"Building the Next Generation Personal Data Platforms"
G.A. n. 871370

DELIVERABLE D6.6
PIMCity Outreach and engagement strategy and final dissemination report

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(Tick the corresponding dissemination level of the deliverable according to Annex I).

Approvals

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Disclaimer

List of abbreviations and acronyms

Abbreviation	Meaning
G.A.	Grant Agreement
CA	Consortium Agreement
GA	General Assembly
PB	Project Board
PC	Project Coordinator
PO	Project Office
IR	Interim Reports
DCP	Dissemination and Communication Plan
PIMS	Personal Information Management Systems

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Executive summary

This deliverable summarizes the effort the project put in the communication and dissemination of the results. The project devoted particular attention to the creation of a community of users and stakeholders with the aim to disseminate the project results, and to create a community of early adopters to test and demonstrate the technical solutions designed and engineered during the projects. For this, the project activated both online channels (websites, social media channels, newsletters, etc.) and organized workshops and meetings within the principal communities around PIMS and privacy (MyData, CPDP, BDVA, etc.).

This report lists all these channels and provides statistics and figures on the success of each channel.

Information and actions organized by the project and related to the open access, open data, science and education initiatives are instead found in the Deliverable 8.5.

Scope

The scope of this deliverable is to present the final project report related to the Outreach dissemination and communication activities of the project performed by project partners.

It outlines the dissemination and communication objectives and strategy of the reporting period and presents the tools and activities that were undertaken to accomplish the set objectives. Moreover, the deliverable reports on dissemination tools that were used to disseminate the project and implement the strategy as it was set in the deliverable D6.2 (Communication and Dissemination Plan).

Methodology of the deliverable

The deliverable has been created based on the detailed description of WP6 objectives and tasks in the close collaboration of WP6 leader with the project coordinator and the partners. AUI as the WP6 leader is responsible for the content of the deliverable which was produced and shared with partners for review, feedback, and contributions in certain sections.

Structure of the deliverable

The first section introduces the project, WP6 and the deliverable. The second describes the objectives and the strategy that was followed during the project. The third section focuses on the dissemination and communication tools that were used, as well as activities that were implemented for the achievement of the objectives for the aforementioned period. At the end of this deliverable, conclusions highlight the main points that were presented in the current report.

Thus, the document is structured as follows

- Introduction
- Dissemination and communication objectives for the reporting period
- Dissemination and communication tools and activities
- Dissemination Activities
- Conclusions
- Annexes

Intended audience of the deliverable

Intended audience	Reasons for interest in reading
PIMCity Consortium partners	To be informed on the communication and dissemination activities performed by the consortium during the reporting period
European Commission	To review and assess this deliverable as a required report based on DoW of PIMCity.
Identified Stakeholders	To be informed about the communication and dissemination activities performed within the reporting period, raise awareness about the project, announce project objectives as well as to find out how they could benefit from the services offered by PIMCity.
Partners participating in similar projects	To share knowledge, information, best practices and activities that could be utilized in their projects as well as to find common ground on which they could establish a potential collaboration of cross-dissemination with PIMCity.

Table 1 Deliverable audiences

Relation with other WP6 deliverables

This deliverable has connections with:

D6.1 Project Public Launch: Release of the visual identity set and projects websites: the websites are the cornerstone for the communication of the project considering both the users engagement (in https://pimcity.eu website), the official project documentation (in https://pimcity.eu website), the technical documentation of the tools (https://easypims.pimcity-h2020.eu and https://gitlab.com/pimcity), and the demonstrators (https://www.easypims.com https://marketplace.easypims.eu, https://dashboard.easypims.eu)

D6.2 Outreach and engagement strategy (M6): this is the communication and dissemination strategy and actions that will be implemented throughout the project's lifetime to achieve the project's widest promotion, greatest visibility and awareness to the external audience. Moreover, this deliverable states clearly the methods and tools of internal communication within the work package.

D6.3 First year dissemination and exploitation report: it summarizes the activities done during the first year of the project.

D6. 4 Second year dissemination and exploitation report: it integrated the activities done during the first year of the project and integrated those occurred during the second year.

Quality of the deliverable

The initial table of content of the current deliverable was presented to project partners in august 2022. A draft of the deliverable was prepared by AUI and additions made by POLITO, after which it was sent to the project coordinator for review and final submission to the EC. The deliverable is written in English, is included in the correct template of the project and a language quality control has been performed.

Outreach and engagement strategy

Starting point

This section summarizes the main objectives set out at the beginning of the project and set out in detail in deliverable D6.2 regarding objectives, key messages, target communities, channels to be used and communication and dissemination materials.

Goals of the Dissemination and Communication Plan:

- Promote and position PIMCity in international forums where relevant scientific, industrial and policy stakeholders meet.

- Contribution to the open science, open innovation and open to the world initiative by supporting dissemination of results and encouraging re-use and verification of results.

- Creating bridges for citizen awareness and participation, including training and community building activities, to ensure societal relevance, acceptability and sustainability of the solution.

- Promote multi stakeholders debate spaces focused on the present and the future of privacy and processing of personal data in a changing digital environment

Target audiences:

a. **Companies and organizations** working or interested in data business: willing to integrate solutions designed by the project to start new businesses or enforce existing ones: PIMS companies (SME, Startups), Data Buyers (Advertisers, Data Brokers, Publishers, etc).

b. **End users** interested in privacy, managing and/or benefiting from the use of their data and, in general, all citizens as they are all contributing to the data ecosystem by the adoption of new technologies.

c. **Regulatory and policy bodies** working on the design, implementation and/or enforcement of data protection, privacy, and other digital society rights (Data Protection agencies, Governments, UE working groups)

d. **Scientific and research communities:** Researchers concerned with privacy issues as key fundamental rights in the digital society (PIMCity Partners, privacy related EU projects)

e. **Society:** all those interested in promoting a data ecosystem with greater transparency and control for the citizen (Influencers, Users and Consumers Associations, sectorial Associations, Professional Associations, Gurus and Influencers, Movements that share the PIMCity philosophy)

Fig 1 PIMS Stakeholders

Within PIMCITY we adopt a multi-sectorial and multi-stakeholder approach, extending our focus to a wider ecosystem including economic, social and regulatory actors. We further integrate broader segments of stakeholders – European & International initiatives, Scientific Community, Policy makers, General public – that are expected to benefit (both directly and indirectly) from the PIMCITY outcomes, enhancing the uptake of PIMCITY technologies and outcomes and creating spillovers to other sectors.
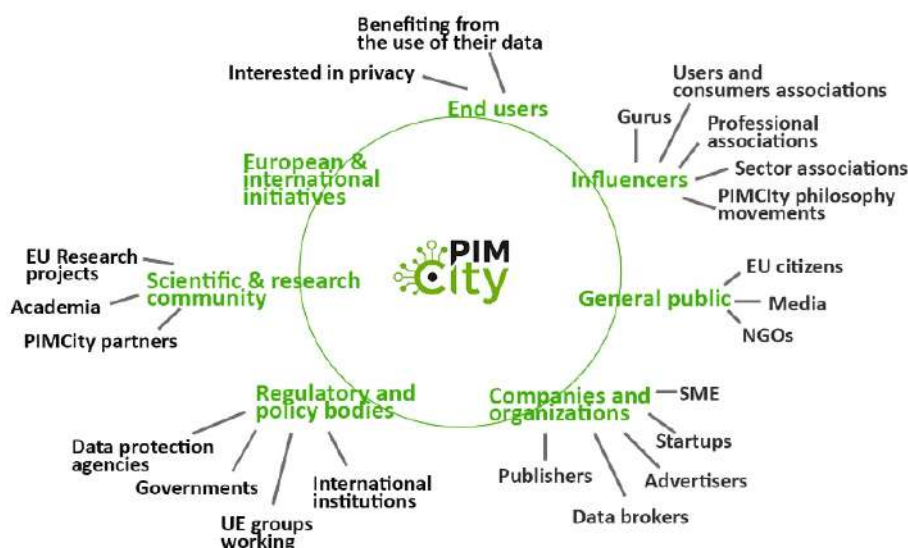

Fig 2 PIMS ecosystem listing all audiences that we target

The project messages to be highlighted from the communication perspective must be focused on the benefits that PIMS brings to society, data companies and citizens with a focus on those aspects that reinforce citizens' rights.

We think the **individuals should have legal right and offered technical tools to manage personal data** collected on them. This is a means of digital identity management and an extension to the freedom of thought and expression we all have as citizens. At the same time, **organizations should have practical methods for getting individuals' consent** to use their personal data when they discover innovative new uses or applications.

As the situation currently stands, individuals grant legal consent to organizations and software applications for the collection and use of their personal data (online and in the physical world) through the standard practice of clicking "Accept" after they read and agreed to terms of service. People usually do not have the knowledge to understand the implications of this and have no realistic way of enforcing their right and control how their data can and is being used. On the other hand, under the current state of data protection regulations, it is often becoming more and more difficult for organizations to create innovative services around personal data, with organizations that are frequently deterred from innovating or may try to figure out ways to bypass existing regulations. In a global scenario as the data marked and the Internet are, this has the risk to slow down and reduce the competitiveness of European countries if compared to other countries with more permissive regulations.

PIMCity focuses on offering a inclusive approach to personal data management that combines digital human rights and industry need to have access to data. This approach benefits individuals, organizations, and society at large. PIMCity enables individuals to aggregate data and intelligence about themselves from multiple sources. With this rich and valuable data, the individuals can

interact with data buyers and service vendors that can provide more valuable data- and consumer services.

- For **individuals** – **PIMCity provides easy-to-use and comprehensive tools for personal data management**, and gives transparency mechanisms that openly show how organizations use their data. The individuals also enjoy the benefits of the new innovative services and increased freedom of choice.

- For **companies** – **PIMCity opens opportunities for new kinds of data-based businesses** by facilitating the legal and technical access to pre-existing personal datasets when the individual is willing to give his/her consent. PIMCity is based on standards and developed to support interoperability. This lowers the barrier of entry for new businesses and makes the landscape more balanced and competitive.

- For civil **society** – **PIMCity creates the necessary structures, processes, and policies for protecting the rights** of individuals and fostering the use of personal data in the development of innovative services.

Community building actions

The generation of a community around the PIMCity project has been one of the objectives present in each of the communication actions. This table summarizes the communication and dissemination actions developed for each of these audiences.

Objectives per target group		Key messages	Activities
PIMS COMPANIES	Demonstrate development cost savings, ease of integration and legislation compliance	With PIMCity you can start a new PIMS business or strengthen an existing one	Events: INTERACT, IAB, CPDP, MyDATA, BDVA, PIMCity Workshops Press Releases Direct contact with associations: IAB, ADIGITAL, IAPP Articles of divulgation BlogPosts in social networks
END USERS	Maximise project impact, ensure acceptability of results, and encourage uptake of the results	With PIMCity you decide who you hand data to	National/European press releases, and mass media presence. Contact with European Consumer and Users' Associations Press releases for general media Posts on social networks Advertising campaigns Explanatory video of the project
DATA BUYERS	Demonstrate easy, transparent access to accurate personal data and reputation improvement	PIMCity will boost your customers' trust and ratings	Project presentation in events in advertising community circuits: INTERACT, CPDP, MyDATA Publication in specialized press and online websites. Direct contact with associations: IAB, ADIGITAL, IAPP Posts on social networks
INDUSTRIAL STAKEHOLDERS	To present project's case and commit industrial stakeholders for exploitation, improvements, and further development	PIMCity will boost your customers' trust and ratings	Participation in events with European industrial networks and working groups. Publication in sectorial press, magazines, brochures. Posts on social networks
REGULATORS	Advocate for policy and regulatory changes that may favour exploitation and impact	PIMCity contributes to rights-respectful, transparent Internet	Project presentation in events with participation of relevant stakeholders. Invitation as speakers at conferences: EDPS, DGCONNECT, AEPD, ABPD Publication in sectorial press, magazines brochures. One-to-one meetings.
RESEARCH COMMUNITY	To encourage synergies and cross-fertilisation, exchange best practices and promote change of paradigms	PIMCity pushes privacy-enhancing technologies and users' awareness	Publications of 47 worls in top tier scientific conferences, workshops and/or journals.
SOCIETY	To ensure societal relevance, acceptability, and sustainability of the solution	With PIMCity you decide who you hand data to	Media impacts in National/European press releases, and mass media. Advertising campaign to participate as betatesters in EasyPIMS

Table 2 Community building actions

Communication and dissemination results

This section includes tables and figures to summarize the main results obtained via the different communication actions and channels carried over during the project. These include the usage of social networks (Facebook, Linkedin, Twitter, Youtube), the online and in presence events that were organized, the scientific publications, the direct communications sent via email, the press releases, and all other actions that the consortium organized.

Measurement of effectiveness of communication and dissemination activities

To achieve the successful implementation of Communication and Dissemination activities and fulfilment of the relevant objectives, we carried out a systematic monitoring throughout the project implementation. This section shows in a table the PKIs that were planned at the beginning of the project and those achieved at the end of the project.

Project PKIs (Key Performance indicators)	Target	Y1+Y2+Y3	Means of verification
Project website pages views	60.000	119.906 98.324 69.007	Google analytics Web stats on www.pimcity.eu Matomo plugin on www.pimcity-h2020.eu
Social media followers	400	3.746	Social media analytics (Linkedin, Twitter, Facebook, Youtube)
Newsletter	300	418	Email records (Sendinblue)
Blog posts	26	28	Project website https://pimcity.eu
Videos released	2	21	YouTube channel
PR articles published in EU Press	60	31	Project reporting
Publications in business scientific journals	37	47	Project reporting and Participant Portal Continuous Reporting website
Distributed printed material	1200	1300	(1000 in CPDP-2022 and 300 in MyData)
Presentations in forums, workshops relevant to project results	8	14	Project reporting
Informal person-to-person meetings with relevant national stakeholders	600	1345	Project reporting Virtual and presence attendees on PIMCity Presentations, Conferences and Workshops

Table 3 PIMCity Key Performance Indicators

Publications

In total **47 publications** have been published about the project by the Pimcity partners, including books, thesis and papers published in conferences proceedings as well as in magazines and journals. All are present in the Continous Reporting tool offered by the EC, and in the project website at https://www.pimcity-h2020.eu/dissemination/publications/ and detailed in the Annex A1 which contains the complete table with the all publications produced by the project participants.

Events

Throughout the project, the PIMCity project has been presented in 14 events of which 4 workshops have been organized directly by the consortium as shown in the following table. Annex A2 contains the detailed description of each of these events with links to the websites and videos that have been published. Despite the Covid-19 pandemic, we consider this a solid achievement that contributed to the dissemination of results, and to the community creation around the project. Notably, in the workshops organized by PIMCity we have had the presence of relevant speakers from different European institutions in the field of data protection (EDPS, DGCONNECT, AEPD, etc.) as well as representative of the research and industrial communities.

During each event, in addition to the interventions as speakers, promotional material has been distributed among the attendees. For each of the events, we include below the summary of the sessions and the speakers who participated, as well as the most relevant data, the link to the event, and the link to the videos that have been published.

Event name	Partner´s participation	Attendees	Description
BDVA 2020 8 May	POLITO	188 registered 88 attendees (online)	This webinar is dedicated to the cluster of data platform projec that address industrial data.
IFIP Performance Conference	POLITO	78 attendees (online)	POLITO presented a tutorial on Privacy-Preserving Data Processing https://www.performance2021.deib.polimi.it/tutorials/
EURODIG June 2020	AUI	1.200 register 143 (online)	Online event. https://eurodigwiki.org/wiki/WS_08_2020
IGFSPAIN 22-23 October 2020	AUI IMDEA	303 registered 130 attendees	From PIMCity we have coordinated an interesting session in which we had as an EU speaker another MyData and two PIMcity in which we talked about the European Data Strategy, the PIMCity project and the MyData movement.
PIMCITY Workshop November 2020	NEC KULEUVEN POLITO	290 registered 116 attendees (online)	The workshop aims to provide customers and entities whose activities involve processing of personal data with key elements of privacy policies and consent forms.
MyDATA 2020 December 2020	POLITO IMDEA	523 registered 76 attendees (online)	PIMCity team organized the session "From Strategy to Practice – Data Intermediaries in the EU" The session focuses on current challenges to making trusted data intermediaries a reality in terms of scalability, functionality and adoption. https://online2020.mydata.org/programme-page/from-strategy-to-practice-data-intermediaries-in-the-eu/
PIMs Business Opportunities	IAB PimCity Partners	93 (online)	PIMs Business Opportunities The goal of the first workshop was raising awareness about key elements of PIMS and how they are intended to be promoted through the European Union.
EURODIG June 2021	AUI POLITO	146 (online)	Data Sovereignty and Trusted Online Identity
PIMCITY Workshop July 2021	IAB	27 attendees +6000 impressions	ZERO PARTY DATA The goal of this Workshop was highlighting key elements of PIMS and how they can help data buyers and advertisers in its daily operations. https://www.pimcity-h2020.eu/event/workshop-zero-party-data/
RAYUELA July 2021	NEC	68 attendees (online)	WORKSHOP ON HUMAN BEHAVIOUR MODELLING This workshop, organized within the scope of the H2020 project RAYUELA (empoweRing and educAting YoUng pEople

			for the internet by pLAying)
IGFSPAIN Nov 2021	AUI	160 attendees (in presence)	EUROPEAN STRATEGY FOR PERSONAL DATA The European Union is working to define a new strategy for the management and exploitation of its citizens' personal data.
PIMs Business Opportunities Feb 2022	IAB PimCity Partners	93 (online)	PIMs Business Opportunities The goal of the first workshop was raising awareness about key elements of PIMS and how they are intended to be promoted through the European Union.
CPDP2022 May 2022	PIMCity	50+ (in presence)	Pims Building the Next Generation Personal Data Platforms, A Human-Centric Approach - https://www.cpdpconferences.org/cpdp-panels/pims-building-the-next-generation-personal-data-platforms-a-human-centric-approach
INTERACT 2022	IAB NEC	227 (in presence)	This is one of the biggest European event concerning digital advertising. The event was hosted in Madrid and organised by IAB Europe and IAB Spain.
MY DATA June 2022	PIMCity	60+ (in presence) (148 online)	BUILDING THE NEXT GENERATION PERSONAL DATA PLATFORMS. We presented the PIMCity project and the EasyPIMS tool to the MyData audience https://2022.mydata.org/programme/
MY DATA June 2022	PIMCity	20+ (in presence) 73 (on line)	WORKSHOP: LEARN HOW TO IMPLEMENT A PIMS SOLUTION. This was a technical workshop to show how to implement a PIMS using the PDK https://2022.mydata.org/programme/

Table 4 PIMCity events

Social media profiles play a promotional role for the project and promote visibility of the project to a wide range of audiences. Their popularity, ease of access and rapid information flow identify them as very effective online dissemination tools, therefore profiles in Facebook, Linkedin and Twitter were created on M5 to support the project's dissemination activities and to acquire presence in these social networks. The YouTube channel was opened in the 20th month and is the repository where all the videos generated in the project have been collected.

Regular posts and updates relating to the project's developments and news, as well as reporting interesting news from the web related to the project's topic have been publicized during the reporting period.

The following table summarizes the most relevant data on the impact of the project in the different social networks:

	Followers	Posts	Impressions	Visitors/Likes
Twitter	762	216	108.123	3.322
Linkedin	535	223	98.008	508
Facebook	2.073	270	123.303	1.558
Youtube	421	21	3.490	
TOTAL	**3.746**	**822**	**332.924**	**4.817**

Table 5 PIMcity at Social networks

Fig 3 Linkedin home page

Fig 4 Twitter PIMCity home page

Fig 5 Facebook PIMCity home page

PIMCity Websites

The PIMCity websites (www.pimcity.eu and www.pimcity-h2020.eu) were created in M3 of the project and are the most informative and resourceful dissemination tool. They consist of a major channel of information and communication for visitors and, for this reason, is harmonized and interrelated with the main goals of WP6 to disseminate the project findings as well as to engage key stakeholders with a view to knowledge sharing.

The www.pimcity.eu is designed for the general public to build the community of users of the technology build during the project. The www.pimcity-h2020.eu collects information about the project itself, including project goals, deliverable, documentation, etc. The table below summarizes the main statistics about the visitors to such websites.

Web	Unique visitors	Number of visits	Pages
www.Pimcity.eu	9.039	12.636	119.906
www.Pimcity-h2020.eu	3001	6907	8.938
www.Easypims.eu	27.345	62.456	98.324

Table 6 PIMCity webs audiences

Besides these two websites, the project has setup also the easypims.pimcity-h2020.eu website, meant to be showcase and collect all the information about the PDK. Similarly, the www.easypims.eu, dashboard.easypims.eu and the marketplace.easypims.eu websites offer the access to the EasyPIMS demonstrator.

Fig 6 www.pimcity.eu home page
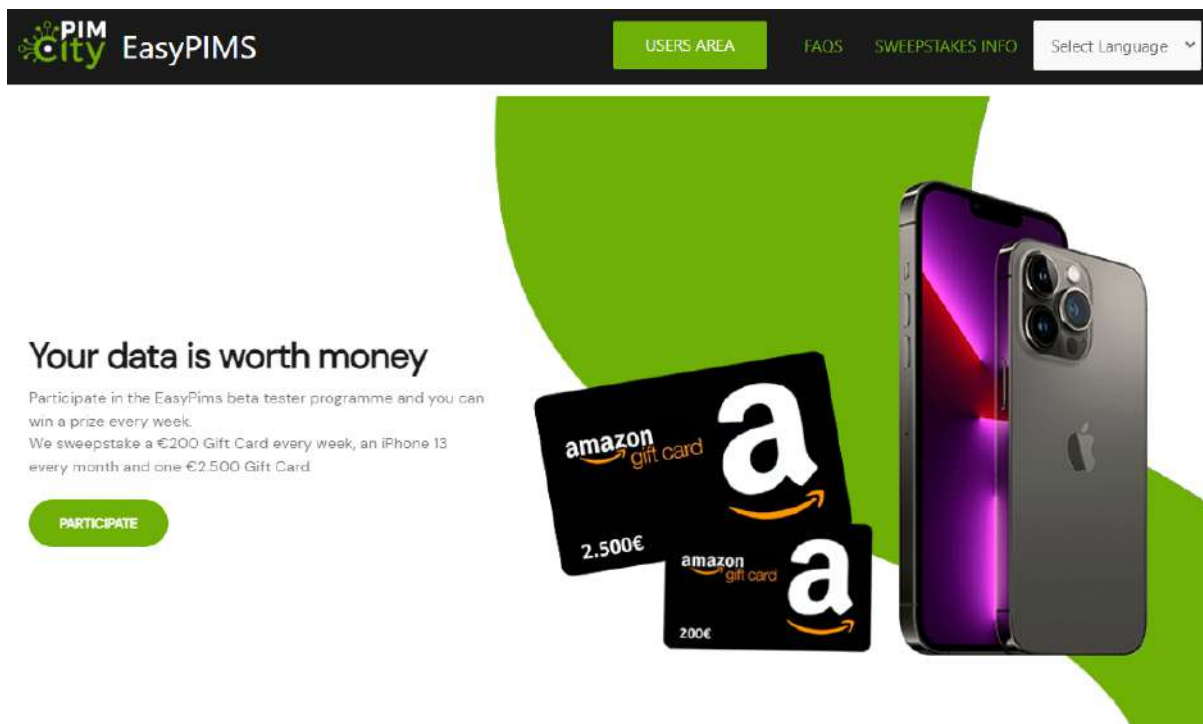
Fig 7 www.easypims.eu home page

Fig 8 www.pimcity-h2020.eu home page

Newsletters

As described in the Communication Plan, the PIMCity quarterly e -newsletter will be the main tool to disseminate updated information on the project work in progress.
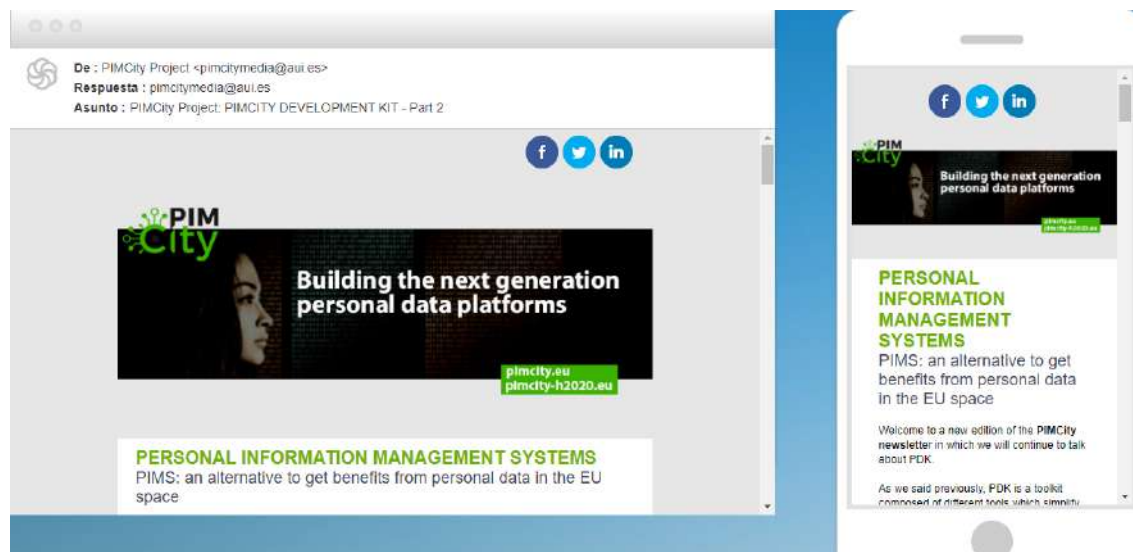

Fig 9 Newsletter PIMCity design

The 1st Newsletter Issue was launched in October 2019 announcing the project's objectives, promotional materials created, the launch of the first press release, PIMCity events and workshops organized by partners (https://pimcity.eu/?page=news&news=44)

Newsletters have been circulated by email to all subscribers as well as to other target groups and similar initiatives that have been incorporated into the mailing list by the dissemination and communication team.

The Newsletter consists of different sections: one with contributions from partners to publicize issues related to the project, another to report on other projects related to PIMS and finally a section dedicated to collecting news and events of interest.

Moreover, they are accessible via the PIMCity website under the section https://pimcity.eu/newsletter. Website visitors can easily subscribe to the newsletter distribution list and follow the project's progress.

In August 2022 we got 418 subscribers to the project´s newsletter.

Press releases

Apart from the project website, press releases are considered a efficient tool for the dissemination of the project since their distribution to a large number of recipients (media outlets, similar organizations, similar initiatives and projects, academia, communities and networks, etc.) help promote the project at national and pan-European level. Press releases will be produced throughout the project's lifetime. Its purpose is the media engagement in the dissemination of the project's achievements and milestones.

AUI, as the dissemination and communication leader, is responsible for the creation of press releases. Once created, they are shared with the press focal points nominated by each partner. The press focal points are responsible for the translation of the press releases in to the partners' native language (if necessary), and for the distribution of the articles to media outlets at national level. Therefore, press focal points enhance AUI's efforts and further awareness and visibility of the project is achieved.

Media coverage of PIMCity has high importance as target groups can be reached at local and pan European level. This practice also helps to increase project impact and informs stakeholders about the project's developments and achievements.

We have been sent six press releases related to the project that have led to the publication of news related to PIMCity in at least 6 media of different nationalities (Spanish, Italian, French, English and Belgian).

A detailed Press clipping can be found in the website https://pimcity.eu/press

Conclusion: highlights and lessons learned

The results obtained in terms of communication and dissemination are very positive if we take as a reference the objectives we set ourselves in the initial proposal, since we have multiplied by nine the number of followers in social networks, tripled the number of page views and almost doubled the presence in events and forums.

The result in terms of "Community Building" has worked well with business agents and regulators, thanks to the participation in the IAB Consortium and the relevant presence of the project in the most important events of the sector (CPDP 2022, INTERACT 2022, MyDATA 2021/22, EURODIG 2021, IGFSPAIN) where we have also achieved the participation of relevant speakers such as Leonardo Cervera (European Data Supervisor), Pēteris Zilgalvis, Head of Unit, Digital Single Market Directorate, DG CONNECT), Alina-Ramona Macelaru, Policy Officer at DG CONNECT and representatives of the Data Agencies of Spain and Brussels. In the academic and research sector we have also reached out thanks to the high number (47) of publications in different media.

We have managed to make the project known in communities such as BDVA and MyDATA that have included it in their respective publications.
It has been difficult for us to reach citizens and end users. We have carried out an important advertising campaign in social networks to get the collaboration of betatesters in the easyPIMS experience and we have only managed to get more than 3000 people to register on the platform, of which only a third have actively participated.

In this final stretch we have to communicate the results obtained, something we will do during the last month and the results of this action are no longer included in this report.

The experience of the implementation of WP6 Communication and dissemination has shown that good timing and the knowledge of how different stakeholders work can make a major contribution in ensuring the impact and uptake of project outputs.

Many circumstances, however, cannot be predicted (COVID19). Not all plans are possible to realize. Therefore, it proved appropriate to devote part of the working time to actively searching for windows of opportunity and using them.

The COVID-19 pandemic only partially affected the project's communication and dissemination activities. Many of these activities were transferred to the network, others were postponed, while others were cancelled. However, it is very likely that the transition to the Internet of the project's communication and dissemination activities. people reached by the project and has meant that PIMCity events have reached a much wider audience.

Through the activities described in this report, PIMCity has contributed to developing awareness among the different stakeholders of alternative models of data exploitation that are user-centered and respectful of user rights, and has developed tools and launched experiences that will help to develop the European Data Space and Strategy in the coming years.

Annexes

The annexes contain details of the most relevant actions in these sections: Publications, Events and Press clipping.

A1 Publications list

The following list presents the **47 publications** have been published about the project by the Pimcity partners, including books, thesis and papers published in conferences proceedings as well as in magazines and journals. All are present in the Continous Reporting tool offered by the EC, and in the project website at https://www.pimcity-h2020.eu/dissemination/publications/

No.	Type	Title	Authors	Title of the Journal/Proc./Book
1	Article in Journal	Why Online Services Should Pay You for Your Data? The Arguments for a Human-Centric Data Economy	Nikolaos Laoutaris	IEEE Internet Computing
3	Article in Journal	Does domain name encryption increase users' privacy?	Martino Trevisan, Francesca Soro, Marco Mellia, Idilio Drago, Ricardo Morla	ACM SIGCOMM Computer Communication Review
4	Publication in Conference proceedings/Workshop	Clash of the Trackers: Measuring the Evolution of the Online Tracking Ecosystem	Konstantinos Solomos; Panagiotis Ilia; Sotiris Ioannidis; Nicolas Kourtellis	TMA CONFERENCE 2020
5	Publication in Conference proceedings/Workshop	Stop tracking me Bro! Differential Tracking of User Demographics on Hyper-Partisan Websites	Pushkal Agarwal, Sagar Joglekar, Panagiotis Papadopoulos, Nishanth Sastry, Nicolas Kourtellis	Proceedings of The Web Conference 2020
6	Thesis/Dissertation	Machine Learning for automatic assessment of the risk related to web tracking.	Marzia Maffei, Marco Mellia, Martino Trevisan, Luca Vassio	
7	Thesis/Dissertation	Personal Data Safe: a flexible storage system for personal data.	Federico Torta, Marco Mellia, Martino Trevisan	
8	Publication in Conference proceedings/Workshop	FLaaS: Federated Learning as a Service	Kourtellis, Nicolas; Katevas, Kleomenis; Perino, Diego	Proceedings of the 1st Workshop on Distributed Machine Learning
9	Article in Journal	Unveiling Web Fingerprinting in the Wild Via Code Mining and Machine Learning	Valentino Rizzo, Stefano Traverso, Marco Mellia	Proceedings on Privacy Enhancing Technologies
10	Article in Journal	Establishing Trust in Online Advertising With Signed Transactions	Antonio Pastor, Ruben Cuevas, Angel Cuevas, Arturo Azcorra	IEEE Access
11	Article in Journal	α-MON: Traffic Anonymizer for Passive Monitoring	Thomas Favale, Martino Trevisan, Idilio Drago, Marco Mellia	IEEE Transactions on Network and Service Management
12	Article in Journal	Does Facebook use sensitive data for advertising purposes?	José González Cabañas, Ángel Cuevas, Aritz Arrate, Rubén Cuevas	Communications of the ACM
13	Article in Journal	Digital Contact Tracing: Large-Scale Geolocation Data as an Alternative to	José González-Cabañas, Ángel Cuevas, Rubén	Electronics

		Bluetooth-Based Apps Failure	Cuevas, Martin Maier	
14	Article in Journal	Digital Marketing Attribution: Understanding the User Path	Jesús Romero Leguina, Ángel Cuevas Rumín, Rubén Cuevas Rumín	Electronics
15	Article in Journal	Malvertising in Facebook: Analysis, Quantification and Solution	Aritz Arrate, José González-Cabañas, Ángel Cuevas, Rubén Cuevas	Electronics
16	Publication in Conference proceedings/Workshop	z-anonymity: Zero-Delay Anonymization for Data Streams	Nikhil Jha, Thomas Favale, Luca Vassio, Martino Trevisan, Marco Mellia	2020 IEEE International Conference on Big Data (Big Data)
17	Publication in Conference proceedings/Workshop	α-MON: Anonymized Passive Traffic Monitoring	Thomas Favale, Martino Trevisan, Idilio Drago, Marco Mellia	2020 32nd International Teletraffic Congress (ITC 32)
18	Publication in Conference proceedings/Workshop	Not one but many Tradeoffs - Privacy Vs. Utility in Differentially Private Machine Learning	Benjamin Zi Hao Zhao, Mohamed Ali Kaafar, Nicolas Kourtellis	Proceedings of the 2020 ACM SIGSAC Conference on Cloud Computing Security Workshop
19	Publication in Conference proceedings/Workshop	User Tracking in the Post-cookie Era: How Websites Bypass GDPR Consent to Track Users	Emmanouil Papadogiannakis, Panagiotis Papadopoulos, Nicolas Kourtellis, Evangelos P. Markatos	Proceedings of the Web Conference 2021
20	Publication in Conference proceedings/Workshop	Under the Spotlight: Web Tracking in Indian Partisan News Websites	Agarwal, Vibhor; Vekaria, Yash; Agarwal, Pushkal; Mahapatra, Sangeeta; Set, Shounak; Muthiah, Sakthi Balan; Sastry, Nishanth; Kourtellis, Nicolas	Proceedings of the International AAAI Conference on Web and Social Media
21	Publication in Conference proceedings/Workshop	Differential Tracking Across Topical Webpages of Indian News Media	Yash Vekaria, Vibhor Agarwal, Pushkal Agarwal, Sangeeta Mahapatra, Sakthi Balan Muthiah, Nishanth Sastry, Nicolas Kourtellis	13th ACM Web Science Conference 2021
22	Article in Journal	User Interaction with Online Advertisements	Luca Vassio, Michele Garetto, Carla Chiasserini, Emilio Leonardi	ACM Transactions on Modeling and Performance Evaluation of Computing Systems
23	Other	The Rise and Fall of Fake News sites: A Traffic Analysis	Chalkiadakis, Manolis; Kornilakis, Alexandros; Papadopoulos, Panagiotis; Markatos, Evangelos P.; Kourtellis, Nicolas	
24	Article in Journal	Tracking Fraudulent and Low-Quality Display Impressions	Patricia Callejo, Ángel Cuevas, Rubén Cuevas, Mercedes Esteban-Bravo, Jose M. Vidal-Sanz	Journal of Advertising
25	Article in Journal	Towards website domain name classification using graph based semi-supervised learning	Azadeh Faroughi, Andrea Morichetta, Luca Vassio, Flavio Figueiredo, Marco Mellia, Reza Javidan	Computer Networks
26	Other	The Internet with Privacy Policies: Measuring The Web Upon Consent	Nikhil Jha, Martino Trevisan, Luca Vassio, Marco Mellia,	
27	Publication in Conference proceedings/Wor	Identifying Sensitive URLs at Web-Scale	Srdjan Matic; Costas Iordanou; Georgios Smaragdakis; Nikolaos	Internet Measurement Conference

|				
	kshop		Laoutaris	
28	Publication in Conference proceedings/Workshop	Insights from Operating an IP Exchage Provider	Lutu, Andra; Perino, Diego; Bagnulo, Marcelo; Bustamante, Fabián E.	
29	Article in Journal	How resilient is the Open Web to the COVID-19 pandemic?	José González-Cabañas; Patricia Callejo; Pelayo Vallina; Ángel Cuevas; Rubén Cuevas; Antonio Fernández Anta	Telematics and Informatics - Crossref
30	Publication in Conference proceedings/Workshop	PPFL: Privacy-preserving Federated Learning with Trusted Execution Environments	Mo, F; Haddadi, H; Katevas, K; Marin, E; Perino, D; Kourtellis, N	MobiSys '21: Proceedings of the 19th Annual International Conference on Mobile Systems, Applications, and Services
31	Article in Journal	A PIMS Development Kit for New Personal Data Platforms	N. Jha, M. Trevisan, L. Vassio, M. Mellia, S. Traverso, A. Garcia-Recuero, N. Laoutaris, A. Mehrjoo, S. A. Azcoitia, R. C. Rumin, K. Katevas, P. Papadopoulos, N. Kourtellis, R. Gonzalez, X. Olivares, G. -M. Kalatzantonakis-Jullien	IEEE Internet Computing
32	Publication in Conference proceedings/Workshop	User profiling by network observers	Roberto Gonzalez; Claudio Soriente; Juan Miguel Carrascosa; Alberto Garcia-Duran; Costas Iordanou; Mathias Niepert	Proceedings of the 17th International Conference on Emerging Networking EXperiments and Technologies
33	Article in Journal	A deep dive into the accuracy of IP Geolocation Databases and its impact on online advertising	Patricia Callejo; Marco Gramaglia; Ruben Cuevas; Angel Cuevas	IEEE Transactions on Mobile Computing
34	Article in Journal	A new methodology to measure faultlines at scale leveraging digital traces	Amir Mehrjoo; Rubén Cuevas; Ángel Cuevas	EPJ Data Science
35	Article in Journal	Expanding the Measurement of Culture with a Sample of Two Billion Humans	Desmet, Klaus; Awad, Edmond; Cuevas, Ángel; Rahwan, Iyad; Obradovich, Nick; Martín, Ignacio; Özak, Ömer; Cuevas, Rubén; Ortuño-Ortín, Ignacio; Cebrián, Manuel	Journal of the Royal Society Interface
36	Publication in Conference proceedings/Workshop	Unique on Facebook: formulation and evidence of (nano)targeting individual users with non-PII data	José González-Cabañas, Ángel Cuevas, Rubén Cuevas, Juan López-Fernández, David García	ACM Internet Measurement Conference
37	Other	The Gender Gap in Preferences: Evidence from 45,397 Facebook Interests	Ángel Cuevas, Rubén Cuevas, Klaus Desmet, Ignacio Ortuño-Ortín	National Bureau of Economics Research Working Papers
38	Article in Journal	Optimizing the Frequency Capping: A Robust and Reliable Methodology to Define the Number of Ads to Maximize ROAS	Jesús Romero, Ángel Cuevas, Rubén Cuevas	Applied Sciences

Table of publications list

A2 Events

BDVA webminar

Big Data PPP Personal Data Platforms - Empowering Citizens Leveraging their Data Power
8 May 2020

This webinar is dedicated to the cluster of data platform projects that address industrial data. The projects that will present their ambitions and first insights are DataPorts, I3-Market, OpertusMundi, and TheFSM. The webinar is organized as an introductory sequence of presentations from projects (ca. 20 minutes each), followed by a moderated Q&A session involving the webinar participants.

Speakers: Yury Glikman, Head of Open Service Engineering Group, Fraunhofer FOKUS & Coordinator of PIMCity project Marco Mellia, Full Professor, Politecnico di Torino & Coordinator of PIMCITY project Juan Carlos Pérez, Research Analyst at Atos Research and Innovation & Project Director of KRAKEN project

Presentations: Data Vaults - https://bit.ly/2XSpTFT Building the next generation persona data platforms - https://bit.ly/3eFYhe3 Brokerage and market platform - https://bit.ly/2U3sHiC
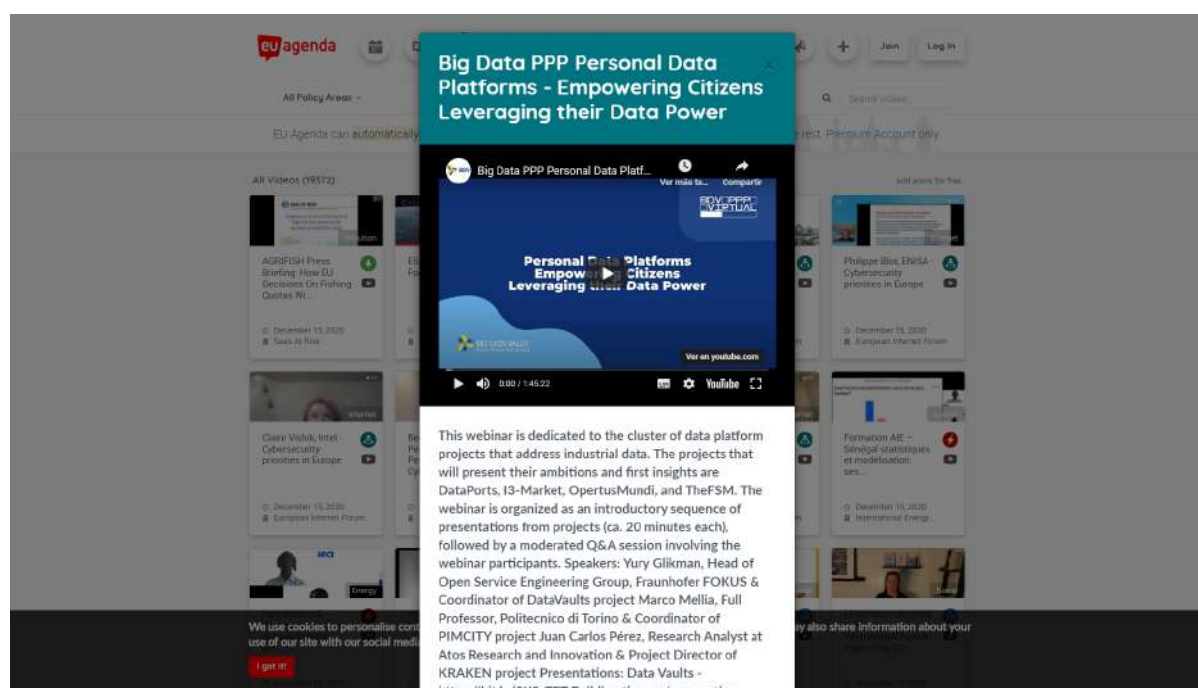
Fig 10 2020 BDVA event

Video: https://youtu.be/vAfqERg32NA

IGFSpain 2020

October 2020

The annual conference **IGF Spain** took place on 22 and 23 October with the title: "Digitalization, Sustainability and Post COVID-19 World". The meeting served for another year to establish the position of Spain and prepare the Annual Meeting of the Internet Governance Forum (IGF Global) wich was held in Berlin in November.

The meeting of IGF-Spain, a body promoted by the United Nations, deal with the new opportunities that are arising, digitalization and sustainable development, identity management on the Internet and the regulatory framework. National and international experts analyzed the experiences in the use of ICTs during the COVID-19 pandemic and the perspectives for the future in the new normality.

Fig 11 2020 IGFSpain event

Video: www.youtu.be/BJvxcJdomHg
Program: www.jornadasigfspain.es/timetable/event/sesion-7-modelos-para-generar-beneficios-con-los-datos-en-la-ue-en-ingles/

PIMCity Workshop

November 2020

Event organized by PIMCity meeting more than a hundred people from different EU countries and with the participation as speakers of the Spanish and Belgian Data Protection Agency.
Registered Stakeholder Group: Academia 17,7%, Civil society 27,7%, Government 12,2%, Business 6,56%, Media 2%, Private sector 14,4%, Technical community 17%

Fig 12 2020 PIMCity Privacy Policies Workshop

Program: www.pimcity.es/workshop

MyData Online 2020

11-12 December

The conference MyData is organised by the MyData Global – an award-winning international nonprofit based in Finland. MyData Global's mission is to empower individuals to self-determination regarding their personal data. Our work is primarily financed by membership fees and revenue from the conference.

From Strategy to Practice – Data Intermediaries in the EU

Day 2 (Friday 11th)
08:45 – 10:15 (UTC+0)

» Check this session in your timezone
» Add this session to your calendar
» Go to the session page

Session Room 5

Presenters: Malte Beyer Katzenberger - EU Commission, Dr. Arianna Rossi, - SnT, University of Luxembourg, Prof. Max von Grafenstein - University of the Arts (UdK), Berlin, Marco Mellia - Researcher at Politecnico di Torino (PIMCity Main research), Nikolaos Laoutaris - Research Professor at IMDEA Networks Institute in Madrid

Session host: Zohar Efroni

Goal: Highlight key elements of MyData Operators and aspects of the EU Data Strategy for making such models realistic. To investigate the alignment of the Strategy and its Action Steps with theoretical models and spur a discourse about the necessary steps for creating legal, technological and market conditions to support the emergence of data intermediaries in practice.

Description: The session focuses on current challenges to making trusted data intermediaries a reality in terms of scalability, functionality and adoption. A short introductory statement by the host (Zohar Efroni) will be followed by five short presentations, all of which illuminate various aspects of trusted intermediaries and PIMS. The presentations will discuss the EU Data Strategy and the novel Data Governance Act, highlight technical and legal challenges of implementable PIMS and consent tools, and touch upon user interface perspectives, legal design, and trust issues.

Level of detail: Mid-level

Business: ⭐⭐⭐
Legal: ⭐⭐⭐⭐
Tech: ⭐⭐⭐⭐
Society: ⭐⭐⭐

Fig 13 2021 Mydata event

Program: http://online2020.mydata.org/programme/#event-27

EURODIG 2021 Data Sovereignty and Trusted Online Identity

A Frank Discussion of the Pitfalls and Possible Antidotes

COVID-19 has intensified privacy, security, and sovereignty concerns. The current vaccination passport discussions show that identity is at the center of the current debate. While online IDs are the key for many digital services, the question is who should design and control them?

AUI and IEEE co-organized a discussion panel at the Pan-European dialogue on Internet Governance (EuroDIG) conference, an event known for its frank and interactive discussions of public policy issues surrounding internet governance. Messages coming out of the discussions will be presented at the Internet Governance Forum (IGF) later this year.

Fig 14 2021 EURODIG event

The panel discussed the creation of self-sovereign identification from three viewpoints—the government, the private sector, and the citizens.

The **government could lead the way, with a centralized public key infrastructure.** The EU EIDAS regulation, adopted in 2014, established electronic identification based on such an infrastructure. *Uptake* has been a challenge with this approach, however. Some countries have seen high adoption rates, such as Estonia, but other countries, such as Germany, still see a low adoption rate.

In a second scenario, the **private sector could potentially lead the effort** — there are already companies that provide us with secure ID. Some people, however, would be concerned about *data privacy*.

A third path could involve **handing back some control to citizens**. One example of such an approach is the European Self Sovereign Identity Framework developed by the EU Commission. Here the control lies neither with a centralized government service nor with private companies, but is given to the citizens.

Dr. Clara Neppel, Director of IEEE Europe, and Moderator of the session asked Pēteris Zilgalvis, Head of Unit, Digital Innovation and Blockchain, Digital Single Market Directorate, DG CONNECT, European Commission and Co-Chairman of the European Commission Task Force on Financial Technology, how can we minimize the data that is needed for the services and what he thought of the EU's Self Sovereign Identity Framework (ESSIF). Mr. Zilgalvis noted that Europe intends to update the EU eID and make the most of emerging decentralized ledger technologies to put Europe at the forefront of both the protection of fundamental rights of its citizens and at the forefront of developing innovative technologies. The proposal for the updated eIDAS regulation establishes, among other

things, a framework for European digital wallets, enabling citizens to link their national digital IDs with their driving license, diplomas, bank accounts, and more without storing them with a centralized operator.

EU digital identity plans — ESSIF
On July 5th, the European Union announced that it was creating a framework for digital identity that could serve as a secure European eID—the European Self-Sovereign Identity Framework (ESSIF). The intent of ESSIF is to make it easier to access public services and do business across borders within Europe. ESSIF will implement a generic self-sovereign identity (SSI) capability, which will allow users to create and control their own identity across borders without relying on centralized authorities. The EU already had an electronic authentication system regulation (eIDAS), approved in 2014 that will be amended to support ESSIF and address issues of poor uptake and lack of mobile apps to support it. There are also plans to support the creation of digital wallets for mobile devices. Users, when asked to share information, could then use the wallet to select the exact information to share.

Decentralized ledger technology-based self sovereign ID solutions are one of the technological solutions available within the framework. ESSIF allows the member states and the markets to choose the complementary mix of technologies they would like to use. These solutions will underpin the new EU eID, which aims to put citizens in control of their own digital identity. Zilgalvis noted that this approach fits well with the ideology of the EU, which focuses on protecting individuals' privacy and fundamental rights.

Terms
SSI - Self Sovereign Identity (SSI) The identity created and managed by an individual (not by a third party), for themself.
Electronic identification (eID) eIDs gives consumers and businesses a way to prove their identity, electronically. It is meant to save people time and help businesses expand their customer base. With an eID in Europe, citizens can, for instance, open a bank account in another country using their national ID.
Electronic Identification, Authentication, and Trust Services (eIDAS) Regulation: The "Regulation on electronic identification and trust services for electronic transactions in the internal market" is a European regulation adopted in 2014 that includes "electronic identification" (eID) and "electronic Trust Services" (eTS) meant to help Europeans conduct their business within Europe and that is now to be amended to support decentralized solutions with the introduction of qualified electronic ledgers.
European Blockchain Services Infrastructure (EBSI) The European blockchain services infrastructure which is meant to deliver EU-wide cross-border services using blockchain technology. Based on a ministerial declaration signed by all 27 member states and Norway and Liechtenstein, the first use cases of the framework will be deployed this year.
European Self Sovereign Identity Framework (ESSIF) The European self-sovereign identity framework (ESSIF) is part of the European blockchain service infrastructure (EBSI). ESSIF focuses on user control, and is meant to remove data silos and provide interoperability.
Trust service for electronic ledgers. This is a new trust service under the Commission proposal ensuring the trustworthiness of electronic ledgers under the eIDAS regime. It will underpin self-sovereign identity solutions. (ESSIF is one use case of the European Blockchain Services Infrastructure [EBSI] delivering EU-wide cross-border public services using blockchain technology)
Digital Identity wallets. There is a legislative proposal for establishing a Framework for a European digital wallets, which will enable citizens to link their national digital identities with proof of other personal attributes (e.g., drivers license, bank account, degrees).

ID Verification May Not Produce the Results We Hope For
Fellow discussant, Cecilia Alvarez, Facebook's EMEA Privacy Policy Director, pointed out some difficulties with the current situation, however. She commented that there has been a proliferation of proposals calling for various forms of authentication that include, or are conflated with, ID Verification (IDV), and that these authentication mechanisms, while they are meant to help curb online speech harms, facilitate government services, protect youth, and address fraudulent online activities, might not.

She pointed out that risks to people's access, well-being, and privacy must be balanced with each other when determining whether authentication is appropriate (and if so, what method). While it is thought that ID verification through the de-anonymizing of users will protect online speech, Ms. Alvarez noted that forcing people to show their ID to others **might undercut individuals' ability to enjoy their fundamental right of expression.** She also said that, surprisingly, **identifiability has not been shown to be an effective remedy for harmful speech online** and suggested that perhaps there are alternative models that could be effective. With respect to protecting youth, ID verification is problematic, she continued, because so many youth do not have identification and as a result, the verification system is not necessarily providing the solution.

Mandatory ID verification requirements could magnify inequalities. Requiring people to verify their identity may exclude those who do not have access to the ID system like youth and older people, or those who cannot afford devices and internet connections. Nishan Chelvachandran, Founder and CEO, Iron Lakes, Chair, Trustworthy Technical Implementations of Children's Online/Offline Experiences Industry Connections Programme, IEEE Standards Association, and Co-Chair, AI-Driven Innovations for Cities and People Industry Connections Programme, IEEE Standards Association remarked, "We are building services for people who have access to these [digital] solutions, but what about people who don't have access to these services, like minority communities and lower income groups?" To begin to address this, Mr. Chelvachandran recommends adopting a flexible or risk-based approach in identifying which method to use and whether there are alternatives, in order to take into account these inequalities.

"When building a system that relies on access to these solutions then how do these [unconnected] people access the system? This can actually perpetuate that kind of divide."
—Nishan Chelvachandran, Founder and CEO of Iron Lakes

Ms. Alvarez pointed out that, according to World Bank data, 1 billion people in the world lack access to ID documents, and one million of those people are in Europe. We need to consider offering more than one solution, or more than "one basket" in which to put our eggs, as she put it, "We need to think about the marginalized people and need to think about them when we provide baskets."

What to do?
Mr. Zilgarvis recommended that we should not put responsibilities on citizens to determine what is safe or not. Their fundamental rights must be covered. Then we need to give people easy to use tools/labels.

"There is an important point to make here while supporting user empowerment and individual autonomy: It is not to put responsibility onto the citizen— 'Here it is. Take care of yourself. Go look at these different frameworks. Try to figure out what's safe and what is not.' The legal framework has to be simple and protect citizens from things that violate fundamental rights."
—Pēteris Zilgalvis, Head of Unit, Digital Innovation and Blockchain,
Digital   Single   Market   Directorate,   DG   CONNECT,   European   Commission

People need to know how and what data is disclosed, which will be an option under the new ID. Self sovereign ID solutions like ESSIF create a secure European ID. Citizens control how and what data is shared. **Decentralized ledger technologies provide an option** under the new eID regulation. We have to give citizens the tools to realize their autonomy/rights in this area, and the interface cannot be too technical, nor should it be too legally complex and filled with boilerplate that benefits no one. Local regions/states are developing systems that make sense for them.

Mr. Chelvachandran noted that the ESSIF is a step in the right direction, to explore the uses of multi-blockchain networks for accountability, and to create a self-sovereign identity capability,

decentralising authorities. However, these systems are either built by the government or built by the private sector and the people are usually just the "end user." **He advocated for involving users in creating the tools**, so companies can manage personal data with transparency and with respect for people's rights and he wondered if the poor uptake seen with previous government solutions was due to the fact that citizens were not involved in the design process? If so, how can they be better involved?

"We have seen that these technological solutions, and even frameworks, are bilateral - they are either built by the government or by the private sector. The end user — the citizens, the humans in the formula — are not involved in the process. Something is delivered to them and they use it, be it a service, a government service, or public sector deliverable."
—Nishan Chelvachandran, Founder and CEO, Iron Lakes

How do we actually involve citizens, though, and how do we do so in a large scale way? Mr. Chelvachandran said that, though it hasn't been done yet, "what is really key is that we need to create a hybridized approach to really incorporate citizens into the design process to work together with government and private sector to design a solution. This nexus can fuel innovation in an equitable and accessible way."

When we talk about a citizen approach **the important thing to consider is if the eID solutions we are developing address the risks, and solve the problems that people actually face.** Within certain communities such as older people, rural residents, and minority communities, for example, the uptake of mobile phones is low compared to the people who are better off socio-economically, so apps, multifactorial identification, and single sign-on may not be appropriate solutions.

Furthermore, people are different. One person might be willing to consent to their data being used by the government but not a private entity. Another person might want to minimally share. What is important is for people to know how their data is being used and stored, and to have a mechanism to allow the individuals themselves to determine who uses their data and for what purpose. Having these considerations addressed in the design stage and through to the solution is key, and the only way to do that is to involve citizens in the process.

Transparency is essential for making the services trustworthy. All agreed that people should be aware of what is happening with their data. Ms. Alvarez was asked what actions she thought should be taken to ensure that the user can know about consent acquisition management and use of their personal data.

All organizations are facing the challenge of how to deliver transparency in an effective way. Ms. Alvarez pointed out that companies feel they need to address all of the elements of a given law in the terms and conditions, but **perhaps the solution is explaining the things that matter the most, not everything. People need to be informed** *enough***, she said. We need to consider how to do that simply, and not in a misleading way.**

"If a company has the obligation to address certain things that are listed in the law, you need to address them. And therefore, there is tension between information, executive information, and transparency. I think to be transparent, doesn't mean to explain everything."
—Cecilia Alvarez, EMEA Privacy Policy Director, Facebook

Having drafted privacy policies for more than 20 years, Ms. Alvarez admitted that those **policies were not so successful in delivering transparency.** They are long and complex. She said she needed to create them because the law required her to do it and noted that there is definitely room for change. **Currently, online terms of service are not usually modifiable—if you do not agree to all of the terms, then you cannot use the device—and most people do not read them.** Ms. Alvarez

recommended making the information contextual, by showing them, *at the moment they are asked to provide personal data*, what data is requested and what will happen to it.

How to make the information digestible? Nutrition Labels. A participant suggested that both the public and private sectors should work to make the concepts easier for the user to understand, and **provide something like a nutrition label to indicate to people in a simple way what is happening with their data.** The discussants agreed that it was a good idea. Ms. Alvarez added that on an airplane, people receive very important information about what to do in case of an emergency on a simple two page card that uses primarily illustrations, in order for one to know what to do in case there is an accident. She noted that Google is making something similar to help inform a broad audience about their AI models.

"If we can have two page leaflet drawings for the airplane, maybe we can do this for the patients [users]."
—Cecilia Alvarez, EMEA Privacy Policy Director, Facebook

Standards Help Develop Interoperability

With authentication methods proliferating and data stores growing, the discussants recognized that governments are hard pressed to keep up with the pace of innovation. Legal frameworks for data governance take time to create and to pass through the legislative system. Discussants noted that frameworks are often built based on a certain technology, and then technology changes. Mr. Chelvachandran emphasized that "The framework needs to work irrespective of the technology, and interoperability is key." **"Privacy-preserving technology, such as blockchain, in itself cannot be relied on,"** said Mr. Chelvachandran. **"The appropriate frameworks, living legal instruments and standards on interoperability must be created,** on which the technology can be maximised in a universally inclusive, progressive manner."

Mr. Zilgarvis noted that "building standards represents extra work on top of building the system itself, but standards are absolutely essential to the functioning of the system. There is a need to make things simpler for practitioners and we are trying to facilitate this." Noting that DG Connect supports standardization certification, Mr. Zilgarvis added, **"We need to figure out a way of standardizing, allowing for both the normalization of data and the interoperability of data whilst including agency and consented use of such data in those processes."**

Mr. Chelvachandran concluded by saying "We must strike a balance. We need to allow the private sector to innovate sustainably and inclusively while also letting the government support citizens." We must also include citizens in our design processes and governance frameworks, so that the balance can return to the main driver, the citizen. **"We need less talking and more doing,"** he said. **"The impetus is there, but we need to start."**

Looking to the future, a solid self sovereign identity framework can be a strong step toward supporting data pooling and data sharing, building trust in and scaling distributed ledger technologies explained Ms. Neppel, and we all agree that the infrastructure must be in line with people's fundamental rights as a starting point. There is no one solution. We need to involve all stakeholders—the government, the private companies, as well as the citizens—in order to successfully handle important issues such as interoperability, inclusion, and/or certification.

Watch the recording of the session (02:12:00-03:24:00) or check out the session webpage—Data Sovereignty and Trusted Online Identity – COVID-19 Vaccination Data.
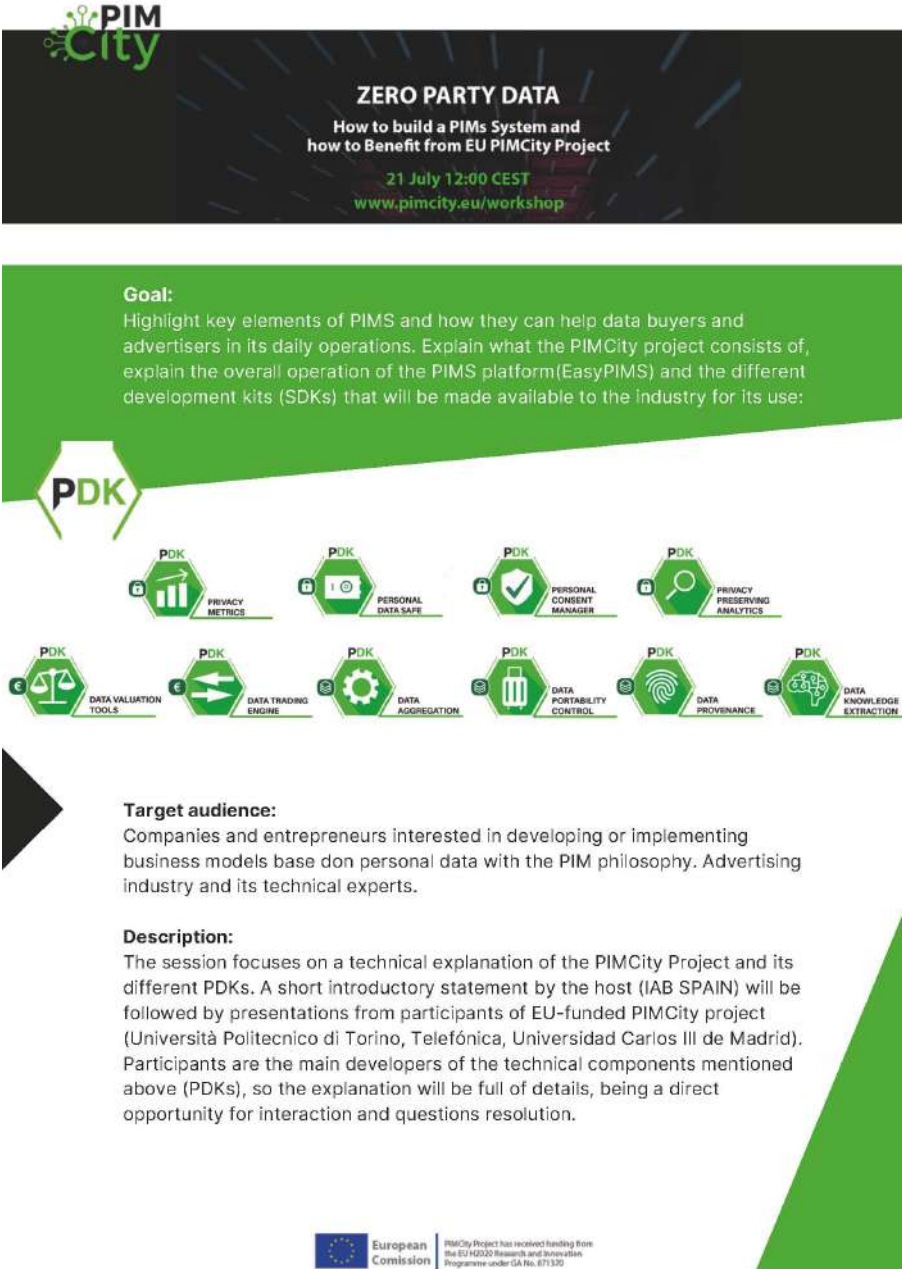
ZERO PARTY DATA

July 2021

How to build a PIMs System and how to Benefit from EU PIMCity Project
The goal of the second Workshop was highlighting key elements of PIMS and how they can help data buyers and advertisers in its daily operations. An explanation of what was the goal of PIMCity was given as well as an explanation of the overall operation of EasyPIMS and the different development kits that the project was developing. IAB Spain, Università Politecnico di Torino, Telefónica, Universidad Carlos III de Madrid were the speakers of the same. 27 companies attended this workshop having also more than 6000 impressions through IAB Spain social networks. The Workshop was also published on Youtube having more than 70 post event visualisations.

Web: https://iabspain.es/eventos/zero-party-data-how-to-build-a-pims-system-and-how-to-benefit-from-eu-pimcity-project/
Video: https://youtu.be/zLcFNwhcB_s

Fig 15 2021 PIMCity Zero Party Data Workshop

Workshop on human behaviour modelling

Date: July 15, 2021
Keywords: criminology, cross-domain learning, human behaviour

Fig 16 2021 RAYUEL Workshop

This workshop, organized within the scope of the H2020 project RAYUELA (empoweRing and educAting YoUng pEople for the internet by pLAying), brings together professionals from different areas of knowledge to discuss the similarities and differences on how they model human behaviour and explore cross-domain learning and possible synergies. A short introductory statement about the RAYUELA project will be followed by short presentations from the experts and a discussion and Q&A session.

Agenda:

15:10 – 15:25 – Human behaviour modelling and privacy: The PIMCITY project
Roberto González
Senior Researcher. NEC labs

15:25 – 15:55 – Discussion and Q&A
Moderator: Gregorio López López
Panelists: Roberto González, Edmond Awad, Anxo Sánchez, Mary Aiken, Nereida Bueno

15:55 – 16: Final remarks, wrap-up and closing of the workshop
WEB
https://www.rayuela-h2020.eu/events/workshop-on-human-behaviour-modelling/

IGFSPAIN EUROPEAN STRATEGY FOR PERSONAL DATA

2021 Session 5 November 17, 2021 9:00-10:00

Fig 17 2021 IGFSpain Conference

SUMMARY

The European Union is working to define a new strategy for the management and exploitation of its citizens' personal data. EUROPE wants to offer not only a new technical architecture and organization for data management, but also regulatory trust frameworks and, as a result, alternative business models for the collection and processing of personal data, in a more respectful and user-centric way.

A new approach where all available data can be shared easily and securely and where individuals are the "owners" of their own personal information, allowing individuals to manage their personal data and share it when and with whom they want. All this while driving the creation of infrastructures and tools that enable the provision and exploitation of such data.

This panel will address the topic from the perspective of the new regulation in the EU regulatory framework (Data Privacy Act), the new business models and tools for its implementation (PIMS), the challenges and opportunities of the single European data space for companies and entrepreneurs (IAB Spain) and the role of Data Protection Agencies in this new context (EDPS). It will be of special interest to regulators, researchers, companies, developers and entrepreneurs interested in business proposals, regulation and exploitation of personal data of European citizens.

SPEAKERS

Ricard Martinez
Director of the Chair of Privacy and Digital Transformation
Polytechnic University of Valencia

Miguel Pérez Subías
President of the Association of Internet Users (www.AUI.es)
Researcher in the project www.PIMCity-H2020.eu

Julian Isla
Data and Artificial Intelligence (AI) Consultant at Microsoft Spain
President of www.Foundation29.org

Fanny Coudert
Head of Sector – Supervision of AFSJ at EDPS – European Data Protection Supervisor.

WEB - VIDEO

Fig 18 2022 PIMCity PIMSs Business Opportunities

The goal of the first workshop was raising awareness about key elements of PIMS and how they are intended to be promoted through the European Union. In the workshop data buyers had a first glance of how user centric personal data management models could help their operations.

The session also had a strong legal and ethical perspective analyzing how new and future data regulations and how new models of personal data management were going to be promoted in the EU. From a public perspective DG Connect members where part of the same as well as the EDPS.

IAB Spain, NEC, Onecub, Telefónica, Vastuu Group, Wibson were the speakers of the workshop. 93 companies attended this workshop having also more than 15000 impressions through IAB Spain social networks and more than 1000 visualisations through LinkedIn.

Feb. 2022

Fig 19 2022 IAB Spain Digital Regulation Congress

This is one of the biggest Spanish events on the digital regulation landscape, is promoted by IAB Spain and PIMCity project was its main sponsor. PIMCity project was presented by its technical coordinator Roberto González that gave an overview of the project and an explanation of EasyPIMS operative. From a public perspective the Spanish data protection authority (AEPD) through its director and the ministry of economic affairs were speakers of this event as well as private corporations such as Google or Onetrust.

More than 500 individuals where registered in the event and more than 300 attended the same. The event was published and communicated by Spanish publishers with interest in marketing and privacy and had an estimated audience of over 100.000 individuals reached through publishers and more than 5 million impressions in social networks.
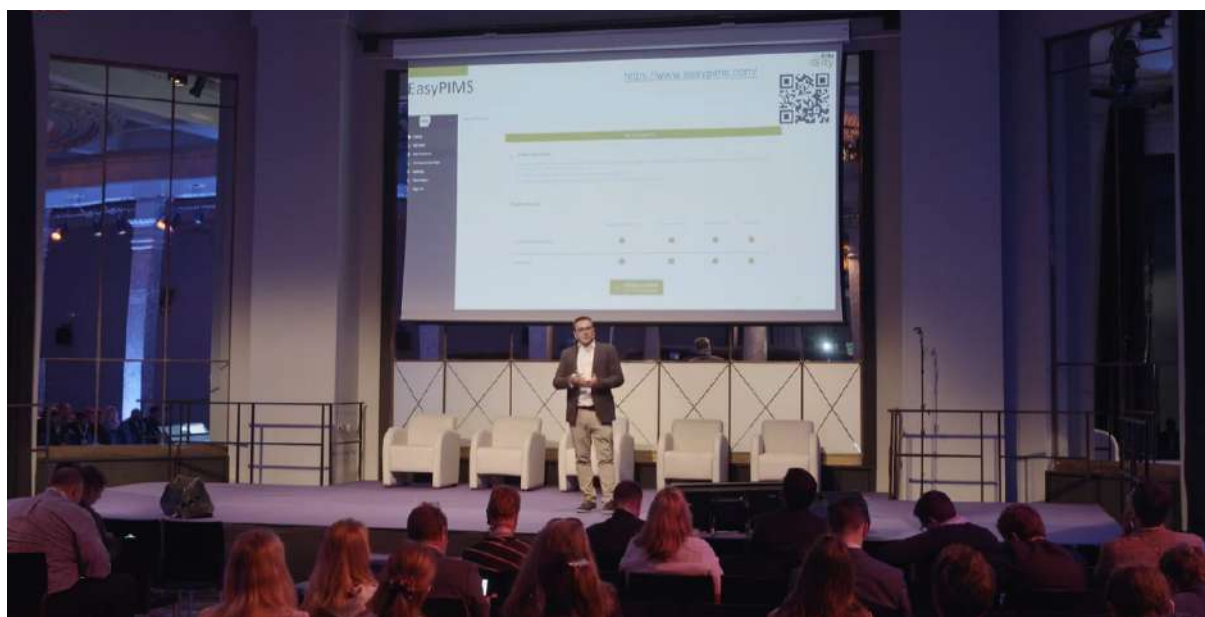
Fig 20 2022 INTERACT   IAB Europe

This is one of the biggest European event concerning digital advertising. The event was hosted in Madrid and organised by IAB Europe and IAB Spain. PIMCity and EasyPIMS platform had a key role in the event as its technical coordinator Roberto González perform a keynote speech promoting the project and platform and inviting data buyers to test the platform and adopt similar PIMs models based on the work done in PIMCity project and in particular on its technical components.

The event had more than 275 stakeholders attending the same and was recorded for streaming purposes.

CPDP 2022

May

Fig 21 2022 CPDP PIMCity participation

Panel Description

The Personal Information Management Systems (PIMS) concept offers a new approach in which individuals are the "holders" of their own personal information. PIMS allow individuals to manage their personal data in secure, local or online storage systems and share them when and with whom they choose. Individuals would be able to decide what services can use their data, and what third parties can share them. This allows for a human centric approach to personal data and to new business models, protecting against unlawful tracking and profiling techniques that aim at circumventing key data protection principles.

PIMS promises to offer not only a new technical architecture and organisation for data management, but also trust frameworks and, as a result, alternative business models for collecting and processing personal data, in a manner more respectful of European data protection law. This panel will address PIMs from the perspective of the EU regulatory framework, new business models, tools for implementation and success stories. It will be of special interest for companies, developers and entrepreneurs interested in business proposals based on the personal data of European citizens.
• What are the benefits of data sharing for citizens?
• What is Europe's personal data strategy in both regulatory and business development?
• Are user-centric data models competitive?
• What are the main barriers to personal data-driven business development and how to overcome them?

In this edition of the CPDP PIMCity has participated as an Event Partner which has allowed us to put the image of the project on the website and in the documentation that was given to all attendees and on the other hand allowed us to make the PIMCity brochures available to the more than 1200 congressmen who attended the conferences in Brussels.

Speakers

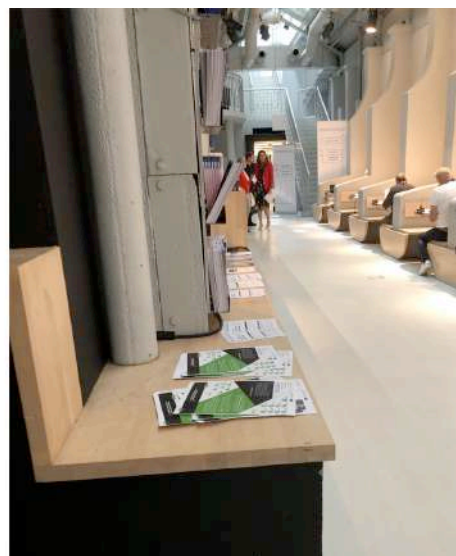| Leoonardo Cervera Navas	Paula Ortíz	Nikolaos Laoutaris	Rodrigo Irrazabal	Marco Mellia
EDPS	**IAB**	**IMDEA**	**Wibson**	**POLITO**

Fig 22 2022 CPDP PIMCity conference

Fig 23 CPDP PIMCity brochures

Conference Website: https://www.cpdpconferences.org/cpdp-panels/pims-building-the-next-generation-personal-data-platforms-a-human-centric-approach
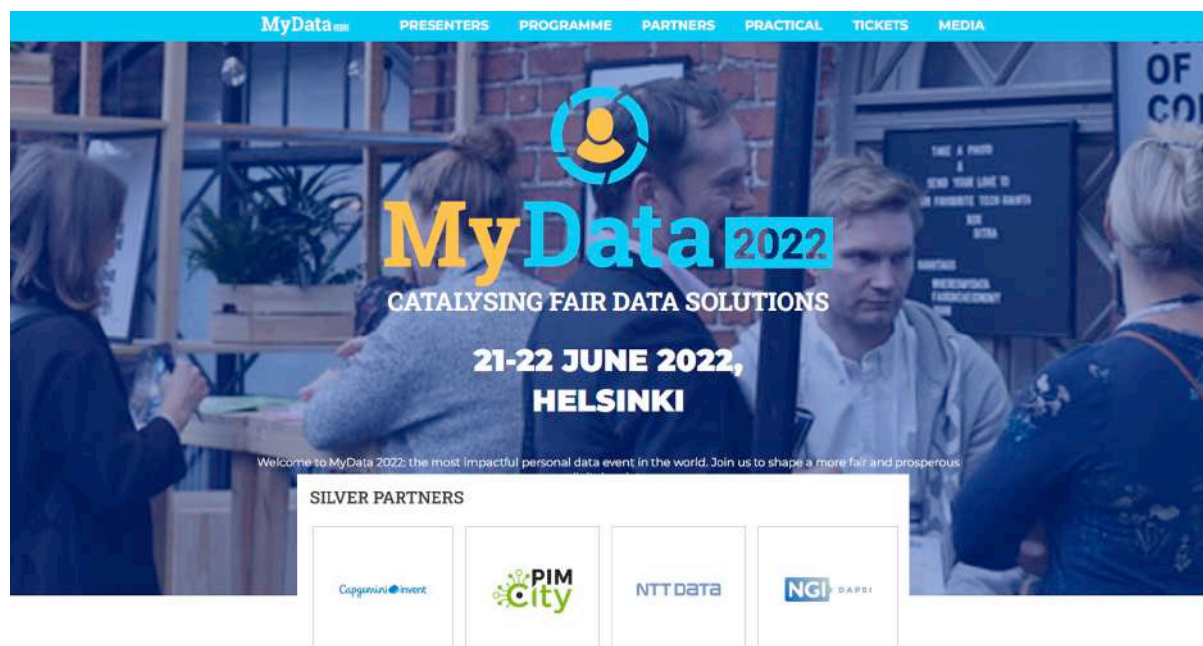
MyDATA 2022: BUILDING THE NEXT GENERATION PERSONAL DATA PLATFORMS

Fig 24 2022 MYDATA PIMCity participation

Conference and Workshop description

PIMCity Conference:21June, 11:30 to 12:45
BUILDING THE NEXT GENERATION PERSONAL DATA PLATFORMS

The Personal Information Management Systems (PIMS) concept offers a new approach in which individuals are the "holders" of their own personal information. PIMS allow individuals to manage their personal data in secure, local or online storage systems and share them when and with whom they choose. Individuals would be able to decide what services can use their data, and what third parties   can   share   them.

The PIMcity.eu project provides a development kit (PDK) to simplify the complexity of creating PIMS-based solutions and we demonstrate the effectiveness of the tools created with the implementation of EasyPIMS.eu, a demonstrator that allows us to test with real users."

Marco Mellia, Politecnico di Torino & PIMCity project coordinator

EasyPIMS Workshop: 21 June, 15:00 to 16:30
LEARN HOW TO IMPLEMENT A PIMS SOLUTION

In this workshop we will show how to implement a PIMS solution using the modules developed in the PIMCITY project, we will share the EasyPIMS experience, and the lessons learned and results obtained. EasyPIMS has been developed using the PDK components. All these basic components will provide anyone the chance to build new PIMS and integrating modules in existing solutions. Open APIs enable communications and interactions between components, easing integration of existing PIMS.

Roberto Gonzalez, NEC
Stefano Traverso, HERMES
Giorgio Prette, POLITO
https://2022.mydata.org/programme/

The participation of PIMCity has been on this occasion as a Silver Sponsor, which in addition to the presence in the contents has allowed us to have a stand in the networking area of the congress where we have made important contacts with professionals from different sectors, distribute brochures with information of the congress and that the image of the project was present in the documentation and communication channels of this edition of MyData.
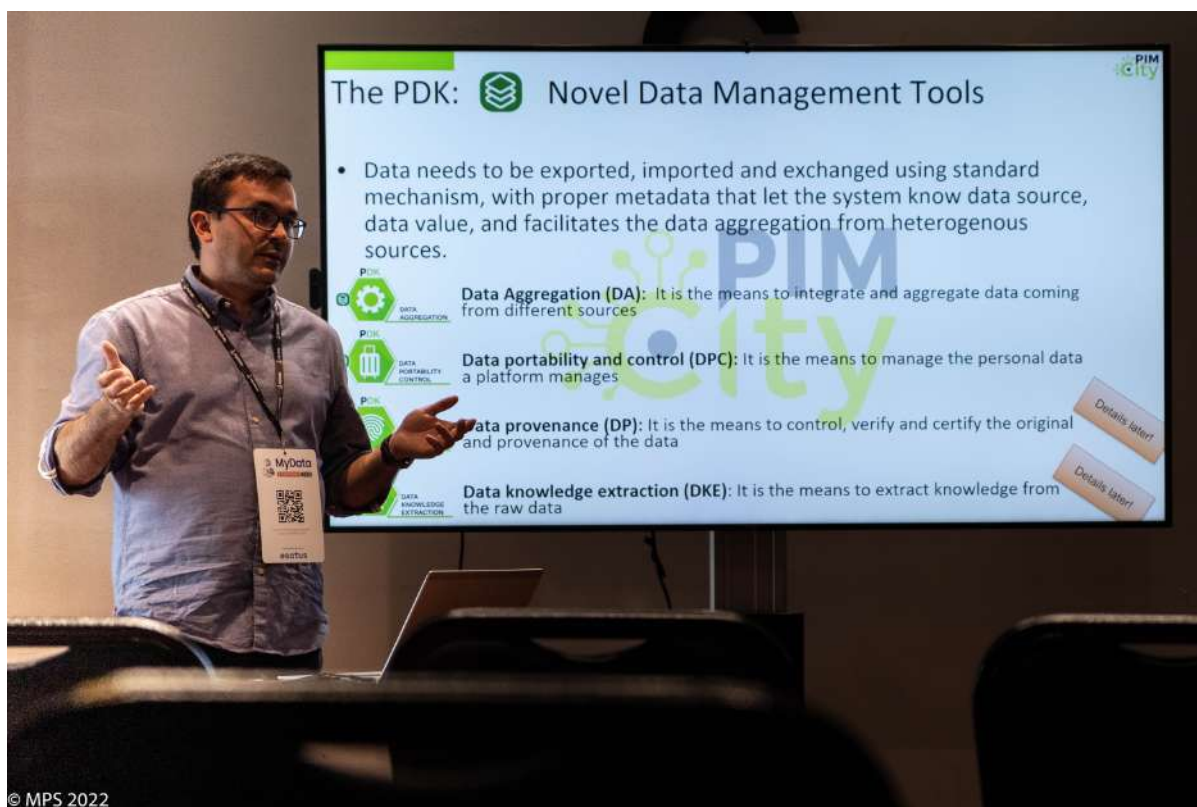

Fig 25 2022 MyData PIMCity booth

Fig 26 2022 MyData PIMS workshop

A3 Press clipping

PIMcity: building the next generation personal data platforms
https://cordis.europa.eu › project
3 jun 2021 — H2020,**PIMCITY**,ICT-13-2018-2019,ERMES CYBER SECURITY SRL(IT),FUNDACION IMDEA
NETWORKS(ES),INTERACTIVE ADVERTISING BUREAU SPAIN IAB SPAIN(ES) ...

ZERO PARTY DATA. How to build a PIMs System ... - IAB Spain
https://iabspain.es › Inicio › Eventos
ZERO PARTY DATA. How to build a PIMs System and how to Benefit from EU **PIMCity Project**. In
order to register for the workshop, please click on the " ...

PIMCity Project EU H2020 (@PimcityProject) / Twitter
https://twitter.com › pimcityproject
PIMCity a user centric set of tools that opens new PIMS business opportunities ensuring greater
transparency and control for personal data management.

PIMCITY - IMDEA Networks
https://networks.imdea.org › projects
IMDEA Networks is the beneficiary of this **project**. Financed by: European Union H2020-ICT-2018-
2020 (Information and Communication Technology) Grant ...

Digital Marketing Attribution: Understanding the User Path
https://e-archivo.uc3m.es › handle
de J Romero Leguina · 2020 · Citado por 1 — ... agreement No 786741 (SMOOTH project) and the
gran agreement No 871370 (**PIMCITY project**); the Ministerio de Economía, Industria y
Competitividad, Spain, ...

AUI - Asociación de Usuarios de Internet - Posts | Facebook
https://m.facebook.com › posts
PIMCity Project EU H2020 | Personal Information Management Systems (PIMS). **PIMCity Project**:
BUILDING THE NEXT GENERATION PERSONAL DATA PLATFORMSPersonal ...

PIMCity – CITIP - Faculteit Rechtsgeleerdheid
https://www.law.kuleuven.be › citip
18 may 2021 — **PROJECT** TITLE : **PIMCity**: Building the next generation Personal Data Platforms ...
Web economy has been revolutionized by unprecedented possibility ...

LSTech ltd. | LinkedIn
https://pr.linkedin.com › company › lstech
The #**PIMCity Project** aims to build systems that ensure control of data on the Internet, enabling
end-users, intermediaries and businesses to create new and ...

PIMCity Privacy Policies Workshop
https://www.ati.es › 2020/11 › workshop_program
experience in GDPR projects, risk assessment and the handling of data ... law in research projects
funded by the ... of the H2020 **PIMCity project** focusing.

A development kit to protect your data on the web - DiCYT
https://www.dicyt.com › news › a-d...

PIMCity - Building the next generation personal data platforms is a new EU-funded research **project** coordinated by Politecnico di Torino.

PIM City

https://pimcity.com › ...

21 jul 2021 — Explain what the **PIMCity project** consists of,explain the overall operation of the PIMS platform(EasyPIMS) and the different development kits ...

BDV PPP going Virtual - Data Platform Webinars

https://www.big-data-value.eu › bd...

30 abr 2020 — These webinars are also organized by BDVA, BDVe project, and other projects which ... Politecnico di Torino & Coordinator of **PIMCITY project** ...

New Software for Personal Data Platforms - POLIFLASH ...

https://poliflash.polito.it › new_soft...

4 nov 2021 — The H2020 European **Project PIMCity**, coordinated by Politecnico di Torino, investigates new solutions to foster the development of open and ...

PIMCITY - OpenAIRE Explore

https://explore.openaire.eu › project

Funder: European Commission**Project** code: 871370 Call for proposal: H2020-ICT-2019-2 · Funded under: H2020 | IA Overall Budget: 6,337,450 EURFunder Contribution: ...

Ponentes - Jornadas IGF Spain

https://jornadasigfspain.es › ponentes-igf-2020

... de la Asociación de Usuarios de Internet e investigador en **PIMCity**.eu **project** ... Networks Institute, e investigador principal del proyecto **PIMCity**.eu.

PIMCity Project EU H2020 @PimcityProject , Twitter Profile

https://twstalker.com › PimcityProject

11 nov 2021 — **PIMCity Project** EU H2020@PimcityProject. PIMCity a user centric set of tools that opens new PIMS business oportunities ensuring greater ...

PIMCity Project EU H2020 - Nitter by PussTheCat.org

https://nitter.pussthecat.org › search

The #**PIMCity Project** aims to build systems that ensure control of data on the Internet, enabling end-users, intermediaries and businesses to create new and ...

La AUI participa en el IGF Spain 2020

https://www.aui.es › ...

8 oct 2020 — Research Professor at IMDEA Networks Institute, and principal investigator of the **PIMCity**.eu **project**; Miguel Pérez Subías

Collaboration with the BDV PPP - DataPorts

https://dataports-project.eu › collab...

DataPorts will also collaborate with other **projects** included in the portfolio of ... A Single Digital Market for Industrial Geospatial Data Assets; **PIMCity**, ...

PIMCity Project EU H2020 (@PimcityProject) - Nachatlb's nitter

https://nitter.s.nachtalb.io › status

29 jun 2021 — "**PIMCity project** objective is to develop tools so that companies and organizations can manage and doing business with citizens' personal ...

agenda de la semana 19jul-25jul - Wilhelm Lappe

https://www.wlappe.com › 2021/07

19 jul 2021 — ... a PIMs System and how to Benefit from EU **PIMCity Project**: miércoles 21 ... teams and projects to deliver projects on time and on budget.

Misc - Kleomenis Katevas

https://minoskt.github.io › misc

How to build a PIMs System and how to Benefit from EU **PIMCity Project** iab Spain, Online, Jul. 21, 2021. Part of a Roundtable discussing Privacy and Personal ...

The Gender Gap in Preferences: Evidence from 45,397 ...

https://www.nber.org › papers

de Á Cuevas · 2021 — ... "Aplicaciones económicas de distancias culturales"); the European Union's Horizon 2020 Innovation Action Program (**PIMCITY project**, ...

Personal Data Safe - PIMCity - GitLab

https://gitlab.com › pimcity › perso...

The documentation and the following instructions refer to a Linux environment, with Python 3.8.2 and pip 20.0.2 installed. The P-DS **project** has been cloned from ...

Services | LSTECH

https://www.lstech.io › copy-of-ser...

H2020 grant agreement No. 871481. https://cordis.europa.eu/**project**/id/871481. . . **PIMCITY**. H2020 ICT-13-2019-2. Building the next generation personal data ...

From Strategy to Practice – Data Intermediaries in the EU

https://online2020.mydata.org › fro...

11 dic 2020 — ... Marco Mellia – Researcher at Politecnico di Torino (PIMCity Main ... and technical challenges exemplified by the **PIMcity Project**, ...

ResearchRanking.org: European Research Ranking - project

http://www.researchranking.org › a...

Events - Privacy Icons Forum

https://privacyiconsforum.eu › events

22 abr 2021 — ... and technical challenges exemplified by the **PIMcity Project**, and ... papers and legal design project outlines after the roundtable.

PIMCity: BUILDING THE NEXT GENERATION PERSONAL ...

https://zenodo.org › pimcity › about

29 jun 2021 — **PIMCity**: BUILDING THE NEXT GENERATION PERSONAL DATA PLATFORMS. Dataset collected and made available via the **PIMCity** H2020 **project**.

Personal-Privacy Metrics - PIMCity Demonstration

http://130.192.238.15 › intro-ppm

The P-PM is distributed under AGPL-3.0-only, see the LICENSE file in the **project** repository. Copyright (C) 2021 Ermes Cyber Security S.R.L. ...

Sociedad de la Información | - Part 3 - madrimasd |

https://www.madrimasd.org › blogs › page

16 dic 2019 — **PIMCity** – Construyendo las plataformas de datos personales de próxima generación– ... LinkedIn: https://www.linkedin.com/in/5growth-**project**/

Empowering Citizens Leveraging their Data Power - SDSC-BW

https://www.sdsc-bw.de › 08-05-20...

8 may 2020 — This webinar is organised by the BDVA, the BDVe project and the EC as a ...
Politecnico di Torino & Coordinator of **PIMCITY project** – Juan ...

La gobernanza del dato - Revista Telos
https://telos.fundaciontelefonica.com › telos-115-cuader...
14 ene 2021 — Disponible en: https://mydata.org/declaration. Unión Europea. **PIMCity project**.
Bruselas, 2020. Disponible en: http://www.pimcity-h2020.eu ...

[Academic] Survey on risk related to web privacy (all) - Reddit
https://www.reddit.com › comments
The Team of the European **Project** H2020 **PIMCity**, whose goal is to improve and ensure
transparency for users while browsing the web, with reference to…

Revista Telos 115: Un mundo en construcción
https://books.google.es › books
Fundación Telefónica · 2021 · Technology & Engineering
PIMCity project. Bruselas, 2020. Disponible en: http://www.pimcity-h2020.eu Con una regulación
común en toda la Unión Europea se garantizará que las ...

Project Lab | Fundación Vodafone España
https://youth4good.fundacionvodafone.es › project-lab
Colaborar para transformar nuestro entorno. En cada edición de **Project** Lab desarrollaréis
competencias digitales y las 4 C's, las habilidades ...

HORIZON-CL4-2022-DIGITAL DATA - Portal GOV.SI
https://www.gov.si › Novice › IKT-dec-2021 › H...
PDF 1 dic 2021 — Current **project** portfolio (if relevant). Examples of Data Platforms (IA) ICT-13-
2019: DATA VAULTS (Personal data vaults),. **PIMCITY** (Building ...

ERMES and PIMCity: Securing next-gen data platforms
https://www.ermes.company › erme...
3 dic 2020 — **PIMCity** is a EU-funded Innovation Action **project** which aims to increase
transparency, privacy and security and provide users with control ...