and Poland

# MOVING consortium - who we are

**GESIS – Leibniz-Institute for the Social Sciences (GESIS)** is the largest German infrastructure institute for the social sciences. GESIS participates in this project through the **Knowledge Technologies for the Social Sciences (WTS)** which is focused on advancing and improving digital services for the Social Sciences. WTS is carrying out research in the fields Web Science, Semantic Web, Linked Open Data and Information Retrieval. <http://www.gesis.org/en/institute/>



**Fundacja Progress and Business (PBF)** is an independent research institution and a leader in implementing best research and consultancy practices in Poland. PBF participates in this project through the **International Centre for Decision Sciences and Forecasting (ICDSF)** which is specialized unit of the PBF that organizes and carries out research on the foundations of Artificial Intelligence and cognitive sciences, decision support systems, multicriteria decision analysis, information retrieval and data mining for forecasting and foresight and discrete-event systems. <http://www.pbf.pl>



## MOVING

### Contact Details

**Project Coordinator:** Dr. Vasileios Mezaris

**Address:** Information Technologies Institute (ITI),  
Centre for Research and Technology Hellas  
(CERTH) 6th Km Charilaou - Thessaloniki Road, 57001  
Thermi - Thessaloniki, Greece

**Fax:** +302310 474128

**Tel:** +302311 257770

**E-mail:** [bmezaris@iti.gr](mailto:bmezaris@iti.gr)

### Project Details

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**Duration:** 36 months



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