Welcome to our fifth Newsletter

Welcome to our fifth issue of the MOVING newsletter. The aim of this issue is to inform the community, our readers and supporters that the complete version of the MOVING platform is publicly available; to expose the latest technological activities of the MOVING consortium (such as the recommender system, the integration of lecture video fragmentation technologies in Videolectures.NET, the platform evaluation, the setup of the 2nd round of the MOVING MOOC); and to report our dissemination activities during the last period, and beyond the end of the project (such as the organisation of a user workshop at EY's premises, the TUD's interview at GenerationR, and the participation at various events such as the Open Science Barcamp and the Pharma Day).

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**MOVING complete platform publicly available**

The complete MOVING platform is publicly available, and its users are able to improve their information literacy and become data savvy informational professionals by using this unique combination of a working and a training environment in one platform.

In the working environment of the platform the users are able to perform scalable real-time search, manage multiple document types, and different file formats. Also, with the faceted search, are able to retrieve various kinds of documents such as scientific articles, books, video lectures, other videos, and metadata. The Graph visualisation highlights relations among documents and related entities (authors, organisations, etc.) and offers an alternative way of exploring the search results. Nevertheless, a classical search list is still also featured. For example, the user can click on an author name and retrieve all documents authored by this person. To ensure a smooth user experience, dedicated tools allow us to separate different authors with the same name or connect different versions of the same document. Furthermore, the Adaptive Training Support (ATS) via the Learn-how-to-search widget provides illustrated feedback, in order to help users familiar with the platform and all its features.

In the training environment of the platform the users are able to access learning resources. All the learning content is organised and directly accessible to the users. The “learning” page gives an overview of the available learning materials, including the platform demo videos and video tutorials, the Learning Tracks for Information Literacy 2.0, and the MOVING MOOC “Science 2.0 and open research methods”. The platform demos are videos that were produced by JSI and are hosted by Videolectures.net. They are embedded in the Learning Environment so users can learn about the different platform features and technologies developed within the MOVING project. Users can improve their data and information literacy as well as digital competences through the MOVING Learning Tracks for Information Literacy 2.0. The ATS in the working environment of the platform regularly offers learning prompts via the “Curriculum reflection” widget to users, based on their prior knowledge, and guides them to the microlearning sessions in the Learning Environment. Additionally, the users can access the MOVING MOOC: a 4-week online course hosted on the MOVING platform, designed to give young scholars a comprehensive introduction to open science methods and open research workflows.
Tools - Demos - Results

MOVING recommender system

The MOVING platform hosts a vast amount of heterogeneous documents, such as publications, video lectures and tutorials, social media posts, etc. To help users to deal with this vast amount of information the recommender system suggests interesting documents. In this way, it enables users to discover documents without explicitly searching for them, since sometimes users do not exactly know what to search, or they may find interesting documents not directly related to their current search. The MOVING recommender system exploits the new HCF-IDF semantic profiling method to build users’ and documents’ profiles, and then provides recommendations based on the match of document-user profiles. The user profiles are based on the search history, collected through the user logging module of the platform which collects user-interaction data. The recommender system is integrated in the search page of the platform. Users can obtain recommendations before searching for documents, so that, alternatively to searching for content, they can click on one of the suggested documents which they find interesting.

New MOVING lecture video fragmentation technologies in VideoLectures.NET portal

The developer of the VideoLectures.NET portal, JSI, is part of the MOVING consortium, which has been working on developing new and more effective methods for lecture video fragmentation and fragment-level annotation, to allow for fine-grained access to lecture video collections. In the latest MOVING method, developed by CERTH, automatically-generated speech transcripts of the lecture video are analysed with the help of word embeddings that are generated from pre-trained state-of-the-art neural networks. This lecture video fragmentation method is part of the MOVING platform, and its results are also being ingested in the VideoLectures.NET portal, making it possible for the users of both platforms to access and view specific fragments of lecture videos that cater to their information needs. For the moment in VideoLectures.NET are 8,896 video lectures that are accompanied with fragments generated CERTH (out of a total of 21,992 lectures in the portal). With the fragments JSI enriches the video lectures that are not accompanied by presentation slides. To illustrate how the fragment-level information can be accessed and used, please watch the following demo: http://videolectures.net/moving_platform_VLNchapters/. For technical details on the lecture fragmentation method, and for accessing a new artificially-generated dataset of synthetic video lecture transcripts that has been created and released by MOVING, based on real VideoLectures.NET data, see paper on “Temporal Lecture Video Fragmentation using Word Embeddings” by D. Galanopoulos and V. Mezaris at the 25th Int. Conf. on Multimedia Modeling (MMM 2019).
MOVING platform evaluation outcomes

Early evaluation of the platform has helped to shape a user friendly interface, that would not only attract users, but also keep more than half of them active within the platform. The final longitudinal evaluation of users' behaviour has shown that half of them became advanced users, making use of MOVING data mining features, such as filters and visualisations. The inclusion of learning support widgets successfully encouraged users to try out MOVING data-mining features, increasing their acquisition of competences and helping them become information-savvy professionals.

MOVING MOOC 2nd round and plans beyond the end of the project

The 2nd round of the MOOC ended on 17th of February 2019. This time 300 participants registered. Accordingly, and due to the contributions of many participants, there were many comments and topics in the forums of the course. The participants actively exchanged ideas in the forums about opportunities and challenges of Open Science and engaged with each other. As part of the course, Open Science expert and advocate Bianca Kramer accepted our invitation to give a webinar, which took place after the 1st course week. Questions from the forum, but also from the 50 participants in the webinar, were answered by Bianca Kramer. In addition, the participants also exchanged their views on Open Science lively in the webinar chat. In the following three weeks, the participants continued to work on topics such as scholarly communication, information discovery (e.g. through Social Web Technologies) and scholarly publication (Open Access, Open Licensing and Altmetrics). Many of the participants completed the weekly tasks and were thus able to obtain a certificate at the end of the course. Together with the Graduate Academy of the TU Dresden, another run of the course on the MOVING platform is currently planned. In the future, the course will be made available to other interested communities.

Communication and dissemination activities

MOVING at the Pharma Day

Know-Center (KC) organised a Pharma Day event on the 13th and 14th of February 2019 at KC’s premises with the goal of gaining first-hand insights into the latest opportunities and challenges of data analytics in the pharmaceutical industry. Pharma day agenda included key speaker slots, demonstrations of prototypes and networking events that encouraged the debate and established connections between representatives across the entire pharmaceutical community. Know-Center brought together people from pharmaceutical companies of different sizes and outside of the conventional pharmaceutical areas, including tech leaders like Siemens. In multiple demonstration slots Know-Center presented its broad range of EU Technology Enhanced Learning projects, including MOVING, and the wide range of TEL activities and prototypes developed within the MOVING project like the Adaptive Training Support consisting of the “Learning-how-to-search” widget and “Curriculum Reflection” widget, as well as the MOVING visualisations including the Concept Graph and uRank. The event was very successful and it was attended by more than 30 top scientists and business practitioners, including 6 speakers.
MOVING at Open Science Barcamp 2019

On 18th of March 2019, the creators of the MOVING MOOC Science 2.0 and open research methods, Sabine Barthold and Franziska Günther from TUD, successfully participated in the Open Science Barcamp at Wikimedia in Berlin. The Open Science Barcamp is a yearly event organized in a workshop format preceding the Open Science Conference that took place on 19th, 20th of March 2019. Both the Barcamp and the Conference attracted around 250 open science advocates, researchers and practitioners from all over the world to discuss the future of science and open scholarship.

MOVING user workshop

During the third year of the project Dr. Michael Wiese from EY conducted a MOVING workshop with the GSA Innovation@EY team, a cross-service line and cross-functional initiative supported by the EY GSA leadership, where he demonstrated the MOVING platform. The team consisted of 30 professionals who have innovation roles in their respective service lines. This leading management group can reach the targeted users of the platform further on. The MOVING platform will be used purposefully to improve their open innovation skills and expand the open innovation culture within EY. The workshop session included a presentation of the main functionalities of the MOVING platform and a hands-on demonstration that was structured for managers/public administrators.

Interview with GenerationR

On 18th of January 2019 Sabine Barthold and Franziska Günther from TUD gave an interview in GenerationR, the online magazine of the TIB - German National Library of Science and Technology, Hannover, Germany. The title of the interview was “Redistributing the Future: An Interview with MOVING MOOC Makers Sabine Barthold and Franziska Günther”, where the MOVING members discussed about Open Science in education, and presented the MOVING platform and the MOVING MOOC Science 2.0, alongside with other open research methods.
A paper on “A Deep Generic to Specific Recognition Model for Group Membership Analysis using Non-verbal Cues”, co-authored by CERTH staff, was published at the Image and Vision Computing Journal, Elsevier on January 2019.

Franziska Günther from TUD was invited to give a lecture on “Research Analytics” at Saxon State and University Library Dresden (SLUB) on 24th of January 2019, in Dresden, Germany. Franziska presented the MOOC "Science 2.0 and open research methods" to researchers and librarians.

Three papers on the MOVING platform and its technologies were presented at the 5th International Conference on MultiMedia Modeling (MMM 2019) on 8th - 11th January 2019, in Thessaloniki, Greece. More specifically, a) the paper “Temporal Lecture Video Fragmentation using Word Embeddings” was presented as a poster by Damianos Galanopoulos (CERTH), b) the paper “Training Researchers with the MOVING Platform” was presented as demo by Iacopo Vagliano again in the same session, and c) the paper “VERGE in VBS 2019” was presented in the “Video Browser Showdown” session by Stelios Andreadis (CERTH).

Professor Dr. Thomas Köhler from TUD was invited as a keynote speaker on “Opening up education through digitization. Remarks on recent developments in the field of Technology Enhanced Learning” at the 7th International Conference on e-Learning and e-Teaching (IceLeT) 2019, on 20th-21st of February 2019, in Teheran, Iran. Among others, he presented the MOVING platform and its technologies.

Dr. Angela Fessl from Know – Center demonstrated the MOVING platform and especially the “Curriculum Reflection Widget” at TEL Marketplace event, on 19th of March 2019, in Graz, Austria.

Dr. Vasileios Mezaris from CERTH presented the MOVING technologies for video analysis, together with other CERTH video technologies, at the “Ateliers de programme” annual event of the SRG SSR - the Swiss public broadcasting association, in Lugano, Switzerland on March 27, 2019.

An invited paper on “Applying real options in the strategic planning of a knowledge repository exploitation”, that is referring to one of the novel methods applied when building the MOVING exploitation strategy, was presented by Professor Dr. Andrzej Skulimowski at the conference “Portfolio theory and derivative pricing”, on 27th – 29th March 2019 in Warsaw, Poland. The conference is co-organised by the Institute of Mathematics and the Systems Research Institute of the Polish Academy of Sciences (PAS).

A paper on “Analyzing the Evolution of Linked Vocabularies” by M. Abdel-Qader, I. Vagliano and A. Scherp is going to be presented at the International Conference on Web Engineering (ICWE) 2019, on 11th-14th of June 2019, at Daejeon, Korea.

A paper on “Recommending Multimedia Educational Resources on the MOVING Platform” by I. Vagliano and S. Nazir is going to be presented at the 8th International Workshop on Bibliometric-enhanced Information Retrieval 2019 (BIR 2019), on 14th-18th of April 2019, in Kologne, Germany.

A paper on “Concept and development of an Information Literacy Curriculum Widget” by A. Fessl, S. Barthold, I. Simic and V. Pammer-Schindler is going to be presented at the Conference on Learning Information Literacy across the Globe, on 10th of May, in Frankfurt, Germany.

CERTH is planning to present the MOVING platform as part of the biennial event at the CERTH-ITI’s open day event which is expected to take place in mid-May 2019.


An article on the MOVING platform that will describe the value proposition of MOVING with specific examples and scenarios of how EY’s assurance professionals can use MOVING in their daily work is going to be published at the EY’s Reporting magazine.
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