

D6.5 – FINAL DISSEMINATION AND COMMUNICATION REPORT

Work Package	WP 6, Dissemination and Exploitation					
Lead Author	Sébastien Canard (ORA)					
Contributing Author(s)	Melek Önen (EURC), Boris Rozenberg (IBM), Simone Fischer-Hübner (KAU), Eleonora Ciceri (MCI), Alberto Miranda Garcia (ATOS)					
Reviewers	Melek Önen (EURC) and Alberto Miranda Garcia (ATOS)					
Due date	26.11.2021					
Date	26.07.2021					
Version	2.0					
Dissemination Level	PU (Public)					



The research leading to these results has received funding from the European Union's Horizon 2020 Research and Innovation Programme, through the PAPAYA project, under Grant Agreement No. 786767. The content and results of this deliverable reflect the view of the consortium only. The Research Executive Agency is not responsible for any use that may be made of the information it contains.



Project No. 786767

Revision History

Revision	Date	Editor	Notes
0.1	10.06.2021	Sébastien Canard (ORA)	File creation
0.2	05.07.2021	Sébastien Canard (ORA)	First version
0.3	06.07.2021	Sébastien Canard (ORA)	Several corrections after discussion with consortium
0.4	15.07.2021	Sébastien Canard (ORA), Melek Onen (EURC), Boris Rozenberg (IBM), Simone Fischer-Hübner (KAU), Eleonora Ciceri (MCI), Alberto Miranda Garcia (ATOS)	Adding inputs from partners
0.5	21.07.2021	Sébastien Canard (ORA), Melek Önen (EURC) and Alberto Miranda Garcia (ATOS)	Integration of comments from the first review
0.6	22.07.2021	Sébastien Canard (ORA), Melek Önen (EURC) and Alberto Miranda Garcia (ATOS)	Integration of comments from the second review
1.0	26.07.2021	Sébastien Canard (ORA), Melek Önen (EURC)	Quality check and final version
2.0	26.11.2021	Sébastien Canard (ORA), Alberto Miranda Garcia (ATOS), Ángel Palomares (ATOS), Melek Önen (EURC)	Update on statistics on PAPAYA's website and social media channels and new table on open-source projects.

Table of Contents

xecutive Summary 4				
Glossary of Terms	. 5			
1 Introduction	. 6			
1.1 Purpose and Scope	. 6			
1.2 Document Outline	. 7			
2 Scientific Dissemination Activities	. 8			



Project No. 786767

2	2.1	Pub	blic Deliverables	8
2	2.2	Res	search Papers and Publications	9
	2.2	.1	List of Publications	9
	2.2	.2	Key Performance Indicators Regarding Publications	13
2	2.3	PAF	PAYA open-source solutions	13
	2.4	Eve	ents and Networking	14
	2.4	.1	PAPAYA Business Workshop	14
	2.4	.2	Event Organization and Participation	16
	2.4	.3	Key Performance Indicators Regarding Events	22
	2.5	Coll	laboration with R&D projects	23
3	Cor	nmu	nication Activities	26
	3.1	PAF	PAYA website	26
	3.1	.1	Website design and maintenance activities	26
	3.1	.2	Website analytics	28
	3.1	.3	Key Performance Indicators	31
	3.2	Soc	cial media	31
	3.2	.1	Twitter	32
	3.2	.2	LinkedIn Account	34
	3.2	.3	Social Media KPIs	34
	3.3	Pre	ss Releases and Communication Campaigns	35
4	Cor	nclus	ion	37

List of Tables

Table 1 PAPAYA Public Deliverables	8
Table 2 PAPAYA publications	9
Table 3 PAPAYA open-source solutions	13
Table 4 PAPAYA business meeting agenda	15
Table 5 Events at which PAPAYA was presented by the PAPAYA consortium members	16
Table 6 Collaborations with other EU projects	23
Table 7 KPIs for website	31
Table 8 Twitter account comparison with other projects	33
Table 9 Social Media KPIs for PAPAYA	35
Table 10 Press releases and Communication Campaigns	35



Project No. 786767

List of Figures

Figure 1 PAPAYA project website	27
Figure 2 Webpage on Related Projects	28
Figure 3 PAPAYA's Website Audience Overview	29
Figure 4 Evolution of PAPAYA's website visitors	30
Figure 5 PAPAYA's website visitors - Geographical Overview	30
Figure 6 Evolution of Twitter & LinkedIn followers	32
Figure 7 PAPAYA's Twitter Account	33
Figure 8 PAPAYA's Linkedin Account	34

Executive Summary

This deliverable gives the dissemination and communication activities that were implemented during the lifetime of the PAPAYA project. It updates deliverable D6.3 that has permitted us to give an intermediary status about dissemination and communication.

The activities performed along the project are in line with the dissemination and communication strategies defined in deliverable D6.2. Accordingly, the goal of the dissemination and communication activities were to raise awareness on the need for privacy enhancing technologies that help organizations or businesses to outsource their data analytics services to cloud servers while being GDPR compliant and to promote the project's goals and achievements.

With this aim, the overall dissemination and communication activities can be summarized as follows:

- PAPAYA members published 19 scientific articles and two posters related to the project's results at international refereed conferences and workshops.
- Consortium members also actively participated in various events with different audiences (including experts in IT, IT security, law, social science, etc.), by organizing summer schools or workshops, giving keynote talks, or attending different panels on topics related to PAPAYA. In particular, the whole consortium has organized a business meeting where PAPAYA results have been presented to business units of our industrial partners and external stakeholders.
- The PAPAYA consortium had several interactions with other EU-funded projects such as PoseID-On, DEFeND or PROMETHEUS. PAPAYA was also invited to join the European GDPR Cluster and the Cyberwatching Project Hub.
- PAPAYA was also promoted through online services such as the PAPAYA website and the various social media accounts.



Project No. 786767

Glossary of Terms

ATOS	Atos Spain S.A.
CBMS	Symposium on Computer-Based Medical Systems
	Dissemination Computer Dased Medical Systems
DoA	Description of Actions
FURC	FURECOM
GDPR	General Data Protection Regulation
IBM	IBM Israel Science & Technology Ltd.
KAU	Karlstad University
KPI	Key Performance Indicators
Μ	Month
MCI	Mediaclinics Italia
0	Objective
ORA	Orange
PAPAYA	PIAtform for PrivAcY preserving data Analytics
PET	Privacy Enhancing Technology
PUT	Privacy, Usability and Transparency
R&D	Research and Development
SotA	State-of-the Art
UC	Use Case

- WP Y Work Package Year



Project No. 786767

1 Introduction

1.1 Purpose and Scope

The aim of this deliverable is to provide a deep analysis of the dissemination and communication activities carried out by the PAPAYA consortium all along the project, from May 1st, 2018 to July 31st, 2021.

The document shows how the dissemination strategy defined in deliverable D6.2 is implemented. Through different kinds of dissemination and communication activities, we have been able to validate the Key Performance Indicators (KPIs) defined in this initial deliverable.

There are several ways to disseminate and communicate about the results of a collaborative project, and within PAPAYA, we have more particularly worked on the following ones:

- through published documents that give a way for people outside the consortium understand what PAPAYA is, the problem we have solved, the results we have obtained, and the way to obtain it. Within PAPAYA, such publications have been done with public deliverables and our scientific publications;
- through given talks, which give us the opportunity to explain the results we have obtained, and to share our knowledge with others. These have been done all along the project with the presentation of our scientific publications to conferences or workshops, and through our participation to some events in which we have been invited;
- through **advertising**, which gives us a way to promote PAPAYA's vision on privacypreserving techniques in the machine learning context. This has been naturally done in the events in which we have been invited, but more deeply in the ones we have organized. Additionally to those one-shot events, we have publicized PAPAYA through our website and our social media accounts;
- through **external interactions**, permitting the PAPAYA consortium to discuss with some other parties the topics covered by PAPAYA, and the solution we have on it. This has obviously been done through the events we have organized, but also with several exchanges we had with other European projects.

As this is usually done, public deliverables, scientific publications and participation/organization of events correspond to our dissemination actions while website and social media are better related to our communication activities.



Project No. 786767

1.2 Document Outline

The document is structured into two main parts. The first one (Section 2) is dedicated to PAPAYA's **dissemination activities** giving some words and reached KPIs on public deliverables, research papers and more general publications, events and networking, and finally on PAPAYA's relation with other European projects and other initiatives. The second part (Section 3) is dedicated to our **communications activities**, giving the details and KPIs related to our website and the social media in which we have been active. We finally conclude in Section 4.



Project No. 786767

2 Scientific Dissemination Activities

2.1 Public Deliverables

Among the 26 official deliverables of the PAPAYA project, 17 have the "public" dissemination level, as shown in Table 1. As of the validation of a deliverable by the European Commission, this one is put in our PAPAYA website so that anybody can have access to it. All these deliverables include an executive summary which mainly informs about the main outputs of these documents and the corresponding PAPAYA results. The rows in this table (and all subsequent tables) highlighted in bold correspond to the ones that were not mentioned in the previous deliverable on dissemination and communication activities (D6.3).

Del. No.	Deliverable Name	WP No.	Editor	Туре	Due Date	Actual Delivery Date
D6.1	Public Project Website	WP6	ATOS	DEC	M3	30/07/2018
D6.2	Dissemination and Communication Plan	WP6	ORA	R	M6	31/10/2018
D2.1	Use case specification	WP2	MCI	R	M12	30/04/2019
D2.2	Requirement Specification	WP2	KAU	R	M12	30/04/2019
D3.1	Preliminary Design of Privacy preserving Data Analytics	WP3	EURC	R	M12	30/04/2019
D4.1	Functional Design and Platform Architecture	WP4	IBM	R	M15	31/07/2019
D3.2	Risk Management Artefacts for Increased Transparency	WP3	KAU	R	M15	31/07/2019
D6.3	Intermediate Dissemination and Communication Report	WP6	EURC	R	M18	31/10/2019
D3.4	Transparent Privacy Preserving Data Analytics	WP3	KAU	R	M24	30/04/2020
D4.2	Progress Report on Platform Implementation and PETS Integration	WP4	IBM	R	M24	30/04/2020
D4.3	Final Report on Platform Implementation and PETS Integration	WP4	IBM	D	M36	31/04/2021
D5.2	Telecom Use Case Validation	WP5	ORA	D	M36	31/04/2021
D5.4	PAPAYA Platform Guide	WP5	IBM	R	M36	31/04/2021
D5.1	e-Health Use Case Validation	WP5	MCI	D	M39	31/07/2021
D5.3	Refinement Recommendations for the Platform	WP5	MCI	D	M39	31/07/2021
D6.5	Final Dissemination and Communication Report	WP6	ORA	R	M39	31/07/2021

Table 1 PAPAYA Public Deliverables



Project No. 786767

2.2 Research Papers and Publications

2.2.1 List of Publications

All along the project, we have published 19 papers, 2 posters and one chapter in a book. Those present different kinds of results related to PAPAYA. They mainly correspond to scientific results related to cryptographic techniques and their application to machine learning, PETs, and Human Computer Interactions. The whole list of publications since the beginning of the project is given in Table 2. **13 new references were produced since deliverable D6.3 and are highlighted in bold in the same table**. As shown, we have published those articles in various venues including refereed conferences, workshops and journals. Among these publications, about a third represent joint works among several partners of the PAPAYA project. In particular, we have provided to the community a tutorial paper on privacy preserving Neural Network classification. This result was submitted and presented jointly by EURC, IBM, MCI and ORA during the IFIP Summer School on Privacy and Identity Management. Additionally, EURC has received the best poster award at the Open Day for Privacy, Usability and Transparency workshop (PUT) which was held in conjunction with the Privacy Enhancing Technologies Symposium (PETS 2019).

#	Туре	Title	Authors	Venue	Date	Partners
1	Article	FHE-compatible Batch Normalization for Privacy Preserving Deep Learning	A. Ibarrondo, M. Önen	14 [™] International Workshop on Data Privacy Management (DPM)	September 2018	EURC
2	Extended Abstract & Poster	A Hybrid Protocol for Private Neural Network Predictions	G. Tillem, B. Bozdemir, M. Önen	8 th edition of ICT.OPEN	March 2019	EURC
3	Article	PAPAYA: A platform for Privacy Preserving Data analytics	E. Ciceri, M. Mosconi, M. Önen, O. Ermis	ERCIM News Magazine	July 2019	EURC, MCI
4	Poster	Privacy Preserving Neural Network Classification	B. Bozdemir, G. Tillem, M. Önen, O. Ermis	Open Day for Privacy, Usability and Transparency (PUT)	July 2019	EURC

Table 2 PAPAYA publications



		(Best poster award)				
5	Article	SoK: Cryptography for Neural Networks	M. Azraoui, B. Bozdemir, S. Canard, E. Ciceri, O. Ermis, M. Mosconi, M. Önen, M. Paindavoine, B. Vialla, S. Vicini, M. Bahram, B. Rozenberg, R. Masalha	Proceedings of the IFIP Summer School on Privacy and Identity Management	August 2019	EURC, IBM, MCI, ORA
6	Article	Interactive Focus Group GDPR- compliant Dynamic Consent Management	E. Schlehahn, S. Fischer- Hübner, R. Wenning, M. Patrick, F. Karegar	Proceedings of the IFIP Summer School on Privacy and Identity Management	August 2019	KAU
7	Article	Protecting different interests in big data analytics - Current trends and solutions (position paper)	T. Timan, R. Aurajo, A. Garnier, A. V. Kiousi, Z. Mann, A. Navia- Vázquez, M. Önen, Á. Palomares	BDVA	September 2019	EURC, ATOS
8	Article	PAC: Privacy- preserving Arrhythmia Classification with Neural Networks	M. Mansouri, Mohamad, B. Bozdemir, M. Önen, O. Ermis	FPS 2019	November 2019	EURC
9	Article	SwaNN: Switching among cryptographic tools for privacy- preserving neural network predictions	G. Tillem, B. Bozdemir, M. Onen	SECRYPT 2020	July 2020	EURC



10	Article	ProteiNN: Privacy- preserving one- to-many Neural Network classifications	B. Bozdemir, O. Ermis, M. Önen	SECRYPT 2020	July 2020	EURC
11	Article	Protecting citizens' personal data and privacy: a joint effort from GDPR EU cluster research projects	R.M. de Carvalho, C. Del Prete, Y.S. Martin, R.M. Araujo Rivero, M. Önen, F.P. Schiavo, Á.C. Rumín, H. Mouratidis, J.C. Yelmo, & M.N. Koukovini	SN Computer Science 2020	2020	EURC
12	Article	Using PAPAYA for eHealth – Use Case Analysis and Requirements	A.S. Alaqra, E. Ciceri, S. Fischer- Hübner, B. Kane, M. Mosconi, S. Vicini	CBMS 2020	July 2020	MCI, KAU
13	Article	Wearable Devices and Measurement Data: An Empirical Study on eHealth and Data Sharing	A.S. Alaqra, B. Kane	CBMS 2020	July 2020	KAU
14	Article	Blind Functional Encryption	S. Canard, A. Hamdi, F. Laguillaumie	ICICS 2020	August 2020	ORA
15	Article	Data Protection: New data analytics platform eases privacy concerns for owners	M. Önen	EU Magazine Special Feature	January 2021	EURC



16	Article	Privacy- preserving Density-based Clustering	B. Bozdemir, S. Canard, O. Ermis, H. Möllering, M. Önen, T. Schneider	AsiaCCS 2021	June 2021	EURC, ORA
17	Article	WeStat: a Privacy- Preserving Mobile Data Usage Statistics System	S. Canard, N. Desmoulins, S. Hallay, A. Hamdi, D. Le Hello	IWSPA 2021	April 2021	ORA
18	Article	From Design Requirements to Effective Privacy Notifications: Empowering Users of Online Services to Make Informed Decisions	P. Murmann, F. Karegar	International Journal of Human–Computer Interaction	2021	KAU
19	Chapter	Traiter des données multimédia chiffrées grâce au chiffrement homomorphe (Chapter 6)	S. Canard, S. Carpov, C. Fontaine, R. Sirdey	Sécurité multimédia 2, Biométrie, protection et chiffrement multimédia	July 2021	ORA
20	Article	Machine Learning Based Analysis of Encrypted Medical Data In The Cloud: A Qualitative Study of Expert Stakeholders' Perspectives	A.S, Alaqra, B. Kane, S. Fischer- Hübner	Journal of Medical Internet Research - JMIR Human Factors. 07/06/2021:21810.	2021 - (forthcoming/in press)	KAU
21	Article	Vision: A Noisy Picture or a Picker Wheel to Spin? Exploring Suitable Metaphors for Differentially	F. Karegar, S. Fischer- Hübner	EuroUSEC 2021	October 2021 (accepted)	KAU



Project No. 786767

		Private Data Analyses				
22	Article	A collaborative training approach for stress detection	E. Ciceri, M. Mosconi, B. Rozenberg, R. Shmelkin	CIBB 2021	November 2021 (accepted)	IBM, MCI

2.2.2 Key Performance Indicators Regarding Publications

At the beginning of the project (see Deliverable D6.2), we have given the objective of 10 published papers at M36, hence we have surpassed our KPI by more than 50% regarding the Number of articles in conference and journals.

As an additional information, there are some ongoing works that we plan to publish after the end of the PAPAYA project. This is for example the case for some ongoing or just finished works such as:

- a new version of the WeStat cryptographic protocol;
- a new privacy-preserving trajectory clustering algorithm;
- the way to manage both functional encryption and differential privacy;
- the end user's comprehension of metaphors for differential privacy and functional versus structural explanations of privacy-enhancing crypto;
- the explanation of the model and collaborative training related to the stress detection use case.

2.3 PAPAYA open-source solutions

Among the different innovation results of PAPAYA, the software solutions enumerated in Table 3 are released open-source.

Project Result	Partner	Licence	URL	Potential release date
Platform for Privacy Preserving Analytics	IBM	MIT	https://github.com/papaya-project/papaya- platform	January 2022
Privacy- preserving arrhythmia classification	EURC	МІТ	https://github.com/papaya-project/papaya- pac	published

Table 2 DADAVA	anan agurag	adutiona
I ADIE S FAFATA	open-source	Solutions



Project No. 786767

Privacy preserving trajectory clustering	EURC	МІТ	https://github.com/papaya-project/papaya- pptraclus	January 2022
Extended PIA Tool	KAU	GNU General Public License v3.0	https://github.com/papaya-h2020/pia	published
Tools for explaining privacy- preserving data analytics	KAU	Apache 2.0	https://git.cs.kau.se/papaya	published
Privacy Engine: Data Subject Right Manager	Atos	GPLv2	https://github.com/papaya-project/privacy- engine	March 2022
Privacy Engine: Privacy Preferences Manager	Atos	GPLv2	https://github.com/papaya-project/privacy- engine	March 2022

2.4 Events and Networking

All along the 3 years, PAPAYA members have actively promoted the project by participating in many and diverse events. The exhaustive list is given in Table 5.

PAPAYA members have also contributed to the organization of several events, and in the sequel (see Section 2.4.2), we recall and complete the list that has been given in the first version of this deliverable at M18. Among those events' organization, we should notice that some of them have been organized in collaboration with some other European projects.

The high point of the events we have organized is the PAPAYA business meeting that we detail first.

2.4.1 PAPAYA Business Workshop

Following an idea proposed by EU experts during the mid-term review, we have organized on the 15th of March 2021 a PAPAYA business workshop. The idea of this half-a-day meeting was to present the results we have obtained so far, that is the PAPAYA platform and the studied use cases, to (i) the business units (BUs) of the PAPAYA partners and (ii) the business units of some



Project No. 786767

well-chosen partners outside the consortium. Initially planned to be held by Orange at Orange Gardens near Paris, this event was eventually organized as an on-line meeting, due to the COVID-19 situation.

In addition to the members of the project and our project officer from the European Commission, 50 persons attended this meeting, among which members of Atos, IBM and Orange BUs, and people from Ericsson¹, Reply² and Sandvine³.

The full agenda of the half-day meeting is given in Table 4. It started with an overview of the project, and the description of the agenda. After that, IBM presented the PAPAYA platform with a demo. The two following sessions were dedicated to e-health and telecom use cases respectively with short presentations and demos. After that, we presented the way PAPAYA components can be used in other contexts. The end of the day was held to open discussions.

14:30 - 14:40	Opening – The PAPAYA concept	EURECOM
14:40 – 15:00	PAPAYA platform demo (20')	IBM
15:00 – 15:30	e-Health use case demo	MediaClinics
	 Privacy-preserving stress and arrhythmia detection (30') 	Italia
15:30 – 16:30	Telecom use cases demos	Orange Labs
	 Privacy-preserving mobility analytics (20') 	_
	 Privacy-preserving mobile usage statistics (20') 	
	- Threat detection (20')	
16:30 – 16:45	Coffee Break	
16:45 – 17:30	Analysis of other use cases	Orange Labs &
	 Anonymous COVID tracking use case (20') 	MediaClinics
	- PAPAYA/PoSeID-on joint use case on COVID-19	Italia
	diagnosis (20')	
17:30 - 18:00	Discussions on Exploitation Opportunities	All
18:00 - 18:30	Feedbacks on Technical Aspects	All

Table 4 PAPAYA business meeting agenda

After the meeting, we had the opportunity to discuss again with the participants, both during internal post-workshop meetings and by sending of a questionnaire to obtain feedbacks. We received three responses to our questionnaire: two of them whose company's main economic activity is in the health sector and the other one's from the public sector. Among the PAPAYA technologies, all three participants found the privacy preserving Neural Network classification "very interesting" and one of them mentioned that this component "may bring value to their healthcare customers". Regarding use cases, the two participants whose main activity is in the

¹ <u>https://www.ericsson.com/</u>

² <u>https://www.reply.com/</u>

³ <u>https://www.sandvine.com/</u>



Project No. 786767

health sector found the two health Use Cases very useful and they can be interested in adopting them. On the other hand, the third participant may be interested in adopting the privacy preserving data analytics and the threat detection use cases.

Even if we had strongly preferred to organize such an important event physically, we are very happy with the conclusions and the discussions we had with the participating BUs, during and after the meeting. This has permitted us (especially the industrial members of the PAPAYA consortium) to think about other use cases (such as fraud detection or trucks' mobility) and to confirm that the PAPAYA privacy-preserving components are seen as valuable by BUs.

2.4.2 Event Organization and Participation

As described in Deliverable D6.3 on the first dissemination and communication report, additionally to the PAPAYA Business Workshop that is described in details above, members of the PAPAYA consortium have organized several events during the first part of the project: CBMS 2019, PUT 2019, and the IFIP Summer School 2019 workshop. We here only give the new events since M18.

2.4.2.1 Events Participation

PAPAYA members have been actively promoting the project in many and diverse events listed in Table 5 (in bold, the new references since Deliverable D6.3). During the lifetime of the project, we gave a total of 37 presentations (about one each month of the project). Those events include scientific conferences and workshops (a third of the presentations), researchers' seminars from academia (a third of the presentations), and exhibitions targeting industry in different disciplines including ICT, security, law, social sciences, companies and organizations from public and private sectors, the EU commission, law makers and data protection authorities (the last third of the presentations).

#	Name of Event	Date & Place	Partner	Audience	Comment
1	DPM 2018	September 7, 2018 Barcelona, Spain	EURC	Technical audience	Presentation of the paper during the session "Privacy and Cryptography"
2	AMUSEC Forum Aix- Marseille de la cybersécurité	October 11, 2019 Marseille, France	EURC	Business, Government, ICT security professionals, academia	Melek Önen gave a keynote speech.
3	Smau International: Meet the Made in Italy Innovation	October 23-24- 25, 2018	MCI	Business, Professionals,	MCI presented its new products whose

Table 5 Events at which PAPAYA was presented by the PAPAYA consortium members



		Milan, Italy		Startups and ICT	development is related to the PAPAYA use cases
4	Digital Identity - Privacy threats and business opportunities, will the technology fix everything?	October 25, 2018 Rogaveme, Italy	EURC	EC, business, government	Melek Önen gave an overview of PAPAYA. Event organized by H2020 project PoseID-on.
5	ISSE (Information Security Solutions Europe) conference	November 6-7, 2018 Brussels, Belgium	ATOS	ICT security professionals, governments and legal communities	Alberto Crespo promoted the project at this event organized by EEMA (independent European association for e- identity and security).
6	European Big Data Value Forum (EBDVF'18)	November 12- 14, 2018 Vienna, Austria	ATOS	Industry professionals, business developers, researchers, and policy makers	Alberto Crespo participated to the workshop entitled "From data protection and privacy to fairness and trust: the way forward" and gave an overview of the PAPAYA use cases.
7	AEGIS cyber Round Table (side event of ICT 2018, one of the most important research and innovation events in Europe) ⁴	December 5, 2018 Vienna, Austria	ATOS	Industry professionals, business developers, researchers, and policy makers	ATOS participated to the round table of "Aegis Cyber", about interaction between technology and policy in the area of data privacy, and promoted PAPAYA.

⁴ After this event, PAPAYA is briefly mentioned in AEGIS's deliverable D1.5 <u>https://tssg.org/wp-con9tent/uploads/2019/03/AEGIS_deliverable_D1.5_v1.pdf</u>



8	EURECOM scientific council	February 8, 2019 Sophia- Antipolis, France	EURC	Business, academia, ICT professionals	PAPAYA's preliminary results were presented during EURECOM's scientific council.
9	Swedish Forum of Data Protection	February 19, 2019 Stockholm, Sweden	KAU	Public sector, industry and academia	Simone Fischer- Hübner gave a talk at a seminar of the Swedish "Forum för Dataskydd"/Forum for Data Protection with 50 participants. Topic: Security & Privacy Requirements for the Cloud. The work by PAPAYA was mentioned on one slide including a logo and reference to its website.
10	ICT.OPEN2019	March 20, 2019 Hilversum, Netherlands	EURC	Scientific audience. Research and professionals from ICT.	EURC presented their paper in the session "Security & Privacy".
11	Community of Users Thematic Group – Cluster meeting on GDPR compliance	March 29, 2019 Brussels, Belgium	MCI	Public sector, industry and academia	MCI team presented a poster on PAPAYA activities in relation with the GDPR.
12	Orange Research Exhibition	April 2-5, 2019 Châtillon, France	ORA	ICT researchers and professionals. Orange business partners	ORA presented their preliminary solution of ECG analysis (FHE based neural network) for PAPAYA.
13	Forum 5i	May 15, 2019	ORA	Industry, startups, key	ORA presented their preliminary



		Grenoble, France		players of the AI community	solution for PAPAYA (privacy preserving ECG classification based on neural networks ans fully homomorphic encryption).
14	Workshop on Privacy, Data Protection and Digital Identity	11 July 2019 Coimbra, Portugal	EURC	Researchers, EU project members, EU commission	EURC presented PAPAYA results.
15	Open Day on Privacy, Usability and Transparency	July 15 2019 Stockholm, Sweden	KAU, EURC	Industry, Researchers	A PAPAYA overview presentation was given by KAU at the beginning of PUT 2019 and a PAPAYA poster was presented by EURECOM and received the best poster presentation award.
16	Cyberwatching Webinar on GDPR compliance in the age of emerging technologies	18 July 2019 Webinar	KAU, EURC	Industry, Researchers, EU projects	Bridget Kane gave a talk on protecting privacy in the context of third party analytical services.
17	IFIP Summer School on Privacy and Identity Management	August 23-25 2019 Brugg/Windish, Switzerland	KAU, EURC	Public sector, industry, academia. Experts on law, social sciences, computer science and cryptography	Melek Önen is chairing this event. EURC presented the problem of privacy preserving Neural Network classification and overviewed relevant PAPAYA solutions.



18	Artificial Intelligence for Assessment (AI FORA) workshop	September 2, 2019 Berlin, Germany	KAU	Researchers. NGOs, Government	Simone Fischer- Hübner gave a talk about TETS and PETs for AI, in which also PAPAYA solutions were presented as PET examples.
19	Harmonic Innovation	September 16, 2019 Castrolibero, Italy	MCI	Innovation experts, startups, industry	MCI presented the PAPAYA project as part of the R&D projects the company is involved in.
20	Smart City Now	September 26, 2019 Milan, Italy	MCI	Public administrators, SMEs	MCI presented PAPAYA and the health-related use cases.
21	Banking mini-exhibition	September 26, 2019 Montreuil, France	ORA	OrangeBank business partners	ORA presented its work on privacy- preserving AI, using encrypted data, and its relation with the banking world.
22	Security and Privacy Research Seminar	December 2, 2019 Haifa, Israel	IBM	Security communities from academia and industry	Allon Adir presented a hybrid approach for pp training and classification of neural networks
23	International Conference on Information and Communications Security (ICICS 2020)	August 24-27, 2020 Online	ORA	Scientific audience	Adel Hamdi gave a presentation of the paper "Blind Functional Encryption"
24	EBDV Forum 2020	November 4, 2020 Online	ATOS	Scientific audience	Juan Carlos Perez and Alberto Crespo gave a talk on "Towards robust privacy preserving of data and digital



					sovereignty in European data spaces: examples from EU research projects" presentation the PAPAYA vision.
26	GDPR Cluster Technical Meeting	November 19 [,] 2020 Online	EURC	Technical audience	EURC gave a technical presentation
26	3IA event, "AI & Security"	November 25, 2020 Online	EURC	Technical audience	EURC gave a technical presentation
27	Atos Digital Show 2020	November 23- 26, 2020 Online	ATOS	ATOS business units	ATOS presented the PAPAYA project and its vision.
28	Security and Privacy by Design for Healthcare: New solutions from EU H2020 Projects to comply with GDPR webinar	December 10, 2020 Online	EURC	Technical audience	Presentation by EURC of the eHealth Use Cases of PAPAYA project
29	COSIC Seminar	December 11, 2020 Online	EURC	Technical audience	EURC gave a presentation entitled "Privacy Preserving NN Classification"
30	EPFL Seminar	January 26, 2021 Online	EURC	Technical audience	EURC gave a presentation entitled "Privacy Preserving NN Classification"
31	German Innovationskonferenz – Cybersicherheit	February, 2021 Online	KAU	Scientific audience	Simone Fischer- Hübner gave a talk presenting work from PAPAYA on the topic "Privacy als Enabler für Maschinelles Lernen"



Project No. 786767

32	Orange Research Exhibition	March, 2021 Online	ORA	ICT researchers and professionals. Orange business partners	ORA presented the PP counting using Bloom filters demonstrator
33	ISBI 2021, International Symposium on Biomedical Imaging	April 13-16, 2021 Online	EURC	Technical audience	EURC gave a technical presentation
34	ACM International Workshop on Security and Privacy Analytics	April 28, 2021 Online	ORA	Scientific audience	Adel Hamdi presented the paper describing the WeStat application.
35	Privacy Studies Journal Inaugural online Workshop 26-28 April 2021, University of Copenhagen	April 28, 2021 Online	KAU	Scientific audience	Simone Fischer- Hübner gave a talk on End User Perspectives on "Privacy Enhancing Technologies (PETs) – User studies from PRISMACLOUD & PAPAYA"
36	Privacy and Security for Emerging Technologies, TU Darmstadt	June 24, 2021 Online	EURC	Scientific audience	EURC gave a lecture on PAPAYA PP techniques
37	Cyber Week, Tel Aviv University, Israel	July 22, 2021	KAU	Scientific audience	Simone Fischer- Hübner presents HCI work related to PAPAYA in a panel session

2.4.3 Key Performance Indicators Regarding Events

At the beginning of the project (see Deliverable D6.2), we have given the objective of 20 attendances to events and 15 technical presentations at M36. As shown in Table 5, we have attended more than 30 events, including more than twenty technical presentations. Hence, we have validated our KPI regarding event metrics.



Project No. 786767

As for publications, we also plan, after the end of PAPAYA, to participate to some future events to promote the results of the project.

2.5 Collaboration with R&D projects

The PAPAYA consortium has already started to network with other initiatives and in particular, other EU H2020 Innovation Action projects and exchange knowledge and technologies, hence establishing synergies with current actions made to address the challenges tackled by PAPAYA. Such interactions contribute to maximizing the impact of dissemination activities.

A list of related EU projects that PAPAYA members are already in contact with, can be found in Table 6 with some details on the actual collaborations.

Project name	Collaboration Details
PoseID-on	Melek Önen (EURC) and Tobias Pulls (KAU) had a first interaction (a telco) with the PoseID-on project on June 26th, 2018. During this telco, the participants had the opportunity to present their respective project. It appears from the discussions that the dashboard and the PAPAYA privacy preserving analytics primitives are the points of interest of the interactions between PAPAYA and PoseID-on. PAPAYA was invited to two events organized by PoseID-on (see Table 2). Besides, PoseID-on and PAPAYA co-organized a workshop on Privacy for Public and Private organizations.
	During 2020 and 2021, the PAPAYA consortium cooperated actively with the PoSeID-on consortium, with the objective of evaluating the feasibility of integration between the two frameworks. Specifically, the PoSeID-on data subject dashboard has been evaluated of interest for the healthcare scenarios, as it allows to check data subject's consent before sharing data, and to check the types of data exchanged between applications. The two teams then set the objective of building a new use case inspired by the COVID-19 scenario. A design of a possible solution that allowed data sharing through the PoSeID-on dashboard and a tentative integration between the PAPAYA assets and the PoSeID-on dashboard have been performed. Unfortunately, the integration required more time than expected and the PoSeID-on project came to an end before the integration was fully working. Hence, we reported the designed use case as an additional one that could be better and fully developed in the future (see Deliverable D5.3 for further details).
PROMETHEUS, FutureTPM, ASTRID	On the initiative of Sébastien Canard (ORA), who is also the Technical Manager of H2020 project PROMETHEUS, the projects PAPAYA, PROMETHEUS and FutureTPM teams have got in touch during a telco,

Table 6 Collaborations with other EU projects



Project No. 786767

D6.5 – Final Dissemination and Communication Report Dissemination Level – PU

held on November 29, 2018. The teams introduced their respective projects and discussed about the interests they share and the potential fruitful collaborations. It appeared during the telco that security and privacy in data analytics is a shared topic between the projects. The parties agreed that this collaboration could be a good opportunity for dissemination and exploitation for the three projects. Hence, the parties defined a possible line of collaboration by means of the organization of a joint workshop. A fourth H2020 project, ASTRID, has been included in the collaboration. All projects collaborated in organizing a new workshop named Cyber-Security Arms Race (CYSARM) which will be held on November 15th, 2019 in London in conjunction with the 26th ACM Conference on Computer and Communications Security. TRUSTEE TRUSTEE (daTa pRivacy and cloUd SecuriTy clustEr Europe) is a cluster of European projects (H2020 and FP7), which stemmed from the Common Dissemination Booster initiative. TRUSTEE is coordinated by the CREDENTIAL project and is dedicated to develop a portfolio of commons results and solutions in the field of security and privacy for cloud After some interactions between PAPAYA's services. and CREDENTIAL's coordinating teams, PAPAYA is now a member of the TRUSTEE cluster. CyberSec4Europe During the third General Meeting in Madrid, we discussed possible synergies with the new pilot project CyberSec4Europe, in which both ATOS and KAU are involved. Simone Fischer-Hübner suggested that potential collaboration could be sparked with the upcoming IFIP Summer Schools. Both projects co-organised the IFIP Summer School in 2019 and 2020. Privacy&Us and SPECIAL PAPAYA collaborated with the EU H2020 Big Data PPP project SPECIAL (Scalable Policy-aware Linked Data Architecture For Privacy, Transparency and Compliance) and the EU H2020 MSCA TN Privacy&Us (Privacy & Usability), and jointly organized PUT 2019 and a workshop at the IFIP Summer School 2019 (see Table 2). DEFeND PAPAYA was contacted by the EU H2020 DEFeND project in order to identify some potential collaboration/synergy opportunities regarding the improvements to the CNIL PIA tool. A first meeting was held on September 23rd, 2019 in which Tobias Pulls (KAU) and Elena Gonzalez (ATOS) were involved. The two porjects are working on complementary topics. Both projects will share documentation and source code links. **GDPR Cluster Projects** PAPAYA is a member of the GDPR cluster and regularly attends to the meetings which are usually organized monthly. Eleonora Ciceri and Marco Mosconi presented PAPAYA during the physical meeting on March 2019. Orhan Ermis and Melek Önen regularly participated to monthly GDPR cluster meetings. Cyberwatching PAPAYA frequently participates to the events organized by the Cyberwatching.eu PROJECT HUB. Bridget Kane presented PAPAYA



	results during a webinar organized on July 18th, 2019. PAPAYA is also presented in the Cyberwatching.eu website.
KRAKEN and PROMETHEUS	PAPAYA partners are working on a new project proposal for the Horizon Europe call HORIZON-CL3-2021-CS-01-04 on "Scalable privacy- preserving technologies for cross-border federated computation in Europe involving personal data" with partners of the KRAKEN and PROMETHEUS projects.



Project No. 786767

3 Communication Activities

3.1 PAPAYA website

3.1.1 Website design and maintenance activities

The PAPAYA website is the public visible face of the project and one of the key channels for dissemination and communication activities. The website was released in the second month of the project lifetime (June 2018) and acquired the domain: <u>https://www.papaya-project.eu/</u>

The initial communication and dissemination plan described in deliverable D6.2 has established the key objectives regarding the website such as:

- website as a center of the information PAPAYA can provide, and initial delivery channel focused on communication and promotion of the project results;
- website as the tool for the diffusion of the PAPAYA vision, the goals and objectives, using the key messages to the potential target audiences;
- website as the key element to build the user's community;
- website as the place of all updates related to the project activities including deliverables, scientific publications, past and future events, and additional material focused on the PAPAYA project.

Some detailed information about the website has also been included in deliverable D6.1 (released at M3) that explains the original design, structure and technical issues. This deliverable and all public documents of the project are and will be available on the project website. The design of the website and in particular the menu bar is illustrated in Figure 1.

In order to provide information efficiently and convey the tasks and goals, the initial structure of the website consists of five main menus whereby each menu is divided into several submenus as follows:

- Menu "Home"
 - Latest News describes all latest news related to the project
 - Objectives describes the six main objectives of the project, namely: multi-setting data processing protocols, efficient privacy-preserving big data analytics, integrated big data analytics platform, risk management, and user-centric dashboard, end-to-end use case validation, dissemination and exploitation.
- Menu "About PAPAYA"
 - About PAPAYA provides information and facts about the project
 - Concept enumerates the four requirements defined in the description of action, namely: privacy by design, integrated platform, usability, and transparency, auditability
 - Use Case Scenarios gives details on PAPAYA's four use case scenarios
 - Technical Approach describes the five phases of the project



Project No. 786767

- Menu "Dissemination"
 - **Deliverables** enumerates the project deliverables
 - Publications provides the list of scientific publications
 - *Graphic Material* shows the dissemination and communication materials
 - Demos provides the demonstrations of the PAPAYA components and the use cases
- Menu "Partners"
 - Partners presents the six partners of the project consortium
- Menu "News"
 - *News* publishes the relevant news

	HOME ABOUT D	ISSEMINATION PARTNERS RELATED NEWS	LOON
РАРАУ	A: PlAtform for PrivAc	Y preserving data Analyti	cs
	Latest	News	
PAPAYA I Hethologie Protet RAWA be Lungean Taghie even Research and Vale Associat Participatio Participatio Participatio Participatio On me lat 72 I 10 1200 On me lat 72 I 10 1200 I 10 1000 I	DBUF easion "Privacy-preserving a - key enable of big data for Al" veryware/agi, adu, ha participard in ing data Valar Form (EUDY), which is the of the turopean Big Oata and Oab-Jones Al mouston community organized by the Big Data on BID-Val and the European Commasion (DG turoston Community organized by the Big Data on BID-Val and the European Commasion (DG and the European Commasion (DG and Cast Scientific Council of rebourg 2020, our partners from DURC have Close Scientific Council for droke privacy preserving arrhythma	Tweets brighterhead	o vother n mber at

Figure 1 PAPAYA project website

The "**Home**" page illustrates the subsection of "**Latest News**" which is constantly updated according to the project's needs: the frequently updated menus are new publications, relevant events, and other outputs. This part of the website regroups information about all dissemination and communication activities with social media networks (with a direct view of the last tweets from the PAPAYA Twitter account); the content published on the website is shared on our social media accounts.

At M6, the consortium has decided to add a new section entitled "**Related Projects**" (see Figure 2 Webpage on Related Projects): This section includes the list of relevant projects with which the project and its consortium members have started some collaborations. The dedicated page provides the short description of each project, its logo, and the link to the corresponding website.



Project No. 786767

Additionally, our team has analyzed how to use digital marketing techniques to help with the position of the PAPAYA website for a particular search. Using the numerous techniques that have been described in D6.2, we continue with the initial plan and periodically review the actual status of the website: With the help of SEO services, we continuously improve our results.

Finally, the website also integrates the social media tolls buttons such as Twitter and LinkedIn to share and promote all relevant information about the project.

Related Projects		
S DE FIAI	SPECIAL - Scalable Policy-awarE linked data arChitecture for privacy, trAnsparency and compLiance.	
	Future TPM Future Proofing the Connected World: A Quantum-Resistant Trusted Platform Module.	
POSEIDON	Poseidon Protection and control of Secured Information by means of a privacy enhanced Dashboard.	

Figure 2 Webpage on Related Projects

3.1.2 Website analytics

The PAPAYA website uses the Google Analytics service (with the privacy-friendly IP Anonymisation option). This tool, offered by Google, facilitates the collection of some analytics regarding:

- the total number of users and the number of pages viewed;
- the numbers of first-time users and sessions;
- some additional information focused on demographics, interest, traffic channels, and system aspects.

We now give the details of those figures for the whole duration of the project (period September 2018 to June 2021).

A first set of detailed information is related to the audience and shown in Figure 3 whereby:



Project No. 786767

- Users correspond to the number of visitors;
- New Users corresponds to the number of first-time visitors⁵;
- Sessions correspond to the number of sessions within the actual period;
- Number of Sessions per User gives the number of sessions a user has on average;
- Page Views corresponds to the total number of pages viewed, including repeated views;
- Pages/Session gives the average number of pages views per session;
- Average Session Duration corresponds to the time length of a session;
- **Bounce Rate** finally represents the percentage of visitors who enter the site and immediately leave after viewing one single page.



Figure 3 PAPAYA's Website Audience Overview

As shown in Figure 4, the number of sessions and users have continuously increased all along the project. One can additionally see a larger increase at the start of the last period of PAPAYA. This seems to be related to both the BU's workshop announcement and our participation to various events such as the webinars organized by the GDPR cluster.

⁵ Note that Google Analytics does not the mean to precisely know a « user ». There are several cases in which Google Analytics cannot determine that two sessions are coming from the same user, e.g. if a visitor accesses your site from multiple devices, when a visitor has multiple browsers, or if a visitor regularly deletes or blocks cookies.



Project No. 786767



Figure 4 Evolution of PAPAYA's website visitors

Figure 5 shows the information of **geographical dimensions** as the list of countries of our visitors. From this figure, we observe that more than 52% percent of users are from the USA and the other 47% are from the six EU countries.

Since last time (see Deliverable D6.3), the quantity of information from Google Analytics is less rich, with less information and less detailed. For example, we have no more access to the top channels giving the distribution of users by organic search, direct access, referral (coming from another website) of social (coming from a social network).

	Language	Users	% Users
1.	en-us	3,914	52.34%
2.	en-gb	1,011	13.52%
3.	fr-fr	268	3.58%
4.	zh-cn	232	3.10%
5.	es-es	213	2.85%
6.	itit	210	2.81%
7.	de-de	151	2.02%
8.	fr	101	1.35%
9.	de	93	1.24%
10	D. en	89	1.19%

Figure 5 PAPAYA's website visitors - Geographical Overview



Project No. 786767

3.1.3 Key Performance Indicators

At the beginning of the project (see Deliverable D6.2), we have defined a set of Key Performance Indicators for the website. As shown in Figure 4 and Table 7, we have largely reached our goals w.r.t. the number of sessions, the number of users and the percentage of new visitors, which makes our website a successful action for communicating around PAPAYA. The average session duration is not as long as expected, even if we have seen a lot of disparities all along the 3-years of the project. Regarding the percentage of new visitors, we are quite close to the expected value so that we can consider it as achieved.

Indicators	Expected (see Deliverable D6.2)	Realized
Sessions	6.000	✓ 12.575
Users	4.000	✓ 7447
Average Session Duration	2:00 min	× 1:10 min
% of New Visitors	85%	× 78.9%

Table 7 KPIs for website

Even if it will obviously be less fed that it is at the moment, the website will be maintained during at least one year, and we will continue to check the related analytics.

3.2 Social media

Social media networks have been very important dissemination tools for the PAPAYA project. These have been considered as another channel for engaging stakeholders and promoting PAPAYA results and the next steps. PAPAYA's team has decided and established all the graphic elements which were used in creating the social media accounts. With this purpose, the graphic identity was agreed to be followed in all publications to maintain the brand identity of PAPAYA project. The project has accounts in Twitter and LinkedIn which can be accessed through the following links:

- <u>https://twitter.com/ProjectPapaya</u>
- https://www.linkedin.com/company/papaya-project-eu-h2020

In order to perform successful social media communication, the consortium has established the main principles to be followed during the project lifetime.



Project No. 786767

- Be relevant: the content should be interesting;
- Be concise: the messages should be concreated, short and include the appropriate hangtags;
- Be visual: the publications should be adapted with the presence of visual aspects;
- Be active: the material should be published actively, with the frequency and regularity;
- Be involved: the partners should collaborate to generate the content, share the publications, interact with other partners and mention the project in meetings and events.

The content on each of the social media accounts has been published in parallel, adapting the needs and format in each case.

As shown in Figure 6, the number of followers for Twitter (and also for LinkedIn, even if in a smaller evolution) have constantly and regularly increased all along the project, with no major deviation. The only major increase seems to be happened at the start of the second period, when we have increased the number of tweets.



Figure 6 Evolution of Twitter & LinkedIn followers

3.2.1 Twitter

The project's Twitter account (illustrated in Figure 7) was established as one of the main tools in order to inform and promote the project findings and the last updates. The initial account was created at M2 (June 2018). At the end of the project, the statistics and numbers as follows:

- Project Account: PAPAYA Project
- Key Hashtags: #PAPAYA, #H2020, Privacy, #DataPrivacy, #Analytics, #DataAnalytics



Project No. 786767

- Key Related Accounts: @EU_H2020, @EU_Commission
- Followers: 290
- Number of Tweets: 169



Figure 7 PAPAYA's Twitter Account

In Table 8, we compare our Twitter account with the one of some related H2020 projects. It shows that we are very good compared to most of them.

Project	Account creation	Number of followers	Number of tweets
PAPAYA	June 2018	290	169
ASTRID	May 2018	116	55
BPR4GDPR	May 2018	259	110
DeFeND	July 2018	177	222
FutureTPM	January 2018	185	94
PDP4E	May 2018	124	89
PoseID-On	June 2018	161	1.414

Table 8 Twitter account comparison with other projects



Project No. 786767

PROMETHEUS	February 2018	139	34
SMOOTH	May 2018	234	317
SPECIAL	December 2016	235	251

3.2.2 LinkedIn Account

For the LinkedIn account, the consortium has decided to create a company page with a purpose to increase page visibility engaging more professional audiences with business and technical interest. The LinkedIn account was created at M5 (September 2018) following the same stylistic aspects as the Twitter account and include all branding elements (logo, cover image, hashtags). Figure 8 illustrates the LinkedIn account with the actual numbers.



Figure 8 PAPAYA's Linkedin Account

The account status at M36 is the following:

- Project Account: PAPAYA project
- Key Hashtags: #PAPAYA, #H2020, Privacy, #DataPrivacy, #Analytics, #DataAnalytics
- Key Related Accounts: @EU_H2020, @EU_Commission
- Followers: 76
- Number of Posts: 52

3.2.3 Social Media KPIs

We now present the final KPIs for the social media that were defined in the initial Dissemination and Communication Plan in Deliverable D6.2. All numbers are obtained with the help of official analytics platforms which offer us the full view and evaluation of several metrics such as several



Project No. 786767

tweets, followers and total engagement. Table 9 shows the final status related to Twitter and LinkedIn.

We can see that most of the KPIs are achieved, even if our participation in LinkedIn has not been as active as we have planned to. Indeed, we more particularly focused on Twitter because it allows a lot more interactivity than LinkedIn, which was preferable for a better communication of our activities.

Indicators	Expected (see Deliverable D6.2)	Realized
Number of Twitter followers	200	✓ 290
Number of tweets (accumulated)	150	✓ 169
Number of engagements per tweet	30	√ 32
Number of LinkedIn followers	200	× 76
Number of LinkedIn updates (accumulated)	60	× 52
Number of engagements per updates	10	✓ 10

Table 9 Social Media KPIs for PAPAYA

3.3 Press Releases and Communication Campaigns

Table 10 lists the main press releases and other communication campaigns that complement the list of events provided in Table 5.

Type of communication	Description
Announcement letter (ORA, EURC)	At M3, ORA, with the help of EURC, produced an announcement letter which communicates about the project start. The letter outlines the project context, objectives, approaches and use cases. It has been published in the PAPAYA website and social platforms.
Interview in the l'MTech blog ⁶ (EURC)	Melek Önen gave an interview at M2 to the l'MTech blog, the blog of the Institut Mines-Télécom, a group of French research schools, which EURC belongs to. The transcript of the interview is available both in French and in English, in the blog.

Table 10 Press rele	eases and Commur	nication Campaigns
---------------------	------------------	--------------------

⁶ Interview in French: <u>https://blogrecherche.wp.imt.fr/2018/06/18/papaya-plateforme-analyse-donnees-confidentielles/</u> and later translated in English: <u>https://blogrecherche.wp.imt.fr/en/2018/10/25/papaya-data-analysis-platform/</u>



Project No. 786767

Applied Crypto Group webpage ⁷ (ORA)	PAPAYA is mentioned in ORA's Applied Crypto Group webpage. Most of the people of the ORA team involved in PAPAYA is a member of this group. The page is in English.
MCI's webpage ⁸ (MCI)	PAPAYA project is described in the Research section of MCI website. The webpage, which is available in both English and Italian, outlines the context of the project, its challenges and its use cases.
ATOS Research and Innovation website ⁹ (ATOS)	PAPAYA appears in ATOS's Research and Innovation website. The page provides the key aspects of the project.
Press release and interview ¹⁰ (KAU)	Simone Fischer-Hübner and Tobias Pulls were interviewed at M7 for a press release, which gives the context of the project and outlines in clear and simple words the use cases we develop in the project. This press release is available both in English and in Swedish.
Interview at a Swedish radio (KAU)	Tobias Pulls gave at M7 an interview to a Swedish radio ¹¹ (link to the interview is not provided) which lasted ten minutes about PAPAYA scope and expected results.
Interview with CORDIS EU magazine (EURC)	Melek Önen was interviewed by CORDIS EU on PAPAYA (see https://cordis.europa.eu/article/id/428619-new-data-analytics-platform-eases-privacy-concerns-for-owners)

¹⁰ KAU's press release in English: <u>https://www.kau.se/en/cs/news/researchers-contribute-using-cloud-services-more-securely</u>. In Swedish, the interview appears in two websites (with different texts): <u>https://www.voister.se/artikel/2018/11/forskning-for-sakrare-moln/</u> and <u>http://www.mynewsdesk.com/se/karlstads_universitet/pressreleases/forskare-ska-bidra-till-saekrare-anvaendning-av-molntjaenster-2797396</u>.

⁷ Applied Crypto Group webpage; <u>https://crypto.orange-labs.fr/projects/</u>

⁸ MCI's webpage in English: <u>http://www.mediaclinics.it/en/papaya-2/</u>. In Italian: http://www.mediaclinics.it/it/papaya/

⁹ ATOS Research and Innovation website: <u>http://booklet.atosresearch.eu/node/1907</u>

¹¹ Swedish radio: <u>https://sverigesradio.se/p4</u>



Project No. 786767

4 Conclusion

All along the last 3 years, the PAPAYA project used a wide variety of communication and dissemination tools, in several multimedia and traditional formats as described in this final dissemination and communication report. The project has followed the designed strategy (see Deliverable D6.2) that in particular included the use of a uniform brand identity, successfully implemented by all partners. The materials produced by the project and the various events planned over the three years allowed reaching the key stakeholders, the target groups and the specialized targeted audience of science communicators. These materials were used at international conferences, during scientific and industrial events where key stakeholder audiences were informed of the project and its achievements.

Since Deliverable D6.3, describing an intermediate balance-sheet, all results have been improved as the project became more mature, with good results highlighted in this report. Eventually, the main relevant Dissemination and Communication KPIs are validated at the end of PAPAYA.

The efforts for the communication and dissemination of PAPAYA will continue as the partners will be using the tools after the end of the project's contract for further PAPAYA commercialization.