

D9.6

Report on standardisation and dissemination – v3

v 2.0 / 2017-01-31

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This report presents the standardization and dissemination activities that have taken place in the third and final year of the USEMP project.

This deliverable is an update of D9.2 (submitted in month 12) and D9.4 (submitted in month 24) presenting the activities of the first and second year respectively.



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Version Changes

- v0.1 First draft version based on D9.4 (Velti)
- v0.2 Added main activities of third year of the project (Velti)
- v0.3 Contributions from all partners for their activities (all)
- v0.4 Merging contributions and unified approach across docuemtn (Velti)
- v0.6 First pre-final version for internal review (Velti)
- v0.7 Internal reviewed version
- v1.0 Final version for submission
- V2.0 Revised based on outcomes of final project review

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1.Introduction

This deliverable includes the third and final year dissemination target achievements. The dissemination targets regarding the promotion of the USEMP project are described in terms of:

- Publications of conference and journal papers where USEMP was cited
- Events and/or sessions where USEMP was promoted
- Standardization related activities
- Collaboration with other projects
- Sharing of the concepts of USEMP through the media outreach that includes the USEMP website, social media accounts and public participating to the experiments that are part of the USEMP DoW

In addition to the outreach dissemination activities this deliverable includes the internal dissemination and standardisation activities performed during the third year period. These activities include the project consortium collaboration in the effort to produce the necessary research and implementation material.

2.USEMP Dissemination Strategy

Dissemination activities are very important for USEMP consortium partners since they allow to reach out to the research and industry community, to make the USEMP project results known to the general public and to collect feedback. Dissemination is also important due to the fact that the multidisciplinary work is relevant for the different scientific and professional communities that focus on data and privacy. As discussed in previous deliverables (D9.1, D9.2 and D9.4), a number of dissemination activities have been considered, planned and carried out within the USEMP project. The dissemination strategy for the third year of the project was to maintain and update the established dissemination channels, to expand on the dissemination avenues and to contribute and disseminate the project to standardization bodies. In addition, with the collaboration of the T9.4 Exploitation Plans, dissemination activities were streamlined with the exploitation plan. More specifically regarding the maintenance and keeping up-to-date dissemination activities these include:

- The USEMP public website content being up-to-date with the current activities of the consortium and deliverables
- The social media (and especially Twitter) update and continues evolving in terms of followers and audience
- The updated leaflets and posters were presented and shared in a number of events
- Maintain and increase the effort regarding paper publication and conference attendance

In addition to the established maintenance and keeping up-to-date dissemination avenues above, in the third year the strategy is expanded into:

- Trademark application for DataBait
- New DataBait landing page for the post-USEMP era
- A working prototype of DataBait that has been demonstrated across different events capturing the interest of different stakeholders (end-users, researchers, privacy advocates)

In order to measure the USEMP's Key Performance Indicators (KPI's) achieved targets against the initially estimated ones proposed in D9.1 "Dissemination plan" deliverable and revised later, are shown in Table 1.

Dissemination		Values and targets			
action	Indicators	End Yr1	End Yr2	End Yr3	End Yr3
action		Target	Target	Target	Values
	Distribution of at least	100 per	100 per	100 per	Achieved
Prepare a simple	100 leaflets per year	partner	partner	partner	
information leaflet	by all partners in	-	-		
about the USEMP	relevant gatherings,				
project	monitored and				
project	reported on by the				
	dissemination team				
Set up public	Use the number of	Increase	Increase of	Increase	Achieved
website with	visitors recorded on a	of 10%	15%	of 20%	(Increase
relevant news and	monthly basis and				of > 187)
information	starting at month 6 try				
featuring USEMP	to achieve a %				
news and events	increase of monthly				
	visitors per year				
Participate and	USEMP partnership to	2	4	6	Achieved
promote USEMP	be represented in				(15)
in relevant	relevant international				
regional or	events				
national events.					
Collaborate	Establish regular	1	3	5	Achieved
effectively with	contact and				(6)
other projects	communication				
consortia,	channels with other				
agencies and	relevant projects and				
networks	networks				
	Identification of	8 posts	12 posts	20 posts	Achieved
	relevant existing				(more
Use social media	social media channels				details in
to provide	for dissemination				section
relevant	actions and provide				3.5)
information to	relevant updates and				
target groups	information about				
	USEMP activities to				
	these channels.				

Table 1. Dissemination KPIs "End of year 3" update

3.Dissemination Activities

This dissemination activities section is separated in detailed sections per-category of dissemination activities achievements. The categories of dissemination activities which consortium members participated in during the second year of the project include:

- Publications in journals, conferences and workshops
- Events and sessions
- Collaboration with other projects
- Update on the public access USEMP Website
- Updated 'traction' of USEMP on the social media
- The latest additions and modifications on the communication kit

In addition a final chapter is dedicated in dissemination actions that are related on the post-USEMP era. The above listed activities are elaborated in their respective sections bellow.

3.1. Publications Achievements

This section lists the publications in journals, conferences and workshops achieved by the USEMP consortium during the third year of the project (from 1st of October 2015 until 30th of September 2016)

CEA:

Title: "Fast and robust duplicate image detection on the web."

Authors: Etienne Gadeski, Hervé Le Borgne, and Adrian Popescu.

Category: Journal, Multimedia Tools and Applications (2016): 1-20

Abstract: Social media intelligence is interested in detecting the massive propagation of similar visual content. It can be seen, under certain conditions, as a problem of detecting near duplicate images in a stream of web data. However, in the context considered, it requires not only an efficient indexing and searching algorithm but also to be fast to compute the image description, since the total time of description and searching must be short enough to satisfy the constraint induced by the web stream flow rate. While most of methods of the state of the art focus on the efficiency at searching time, we propose a new descriptor satisfying the aforementioned requirements. We evaluate our method on two different datasets with the use of different sets of distractor images, leading to large-scale image collections (up to 100 million images). We compare our method to the state of the art and show it exhibits among the best detection performances but is much faster (one to two orders of magnitude).

 Title: "Constrained Local Enhancement of Semantic Features by Content-Based Sparsity" Authors: Tamaazousti Youssef, Hervé Le Borgne, and Adrian Popescu.

Category: Conference, 2016 ACM on International Conference on Multimedia Retrieval

Abstract: Semantic features represent images by the outputs of a set of visual concept classifiers and have shown interesting performances in image classification and retrieval. All classifier outputs are usually exploited but it was recently shown that feature sparsification improves both performance and scalability. However, existing approaches consider a fixed sparsity level which disregards the actual content of individual images. In this paper, we propose a method to determine automatically a level of sparsity for the semantic features that is adapted to each image content. This method takes into account the amount of information contained by the image through a modeling of the semantic feature entropy and the confidence of individual dimensions of the feature. We also investigate the use of local regions of the image to further improve the quality of semantic features. Experimental validation is conducted on three bench-marks (Pascal VOC 2007, VOC 2012 and MIT Indoor) for image classification and two of them for image retrieval. Our method obtains competitive results on image classification and achieves state-of-the-art performances on image retrieval.

• Title: "Aggregating Image and Text Quantized Correlated Components."

Authors: Quynh Nhi Tran, Herve Le Borgne, and Michel Crucianu.

Category: Conference, Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition, pp. 2046-2054. 2016.

Abstract: Cross-modal tasks occur naturally for multimedia content that can be described along two or more modalities like visual content and text. Such tasks require to "translate" information from one modality to another. Methods like kernelized canonical correlation analysis (KCCA) attempt to solve such tasks by finding aligned subspaces in the description spaces of different modalities. Since they favor correlations against modality-specific information, these methods have shown some success in both cross-modal and bi-modal tasks. However, we show that a direct use of the subspace alignment obtained by KCCA only leads to coarse translation abilities. To address this problem, we first put forward here a new representation method that aggregates information provided by the projections of both modalities on their aligned subspaces. We further suggest a method relying on neighborhoods in these subspaces to complete uni-modal information. Our proposal exhibits state-of-the-art results for bi-modal classification on Pascal VOC07 and for cross-modal retrieval on FlickR 8K and FlickR 30K.

iCIS

• Title: " Het recht van mededeling aan het publiek "

Authors: Depreeuw, S. & Brison, F.

Category: Journal, 20 ans de nouveau droit d'auteur - 20 jaar nieuw auteursrecht. lemal: Anthemis 2015, p. 69-117

• Title: "Exceptions and limitations to copyright protection for libraries, archives and educational and research institutions "

Authors: Michaux, B., Depreeuw, S., Van Den Brande, S. & Van de Gehuchte, T.

Category: Journal, Revue de Droit Intellectuel - L'Ingénieur Conseil. 2015/2, p. 234-257 Depreeuw, S. "De 'mededeling aan het publiek' in de rechtspraak van het Hof van Justitie van de Europese Unie" IRDI, 2015/4, p. 309-329

• Title: "Working responsibly across boundaries: practical and theoretical lessons "

Authors: Rommetveit, K., van Dijk, N., Gunnarsdóttir, K., O'Riordan, K., Gutwirth, S., Strand, R., Wynne, B

Category: Journal, R. von Schomberg (Ed.) Handbook of Responsible Innovation, Edward Elgar Publishing, Cheltenham, Accepted 2016

Abstract: This paper examines some of the tensions between the ideals and the operationalisation of Responsible Research and Innovation (RRI). It does so through reflections on research into integrating assessments of various kinds in the context of complex, emerging technologies. Its aim is to address some aspects of what actually happens, as new collaborations are sought out across institutional cultures and scientific disciplines. It is especially interested in those kinds of 'integrations of assessments' that take place, or will take place, as assessors of various flavours, seek out closer collaborations with scientists, innovators, industrialists and policy makers. Situated within the broader horizon of an empirical investigation into integration of assessments (www.epinet.no) it recounts three (practical and theoretical) lessons for RRI. react-text: 155 /react-text

• Title: " A Risk to a Right? Beyond Data Protection Risk Assessments "

Authors: Van Dijk, N., Gellert, R., Rommetveit, K.

Category: Journal, Computer Law & Security Review, 32(2). 2016. 286-306

Abstract: The proposal for a new European Data Protection Regulation introduces the novel obligation of performing data protection assessments. Since these assessments will become a mandatory exercise for those in control of data processing systems, they will become an important apparatus for the governance of new and emerging information technologies. This tool, and in particular the notion of "risks to the rights and freedoms of data subjects" which is at its core, epitomises the shift from classical legal practice to more risk-based approaches. Merging risks and rights in the proposed fashion could change their meanings into something hardly predictable. This contribution proposes to explore the nature of the relation between both concepts within the assessment of a "risk to a right". It will start by mapping out the various relations that exist between risks and rights in different practices. This should serve to identify gaps in the way DPIAs are currently operationalised and might well determine whether the introduction of this methodology in its current form might itself pose a risk to the rights of privacy and data protection. In turn however, it can provide opportunities for improvement and for lessons to be drawn from other practices and expertise that strike different relations between risks and rights, like the ones found in environmental governance and courts.

 Title: "Assessing the European approach to privacy and data protection in smart grids. Lessons for emerging technologies "

Authors: Kloza, D., van Dijk, N., De Hert, P.

Category: Journal, Skopik, F., Smith, P. Smart grid security: holistic and innovative solutions for a modernized grid, Elsevier, 2015

Abstract: Smart grids offer novel means of energy governance and promise an adequate response to environmental, societal and technical developments of the 21st century. At the same time, they are capable of invading the sacrosanctity of the most privacy-sensitive place – the home. This chapter sketches several societal challenges that smart grids pose, and amongst these the threat of abusive surveillance practices. The "light" regulatory approach that the European Union has taken as a response is subsequently overviewed and critically assessed. We argue that this approach and its core element, i.e. a data protection impact assessment (DPIA) framework, is rather a missed opportunity. We conclude that impact assessments of emerging technologies must be inclusive, easy to use and flexible, satisfying certain quality criteria

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• Title: " Law as information in the era of data-driven agency'"

Authors: Hildebrandt, M.

Category: Journal, The Modern Law Review 79(1), 1-30, January 2016

Abstract: This contribution introduces the mathematical theory of information that 'informs' computer systems, the internet and all that has been built upon it. The aim of the author is to invite lawyers to reconsider the grammar and alphabet of modern positive law and of the Rule of Law, in the face of the alternative grammar and alphabet of a datadriven society. Instead of either embracing or rejecting the technological transitions that reconfigure the operations of the law, this article argues that lawyers should collaborate with the computer scientists that engineer and design the affordances of our new onli*f*e world. This is crucial if we want to sustain democratic participation in law-making, contestability of legal effect and transparency of how citizens may be manipulated by the invisible computational backbone of our rapidly and radically changing world.

 Title: "Information, freedom and property. The philosophy of law meets the philosophy of technology"

Authors: Hildebrandt, M. and Van den Berg, B.

Category: Book, Abingdon, Routledge 2016

Abstract: This book addresses issues on the nexus of *freedom* of and *property in* information, while acknowledging that both hiding and exposing information may affect our privacy. It inquires into the physics, the technologies, the business models, the governmental strategies and last but not least the legal frameworks concerning access,

organisation and control of information. It debates whether it is in the very nature of information to be either free or monopolized, or both. Analysing upcoming power structures, new types of colonization and attempts to replace legal norms with technonudging, this book also presents the idea of an infra-ethics capable of pre-empting our pre-emption. It discusses the interrelations between open access, the hacker ethos, the personal data economy, and freedom of information, highlighting the ephemeral but pivotal role played by information in a data-driven society. This book is a must-read for those working on the contemporary dimensions of freedom of information, data protection, and intellectual property rights.

• Title: "The Median Estate. Breaking down boundaries and reconstituting rights "

Authors: Van Dijk, N., & Rommetveit, K.,

Category: Conference, Society for Social Studies of Science (4S) & European Association for the Study of Science and Technology (EASST): Science and Technology by other Means. Barcelona, Spain. September 2016.

Abstract:

• Title: " Discussant on Legal hybridity, risk, transparency & (counter)profiling in wearable sensing "

Authors: Van Dijk, N

Category: Workshop on "INSIGHTS: bringing together sensor technology and social research". Homesense Project. London. UK. 20-21 June 2016. Invited,

Abstract:

• Title: " Increasing transparency & privacy for Online Social Network users. The USEMP project as a case study of Data Protection by Design "

Authors: Van Dijk, N., & K. de Vries,

Category: Conference, Amsterdam Privacy Conference. Amsterdam. Netherlands, 24 October 2015

Abstract:

• Title: " Seven sins against privacy and personal data protection in European smart metering systems "

Authors: Van Dijk, N., & Kloza, D.,

Category: Conference, Cybersecurity Lecture Series. TU Vienna. Austria, 21 October 2015

Abstract: Smart grids offer novel means of energy governance and promise an adequate response to environmental, societal and technical developments of the 21st century. Yet, at the same time, they are capable of invading the sacrosanctity of the most privacy-sensitive place - the home. In this lecture, Dariusz Kloza and Niels van Dijk will sketch several societal challenges that smart grids pose and amongst these the threat of abusive surveillance practices. They will next overview and critically assess the "light" regulatory approach that the European Union (EU) has taken as a response thereto. By pointing out the seven major drawbacks of this "light" approach, they will argue that its

core element, i.e. a data protection impact assessment (DPIA) framework, is rather a missed opportunity. In their opinion, impact assessments of emerging technologies must be inclusive, easy to use and flexible, satisfying certain quality criteria.

• Title: " The Median Estate. Breaking down boundaries and reconstituting rights "

Authors: Van Dijk, N., & Rommetveit, K.

Category: Conference, Trading Zones in Technological Societies conference. Liège. Belgium. 16 October 2015.

Title: "Les actualités en droit de la protection des données à caractère personnel, "

Authors: Depreeuw, S. & de Meeûs, J.

Category: Conference, Midis de la formation organisés par la conférence du jeune barreau, 22 January 2016.

• Authors: Hildebrandt, M

Category: Presentation in Workshop National Science Foundation (NSF) & Nederlands Wetenschappelijk Onderzoek (NWO), Heinz College Washington DC, 2-3 October 2015

• Authors: Hildebrandt, M

Category: Presentation, Keynote on data-driven agency, EPP Women Congress on 'Europe's Digital Agenda', Maximillianeum/Bayerischer Landtag Munich, 30th October 2015

• Title: " Law in the Era of Data-Driven Agency' "

Authors: Hildebrandt, M. Guest Lecture

Category: Conference, Le Future du Droit, big data, algorithms et robotisation, Centre Perelman du Philosophie du Droit, ULB, 1 December 2015 Brussels

• Title: " New Animisms' "

Authors: Hildebrandt, M

Category: Workshop on 'Algorithmic Power and Accountability in Black Box Platforms' at London School of Economics, London, 25 January 2016,

• Title: " Algorithmic Accountability and Accountability for Algorithmic Decision-Making "

Authors: Hildebrandt, M

Category: Workshop, panel on 'Governing increasingly autonomous machines' at the workshop on Algorithmic decision-making and Government, NESTA 1 February 2016, London (full day)

 Title: "Computer Says No: Justice, Accountability & Clarity in the Age of Algorithms, public event at "

Authors: Hildebrandt, M

Category: Conference, NESTA, with Burkhard Shafer and Sally Applin, London 1 February 2016 (evening)

• Title: " Utopian Futures, Privacy and security online: a choice between two utopias? "

Authors: Hildebrandt, M

Category: Seminar, panel presentation at the seminar 'Digital utopias: what remains of the promises of Internet?, 19th February 2016, UCL, Louvain La Neuve

Title: " ML and the Law' "

Authors: Hildebrandt, M

Category: Workshop 'Knowing Algorithms: Epistemology and Ethics in Machine Learning.' organised by the Data Science Institute, Lancaster University, Work Foundation, London 30th March 2016

• Title: " Learning as a machine. Cross-overs between humans and machines "

Authors: Hildebrandt, M

Category: Conference, keynote at LAK2016, the annual conference of the society for learning analytics and knowledge, Edinburgh, 27 April 2016

• Title: " No free lunch and the law'"

Authors: Hildebrandt, M

Category: Seminar, Huygens lunchlezing Faculty of Science, Radboud University Nijmegen, 9th May 2016

• Title: " Speaking Law to Power. Secrets, cowboys and spies in a data-driven world"

Authors: Hildebrandt, M

Category: Conference, WIELS Brussel, 28 juni 2016

Abstract: The lecture discussed the implications of the 'new digital unconscious' that forms the playground for both cowboys and spies, rummaging through our secrets and trivialities to feed into new business models or to detect the patterns of predictable dangers

• Title: " Looking forward'"

Authors: Hildebrandt, M

Category: Lecture in Privacy Summer School Brussels Privacy Hub, 8 July 2016

• Title: "Promiscuous Data Sharing in Times of Data Driven Animisms, Symposium 'Observing the Web "

Authors: Hildebrandt, M

Category: Conference, Ethics in a Data Sharing World, Web Science Institute, London, 19th July 2016

Abstract: A combination of the disciplines of philosophy and law, presenting the unintended consequences of data sharing.

 Title: " How machine learning differentiates/discriminates – some legal and philosophical explorations." Authors: De Vries, K.

Category: Seminar, public ETHOS lecture series, IT University of Copenhagen (ITU), Denmark, 26 May 2016

Abstract: This presentation demonstrated how machine learning, when it is used to make sense of human behavior and characteristics ('profiling'), can lead to infringements in terms of privacy, data protection and antidiscrimination law.

IMINDS:

• Title: "What Facebook's changes mean".

Authors: Heyman, Rob,

Category: Workshop, EEMA / TrustCore - Fireside Workshop "Is Privacy an Obsolete Concept?", Brussels, 17 March 2016

Abstract: Is privacy still something that really exists or does it need to be redefined? The Facebook case between the Belgian State and Facebook has clearly shown to what extent our activities on the net are (without our consent) being tracked... But what about pervasive use of Google-analytics, the tracking of our buying habits on a vast number of online sites... For the short term it seems to be for our benefit and for providing us better online service... but what if in x years time such information might eg be sold to an insurance provider? Will the new GDPR give us any real protection in this wild wild west? We invite you to come and debate with peers.

• Title: "Datafication, privacy and (dis)empowerment" (Invited)

Authors: Pierson, Jo

Category: Workshop, Invited presentation at conference seminar of CNRS Institut des sciences de la communication (ISCC), l'Université Paris-Sorbonne & l'Université Pierre et Marie Curie (UPMC), 2 May 2016, Paris, France. (http://www.iscc.cnrs.fr/spip.php?article2098)

Abstract: The lecture, based on Media and Communication Studies (MCS) and Science and Technology Studies (STS), takes an interdisciplinary look at how data and social media online platforms (like Facebook) interact with today's society, and the kind of social challenges this poses for users/citizens/consumers. This social science perspective supports a better understanding of the relationship between media, privacy and empowerment.

We discuss how a combined MCS and STS approach can enrich privacy research on these topics, in the way that it looks at digital media platforms and their algorithms as (technological) tools for mediation. The latter perspective incorporates three inextricable and mutually determining components : artefacts, practices and social arrangements. This threefold approach offers a particular value for better assessing privacy in technologically mediated communications, while avoiding the reductionist view of technological determinism. We posit that multifaceted perspective on media and communication between people changes and broadens the framing of online privacy and datafication of media users. This also helps to delineate a realistic and multidimensional picture of users and their awareness, attitudes, capabilities and practices.

As for the structure of the lecture, we first identify how social media technologies 'delinguistify' and change the social interaction between people from (human) connectedness to (automated) connectiviy, building on theories of Andrew Feenberg and José van Dijck. Next we broaden the scope by looking at the role of datafication and data in online (social media) platforms, and how this is interrelates with notions of (dis)empowerment and vulnerability. Finally we propose a conceptual framework, substantiated by findings from recent national and international research projects.

• Title: "Data reuse by social media platforms and the alienation of users: integrating science and technology studies and political economy perspectives"

Authors: Heyman, Rob & Pierson, Jo

Category: Conference, Presentation at Political Economy section for IAMCR Conference 'Memory, commemoration and communication: looking back, looking forward', UK, Leicester, 27-31 July 2016.

Abstract: We observe two things, more and more invasive uses for personal data are found in Facebook, but nobody changes or challenges these decisions. The proliferation of social media (e.g. Facebook) and online platforms (e.g. sharing economy) has led to an increased reuse and commodification of personal data. Strategies to increase and strengthen secondary use of data drive updates, changed privacy policies and company acquisitions. Despite public knowledge about this extended (re)use of data, users keep on using these services. The fact that Google revealed the merging of user data across all its separate services in 2012 or that Facebook announced to exchange user data between its 'family of apps' in 2015, has not stopped user growth. Hence we witness how the evolution of these technologies and the increased commodification of personal data has met little user resistance, despite privacy outcries.

We investigate this situation from a theoretical perspective, by applying the central Science and Technology Studies (STS) concepts of 'interpretative flexibility' (social construction of technology (Pinch & Bijker, 1984)) and 'irreversibilisation' (sociology of translation (Callon, 1991)). These notions are framed in a political economic perspective, where we identify social media as platforms to create ethical surplus (Arvidsson, 2005) on the level of the platform and the audience commodity. By combining STS with political economy, we are able to show how the commodification of personal data on social media may not be hyper-exploitation (Fuchs, 2012) but a form of alienation, more aptly described in actor-network theory as 'treason', i.e. the point where an actor no longer behaves as expected (Callon, 1986).

The aim of the paper is to analyse the coercion and alienation of users via the technological development of data-driven platforms and services. For this we frame Facebook as an exemplary case to illustrate how the technological evolution of this platform consists of two phases: a first phase of irreversibilisation and a second phase commodification. We refer to irreversibilisation as the point where a platform becomes so central in other actor-networks that non-usage becomes more difficult than usage. Social media, but also internet-of-things and smart city initiatives, remain in perpetual beta, therefor they can add new actors any time. In the second phase the actors that increase value are attracted to this network from as soon irreversibilisation is achieved for end-users. As a result, new uses for data can be added without losing the user base via silent coercion.

The research questions are: (1) How can we apply the notion of interpretative flexibility to unfinished technologies? (2) How can we use the notion of irreversibilisation to refer to particular situations of social closure of a technology? (3) How can we use these STS concepts to identify sites of coercion and alienation of users via platform technologies and services?

In the conclusion we first problematize the concept of interpretative flexibility for technologies that are never truly finished. Second we illustrate the much needed integration of STS with political economy to better criticise what data driven corporations like Facebook and other social media platforms do in order to reuse personal data for more and more purposes.

• Title: "Mythes and media"

Authors: Heyman, Rob,

Category: Conference, Mediawijs Conference, Ghent, 15-16 November 2016.

Abstract: Rob Heyman will present insights of USEMP with regard to users' digital footprint and he will also show DataBait as a transparency tool.

CERTH:

• Title: "Personalized Privacy-aware Image Classification"

Authors: Eleftherios Spyromitros-Xioufis, Symeon Papadopoulos, Adrian Popescu, and Yiannis Kompatsiaris,

Category: Conference, ACM International Conference on Multimedia Retrieval, pp. 71-78. ACM, 2016

Abstract: Information sharing in online social networks is a daily practice for billions of users. The sharing process facilitates the maintenance of users' social ties but also entails privacy disclosure in relation to other users and third parties. Depending on the intentions of the latter, this disclosure can become a risk. It is thus important to propose tools that empower the users in their relations to social networks and third parties connected to them. As part of USEMP, a coordinated research effort aimed at user empowerment, we introduce a system that performs privacy-aware classification of images. We show that generic privacy models perform badly with real-life datasets in which images are contributed by individuals because they ignore the subjective nature of privacy. Motivated by this, we develop personalized privacy classification models that, utilizing small amounts of user feedback, provide significantly better performance than generic models. The proposed semi-personalized models lead to performance improvements for the best generic model ranging from 4%, when 5 user-specific examples are provided, to 18% with 35 examples. Furthermore, by using a semantic representation space for these models we manage to provide intuitive explanations of their decisions and to gain novel insights with respect to individuals' privacy concerns stemming from image sharing. We hope that the results reported here will motivate other researchers and practitioners to propose new methods of exploiting user feedback and of explaining privacy classifications to users.

• Title: "Perceived Versus Actual Predictability of Personal Information in Social Networks", Authors: Eleftherios Spyromitros-Xioufis, Georgios Petkos, Symeon Papadopoulos, Rob Heyman, and Yiannis Kompatsiaris,

Category: Conference, International Conference on Internet Science, pp. 133-147. Springer International Publishing, 2016

Abstract: This paper looks at the problem of privacy in the context of Online Social Networks (OSNs). In particular, it examines the predictability of different types of personal information based on OSN data and compares it to the perceptions of users about the disclosure of their information. To this end, a real life dataset is composed. This consists of the Facebook data (images, posts and likes) of 170 people along with their replies to a survey that addresses both their personal information, as well as their perceptions about the sensitivity and the predictability of different types of information. Importantly, we evaluate several learning techniques for the prediction of users with respect to the disclosure of specific types of information are often incorrect. For instance, it appears that the predictability of their political beliefs and employment status is higher than they tend to believe. Interestingly, it also appears that information that is characterized by users as more sensitive, is actually more easily predictable than users think, and vice versa (i.e. information that is characterized as relatively less sensitive is less easily predictable than users might have thought).

• Title: "CERTH/CEA LIST @ MediaEval Placing Task 2016"

Authors: Giorgos, Kordopatis-Zilos, Adrian, Popescu, Symeon, Papadopoulos, and Yiannis Kompatsiaris

Category: Workshop, MediaEval, 2016

Abstract: We describe the participation of the CERTH/CEA LIST team in the MediaEval 2016 Placing Task. We submitted five runs in total to the Estimation-based sub-task, providing the estimated locations for the test set released by the organizers. Out of five runs, one is based only on textual information, employing a language model-based approach with several refinement schemes. One is based on visual content, using geo-spatial clustering over the most visually similar images, and three runs are based on a hybrid approaches exploiting both visual and textual cues from the multimedia items, trained on datasets of different size and origin. The best results were obtained by the hybrid approach, built using external training data.

• Title: ACM MM 2016 Tutorial on "Multimedia Privacy",

Authors: Gerald Friedland, Symeon Papadopoulos, Julia Bernd, and Yiannis Kompatsiaris

Category: Conference (Tutorial), ACM Multimedia, 2016

Abstract: This tutorial brings together a number of recent advances at the nexus of multimedia analysis, online privacy, and social media mining. Our goal is to offer a multidisciplinary view of the emerging field of Multimedia Privacy: the study of privacy issues arising in the context of multimedia sharing in online platforms, and the pursuit of new approaches to mitigating those issues within multimedia computer science.

• Title: "A Disclosure Scoring Framework for Personal Data"

Authors: Symeon Papadopoulos, Georgios Petkos, Eleftherios Spyromitros-Xioufis, and Yiannis Kompatsiaris

Category: Conference/Exhibition (Poster), European Data Forum, 2016

Abstract: We present a framework that aims to help citizens better understand and manage the type of personal information that can be inferred from their digital trails. The framework organizes personal data along ten disclosure dimensions (e.g. demographics, employment, health, etc.) and provides estimates with respect to the extent of disclosure of information along each of those dimensions based on automated processing of a user's observed data. We conducted a study with a sample of 170 Facebook users and found out that there is considerable mismatch between user perceptions and reality in terms of how predictable sensitive information is.

LTU:

• Title: "Facebook User Attitudes Towards Secondary Use of Personal Information"

Authors: Padyab, A., Päivärinta, T., Ståhlbröst, A. & Bergvall-Kåreborn, B.

Category: Conference, ICIS 2016, 11-14 Dec 2016

Abstract: This paper reports on a study of how user attitudes to institutional privacy change after exposing users to potential inferences that can be made from information disclosed on Facebook. Two sets of focus group sessions with Facebook users were conducted. Three sessions were conducted by demonstrating to the users, on a general level, what can be inferred from posts using prototypical software called DataBait. Another set of three sessions let the users experience the potential inferences from their own actual Facebook profiles by using the DataBait tool. Findings suggest that the participants' attitudes to secondary use of information changed from affective to cognitive when they were exposed to potential third-party inferences using their own actual personal information. This observation calls for more research into online tools that allow users to manage and educate themselves dynamically about their own disclosure practices.

VELTI:

• Title: "Increasing transparency & privacy for Online Social Network users – USEMP value model, scoring framework & legal"

Authors: Adrian Popescu, Mireille Hildebrandt, Jonas Breuer, Rob Heyman, Shenja van der Graaf, Laurence Claeys, Symeon Papadopoulos, George Petkos, David Lund, Theodoros Michalareas, Timotheos Kastrinogiannis, Apostolos Kousaridas, Etienne Gadeski, Hervé Le Borgne, Katja de Vries Category: Conference

Category: Conference, APF 2015, 7-8 October 2015

Abstract: In this paper we present research results from the multi-disciplinary EU research project USEMP. In particular, we look at the development of a personal data value model in Online Social Networks (OSNs), the development of privacy & personal data value indicators frameworks and the legal aspects personal data licensing & profile transparency. In the first part of the paper we present overview of the existing personal data monetization ecosystem in OSNs and its possible evolutions for

increasing privacy and transparency for consumers about their OSN presence. In the second part of the paper, we describe USEMP scoring framework for privacy & personal data value indicators that can assist users to better perceive how their privacy is affected by their OSN presence and what the value of their OSN activities is. In the last part of the paper we show how personal data usage licensing and profile transparency for OSN activities provides for Data Protection by Design (DPbD).

 Title: "User Empowerment for Enhanced Online Presence Management – Use Cases and Tools"

Authors: A. Popescu, M. Hildebrandt, S. Papadopoulos, G. Petkos, Y. Kompatsiaris, L. Claeys, T. Seymoens, D. Lund, T. Michalareas, T. Kastrinogiannis, E. de Vries, N. van Dijk, J. Pierson, A.M. Padyab, E. Gadeski, H. Le Borgne "

Category: Conference, Amsterdam Privacy Conference 2015, pages 23-26, 8 October 2015, Amsterdam

Abstract: In this paper we present the DataBait platform, a set of privacy awareness tools and methods that offer online social network (OSN) users the ability to better manage their online presence and to better understand the economic value of their shared data in the context of EU FP7 USEMP project. DataBait offers transparency on how users of OSNs may be profiled by their providers and third parties, while making visible what information they unknowingly disclose about themselves. Simultaneously DataBait offers tools to automatically change one's privacy settings, based on the profile transparency that is provided. The paper starts by recounting the privacy paradox that refers to people sharing their private information even though they explicitly indicate that they would rather not share so much. It then explains how the DataBait tools will contribute to a new form of user empowerment, capable of reducing the privacy paradox. We follow up with an explanation of the legal ground that covers the processing of personal data, discussing the Data Licensing Agreement. Finally, we explain the architecture of the DataBait platform, hoping to clarify that and how data mining operations on the side of the users can enhance their awareness of the knowledge and information they leak while interacting with their preferred OSN.

• Title: "My Privacy at risk: is it Safe?"

Authors: A. Drakos

Category: Conference, 17th Infocom World 2015, 24 November 2015, Athens, Greece

Abstract: during 17th Infocom World conference, a parallel session was organized in regards to privacy. In this presentation a general introduction to privacy awareness technologies was made with USEMP and the DataBait as the main presented tool. The presentation and demo sparked a long discussion between the participants around privacy and the usage of OSNs.

3.2. Events and Sessions Participation

This section includes the list of events and sessions which the USEMP consortium partners have represented and/or communicated the vision of USEMP during the third year of the project (October 2015 until end of September 2016).

ICT 2015 Innovate, Connect, Transform – Lisbon Portugal – HWC, CEA, Velti

The ICT 2015 Innovate, Connect, Transform in Lisbon Portugal was a major success story for the USEMP booth among the 140 exhibition booths, with significant contributions and participation from HWC, VELTI and CEA. ICT 2015, which took place from 20 to 22 October, is an event lead by the European Commission offering to more than 6000 visitors the possibility to "Innovate, Connect, Transform" our digital world¹.

The USEMP booth received a lot of interest in all three days of the ICT event and actually was voted BEST exhibitor among 140. The assessment for the award was made by a group of volunteers called 'Young Minds' that visited all the booths in the exhibition and after a vote among the volunteers USEMP/DATABAIT was awarded the ICT 2015 'YOUNG MINDS' AWARD (see Figure 1 and Figure 2). The booth-visitors interested in DataBait had the opportunity to:

- talk to the USEMP-booth team and see 'DataBait tool in action' through live accounts
- see the DataBait video (on the booth-screen)
- write your name and Facebook account in order to take part in DataBait
- take the USEMP-DataBait flyer

Overall the total number of visitors was approximately 64 per day and during the three days of the event (3*64=192 people) 41 were interested in subscribing to DataBait.

¹ Details about the event, photos, tweets and videos are available on the <u>https://ec.europa.eu/digital-single-market/en/ict2015</u> (last updated on 15/12/2015)



Figure 1. ICT2015 award (top-left), Exhibition Prize Winners (top-right), tweet from the award ceremony #ict2015eu (bottom-left) and USEMP-booth team photo with the award in front of the booth



Figure 2. ICT2015 event summing up YouTube video ²snapshots from the award ceremony (bottomright) with the award price a traditional 'A Sardinha de Lisboa' (bottom-left) and David talking to the event covering media about the project (top-right)

² The summing up video link: <u>https://www.youtube.com/watch?v=8zpMRil8YpU</u> and the ceremony video link is: <u>https://www.youtube.com/watch?v=WF79EGB3veY</u>

Annual Privacy Forum 2016 – Frankfurt, Germany – CEA, VELTI, iMINDS, LTU, CERTH, iCIS



The Annual Privacy Forum 2016 took place on the 7th-8th of September at Goethe University Frankfurt am Main, Germany. The event aimed to encourage dialog with panel discussions and provided room for exchange of ideas in between scientific sessions around Privacy. Sponsored by DG CONNECT and ENISA (ww.enisa.eu), the European Union Agency for

Network and Information Security, APF is considered one of the main events focusing in data protection and privacy.

During the event, USEMP hold a both demonstrating DataBait and showcasing how DataBait can be used to educate users on privacy awareness.



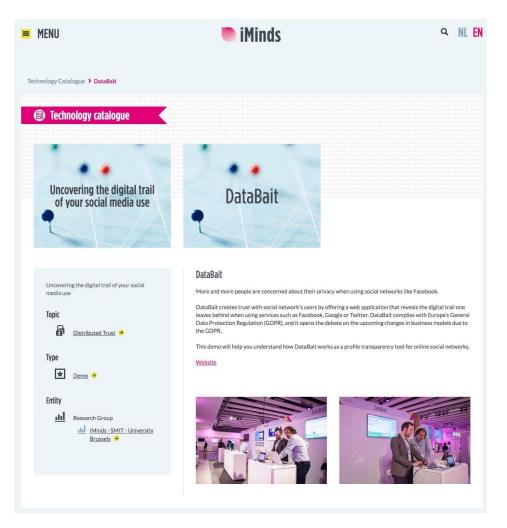
Figure 3. Presenting DataBait and the USEMP project during the Annual Privacy Forum 2016

iMinds The Conference – Brussels, Belgium – iMinds

IMINDS represented USEMP project in iMinds The Conference, held in SQUARE Brussels, 28 April 2016.

http://www.iminds.be/en/events/20160428 iminds-the-conference

IMINDS set up a booth with a demo of Databait during iMinds The Conference 2016. The latter brought together 1,300 digital minds to experience the bright opportunities of digital transformation. The full-day program featured 30+ renowned expert speakers, 50+ interactive demos of tech solutions by researchers and start-ups, and plenty of networking and consultation moments. The booth with the Databait demo was attended by many interested conference visitors.



Technology Days – Tampere, Finland – LTU

Prof. Tero Päivärinta and PhD Student Ali Padyab have demonstrated the DataBait tools and talked about the dangers of disclosing information via photos and texts in social media during the Technology Days event in Tampere, 22nd-24th of October 2015 (<u>http://tekniikanpaivat.fi/tampere/</u>). The presentation followed by live demonstration of the photo, location leaks and third party trackers features and participants asked questions regarding the project and the DataBait tools.

Connected Smart Cities Conference – Brussels, Belgium – LTU

The Connected Smart Cities Conference (<u>https://www.fiware.org/event/connected-smart-cities-conference/</u>) took place in Brussels on January the 22nd, 2016. At the conference Marita Holst together with Ana Garcia chaired a session on Living Labs and Open Innovation. As part of the presentation we gave reflections on experiences from Botnia Living

Labs. In this part we did among other discuss experiences from implementing FormIT in the USEMP project.

Living Labs and Open Innovation

Moderators: Ana Garcia, ENoLL Director & Marita Holst, Botnia General Manager, Luleå University of Technology

Speakers:

- Olavi Luotonen, Experimental Platforms, Net Futures, DG CONNECT, European Commission
- Bror Salmelin, Adviser for Innovation Systems, DG CONNECT, European Commission
- Lieve Bos, Innovation, Pre-Commercial Procurement / Public Procurement of Innovative Solutions (PCP/PPI), DG CONNECT, European Commission
- Hugo Goncalves, SELECT for Cities, Forum Virium Helsinki, Finland
- Davor Meersman, City of Things, Antwerp, Belgium
- Marita Holst/Anna Stahlbröst, OrganiCity and inputs from Botnia, Sweden
- Louise Overgaard, City of Aarhus
- Olha Bondarenko, City of Eindhoven
- Ingrid Willems, iMinds, CreatiFI (tbc)
- Mikael Grannas, Mayor of Sipoo, Finland

Open Innovation 2.0 – Amsterdam – LTU

On the Open Innovation 2.0 conference (Amsterdam, on 23rd and 24th May 2016) Anna Ståhlbröst gave one presentation under the theme Implementing Urban Agenda – Cities and regions as launch pads for digital transformation. As part of this presentation the work on DataBait in USEMP project was given as example. Furthermore, Anna Ståhlbröst also joined a workshop/panel focused on Living Labs as the backbone for the digital single market where she as part of the discussion also could refer to the work done in USEMP.

Implementing Urban Agenda - Cities and regions as launch pads for digital transformation

Chair: Markku Markkula,

OISPG Facilitator: Hank Kune, Educore, I2SI

Speakers: Anna Stahlbrost, Lulea University of Technology Mikael Grannas, Mayor, City of Sipoo Prof. Leif Edvinsson, Lund/ Hong Kong University Future Centers Jan Sturesson, PWC Martijn de Waal, Amsterdam University of Applied Sciences Design & the City Bianca Muntean, Transylvanian Clusters Consortium Adrin Alin Nica, Member of the European Committee of the Regions, Mayor of Dudeștii Noi Timiş County

Living Labs Network as a Future Backbone for Digital Single Market Moderators:

Tuija Hirvikoski, ENoLL

Markku Markkula, President, European Committee of the Regions Anna Stahlbrost, Luleå University of Technology Artur Serra, i2cat Veera Mustonen, Forum Virium NN, Appiness Marie Louise Eriksson, Skane region

IoT Week – Belgrade, Serbia – LTU

At the IOT Week (<u>http://iot-week.eu/events/iot-week-belgrade/</u>), hosted in Belgrade on the 31st of May to the 2nd of June 2016, Anna Ståhlbröst and Marita Holst chaired a workshop focused on End-user Engagement and IoT services and gave presentations with examples from USEMP project, Organicity Project and IoT Lab project.

Workshop: End-user Engagement and IoT services

Co-chairs: Marita Holst and Anna Ståhlbröst, LTU/Botnia Living Lab

Anna Ståhlbröst, LTU/Botnia Living Lab: Users as Actors or Factors in IoT service development Marita Holst, LTU/Botnia Living Lab: Living Lab as an approach for IoT service development Adriënne Heijnen, Aarhus University: Co-creation as integrated element in Future Smart Cities and IoT technology development

Interactive Panel discussion Moderator: Marita Holst, LTU/Botnia Living Lab How can we go beyond traditional approaches to end-user engagement?

Panelists: Anna Ståhlbröst, LTU/Botnia Living Lab Adriënne Heijnen, Aarhus University Mirko Presser, Alexandra Institute

Open Living Labs – Montreal, Canada – LTU

At the Open Living Labs (<u>https://openlivinglabdays.com/</u>) days, 23rd- 26th of August 2016, Marita Holst held a workshop on end-user engagement entitled "Empowering End-users from Factors to Actors". The workshop focused on the increased awareness which is created by having users/citizens participating in Living Lab activities and design, at the same time as we develop systems which create an added value and enable users to become actors rather than factors.

The workshop used the USEMP project as case to illuminate this, and also provided examples of the opposite in many projects where the users are only invited as factors (datacontainers). Moreover, it focused on users as competent actors in development and innovation of services in the new digital world. Examples were given mainly from the EU project USEMP where empowerment of users is much in focus. In USEMP where we have worked on a framework that will empower the users by enhancing their control over the data they distribute or interact with in online social networks.

Issues discussed were:

- citizens needs should drive innovation and growth in cities
- Data as the Holy Grail

- From users as Factors through users as Actors and back again
- Who creates value from data and who captures it
- The new data economy and what it impliy

Participants in the workshop could also test and use the DataBait tools which has been developed in USEMP

Computers, Privacy & Data Protection (CPDP 2016) – Brussels, Belgium – iCIS

M. Hildebrandt was the organizer and chair at the Philosophers' Reading Panel, a book forum on 'Smart Technologies and the End(s) of Law. Novel Entanglements of Law and Technology (Edward Elgar 2015)'. The forum took place in parallel with the Computers, Privacy & Data Protection (CPDP 2016) in Maison des Arts Schaarbeek in Brussels on the 27th January 2016 and was co-funded by the FWO project on Contextual Integrity and the Proliferation of Location Data.

Computers, Privacy & Data Protection (CPDP 2016) – Brussels, Belgium – iCIS

M. Hildebrandt chaired the DEF Digital Ethics Debate, a closed session with invitation only, hosted by Office of the Federal State Secretary for Privacy Bart Tommelein on the 1st March 2016 in Brussels

3.3. Collaboration with other Projects

During the lifetime of the project, a number of clustering activities have taken place for collaboration with other research projects. The following presents a summary of this type of activities:

- MUCKE: CEA is part of the MUCKE FP7 project, which focuses on large scale text and image mining and will run until December 2015. After adaptation, a part of MUCKE resources (i.e. structured textual and visual resources) proved useful for multimedia mining tools developed in USEMP and their exploitation will be explored.
- Privacy Flag: HWC, LTU and VELTI participate in the H2020 Privacy Flag project started May 2015, where concerns in privacy and personal data protection are addressed in the scope of smartphones, IoT and websites utilizing a crowd sourcing platform. Privacy Flag will create its own browser add-on which will be based on the USEMP work. In addition, the work on the backend architecture of USEMP will be a basis for the privacy by design architecture in Privacy Flag.
- REVEAL: CERTH coordinated a joint submission with the REVEAL project for the MediaEval 2016 Placing Task. In addition to leveraging technical resources from both projects, this collaboration was very fruitful since it provided feedback to the task organizers from two different use case viewpoints, i.e. location detection from personal content (and the privacy concerns arising from it) and location detection for public content verification (coming from the REVEAL project).
- CAPS: CERTH has communicated with CAPS cluster project CHEST (http://www.chest-project.eu/) and has provided CHEST team with access to USEMP public deliverables and ideas for collaboration.
- VisiOn: Velti is participating in the H2020 VisiOn project that creates a platform for public authorities to evaluate and inform their users on privacy management and risks related to their services. VisiOn creates a number of visualization for end-users around privacy awareness. To this end USEMP deliverables and findings were shared with the VisiOn consortium to base the future work.

3.4. USEMP Website

The USEMP website (<u>http://www.usemp-project.eu</u> – Figure 4) has been kept up-to-date utilising features such as: the tweets from the project's twitter account, RESULTS-link which includes a comprehensive list of USEMP-deliverables accessible to download (pdf's only), NEWS-link offering an inside view to the project internal dissemination activities.



Figure 4. User Empowerment for Enhanced Online Management (home page)

The statistics of the USEMP web page site, based on the Google Analytics (set up in the beginning of the operation of the project) are summarised in Table 2 (depicted information from Figure 5, Figure 6 and Figure 7) and illustrate an encouraging increase of unique visitors to the USEMP website from different countries around the world. Figure 7 shows the year 3 visitors geo-location and Figure 6 presents the number of page views during the last period of the project. We observe that the number of visitors is continuously increasing, achieving the goal that has been set for the first and second year, as it is described in Section 2.3. The new visitor's acquisition presented in Figure 8 depicts the top channels from which users have visited the site during this last period.

Period of activity Website compare factors	Year 1 (Feb 2013- Sep 2014)	Year 2 (Oct 2014- Sep 2015)	Year 3 (Oct 2015- Sep 2016)
Website ³ unique visitors	482	4934	2968
Website ³ page views	1805	8477	51953
Website ³ visitors'	35	114	52
countries			

Table 2. Three factors comparison of USEMP website between year one and two

³ The public website URL is: <u>http://www.usemp-project.eu</u>



Figure 5. Number of unique visitors for the period of October 2015 – September 2016 (Source: Google Analytics)

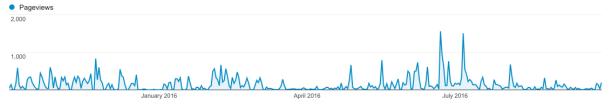


Figure 6. Number of page views for the period of October 2015 – September 2016 (Source: Google Analytics)

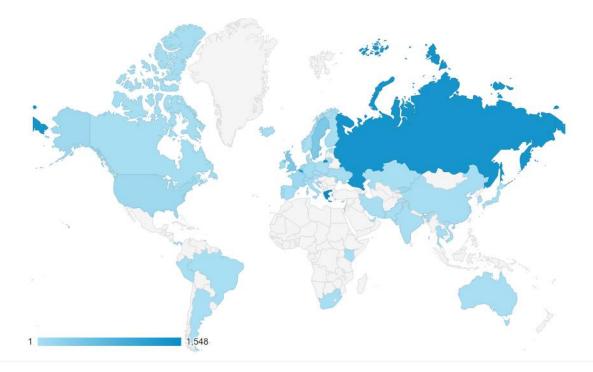


Figure 7. Geographical distribution of sessions on USEMP web site between October 2015-September 2016 (Source: Google Analytics)

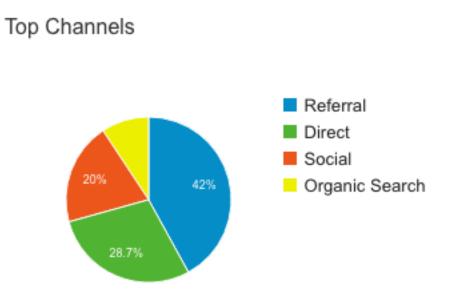


Figure 8. Top channels for new user' acquisition between October 2015-September 2016 (Source: Google Analytics)

3.5. Social Media

Social network accounts have been maintained by the USEMP consortium team members to promote the USEMP research results. A summary of the social media activity is shown in Table 3. Overall, as shown below, during the second year of the project we focused on enhancing our social media presence creating a network of people engaged in the social media, following the USEMP news items. The following table and figures present in summary the insights from the different networks.

Year of activity Media outreach	Year 1 activity Feb 2013 - Sep 2014	Year 2 activity Oct 2014- Sep 2015	Year 3 activity Oct 2015- Sep 2016
Twitter ^₄ overall	26 (tweets), 12	106 (tweets), 36	277 (tweets), 76
tweets	(followers)	(followers)	(followers)
LinkedIn ⁵ activity	2 members	20 members	21 members
USEMP ⁶ Facebook	30 (likes), 10 (posts)	50 (likes), 92 (posts)	65 (likes), 25
activity			(posts)

Table 3. Summary of the Social Media activity comparison table

⁴ Twitter account name; "<u>usempproject</u>" Twitter account link: <u>https://twitter.com/usempproject/status/441139826759196672</u>

⁵ LinkedIn account <u>https://www.linkedin.com/grp/home?gid=7469046</u>

⁶ The project Facebook account (open page) is <u>https://www.facebook.com/usempfireproject</u>

in。			Search for	people, jobs,	companies,	, and more		۹
Home	Profile	Connections	Jobs	Interests				
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		m USEMP team or e of personal data t						

New presentation from USEMP team on personal data value. VELTI has presented USEMP approach to the value of personal data to the 26th International Conference on Advanced Information Systems Engineering (CAiSE 2014), held in... more

Figure 9. Front page of the USEMP LinkedIn account⁵

facebook		Email or Phone	Password Forgot account?	Log In
USEMI	🖆 Like 🕥 Message 🍌 Share \cdots More 🕶			
	USEMP project community June 20 · €	Com	munity	
15	http://time.com//30863/facebook-ad-tracking-block-privacy/	Q	Search for posts on this Pag	θ
USEMP project		PEOP	LE	>
community			65 likes	
Home		ABOU	т	>
About		F	These are the facebook communi P7 ICT FIRE USEMP project em subjects with regard to the sharing	powering data
Photos Likes		p	ersonal data	y of their
Videos	Here's How to Find Out and Control Exactly I		iup.//www.usemp-project.eu/	
Posts	Facebook Sells You To Advertisers Last quarter, Facebook made \$2.8 billion off our personal information. Star summer, the social network is letting us see exactly what pieces of our onli		os	>
Create a Page	TIME.COM			

Figure 10. Front page of the USEMP Facebook account⁶



Figure 11. Total Page likes from USEMP Facebook pages audience

3.6. Communication Kit

Even from last year, the USEMP – DataBait communication kit was updated to attract more people. It is evident that these changes helped the project be better positioned and get more views. In summary the main items of the communication kit are:

- The USEMP Platform tools had a name and logo change agreed among the partners in the consortium meeting in the beginning of the second year of the project. The agreement of logo and name was necessary in order to implement a uniform visualisations theme in the various tools. The new name is 'DataBait' and the logo can be seen in Figure 12 (within the screen of the animated computer)
- Samples of the informative visualisation produced (mainly by VELTI UI team) are shown in Figure 13 and Figure 14
- A new addition to the communication kit is the promotional video describing the DataBait tool capability and a screenshot can found in Figure 12

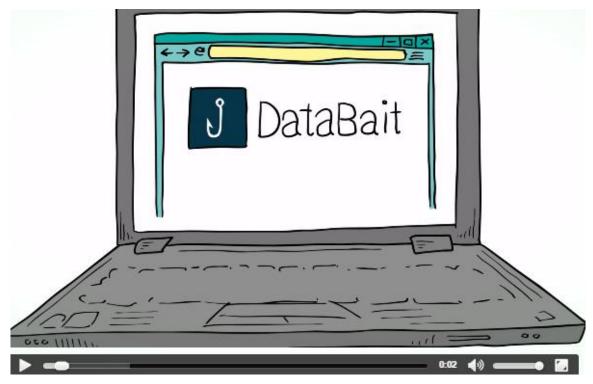


Figure 12. Screenshot from promotional Video explaining DataBait at-a-glance

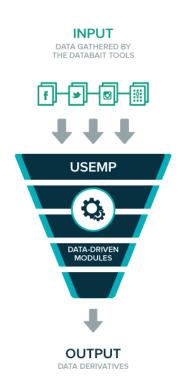


Figure 13. Infographic produced for promotional purposes



Figure 14. Infographic produced for explaining DataBait process for processing& extracting privacy indicators from users' personal data

3.7. Post Project Plan

As the project comes to its end, it is important to note what the post-USEMP era would look like for the main outcome of the project, DataBait. As presented in the D9.7 Exploitation plan, the current effort is for the creation of a legal entity to uptake the future development of DataBait. To support this effort and to ensure the future of the project, from the dissemination / communication perspective three actions took place: (a) the application for trademarking DataBait, (b) the DataBait new landing page and (c) DataBait social media.

3.7.1. DataBait Trademark Application

After a decision and agreement of the whole consortium, a trademark application for "DataBait" was submitted in September 2016. For the application, Radboud University took the initiative to take the lead in this, with all partners agreeing in a formal document for Radboud to represent the whole consortium on any issues regarding the trademark. The application is available as annex to this document (in separate document).

3.7.2. DataBait new Landing Page

With the end of the project, it was a common understanding that for better visibility, all items should be moved under the DataBait trademark. To this end, a new landing page has been created as the main channel of interaction with users. The page follows a minimalistic approach with all the basic information for DataBait included there with links to both the DataBait site as well as the USEMP project web site.



Figure 15. The new landing page for DataBait

3.7.3. DataBait Social Media

Since social media has become the main source of information over the past years, it is evident that main interaction and publicity goes through this type of channels. For DataBait the case is even easier since the existing social media accounts of USEMP can be re-used and transferred under the "DataBait" trademark. Doing so, DataBait inherits the media attraction of the USEMP project, including members/users/likes/followers.

4.Internal Dissemination

4.1. Published Deliverables

The USEMP project webpage includes a list of all public approved deliverables, as they were submitted and/or revised after the first and second year review respectively. These documents are publicly available for any interested party to download and read. In addition, following an internal decision in the project, some of deliverables marked as Restricted in the project's Description of Work, were also made public. After the approval of the deliverables of the third year, these will also be made public in the project web-site. The list of deliverables is:

Publicly available – approved deliverables [these deliverables have been reviewed & approved from project reviewers]

- 1. **Deliverable D2.1**, Multidisciplinary Use Case Analysis, this document describes the results of the use case analysis done during the first six months of the USEMP project
- 2. **Deliverable D2.3,** Content and dataset specifications, this deliverable looks at the variety of data that is used during the development of USEMP tools and that is foreseen to be handled by the USEMP system once it is operational
- 3. **Deliverable D2.4,** Integration with FIRE Infrastructure, this document provides a specification of the integration of the USEMP tools for FIRE facilities
- 4. **Deliverable D3.1,** Fundamental Rights Protection by Design for OSN, this document presents an overview of the possibilities for fundamental rights protection by design (FRPbD),
- 5. **Deliverable D3.2,** Profile transparency, Trade Secrets and Intellectual Property Rights in OSNs, this document relates the analysis of the end users' right to profile transparency (conducted in D3.1) with the database rights and copyright software rights of OSNs and third parties that process user generated data and behavioural data of OSN end users,
- Deliverable D3.3, Copyrights and portrait rights in content posted on OSNs, this document presents a first analysis of the copyrights and portrait rights involved in content posted on OSNs,
- 7. **Deliverable D3.4**, Coordination of Legal Aspects in USEMP, this document presents the results of the legal coordination and the integration during the first half of the USEMP project,
- 8. **Deliverable D3.5,** Socio-economic value of personal information, this report presents a socio-economic perspective on the tool for user-centred personal data management as envisioned by the USEMP project
- 9. **Deliverable D3.6**, Fundamental Rights Protection by Design for OSN, this document presents an update on D3.1 on the possibilities for fundamental rights protection by design
- 10. **Deliverable D4.1**, Social Requirement Analysis, this document presents the methodology used and the results of the first user research
- 11. **Deliverable D4.2**, User Categorisation of Digital Footprint, this deliverable discloses the methodology behind the upcoming quantitative and qualitative research track that will result in a user categorisation of their digital footprint

- 12. **Deliverable D4.3**, UI Low Fidelity Prototypes, this document presents the methodology used and the results of the initial investigations into the types of visualisation that could be used for the USEMP application (named DataBait),
- 13. **Deliverable D4.4**, Social Requirement Analysis, this deliverable describes the need for transparency enhancing technologies from a contextual privacy perspective
- 14. **Deliverable D5.1**, Text mining and linking modules, this report presents a socioeconomic perspective on the tool for user-centred personal data management as envisioned by the USEMP project,
- 15. **Deliverable D5.2**, Visual mining and linking modules, the current deliverable is a technical report accompanying the first version of the USEMP visual mining and linking modules,
- 16. **Deliverable D5.3,** Multimodal content mining and linking framework, this deliverable is a report which describes the first version of the USEMP multimodal content mining and linking modules,
- 17. **Deliverable D6.1**, USEMP privacy scoring framework, the current deliverable is a technical report accompanying the first version of the USEMP privacy scoring framework, a tool that aims at raising the awareness of users about the disclosure and value of their personal information,
- 18. **Deliverable D6.2**, USEMP privacy setting framework, this is a report accompanying the first version of the USEMP privacy setting framework that aims at assisting the USEMP users to better perceive and control the exposure of their data,
- 19. **Deliverable D6.3**, USEMP Visualisation and Interaction Recommendations, this deliverable describes some of the background and motivation for this work and presents the planning for the remainder of WP6, task 6.3. The goal of the work carried out in task 6.3 in particular, is to develop front-end visualisations of a user's privacy profile, generated based on output from the developed tools for various functionalities of the USEMP web application.
- 20. **Deliverable D6.4**, USEMP isclosure scoring framework and disclosure setting framework, this deliverable provides an update on the implementation of the disclosure scoring and setting frameworks, the designs of which were presented in D6.1 and D6.2 respectively as well as the disclosure settings framework
- 21. **Deliverable D7.1**, Architecture Design, this document defines the architecture design of the USEMP software
- 22. **Deliverable D7.2**, Web & Mobile Interface Templates, the scope of this deliverable is the design of the first version of the Web & Mobile Interface for the overall platform regarding mobile and web clients, based on the requirements that are collected by WP2, WP4 and WP6
- 23. **Deliverable D7.3**, Integrated USEMP platform –v 1, provides information on the first revision of the Integrated USEMP Platform
- 24. **Deliverable D7.5**, Web & Mobile Interface Templates v2, presents the implementation of the web and mobile interface for the overall DataBait platform based on the initial design
- 25. **Deliverable D8.1**, Pilot Case Requirements and Specification, the objective of this deliverable is to define the plans and activities to perform the pilot studies in USEMP
- 26. **Deliverable D8.2**, Pre-pilot evaluation report, this report presents the results from the early evaluation of the DataBait tool
- 27. **Deliverable D8.4**, Setup of the experiment in the Living Labs, this document presents the planned methodology and the research questions for the upcoming pilot studies.

The aim of the USEMP pilot studies are to test and evaluate the DataBait tools in collaboration with all project partners and end-users as they are implemented into a Living Lab approach

- 28. **Deliverable D9.1**, Project Presentation, Communication Kit, Website, Communication and Dissemination Plan, this document provides the initial version of the project dissemination plan
- 29. **Deliverable D9.2**, Report on Standardisation and Dissemination, this report describes the status of standardization activities related to USEMP topics and reports on the undertaken standardisation and dissemination
- 30. **Deliverable D9.3**, Market analysis, this document contains a thorough market analysis on personal data management, presenting the main technology players and providing an overview of the market landscape
- 31. **Deliverable D9.4**, Report on Standardisation and Dissemination, this report describes the status of standardization activities related to USEMP topics and reports on the undertaken standardisation and dissemination
- 32. **Deliverable D9.5**, Initial Exploitation Plan, **2015-10-09**, This report describes the exploitable foreground to arise from the USEMP project, and provides the initial plans for exploitation by consortium partners

Publicly available – under review deliverables [these deliverables are not yet approved by the European Commission]

- 1. **Deliverable D3.7,** Profile transparency, trade secrets and Intellectual Property rights in OSNs v2, update on the analysis of the end users' right to profile transparency (conducted in D3.2)
- 2. **Deliverable D3.8**, Copyrights and portrait rights in content posted on OSNs-v2, the second version of the analysis of the copyrights and portrait rights involved in content posted on OSNs
- 3. **Deliverable D3.9**, Coordination of Legal Aspects in USEMP v2, this document presents the results of the legal coordination and the integration during the second half of the USEMP project
- 4. **Deliverable D3.10**, Fundamental Rights Protection by Design for OSNs v3, final update on the possibilities for fundamental rights protection by design.
- 5. **Deliverable D3.11**, Profile transparency, trade secrets and Intellectual Property rights in OSNs v3, final version for the analysis of the end users' right to profile transparency (conducted in D3.7)
- Deliverable D3.12, Copyrights and portrait rights in content posted onOSNs-v3, final of the analysis of the copyrights and portrait rights involved in content posted on OSNs
- Deliverable D3.13, Coordination of legal aspects in USEMP v3, final version of the legal coordination and the integration during the second half of the USEMP project
- 8. **Deliverable D4.5**, User categorisation of digital footprint v2, presents an update on the methodology behind the upcoming quantitative and qualitative research track that will result in a user categorisation of their digital footprint

- 9. **Deliverable D5.4**, Text mining and linking modules v2, update on the socioeconomic perspective on the tool for user-centred personal data management as envisioned by the USEMP project,
- 10. **Deliverable D5.5**, Visual mining and linking modules v2, second version of the technical report accompanying the USEMP visual mining and linking modules,
- 11. **Deliverable D5.6**, Multimodal content mining and linking framework v2, describes the updated version of the USEMP multimodal content mining and linking modules
- 12. **Deliverable D6.5**, USEMP disclosure scoring and privacy assistance framework v3, final update on the implementation of the disclosure scoring and setting frameworks
- 13. **Deliverable D6.6**, USEMP visualisation and interaction recommendation -v2, update on the work around visualization of information regarding users' privacy
- 14. **Deliverable D7.4**, Architectural Design Document v3, final version the architecture design of the USEMP software
- 15. **Deliverable D7.6**, Integrated USEMP platform –v2, updated version on the integrated USEMP platform.
- 16. **Deliverable D8.3**, Pilot Case Evaluation Report and Lessons Learned v1, first version of the report from the piloting in USEMP
- 17. **Deliverable D8.5**, Pilot Case Evaluation Report and Lessons Learned v2, updated version of the report from the piloting in USEMP
- 18. **Deliverable D9.6**, Final Dissemination Report, the final dissemination activities during the last period of the project
- 19. **Deliverable D9.7**, Final Exploitation Report, the final exploitation report for the future of USEMP and DataBait

Public deliverables will be uploaded on the project website (<u>http://www.usemp-project.eu/documents/deliverables/</u>) after their review and approval by the EC.

4.2. Project collaborative website

The chosen project collaboration area is PBworks (<u>http://usemp.pbworks.com/</u>) and is utilised by the consortium without any issues or deviations. This serves as the main workspace to share project deliverables and to organize and support management activities, such as regular project meetings.

5.Standardisation Activities

5.1. Monitoring & participation to standardization bodies

During the lifetime of the project, partners monitored and participated in standardization bodies. The following table presents the main working group that USEMP interacted with during the lifetime of the project.

Stand. Body	Description
W3C Tracking	VELTI monitors closely the developments of W3C Tracking Protection
Protection	working group http://www.w3.org/2011/tracking-protection/ in order to
Working group	understand better what new features are available to build privacy aware
	tools for the web
W3C Social	VELTI monitors closely the developments of W3C Social interest
interest group	http://www.w3.org/Social/IG in order to understand better what new use
	cases related to OSNs are promoted by W3C
W3C property	VELTI participates to W3C property graphs community group that
graphs	provides recommendation to W3C for work and business cases on how
community	property graphs can be modelled in web application
group	https://www.w3.org/community/propertygraphs/. This work relates to the
	development of privacy aware advertising.

Table 4. Standardisation activities related to the objectives of USEMP.

It is important to note that during the lifetime of the project, privacy and do not track issues become an item of the highest priority for all interested parties. Only few months before the end of the project, the W3C Tracking protection working group had its second reference document as a candidate recommendation (Tracking Compliance and Scope, 26th April 2016).

VELTI not only followed these groups but had an actual participation showcasing the work of the USEMP project. The last year's participation in the W3C meeting (presented in D9.4) is an evidence of the high visibility of the USEMP project in these standardization efforts.

6.Conclusions

This report concludes the USEMP dissemination efforts. In the previous chapter the USEMP consortium documented the dissemination work progress of the third and final year and how it fits within the overall plan for the USEMP Project. In addition, and in alignment with the exploitation path of the project, all dissemination channels have been updated to support the needs of DataBait and assist in the continuation of the work.

In summary, during the whole lifetime of the project, USEMP managed to be on the spotlight of privacy awareness, being recognised and awarded for the great work (ICT'15, Lisbon) and influencing main standardization activities. Overall more than 40 publications were made during the project while the consortium participated in numerous evens reaching a high visibility of the project.

Regarding online presence and social media, over the years the project changed the focus from a blog posting activities to more social media aware strategies, following the trends of the period. The twitter channel of the USEMP was one of the main dissemination channels that was used and gathered a lot of attraction especially during the last period of the project.

With the end of the project, USEMP lives behind a successful dissemination "history" with a great communication kit that is passed over to DataBait as the exploitation path of the project starts.