UPCAST
PROJECT

Draft Document

D6.3: Dissemination and Communication Plan Version 2

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Authors (organization):
Nevena Raczko (IDC)
Giorgio Micheletti (IDC)
Luis-Daniel Ibáñez (SOT)
George Konstantinidis (SOT)
Alexandros Lemperos (CACTUS)
Lorenzo Gugliotta (KUL)
Olga Papadodima (NHRF)

Abstract:
This document is the deliverable D6.3 Dissemination Strategy and Plan for the UPCAST project. It is the third deliverable of Work Package 6, "Dissemination, Communication and Outreach". It describes the goals achieved in the first year of the project by providing an overview of the various activities related to dissemination and communication. This document provides also information on how the project plans to conduct communication and dissemination activities in year 2 of the project and engage with the main stakeholders through various channels such as the website, social media and events.

Keywords:
Communication, Dissemination, Strategy Plan,

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1   Introduction

1.1   Purpose of this document

This document is the deliverable **D6.3 Dissemination Strategy and Plan Version 2.0** of the UPCAST project. It is the third deliverable of Work Package 6 of Dissemination, Communication, and Outreach.

Deliverable D6.3, outlines the communication and dissemination initiatives undertaken by the UPCAST project from January 2023 to December 2023. This document details the activities conducted within Work Package 6 focused on effectively implementing the dissemination and communication strategy. The primary objective of WP6 is to enhance the visibility of the UPCAST Project among key stakeholders and promote outputs and activities.

Aligned with the strategy outlined in D6.2 Dissemination Strategy and Plan Version 2.0 submitted in M4 April 2023, the report describes the activities in the so-called "traditional" communication channels, such as the creation of dissemination materials and event participation, and the online social media platforms, providing insights into project website updates and social media KPIs.

The document also presents the plan for its phase 2, which will cover the period of January 2024-December 2024. The plan includes actions related to upcoming events, online activities and other activities related to communication and dissemination.

The Annex of this document includes evidence of the materials generated in the first phase.

1.2   Structure of the document

D6.3 has been structured along the following major chapters:

Chapter 2 – **Dissemination and Communication Strategy** This chapter serves as an introduction to the comprehensive dissemination and communication strategy formulated during phase 1 of the project. It provides an overview of the planned approach, outlining key objectives and methodologies devised to effectively communicate project milestones and outcomes.

Chapter 3 – **Events** Diving into the realm of events, this chapter details all activities associated with the UPCAST project. It presents a chronological list of events held since the project's starting date, highlighting key moments and achievements. Additionally, the chapter delves into the creation of communication materials.

Chapter 4 – **Publications** This section compiles all publications generated throughout the project's timeline. It encompasses newsletters, press releases, and other written materials that have played a crucial role in disseminating project-related information. The chapter sheds light on the evolution of communication materials, emphasizing the role of publications in reaching a wider audience.

Chapter 5 –**Collaboration with EU Related Projects** Detailing interactions with key Horizon Europe projects funded under DATA 01-04, this chapter outlines the collaborative efforts undertaken. It explores the synergies and mutual benefits derived from engaging with other projects, contributing to a broader dissemination network and fostering collaboration within the European Union.

Chapter 6 – **Website and Social Media Platforms** Highlighting the dynamic nature of online platforms, this chapter provides updates on the official project website and social media channels such as LinkedIn, X, YouTube, and Facebook. It outlines key changes, additions, and content generation initiatives implemented since the project's inception, showcasing the evolving online presence.

Chapter 7 – **KPIs and Impact** Focusing on Key Performance Indicators (KPIs) and impact assessment, this chapter offers insights into the project's reach and engagement. It shares updates on metrics such as website visits, LinkedIn, Twitter, and Facebook interactions, providing a quantitative assessment of the dissemination strategy's effectiveness.

Chapter 8 – **Plan for Phase 2** Anticipating the future, this chapter outlines the initial plan for the second phase of the dissemination and communication strategy. It discusses strategies for building upon the successes of the initial phase, adapting to emerging trends, and addressing any challenges encountered.

Chapter 9 – **Conclusions and Next Steps** Bringing the narrative to a close, this concluding chapter reflects on the overall effectiveness of the dissemination and communication efforts. It encapsulates key learnings, successes, and challenges faced during phase 1, paving the way for the identification of next steps and considerations as the project progresses.

2 Dissemination and Communication Strategy

In D6.2, the dissemination and communication plan outlined a structured approach encompassing three distinct phases. In the following chapter, we aim to provide a comprehensive overview of the tangible outcomes and key activities undertaken from January 2023 to December 2023, specifically within the domain of Work Package 6 Communication and Dissemination.

Table 1 Communication Methodology

Target group WHO	Tools/channels WHERE	Timing WHEN	Goal WHY
• **Data scientists** • **Scientific community** • **Research Institutions** • **Related projects or initiatives**	Conferences, workshops, seminars, etc	From M3	Disseminate information about the project objectives, scientific outcomes and main milestones achieved.
	Scientific Journals Open access repositories	From M8	Knowledge sharing Disclose research results
• **Cities and public administrations**	Press releases	From M1	Inform about the project's status, goals and results
	YouTube video	From M6	Video showcasing the project objectives and results
• **Industry & SMEs** • **Data Operation Providers**	Conferences, workshops, seminars, etc	From M15	Disseminate information about the project objectives and main results achieved
• **Standardization bodies**	Conferences, workshops, seminars, etc	From M6	Disseminate information about the project objectives and main results achieved. Collect necessary input on standardisation and interoperability requirements.
• **Consumers** • **Citizens** • **Scientific and academic communities** • **All target groups and other stakeholders**	Website	From M3	Disseminate information about the project objectives, outcomes and main milestones achieved.
	Social media	From M1	Post regular updates on the project's progress Promote the information published on other channels (website, newsletter, events) Video explaining how the project impact consumers/citizens/other stakeholders' life
	Newsletters	From M6	Inform about the project's objectives, project's status, milestones, and outcomes. Promote project's events

The three communication and dissemination phases (see the figure below) were devised, considering the project's duration of 36 months. Each phase is strategically

aligned with the project's overarching objectives, allowing for a systematic and targeted dissemination of information to various stakeholders.

Throughout the specified timeframe, the activities under WP6 were particularly executed to achieve maximum impact. This included the establishment of the project's visual identity, the development and maintenance of a dynamic website, the creation and upkeep of profiles across relevant social media channels, content generation for widespread dissemination, active participation in events and conferences, organizational endeavours to enhance project visibility, proactive engagement with key stakeholders, and the generation of publications and press releases.

As we delve into the following chapter, the focus will be on shedding light on the progress made during this first period, showcasing the concerted efforts made to effectively communicate project's objectives and achievements. Describing accomplished actions and activities under the communication and dissemination plan will provide a transparent and insightful perspective on the project's outreach and impact within the specified timeframe.

Phase 1
Awareness
M1-M12

Raise awareness about the project's objectives and expected results in the wider audience possible

1) Creation of dissemination material
2) Website & linked social media accounts;
3) Participation in events with presentations
4) Liaisons with other initiatives, joint workshops;
5) Press releases.

Phase 2
Dissemination
M13-M24

Leverage the awareness raised and **relationships established** during the first year to disseminate the major scientific and technical results

1) Participation in events presenting technical results
2) Publication in scientific papers;
3) Liaisons with other EU-initiatives, associations and clusters in joint workshops and road mapping activities.

Phase 3
Valorisation
M25-M36

Maximize the potential impact achievable by the project. Creation of dissemination material

1) Participation in events presenting pilots' success stories;
2) Liaisons with other initiatives
3) Pilot-specific brochures;
4) Finalization of the exploitation plans and potential business approaches;
5) Networking with external partners, SMEs, innovative start-ups and potential investors to stage future commercial exploitation.

Figure 1 Phases of the Dissemination and Communication Plan

In Phase 1 of the project, the primary focus centered on raising awareness about the project's objectives and anticipated outcomes within a broader audience. Key activities during this phase encompassed the establishment of the project's visual identity, the development of a website, the creation of profiles across social media platforms, content generation for dissemination, participation in and organization of events and conferences, engagement with key stakeholders, and the production of publications and press releases.

Key actions
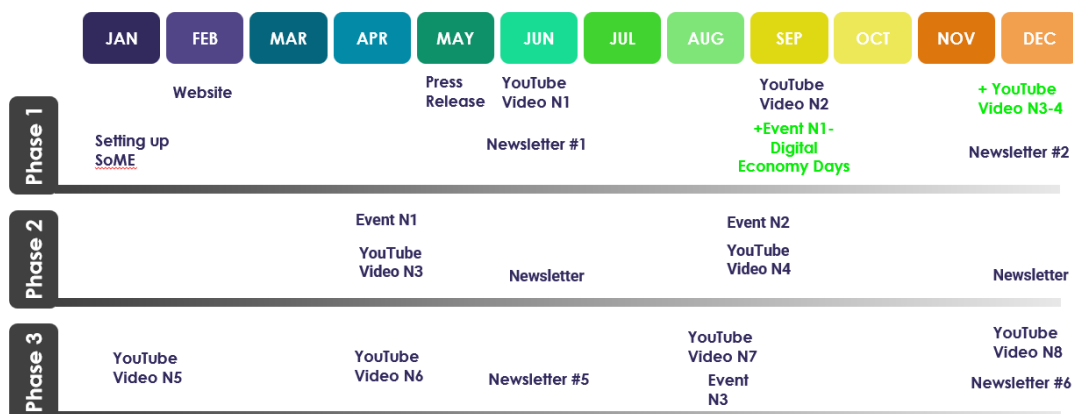
Figure 2 Updated Phase 1 Key actions planned

In the subsequent section of this document, attention will be directed towards the above-mentioned activities. With the goal of providing comprehensive updates on communication initiatives, the focus will specifically be on:

- Providing an overview of events attended or organized by the project.
- Presenting publications, including updates on scientific publications, newsletters, and press releases.
- Detailing collaborations with other Horizon Europe-funded projects and data spaces.
- Highlighting updates and changes across social media channels.
- Offering an overview of KPIs and their status at the conclusion of Phase 1.
- Outlining the approach and strategy planning for Phase 2.

2.1 Phase 1

The primary goals of the awareness phase of the communication activities were to perform preliminary analyses, collect data and use cases, fully grasp the scenarios, start building the community, and establish relationships with key stakeholders. Additionally in this phase, the main goal was to promote the project, increases awareness, sparks interest, and increases understanding of the UPCAST concepts and terms. This phase encompasses the project's first year, running *from January 2023 until the end of December 2023.*

The activities planned in this period, distinguished according to their communication, dissemination and engagement purposes, are summarised in the following Table.

Table 2 Phase 1 Communication and Dissemination activities.

Activity	Communication
• **Branding**	Setting up the visual identity Creating the logo and templates
• **Website**	Creating the website and building its structure

• **Social Media**	Registering and continuously updating the UPCAST project profiles on Twitter, LinkedIn, Facebook and YouTube.	
• **Project's Promotion**	Preparing distribution materials such as booths, brochures, gadgets etc.	
• **Events**	Join external events and present the initial phase of the project	
• **Press release**	Publishing the first official press release about the project	
• **Newsletter**	Publishing newsletters in M6 and M12 of the project	
• **Video**	Recording from events and other digital materials.	
• **Stakeholder Engagements**	Joint events, collaboration established with key partners.	
• **Publication**	Number of scientific papers officially published	

3 Events

3.1 Overview of the events

To follow and document upcoming and past speaking engagements, WP6 has set up an event tracker, accessible by all UPCAST partners from the project's repository on MS Teams and SharePoint.

The goal of the event tracker is to list all the events where the consortium partners presented the UPCAST project in externally facing events, facilitate monitoring and effectively plan new activities.

The tracker gives an overview and a detailed description of the various events and supports communication preparation prior to the events. Through this tracker, the partners are aware of the upcoming events, which lets them engage with relevant stakeholders even before the events.

The internal tracker includes the following information: event title, panel title, date & time, speaker on behalf of the project, partner, organised by, description, official link to the event, content files, and content image. The below tracker has been adjusted to the deliverable and includes the name of the event, date and time, speaker and partner involvement and link to the event.

Table 3 Overview of the events in phase 1

Name of the event	Date & Time	Speaker	Partner
Data Space Support Centre and BDVA Concertation Event for CL4-DATA-01 Projects	2023-02-23	Richard Stevens	IDC
Automated Data Sharing Agreements	2023-03-09	George Konstantinidis	SOT
AI meets complex knowledge structures: Neuro-Symbolic AI and Graph Tech	2023-03-16	Dumitru Roman	SINTEF
Data Space Symposium & Deep-Dive Day	March 21-23	2023-03-21	Luis Ibáñez	SOT

International Conference on Extending Database Technologies	2023-03-29	George Konstantinidis	SOT
Lecture on Automated Data Sharing Agreements	2023-04-03	George Konstantinidis	SOT
National Event on Open Science University of Western Macedonia	2023-04-25	George Konstantinidis	SOT
Symposium on AI, Data and Digitalization	2023-05-09	George Konstantinidis	SOT
TV Interview at Western Macedonia Greece	2023-05-13	George Konstantinidis	SOT
Semantic Conference	2023-05-28	Luis Ibáñez	SOT
MyData Conference 2023	2023-05-31	Julia Palma	CeADAR
Extended Semantic Web Conference, Project Networking session	2023-06-02	Luis Ibáñez	SOT
DATA Week 2023	**2023-06-13**	**Nevena Raczko, Richard Stevens, George Konstantinidis, Till Christopher Lech**	**IDC, SOT, SINTEF**
Open Knowledge Network Meeting	2023-06-15	Evangelos Chondrokostas	OKF
Data Science International Summer School	2023-07-20	Dumitru Roman	SINTEF
Borderless Cyber and Privacy 2023	2023-09-11	Mariza Koukovini	ICT
7th Thessaloniki International Fair, 9-17 September 2023	2013-09-13	Olga Papadodima	NHRF
Biomedicine, Bioinformatics & Biotechnology Forum: Fostering Collaboration in Industry & Academia	2023-09-15	Olga Papadodima, Eleftherios Pilalis	NHRF
Beyond Data Protection Conference: Regulating Information and Protection against Risks of the Digital Society	2023-09-22	Lorenzo Gugliotta	KUL
UPCAST Digital Economy Day Thessaloniki	**2023-09-27**	**Richard, Stevens, George Konstantinidis, Olga Papadodima, Milan Vukic, Charalampos Bratsas, Paraskevi Tarani Anestis Stamatis, Alexandros Lemperos**	**IDC, SOT, NIS, CACTUS, MDAT, OKFN, NHRF**
EBDVF 2023	**2023-10-28**	**Richard Stevens, George Konstantinidis**	**IDC, SOT**
International Semantic Web Conference 2023	2023-11-06-11	George Konstantinidis	SOT
Winter School - LLM and KGs: Bridging the Gap (6-10 November Online)	2023-11-10	Tek Raj Chhetri	SOT
Pacific Rim International Workshop on Applied Knowledge Graphs	2023-11-16	Tek Raj Chhetri	SOT
London Information Retrieval Meetup	2023-11-20	Luis Ibáñez	SOT
ICB Workshop on Chemical Biology: Drug and Biomarker Discovery	2023-11-23-25	Olga Papadodima, Eleftherios Pilalis	NHRF
Workshop "Open Climate Data Index	2023-11-30	Paraskevi Tarani, Anthi Tsakiropoulou Charalampos Bratsa	OKF, MDAT
73rd National Conference of the Hellenic Society of Biochemistry and Molecular Biology	2023-12-1	Eleftherios Pilalis	NHRF

3.2 Key highlights of the year

The following sections highlight a select set of communication and dissemination events with the participation of the UPCAST project. The events chosen are based on specific criteria, including relevance, stakeholder engagement, effectiveness of dissemination channels, and impact on collaboration and knowledge transfer.

Among these, three events—Data Week, Thessaloniki Data Economy Day, and EBDVF 2023—stand out as pivotal highlights. The UPCAST project not only participated but played a central role as the primary organizers. This involved drafting conceptual frameworks, extending invitations to speakers, orchestrating discussions, and overseeing online promotional activities.

3.2.1 DATA Week 2023 | June 13, 2023

As part of the Data Week 2023 organized by BDVA, the UPCAST project organised a session titled *"Technological Enablers for the Next-Level Data Economy"*.

The session brought together four Horizon Europe projects (UPCAST, FAME, DATAMITE, and PISTIS) that built digital technologies, solutions, and interoperable frameworks for data markets and the data economy.

The objective of the session was to facilitate discussions, generate

Figure 3 Data Week 2023

initiatives, and create synergies between these projects and the larger BDVA - Big Data Value Association community. Additionally, we aimed to share insights regarding the technologies and tools that were being developed under Horizon Europe actions and discuss best practices for the deployment of the Data Spaces Support Centre.

The session focused on the technologies, solutions, and frameworks the four projects were developing. These technologies facilitated the collection, sharing, storing, processing, trading, and reusing of data in compliance with the legal framework and satisfying the needs, expectations, and rights of the data providers, brokers, users, and data subjects.

3.2.2 Thessaloniki Data Economy Day | September 27, 2023

In September 2023, our project organized a one-day event called "Thessaloniki Data Economy Day". This event brought together professionals, experts, and enthusiasts to explore the role of data in our evolving world.

The event kicked off a keynote session featuring Stathis Konstantinidis, *the Vice Minister of Interior, Sector of Macedonia & Thrace*, and Maria Karagianni, the *Deputy Mayor of Culture and Tourism, and Chair of MDAT S.A*. Their insights set the tone for the event, offering valuable perspectives on the significance of data in Greece and Europe

Following Richard Lloyd Stevens, the Project Coordinator from IDC4EU, took the stage to provide a brief introduction to the UPCAST project. This was followed by a warm welcome and moderation in Greek by George Konstantinidis, the Scientific Coordinator from the University of Southampton, who guided the audience through the event's agenda and ensured a seamless flow of discussions throughout the day.

Data Economy Use Cases:

The first part of the event was dedicated to exploring real-world applications of data in

Figure 4 Thessaloniki Data Economy Day Poster

various sectors. The UPCAST pilots connected to the region presented their work, with additional speakers representing Horizon Europe projects taking the floor to share their insights.

Charalampos Bratsas and Paraskevi Tarani from the Major Development Agency Thessaloniki S.A. and Open Knowledge Foundation Greece discussed "Data Economy and Climate Change Policymaking – The Case of Thessaloniki," shedding light on the intersection of data and climate policy.

Anestis Stamatis and Alexandros Lemperos-Giannakos from CACTUS delved into "Digital Marketing in the Data Era," emphasizing the evolving landscape of marketing in the digital age.

Milan Vuckovic of Nissatech Innovation Centre presented "Fitness Data," exploring the implications of data in the health and fitness industry.

Evdokimos Konstantinidis from Aristotle University of Thessaloniki introduced the "RAISE Project - Opening Science Data," outlining initiatives to enhance open access to scientific data.

Vassilios Vescoukis from the National Technical University of Athens discussed "Data Infrastructures for Disaster Risk Management," highlighting challenges and standards in building repositories for disaster-related data.

Each presentation contributed to the diverse and comprehensive exploration of data's impact across different domains.

The second part of Thessaloniki Data Economy Day 2023 delved into the aspect of the event - a panel discussion focusing on the **data economy in strategic sectors and domains of public interest.** Esteemed panelists, including Savvas Rogotis from BDVA - Big Data Value Association, Olga Papadodima from the National Hellenic Research Foundation, Panagiotis Bamidis from Aristotle University of Thessaloniki, Nicos Komninos from URENIO Research (Aristotle University of Thessaloniki), and Stavros Keppas from the Laboratory of Atmospheric Physics (Aristotle University of Thessaloniki), shared their expertise and insights. Moderated by George Konstantinidis, the discussion explored the challenges, opportunities, and future implications of the data economy across various sectors. At the end of the panel attendees had the opportunity to ask questions and engage in a discussion.

The event concluded with a reception, fostering networking and collaboration among participants.

Thessaloniki Data Economy Day received a positive review that was prominently featured in local newspapers. The event's comprehensive exploration of data's transformative power, from addressing climate change to enhancing the viability of Thessaloniki, resonated well with attendees and industry experts alike.

Figure 5 UPCAST in Makedonia Newspaper

One such publication, Makthes-Makedonia, highlighted the event's significant contributions, underscoring the discussions on climate change policymaking and the broader implications for the city. The news coverage served as a testament to the event's success and its impact on fostering awareness and dialogue around the critical role of

data in today's dynamic landscape. The positive review underlines Thessaloniki's growing reputation as a hub for progressive discussions on the data economy.

In the following video we have shared a short recap from the event, which is accessible on the YouTube channel of the project.

Figure 6 Thessaloniki Data Economy Days Video Recap

3.2.3 European Big Data Value Forum | October 25-27, 2023

The European Big Data Value Forum 2023, held in Valencia, Spain from the 25th to the 27th of October, marked an important moment for the UPCAST team. Organized by the Big Data Value Association (BDVA) of which IDC and some other partners in the project are members, the event included a diverse audience of industry professionals, business developers, researchers, and policymakers from across Europe.

Figure 7 EBDVF 2023

The UPCAST team, in continuation of the collaboration kicked off at the Data Week in Lulea, together with DATAMITE, PISTIS, and FAME Horizon EU project co-organized a session titled "**Technologies for the Data Economy**." The session brought together thought leaders and experts to discuss and share insights into their projects' latest advancements.

The first part of the session featured a panel discussion moderated by Richard Lloyd Stevens from IDC4EU and UPCAST Project Coordinator. Project representatives including George Konstantinidis from UPCAST, Liliana Beltran from DATAMITE, Ernesto Troiano from FAME, and Yury Glikman from PISTIS shared the most recent findings and outcomes of their collaborative work. This exchange of knowledge and experiences contributed to the broader understanding of the challenges and opportunities within the rapidly evolving landscape of Big Data and AI.

In the second part of the panel, Jordi Arjona Aroca from ITI steered the discussion towards "Promoting Interoperability for a Flourishing Data Economy." The importance of seamless data exchange and compatibility was emphasized by contributors Raul Garcia Castro, Freek Bomhof, and Gabriel González-Castañé. Their insights shed light on the critical role of interoperability in fostering a thriving data economy, emphasizing the need for collaborative efforts to address this fundamental aspect.

As one of the official sponsors of the European Big Data Value Forum 2023, UPCAST expressed appreciation to the organizers for their work.

The European Big Data Value Forum 2023 not only provided a platform for panel discussion but also by setting up a booth we had the chance to exchange knowledge with the larger big data community.

Figure 8 UPCAST dedicated booth at EBDVF 2023 attended by Aditya Grover, WP2 Leader

3.2.4 DSSC & BDVA Concertation Event | February 23, 2023

On February 23rd, 2023, Richard Stevens (IDC) presented the UPCAST project at the **Concertation Event for CL4-Data-01 projects.** The presentation of the project included: the objectives and expected outcome in terms of a tool, the services provided, the four projects in which it will be piloted, the expected training and technology transfer to Public Administrations and SMEs that will be carried out.

The following project financed under the topic of DATA-01 were also present.

- FAME project: Ernesto Troiano (GFT)
- DATAMITE project: Daniel Sáez Domingo, Jordi Arjona (ITI)
- PISTIS project: Yury Glikman (Fraunhofer)

A short presentation from each project was followed by a round table. Questions from the audience were used to collect important information about the data monetisation platform projects.

3.2.5 Automated Data Sharing Agreements | March 9, 2023

Figure 9 Automated Data Sharing Agreements

On Thursday, March 9th for the **"Innovation and Entrepreneurship Dialogues in Healthcare"** series hosted by AUTH's Medical Physics and Digital Innovation Lab and BRESU/MEIRU, Dr. George Konstantinidis, Assistant Professor in AI at the School of Electronics and Computer Science of the University of Southampton, UK, represented the UPCAST project.

There is an evidently growing legal, cultural, and technological need for tools that allow users to express their own intentions and consent over the usage of their personal data and information. Service providers and institutions that manage personal data rely on specifying monolithic "Terms and Conditions" written in natural language and enforced in an ad-hoc manner. Often, the only degree of automation is by presenting users with top-down and coarse-grained "opt-in/out" options. Technology is developed for users to describe their personal contract of data usage in formal, machine-processable, and fine-grained languages. Unlike traditional computational privacy approaches, AUTH's Medical Physics and Digital Innovation Lab's focus is not on preserving confidentiality against an adversary, but rather on cooperating with a trusted service provider to abide by user preferences in an algorithmic way, in what we call Collaborative Privacy.
Dr. Konstantinidids presented recent results on Collaborative Privacy and applications on (i) clinical trials and (ii) relational databases, (iii) and open research data (EU project RAISE), (iv) data marketplaces (EU project UPCAST).

3.2.6 AI meets complex knowledge structures | March 16, 2023

As part of the collaboration with Norwegian Research Center for AI Innovation (NorwAI) and OsloMet, a seminar was organized on the 16th of March 30, 2023 on the topic of "AI meets complex knowledge structures: Neuro-Symbolic AI and Graph Technologies", with a scientific audience of more than 50 attendees and fostering collaborating between DataCloud, enRichMyData, Graph-Massivizer, UPCAST, and NorwAI projects. Till C. Lech From SINTEF, presented the concept of the UPCAST project and shared upcoming activities and potential topics for collaboration.

Event Description:

Neuro-Symbolic AI is currently emerging as a paradigm for developing intelligent systems that can process and recognize patterns in large amounts of data, as well as reason and make decisions based on explicit knowledge and rules. Neuro-Symbolic AI combines the strengths of symbolic reasoning and neural-based approaches. Graph technologies (Knowledge Graphs, Graph Neural Networks, graph databases, etc.) provide a natural way to represent, manage, and analyze complex knowledge structures, making them a useful tool in implementing Neuro-Symbolic AI systems. Neuro-Symbolic AI and Graph technologies have significant potential to bring value to various businesses and industries by enabling advanced decision-making and reasoning capabilities. This seminar explored recent advancements in Neuro-Symbolic AI and Graph Technologies and their relevance to practical applications.
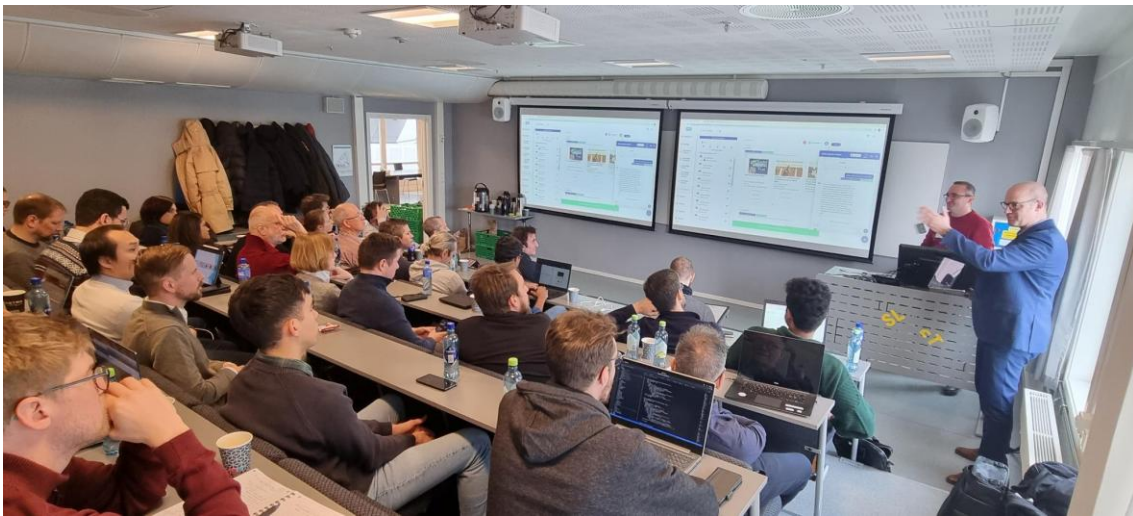
Figure 10 AI meets complex knowledge structures: Neuro-Symbolic AI and Graph Technologies Event

3.2.7 Data Space Symposium | March 21-23, 2023

The Annual event of Data Spaces Support Centre explored the needs of dataspaces initiatives, defined common requirements and established best practices to accelerate the formation of sovereign data spaces as a key element of digital transformation at all levels. From technical aspects to business several sessions were organised with experts on how the support platform works, the value for anyone and the European Commission's vision on Data Space.

UPCAST attended this event for the technical perspective, represented by Technical Coordinator, Luis-Daniel Ibáñez (SOT) to learn and participate in the latest development efforts around the IDSA architectural models and vocabularies, and to connect with existing Data Space providers. From UPCAST's point of view, it was important to attend the event, thus UPCAST's "universal plugins" can be designed for compliance with the evolving standards, and to tailor their functionalities to the needs of the ecosystem as a whole.

3.2.8 Lecture at IHU | April 3, 2023

George Konstantinidis, Assistant Professor in AI at the School of Electronics & Computer Science of the University of Southampton, delivered an inspiring lecture at the Department of Information & Electronic Engineering of the International Hellenic University - IHU.

Dr. George Konstantinidis made explicit transitions between automated data usage and sharing agreements and presented how the developed technology in the lab - handled by the professor - aims to replace the monolithic *"Terms and Conditions"* contracts written in natural language and enforced in an ad-hoc manner

Figure 11 Lecture at the International Hellenic University

The interactive speech triggered the audience's attendance by raising targeted questions that were answered in detail respectively by the professor.

3.2.9 Symposium on AI, Data and Digitalization | May 9-10, 2023

Exploring the Future of Data Marketplaces: Insights from the Symposium on AI, Data, and Digitalization

The Symposium on AI, Data, and Digitalization in Norwegian fjords, brought together industry leaders, researchers, and innovators to discuss the cutting-edge advancements in the realm of artificial intelligence, data, and digitalization. Among the participants was Dumitru Roman from SINTEF, and George Konstantinidis Assistant Professor in AI at the School of Electronics & Computer Science of the University of Southampton

During the symposium, participants had the privilege of delving into a myriad of topics, ranging from emerging technologies to the ethical implications of AI and data-driven approaches. Among the speakers was an individual who stood out with their intriguing research on technologies for future data marketplaces—highlighting the groundbreaking work being carried out under the UPCAST project.

The UPCAST project has been spearheading advancements in the realm of data marketplaces, exploring innovative solutions to facilitate the efficient exchange, management, and utilization of data. This project aims to shape the data landscape of the future, ensuring that data flows seamlessly while adhering to legal frameworks and meeting the expectations and rights of all stakeholders.

Our esteemed speaker had the opportunity to share their valuable insights and research during the symposium. Their presentation captivated the audience as they outlined the vision and progress of the UPCAST project. The session shed light on the technological advancements being made, paving the way for more efficient and secure data marketplaces that will drive innovation and collaboration.

The discussions and knowledge shared at the Symposium on AI, Data, and Digitalization were nothing short of transformative. The event provided an invaluable platform for networking and fostering collaborations among like-minded individuals and organizations passionate about shaping the future of AI and data.

As the symposium came to a close, participants left with a renewed sense of enthusiasm and inspiration, armed with fresh perspectives and ideas. The Symposium on AI, Data, and Digitalization in the Norwegian fjords was an unforgettable experience, reaffirming the significance of collective efforts in harnessing the potential of AI, data, and digitalization for a brighter future.

3.2.10 Western Macedonia Local TV Interview | May 13, 2023

Dr. George Konstantinidis of University of Southampton gave an interview to "Amphitheatre", a one-on-one interview show with domain-knowledge experts held in Western Macedonia Greece local TV station. Dr. Konstantinidis discussed the Data Economy, AI and the impact on society. In particular, how the exchange of data for powering AI models, as the ones implemented in UPCAST, would enable the implementation of transformative advancements for society.

3.2.11 Semantic Conference | May 28 , 2023

Our technical director, Dr. Luis Ibáñez from University of Southampton attended the Extended Semantic Web Conference in Crete, Greece from 28th May to 1st June

In the Trusting Decentralised Knowledge Graphs and Web Data (TrusDeKW) Workshop he presented work on "Selling Decentralised Knowledge Graphs"

Where we examine the specifics of selling Knowledge Graphs with respect to general datasets in Data Marketplaces.

Figure 12 Semantic Conference

UPCAST was also present in the Project Networking session, where we exchanged knowledge with other projects that use Semantic Web tools and models, including the potential reuse of outcomes.

3.2.12 My Data Conference | May 31, 2023

Julia Palma presented CeADAR Ireland's contributions to the UPCAST Project during the annual MyData Conference in Helsinki. In the "Data Justice in Participatory Projects" session, the expert panel, including representatives from MyData Organisation, King's College London (KCL), and Science4Change (S4C), delved into various perspectives on how data can contribute to achieving the Sustainable Development Goals (SDGs). The discussion also encompassed an exploration of the challenges and opportunities surrounding trustworthiness, equality, and fairness for data owners. The UPCAST tools, which offer specialized features for environmental impact and data valorization, garnered significant interest from the audience. These tools are designed to empower both citizens and

Figure 13 MyData 2023

administrations in making informed decisions regarding data sharing, and they have the potential to sustainably address societal challenges.

3.2.13 Open Knowledge Network Meeting | June 15-16, 2023

Figure 14 Open Knowledge Network Meeting

On 15th of June, during the official Open Knowledge Network Meeting Evangelos Chondrokostas delivered an insightful presentation about the objectives of the UPCAST project – in which the Open Knowledge Foundation Greece participates as a partner – as well as the four real-world pilots that will emerge from this project. He further elaborated on the Thessaloniki pilot, in which Open Knowledge Foundation Greece collaborates with the Major Development Agency Thessaloniki (MDAT). This specific pilot will utilize the tools that will be developed throughout the project's lifespan to facilitate the sharing of public administration data for climate across the Thessaloniki region. The interactive presentation sparked the interest of representatives from the Open Knowledge Network's chapters, who expressed their interest in the project's goals and shared their relevant experience from similar projects.

On 16th of June 2023, the Open Knowledge Network's chapters from Germany, Finland, Sweden, Japan, Nepal, Brazil, and Greece joined the Opendata.ch 2023 annual forum – a day of inspiration, innovation, and networking. Experts from research, business, government, politics, journalism, and civil society joined the forum to discuss the impact of open data and knowledge on transforming our world for the better. The forum was a great chance to meet top speakers from Switzerland and abroad and to network with like-minded individuals. Among those productive and up to date presentations, Dr. Charalampos Bratsas and Evangelos Chondrokostas from Open Knowledge Foundation Greece had the opportunity to further discuss the UPCAST project's goals and the pilot of Thessaloniki with participants from a wide scientific spectrum.

3.2.14 Borderless Cyber and Privacy | September 11-12 2023

At the **Borderless Cyber 2023** event, Dr. Mariza Koukovini, Senior Research Engineer, at ICT ABO representing the UPCAST project delivered a presentation in the session titled "Empowering Success through Operationalized Security and Privacy". Her presentation focused on framework for automating compliance of business processes and data processing workflows

GoodFlows is a solution designed to help organizations ensure compliance with data protection requirements, particularly the GDPR. It consists of two pillars: a semantic policy-based access and usage control framework, and a process planning and re-engineering framework. The access and usage control framework allows for the specification of expressive rules and real-time decision-making on access authorizations. The process planning and re-engineering framework provides a methodology for automating compliance assessment and transformation of process models. GoodFlows aims to streamline compliance efforts, reduce human errors, and support scalability and maintainability. It can be extended to other types of compliance,

including Trustworthy AI. The presentation covered compliance challenges, the main pillars of GoodFlows, and real-world examples.

Takeaways:

1. Semantic modelling of organisational assets and entities, along with their associations.
2. Comprehensive access and usage control rules specification and reasoning thereof.
3. Compliance requirements and patterns in process-based systems.
4. Automation of compliance-driven process planning and re-engineering.

3.2.15 Thessaloniki International Fair | 9-17 September 2023

The International Fair of Thessaloniki (9-17 September 2023) is one of the most significant events in the field of exhibitions in Southeastern Europe. It is a multifaceted exhibition event that is closely linked to the history of Greece's economic and cultural development. During the exhibition, the activities of the Institutes of NHRF were presented at the pavilion of NHRF by Olga Papadodima. The video of UPCAST project was presented with Greek subtitles.

Figure 15 Thessaloniki International Fair

3.2.16 Biomedicine, Bioinformatics & Biotechnology Forum | September 15-17, 2023

The Biomedicine, Bioinformatics & Biotechnology Forum took place in Athens, Greece on the 15-17th of September 2023. It aimed to bring together leading researchers, innovative biotech start-ups, and key players from the pharmaceutical and venture capital industries. Eleftherios Pilalis and Olga Papadodima from NHRF presented a poster, entitled 'Safe Fair Interoperable Genomic and Biomedical data sharing in the framework of the UPCAST project'. This was a joint work of NHRF and ICT abovo partners. The poster presented the general concept of the UPCAST project and focused on the pilot of Biomedical and Genomic data sharing. The poster described the work towards the development of semi-automated agreements to facilitate the establishment of multi-disciplinary collaborations between clinicians, biologists, and data scientists, ensuring compliance with ethical and legal issues. In addition, ways to adapt the current analytical tools and workflows of NHRF to agree with the FAIR principles and international standards to support the harmonisation and integration of heterogeneous data, were highlighted.

Figure 16 Biomedicine, Bioinformatics & Biotechnology Forum

3.2.17 Beyond Data Protection Conference | September 21-22, 2023

Lorenzo Gugliotta (KUL) attended the "Beyond Data Protection Conference" (BDPC) organised in September 2023 by Utrecht University under the auspices of the ERC INFO-LEG project. The BDPC was aimed to bring together established and early-career scholars to discuss and exchange on the present and future challenges posed by new technologies and new business models for data protection law.

At the BDPC, Lorenzo presented a research idea related to 'explainability' of algorithmic and AI-based decision-making seen through the lights of EU data protection law. As highlighted by tasks 2.3 and 4.3, explainability is going to be a key feature of UPCAST AI-assisted tools. This research aims to shed light on the evolving legal contours of the notion of 'explainability' in EU law based on previous academic debates and on case law of the EU Court of Justice, particularly the upcoming *Land Hesse* judgment.[1] The research is aimed to feed and reinforce the legal assessment of UPCAST AI-assisted tools with a view to ensuring state-of-the-art explainability methods in line with the evolving EU legal framework.

3.2.18 Winter School - LLM and KGs | November 6-11, 2023

Dr. Tek Raj Chhetri from University of Southampton was invited to give a talk on the Winter School of the KGSWC conference. The Knowledge Graph and Semantic Web Conference is an international scientific conference series devoted to knowledge graph and semantic web research. In 2023 the conference brought together researchers from the Ibero-american and Indo-america communities

The focus was on how semantic technology, particularly ontologies and knowledge graphs, can be utilized to build (or enable) the privacy-preserving and GDPR-compliance systems to enable data-driven economy. Particularly, the talk focused on the advantages that can be realized using the shared common vocabulary, e.g., ontology--the same technology used in the UPCAST project.
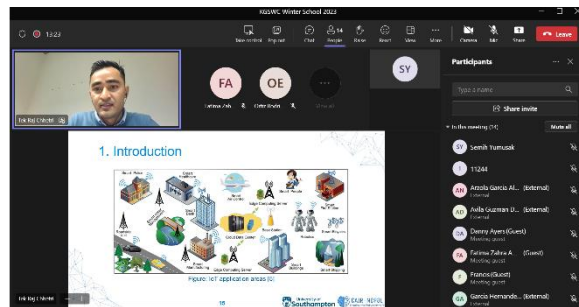
Figure 17 Winter School

In addition to GDPR compliance and privacy, the talk also focused on using knowledge graphs for explainable AI and the advantages that can be obtained in terms of improved and robust prediction when knowledge graphs are combined with deep learning

3.2.19 Pacific Rim International Workshop | November 16, 2023

A talk on the same topic was given by Dr. Chhetri from SOT in the Pacific Rim International Workshop on Applied Knowledge Graphs, a venue for Knowledge Graph researchers in the Pacific Rim area.

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[1] Case C-634/21 *OQ v Land Hesse and SCHUFA Holding* (pending) ECLI:EU:C:2023:220.

3.2.20 London Information Retrieval Meetup | November 20, 2023

The Information Retrieval Meetup is a regular forum for the exchange of ideas and advancements in the field of Information Retrieval between academics and practitioners. In it's November 2023 edition, the Meetup was a satellite event of the SearchSolutions conference. SearchSolutions is BCS Information Retrieval Specialist Group's annual event focused on practitioner issues in the arena of search and information retrieval. The objective of the conference this year is to explore the implication s and opportunities of AI-based technologies in enhancing the user experience in enterprise, e-commerce and systematic search.

Figure 18 London Information Retrieval Meetup

Dr. Luis-Daniel Ibáñez from University of Southampton gave a talk on Data Discovery, based on the work on UPCAST's Data Discovery Plugin. The talk abstract was: "A common task in Data Science practice is to search for datasets required for a given task. In this talk I will introduce the problem of dataset search (aka Discovery), explain differences and similarities with other verticals its and provide a summary of the state of the art. I will also provide an overview of the additional challenges faced as we move towards the realisation of Common Data Spaces, an abstraction to facilitate the free flow of data for common and fair exploitation by multiple actors."

3.2.21 ICB Workshop on Chemical Biology | November 23-25, 2023

Figure 19 Chemical Biology Discovery

The Workshop was organized by the Institute of Chemical Biology/NHRF and the topics included: Target identification and validation, Drug discovery and development, Omics-guided biomarkers in chemical biology and Therapeutic-Clinical approaches. Olga Papadodima (NHRF) presented the current obstacles hindering genomic data sharing and multi-sourced data integration and the UPCAST proposed solutions, with an oral presentation entitled "Generating, analysing and sharing genomic data: A study of melanoma patients and the UPCAST project". In addition, a poster was also presented during the workshop. The presented work was a joint effort of NHRF and ICT abovo partners.

3.2.22 Workshop on Open Climate Data Index | November 30, 2023

On Thursday, November 30th, the "Open Climate Data Index" workshop of the municipalities of Thessaloniki was organized by the Department of Information and Electronic Engineering of International Hellenic University in collaboration with the Open Knowledge Foundation Greek Chapter.

This initiative was organised by Charalampos Bratsas from OKFN, Assistant Professor at the Department of Information and Electronic Engineering (IHU) in collaboration with the newly formed team of Open Knowledge Foundation Greece (OKF) Student branch and the team of IEEE IHU Student. The aim of the workshop was for the students to record the datasets of the municipalities of Thessaloniki regarding environmental data.

The students of the different departments of the International University of Greece, mainly from the Department of Information and Electronic Engineering, were divided in team groups, where each group had to search for 10 datasets to consider for the selected municipalities of Thessaloniki. Their task was to search for datasets that exist in open data portals of countries and/or cities abroad that were discussed in the previous workshop. Some of them were: data concerning green spaces or Forest Cover: e.g. the extent of forests in each municipality and locations, number of trees and tree species data on the percentage of land that is green space, such as parks and public gardens

This workshop was organized in the context of the UPCAST Project and one of its pilots which concerns the 11 cities that comprise the metropolitan area of Thessaloniki and their need to realize data-driven environmental policymaking. Working under their umbrella organization, the Major Development Agency Thessaloniki (MDA), and Open Knowledge Foundation Greece (OKF Greece) this pilot will use one of the UPCAST plugins for integration and exchange of all data related to its environmental use case, thus we are planning to organize a hackathon leveraging UPCAST's platform for the Thessaloniki pilot.

3.3 Communication Materials

The project has created several communication materials that partners of the consortium and our stakeholders can leverage to promote the project. In the first months of the project, a brand book was made available on the project's website under the resources section, which is accessible to everyone. Throughout the first year, the project participated in several physical events, such as Data Week 2023 or the European Big Data Value Forum 2023 in Valencia. At the latter event, the UPCAST project had a booth for which goodies and distribution materials were created.

The goodies included business cards, multi-connector USB cables, and a roll-up.

The idea behind the business cards was twofold. The format of business cards facilitates easy distribution, and via a QR code, it allows us to share more content while limiting the environmental impact of printed materials. The idea behind the multi-connector USB cables was to associate them with the UPCAST plugins that the project is developing.
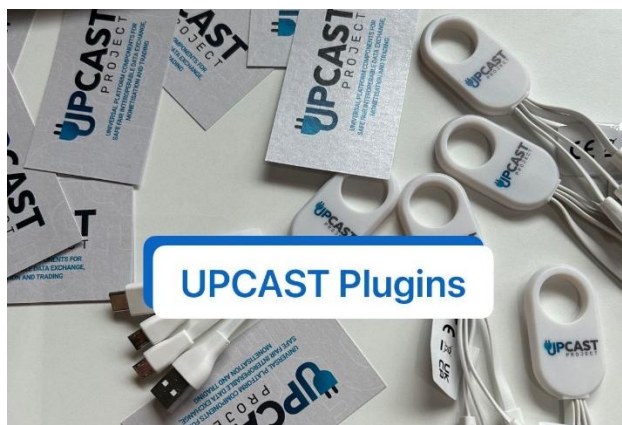

Figure 20 UPCAST Communication Materials

Figure 21 Business Card Template
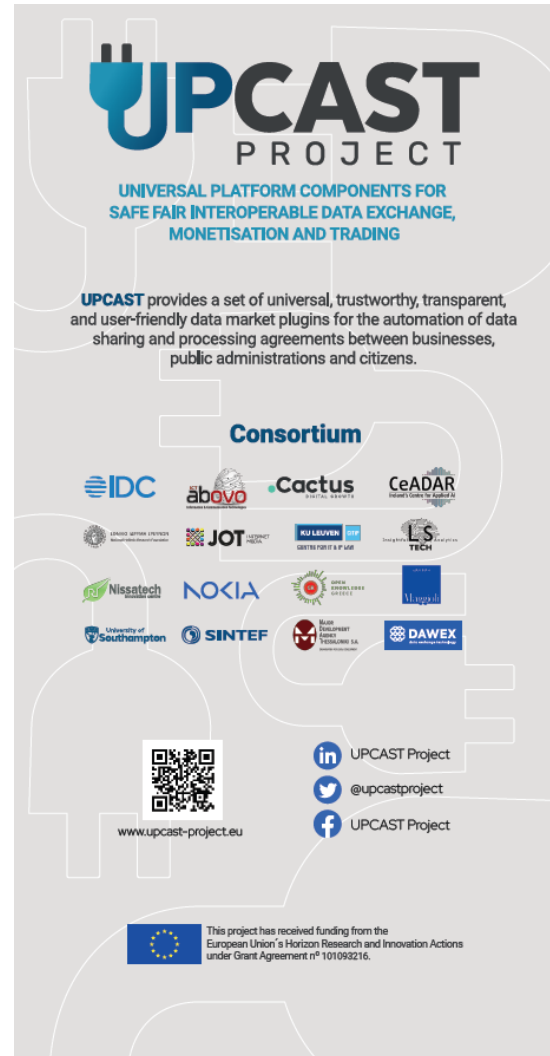

Figure 22 Project Booth

Figure 23 Upcast Booth Design

4 Publications

To ensure adoption and high visibility of UPCAST results, the consortium makes a strategic and synergic use of most effective communication means such as scientific publications.

The responsibility for coordinating publications within the project is distributed among the task leaders, with each leader overseeing the content related to their respective tasks. Specifically, publications addressing the general architecture undergo a preliminary review by the technical coordinator before dissemination. This procedural step ensures a cohesive and technically accurate representation in publications related to the project's overarching architectural framework. By implementing this coordinated approach, the project maintains a high standard of quality and consistency in its publications, fostering effective communication and information dissemination.

The table below includes the list of the publications submitted and published in the year one of the project.

Table 4 List of publications M1-M12

Title	Authors	Venue	Date	DOI	Partners
Consent Management in Data Workflows: A Graph Problem	Dorota Filipczuk, Enrico H Gerding, George Konstantinidis	Extending Database Technology	3/23	http://dx.doi.org/10.48786/edbt.2023.61	SOT
Data Marketplaces in the AI Economy.	George Konstantinidis, Luis-Daniel Ibáñez and Dumitru Roman	Symposium on AI, Data and Digitalization	4/23	https://nla.brage.unit.no/nla-xmlui/bitstream/handle/11250/3067874/SAIDD2023-Proceedings.pdf?sequence=1#page=51	SOT SINTEF
Selling Decentralized Knowledge Graphs	Luis-Daniel Ibáñez, George Konstantinidis	Trusting Decentralised Knowledge Graphs and Web Data, ESWC2023 Workshop - Knowledge Media Institute (open.ac.uk)	5/23	TrustDeKW_CameraReady.pdf (soton.ac.uk)	SOT
ForBackBench: From Database to Semantic Web mappings and back	Afnan Alhazmi, Jaime Salas Trejo and George Konstantinidis	ForBackBench: From Database to Semantic Web mappings and back	11/23	https://hozo.jp/ISWC2023_PD-Industry-proc/ISWC2023_paper_488.pdf	SOT
White Paper on the Definition of Data Intermediation Services in the DGA	Bobev, Tervel and Dessers, Vilte Kristina and Ducuing, Charlotte and Fierens, Michiel and Palumbo, Andrea and	CiTiP White Paper series	10/23	http://dx.doi.org/10.2139/ssrn.4589987	KUL

	Peeters, Bert and Stähler, Leander				
Blog post series on the EU AI Act proposal(s)	Donatella Casaburo and Lorenzo Gugliotta	CiTiP Blog	09/23	• [Blogpost 1](#) (Contex and definition of AI) • [Blogpost 2](#) (Manipulative and exploitative AI practices) • [Blogpost 3](#) (Social scoring and real-time remote biometric identification)	KUL

The summary of the different publications is included below:

1. Consent Management in Data Workflows: A Graph Problem

In modern data processing systems users expect a service provider to automatically respect their consent in all data processing within the service. However, several layers of algorithms may process data for many different purposes that create complex workflows. To date, there is no existing approach to automatically satisfy fine-grained privacy constraints of a user in a way which optimises the service provider's gains from processing. In this paper, we model a data processing workflow as a graph. User constraints and processing purposes are pairs of vertices which need to be disconnected in this graph. We propose heuristics and algorithms while at the same time we show that, in general, this problem is NP-hard. We discuss the optimality versus efficiency of our algorithms and evaluate them using synthetically generated data. On the practical side, our algorithms can provide a nearly optimal solution in the face of tens of constraints and graphs of thousands of nodes, in a few seconds.

2. Data Marketplaces in the AI Economy.

We envision a set of universal, trustworthy, transparent and user-friendly data market plugins (called UPCAST plugins) for the automation of data sharing and processing agreements between businesses, public administrations and citizens. Our foreseen plugins will enable actors in data spaces to design and deploy data exchange and trading operations guaranteeing (i) automatic negotiation of agreement terms, (ii) dynamic fair pricing, (ii) improved data-asset discovery, (iii) privacy, commercial and administrative confidentiality requirements, (iv) low environmental footprint, as well as ensuring compliance with (v) relevant legislation and (vi) ethical and responsibility guidelines. To achieve this we need to consolidate mature research in the areas of data management, privacy, monetisation, exchange and automated negotiation, considering efficiency for the environment as well as compliance with EU and international initiatives, AI regulations and ethical procedures.

3. **Selling Decentralized Knowledge Graphs**

Knowledge Graphs encode valuable information that has been so far restricted to the companies that developed them, or dependent on public subsidies. Data marketplaces have emerged as platforms where data consumers meet providers to find the data they need and willing to pay for, as an answer to the need to enable data transactions. In this position paper we examine the specifics of selling Knowledge Graphs with respect to general datasets, and how we can sell decentralized Knowledge Graphs in a decentralized way.

4. **ForBackBench: From Database to Semantic Web mappings and back**

The problems of Data Integration/Exchange (DE) and Ontology-Based Data Access (OBDA) have been extensively studied across different communities. The underlying problem is common: using a number of differently structured data-sources mapped to a mediating schema/ontology/knowledge-graph, answer a query posed on the latter. In DE, forward-chaining algorithms, collectively known as the chase, transform source data to a new materialised instance that satisfies the ontology and can be directly queried. In OBDA, backward-chaining algorithms rewrite the query over the source schema, taking the ontology into account, to execute the rewriting directly on the sources. These two reasoning approaches have seen an individual rise in algorithms, practical implementations, and benchmarks. However, there has not been a principled methodology to compare solutions across both areas. In this paper we provide an original methodology and a benchmark infrastructure - a set of test scenarios, generator and translator tools, and an experimental infrastructure - to allow the translation and execution of a DE/OBDA scenario across areas and among different chase and query-rewriting systems. In the process, we also present a syntactic restriction of linear Tuple Generating Dependencies that precisely captures DL-LiteR, a correspondence previously uninvestigated. We perform cross-approach experiments under a wide range of assumptions, such as the use of different source-to-target mapping languages, shedding light to the interplay between forward-and backward-chaining. Our preliminary results show that, indeed, chase can compete and might overcome query rewriting even in the face of large data especially for complex mapping languages.

5. **White Paper on the Definition of Data Intermediation Services in the DGA**

The White Paper provides an academic assessment of the notion of 'data intermediation service' (DIS) in the recently adopted Data Governance Act (DGA). The White Paper starts by acknowledging that the definition of DIS leaves several aspects open to interpretation. As neither institutional guidelines nor case law have been issued to date on this specific topic, the White Paper aims to critically assess all the elements of the definition of DIS and to constitute the first piece of academic guidance in the area. This White Paper will be a key resource to map the implications of the DGA for the UPCAST project and ensure its sustainability upon project completion.

6. **Blogpost series on the EU AI Act proposal(s)**

With the co-legislators still negotiating the AI Act , this series of blogposts aims to provide an introductory assessment of some of the AI Act proposal's core components: the definition of AI and the regulation of so-called 'prohibited AI practices'. To this end, these contributions present and analyse the similarities and differences between the

versions of the European Commission, of the European Parliament and of the Council. The posts critically assess the different versions to highlight the pros and cons of each from a fundamental rights perspective. These posts are the result of ongoing research into the relationship between the AI Act and the UPCAST project, which will result in continuous guidance and assessment in the development of UPCAST AI-assisted tools.

4.1 Newsletters & Press release

4.1.1 Newsletter

Since the launch of the project's website, interested stakeholders have been provided with the opportunity to subscribe to the newsletter directly from the site. This accessibility has facilitated a growing community of subscribers eager to stay up to date about the project's activities.

In general, in the newsletter the key items featured are the following: promotions of upcoming events and the release of videos on the project's YouTube channel, enhancing the dissemination of project information.

The project's first newsletter was distributed in month 7 (July 2023). That edition centered on spotlighting the initial collaborative endeavours undertaken by project partners. It encapsulated a summary of key events and highlights, encompassing all external facing activities like speaking engagements and the dissemination of various materials. The newsletter not only served as a comprehensive snapshot of the early project developments but also as a platform for engaging stakeholders.

The second newsletter, distributed in December 2023, continued with a similar format, emphasizing key highlights and achievements during the second part of the year. Notably, it showcased significant events, such as the one organized in Thessaloniki on Data Economy, offering stakeholders a detailed account of the project's progress and accomplishments.

The newsletters are enclosed in the Annex of this deliverable.

4.1.2 Press release

As anticipated, the UPCAST project is set to release multiple press statements during its development. These press releases are strategically crafted with the overarching objective of garnering attention and making an impact on the targeted stakeholders.

In line with this strategy, the first press release was successfully published and disseminated across diverse channels during month 5 (May 2023). This release marked the project's first official foray into online communication, serving as a pivotal announcement heralding the commencement of the UPCAST initiative. Within its contents, the press release not only outlined the overarching objectives of the project but also provided comprehensive insights into the planned pilot programs, thereby laying the foundation for a comprehensive understanding of the project's scope and vision.

The full press release is enclosed in the Annex 1 of this deliverable.

5 Collaboration with Related EU Projects & Initiatives:

UPCAST is a project of relevance for the development of data spaces. As such it has started to develop an active relationship with major initiatives such as GAIA-X, BDVA-DAIRO, Fiware Foundation and IDSA and in particular with the Digital Europe Programme funded Data Spaces Support Centre. The below chapters focuses on the collaboration established with projects funded under the *Technologies and solutions for data trading, monetizing, exchange and interoperability* AI, Data and Robotics Partnership-HORIZON-CL4-2022-DATA-01-04 topic.

5.1 Horizon Europe

As foreseen in D6.2 our project has established contact with a set of Horizon Europe projects. Among those projects that are already ongoing, UPCAST mainly focused its interactions with the ones indicated in Table 7below.

Table 5 Initial list of Horizon Europe projects synergies

Project Title	Project short name
DATA Monetization, Interoperability, Trading & Exchange	DATAMITE
Federated decentralized trusted dAta Marketplace for Embedded finance	FAME
Promoting and Incentivising Federated, Trusted, and Fair Sharing and Trading of Interoperable Data Assets	PISTIS
Enabling data enrichment pipelines for ai-driven business products and services	enRichMyData

The Horizon Europe projects outlined above deal with fundamental data-related topics such as data monetization, decentralized data marketplaces, interoperable data asset trading, big data sharing and data enrichment for AI-driven business products and services.

The UPCAST project as the initiator of this collaboration has set a common space on Google Drive that all other project representatives can access to share and store documents. In the common repository we develop ideas, event drafts, mailing lists etc.

The key highlights of this collaboration in this first year of the project can be illustrated by the two major events organised with the Data-01-04 projects which we described in detailed in sections 3.2.1 and 3.2.3 in Chapter 3.

1.**Data Week 2023 Lulea**

As part of the Data Week 2023 organized by Big Data Value Association (BDVA), the UPCAST project co- organised a session titled "*Technological Enablers for the Next-Level Data Economy*".

- Official agenda of the session, access here.
- Session's presentations here

2. **EBDVF 2023, Valencia**

Building on the ongoing collaboration with the Data 01-04 projects, a dynamic panel discussion titled "Technologies Enabling the Data Economy" was orchestrated at the European Big Data Value Forum in Valencia.

- Find the session's agenda **here**
- The session's presentation **here**

6 Website and Social Media Platforms

The initial list of tools and social media platforms were set up at the beginning of the project. The table below gives an overview of the current platform the project actively uses. As mentioned in the first D6.2 Dissemination report, the below list will be enriched and revised based on feedback received and the results of different KPIs. The list incorporates communication tools (i.e., social media, newsletters), which the UPCAST project aims to leverage to reach target audiences and increase efficiency. In the following chapter we will share the key updates and changes introduced.

Table 6 UPCAST List of Social Media Platforms

Social Media Platform	Link
▪ **LinkedIn**	**https://www.linkedin.com/company/upcast-project/**
▪ **Twitter**	**https://twitter.com/upcastproject**
▪ **YouTube**	**https://www.youtube.com/@upcastproject**
▪ **Facebook**	**www.facebook.com/upcastprojecteu**

6.1 Website

The development of the UPCAST website started in month 1 of the project and it serves as an entry point for external stakeholders to gather information on the various activities related to the project. In the last deliverable D6.2 (April 2023) we have reported that website contained the following sections on the Consortium, News and Events, Resources and a generic project description. Since April 2023, we have introduced new changes and edited the website. The changes are presented in the following section.
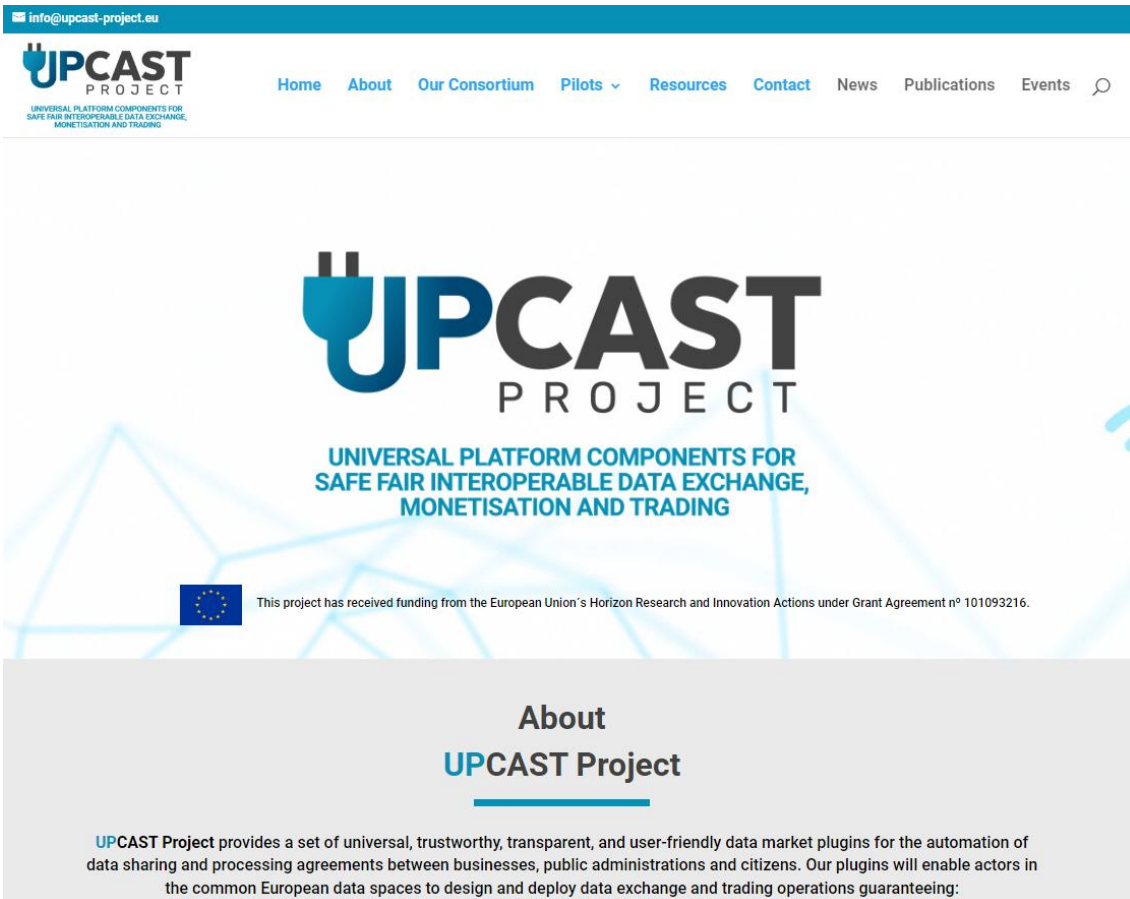
Figure 24 UPCAST Portal Landing Page

A new section was introduced describing the initial identified 4 pilots and the newly added pilot from CACTUS.
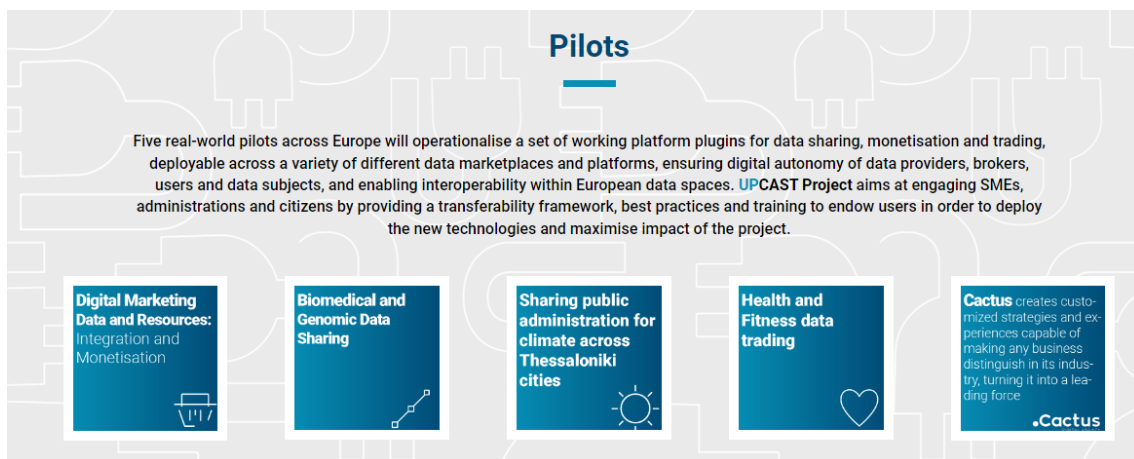

Figure 25 Pilots

Each pilot has a dedicated page where we share the key information about their activity. The pilot pages include the following:

1. Title of the pilot
2. Description of the pilot (short description explaining the key activities the pilots is pursuing)

3. Contribution to the UPCAST project (explaining their role and responsibilities in the project)
4. Link to the pilot website
5. Contact person
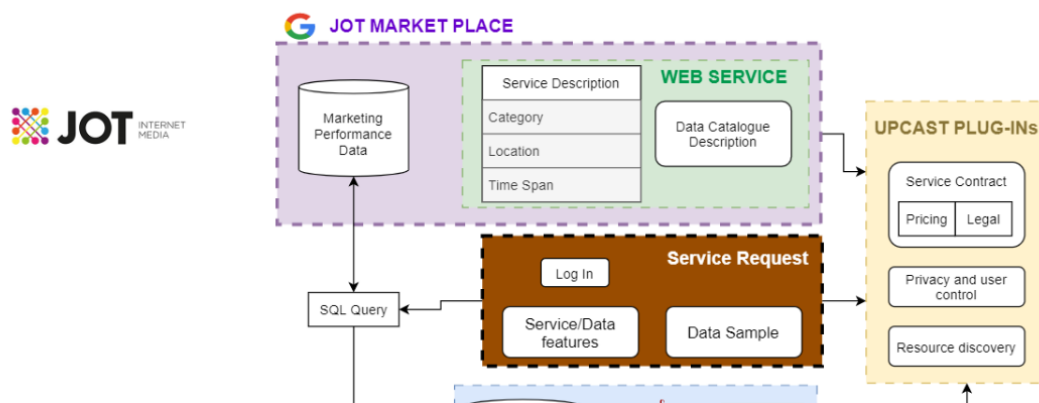6. Visuals (helping the user better understand the activity)

Figure 26 Digital Marketing Data and Resources Pilot (led by JOT) Page

News section

Under the "News" tab we have developed a page where the project shares key updates and news. In this section, users can browse through past events' descriptions, blog posts and articles. Through this channel the key activities under the WP6 Dissemination and Communication are spread to   external and internal stakeholders.

News

Unveiling the Power of Semantic Technology and Knowledge Graphs: A Journey through KGSWC-2023 and Pacific Rim International Workshop

Dec 13, 2023 | News

Our colleague, Tek Raj Chhetri from the University of Southampton, recently had the honor of participating in two prestigious events – KGSWC-2023 Winter School and the Pacific Rim International Workshop on Applied Knowledge Graphs. The heart of these gatherings...

Workshop "Open Climate Data Index"

Dec 12, 2023 | News

Workshop "Open Climate Data Index"On Thursday, November 30th, the "Open Climate Data Index" workshop of the municipalities of Thessaloniki was organized by the Department of Information and Electronic Engineering of International Hellenic University in collaboration...

Open Knowledge Network Meeting

Jul 5, 2023 | News

On 15th of June, during the official Open Knowledge Network Meeting Evangelos Chondrokostas delivered an insightful presentation about the objectives of the UPCAST project - in which the Open Knowledge Foundation Greece participates as a partner - as well as the four...

UPCAST project at the DataWeek 2023

Jul 5, 2023 | News

Symposium on AI, Data and Digitalization

Jul 5, 2023 | News

The Symposium on AI, Data, and Digitalization in Norwegian fjords, brought together industry leaders.

Semantic Conference in Greece

Jul 5, 2023 | News

Our technical director, Dr. Luis Daniel Ibáñez from University of Southampton attended the Extended Semantic Web Conference in Crete.

Figure 27 News Page

Finally ,a new page has been added under "Publications". The dedicated page includes all the publications the members of the consortium have officially published mentioning the work of the project.

Publications

Consent Management in Data Workflows: A Graph Problem

by Nerea Leza | Dec 11, 2023 | Publication

AuthorsDorota Filipczuk Enrico H Gerding George KonstantinidisUpcast partnersSotonPublishing platformExtending Database Technology

Data Marketplaces in the AI Economy

by Nerea Leza | Dec 11, 2023 | Publication

AuthorsGeorge Konstantinidis Luis-Daniel Ibáñez Dumitru Roman Upcast partnersSoton SINTEFPublishing platformSymposium on AI, Data and Digitalization

Selling Decentralized Knowledge Graphs

by Nerea Leza | Dec 11, 2023 | Publication

AuthorsLuis-Daniel Ibáñez George KonstantinidisUpcast partnersSotonPublishing platformTrusting Decentralised Knowledge Graphs and Web Data, ESWC2023

ForBackBench: From Database to Semantic Web mappings and back

by Nerea Leza | Dec 11, 2023 | Publication

AuthorsAfnan Alhazmi Jaime Salas Trejo George KonstantinidisUpcast partnersSotonPublishing platformForBackBench: From Database to Semantic Web mappings and back

White Paper on the Definition of Data Intermediation Services

by Nerea Leza | Dec 11, 2023 | Publication

AuthorsBobev, Tervel and Dessers Vilte Kristina and Ducuing Charlotte and Fierens Michiel and Palumbo Andrea and Peeters Bert and Stähler LeanderUpcast partnersKU LeuvenPublishing platformCiTiP White Paper series

Figure 28 Publication Page

6.2 LinkedIn

A LinkedIn account was created at the very beginning of the project, which is particularly used to communicate the key updates and information on the pilots and opportunities for stakeholders. This platform is also employed to target other initiatives and explain the role of the project. Furthermore, given the new features, the project uses this platform to advertise events and extend its database.
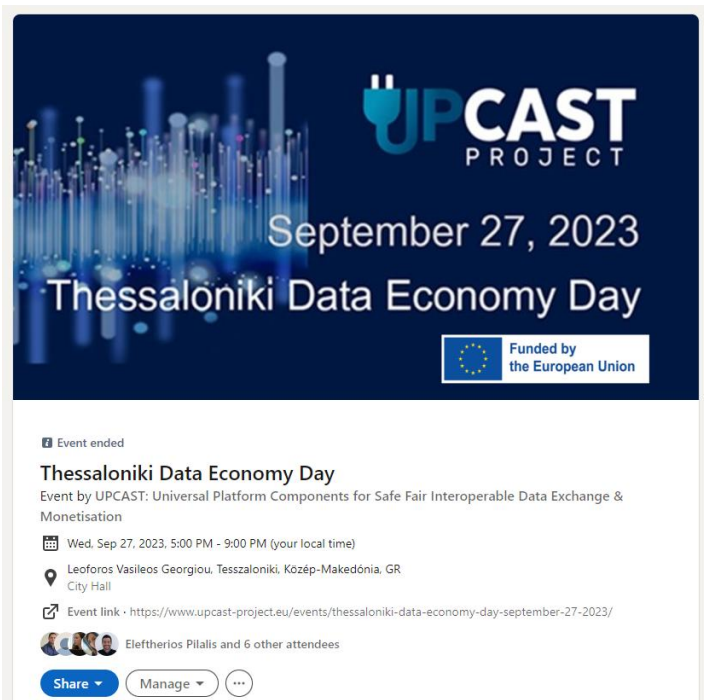
Figure 29 LinkedIn Event

Throughout the first year of the project, LinkedIn served as a platform to engage with our stakeholders. Small changes were made regarding the profile page of the project. With the update our aim was to make sure users get a better understanding of the meaning of the UPCAST abbreviation and related better to data markets and data sharing processes. Below we share the initial page and the update one.
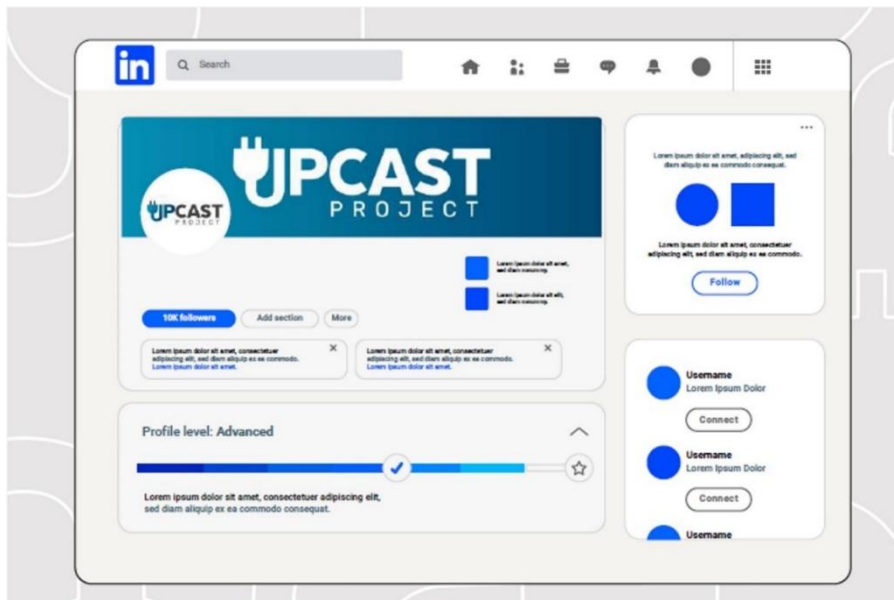
Link to the project's LinkedIn page: https://www.linkedin.com/company/upcast-project/

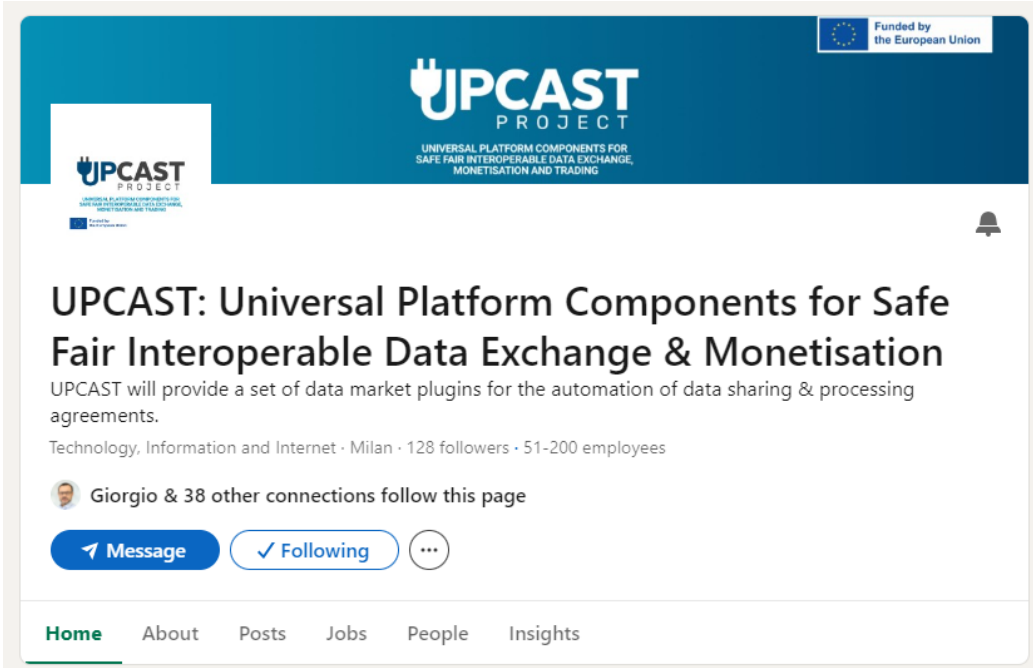*Figure 30 LinkedIn visual at the project's beginning*

Figure 31 Updated LinkedIn Visual
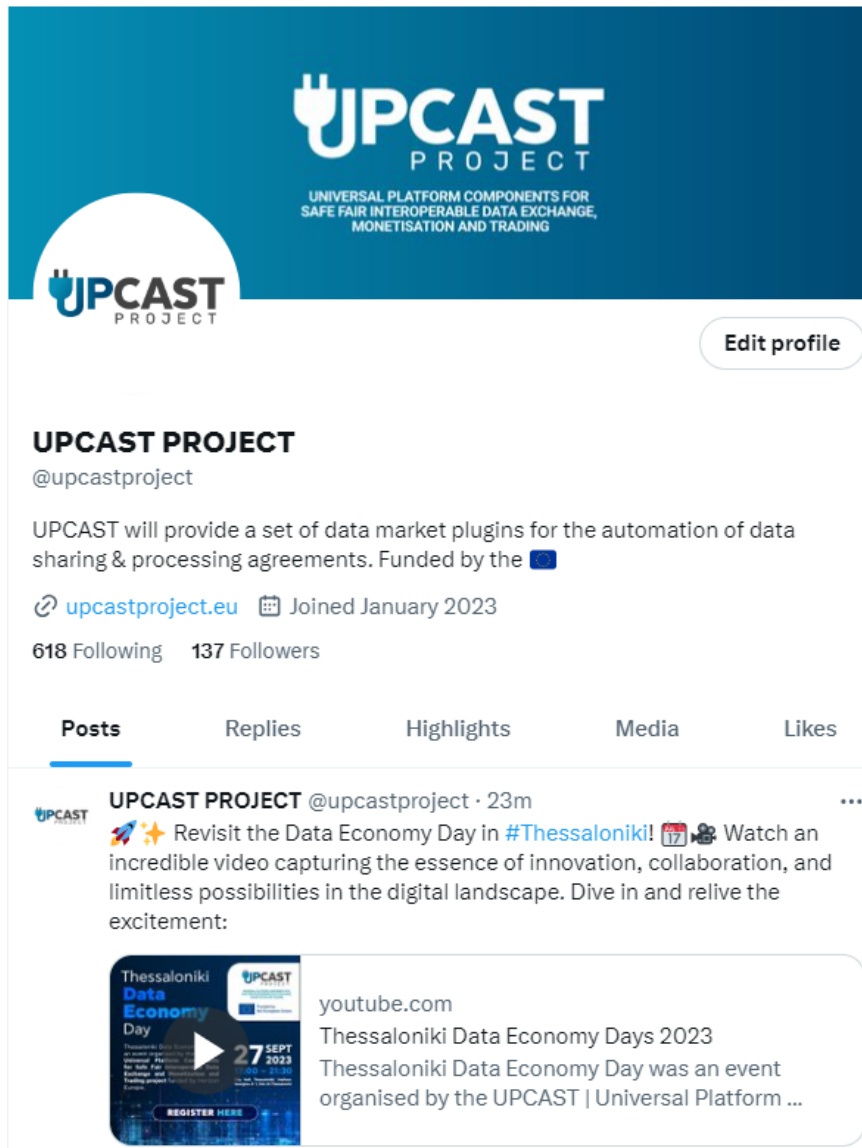
6.3 X (previously Twitter)

Figure 32 UPCAST Twitter Page

In the first year of the project, X played a role in the project, serving two primary purposes. Firstly, it is used to highlight news and outcomes of the projects. This involved disseminating information about key developments and achievements, ensuring that the broader audience was kept well-informed about the project's progress. Secondly, X served as a tool for engaging with the community. The team aimed to engage with a diverse audience, reaching out to stakeholders beyond the immediate research circle. This inclusive approach sought to involve projects, policymakers, and other relevant entities. By leveraging X as a platform for interaction, the project aimed to bridge the gap between the project's objectives and the broader community.

6.4 YouTube

A YouTube channel was set up to host all videos produced in the context of the project, either advertisement videos or recordings of webinars and events.
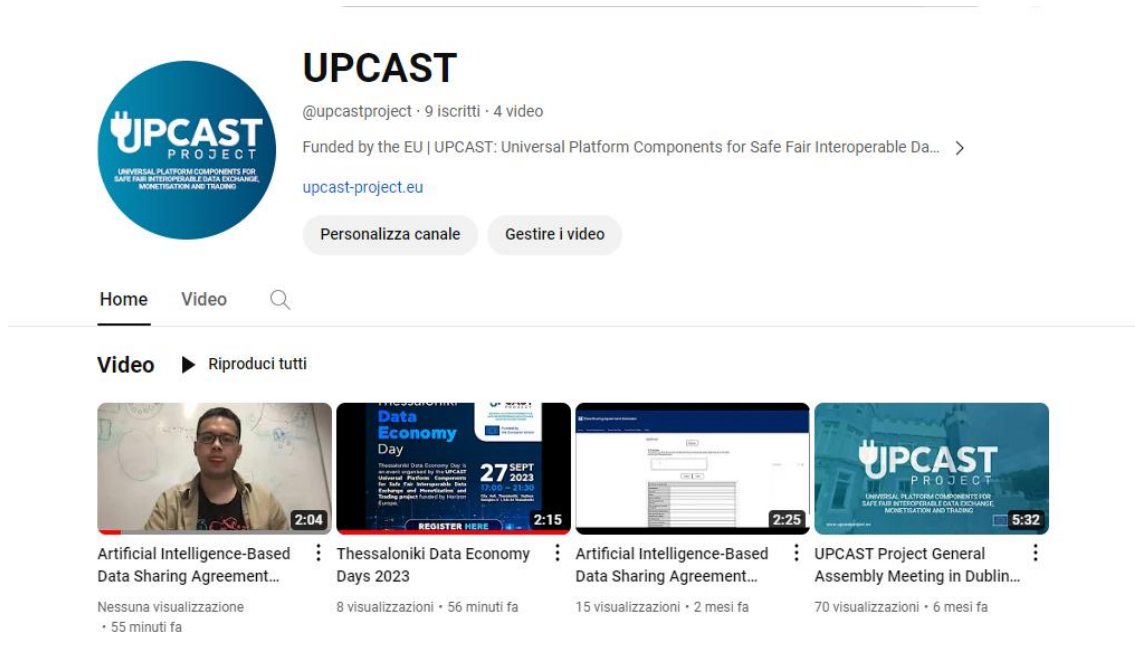
https://www.youtube.com/@upcastproject

Figure 33 YouTube Channel

In the initial project year, four videos were uploaded to the YouTube channel, offering informative content on various facets of the undertaking:

1. **UPCAST Project General Assembly Meeting:** This video presents a condensed overview of a two-day meeting convened in Dublin during April 2023. It includes interviews with the Project Coordinator, Scientific Coordinator, and a pilot representative from OKF, providing insights into the project's proceedings.

2. **Artificial Intelligence-Based Data Sharing Agreements:** This video explores the nuanced topic of artificial intelligence within the context of data-sharing agreements, delving into the project's examination of this area.

3. **Thessaloniki Data Economy 2023:** Showcasing key moments from the September 2023 Thessaloniki Data Economy event, the video features speeches by dignitaries such as Stathis Konstantinidis, Vice Minister of Interior, Sector of Macedonia & Thrace, and Maria Karagianni, Deputy Mayor of Culture and Tourism, Chair MDAT S.A., who inaugurated the event.

4. **Artificial Intelligence-Based Data Sharing Agreements Explained:** This video provides a straightforward explanation of the complexities associated with artificial intelligence-based data sharing agreements, catering to those seeking a lucid comprehension of this integral aspect of the project.

6.5 Facebook

A Facebook page was set up to share the latest updates and activities related to the project.
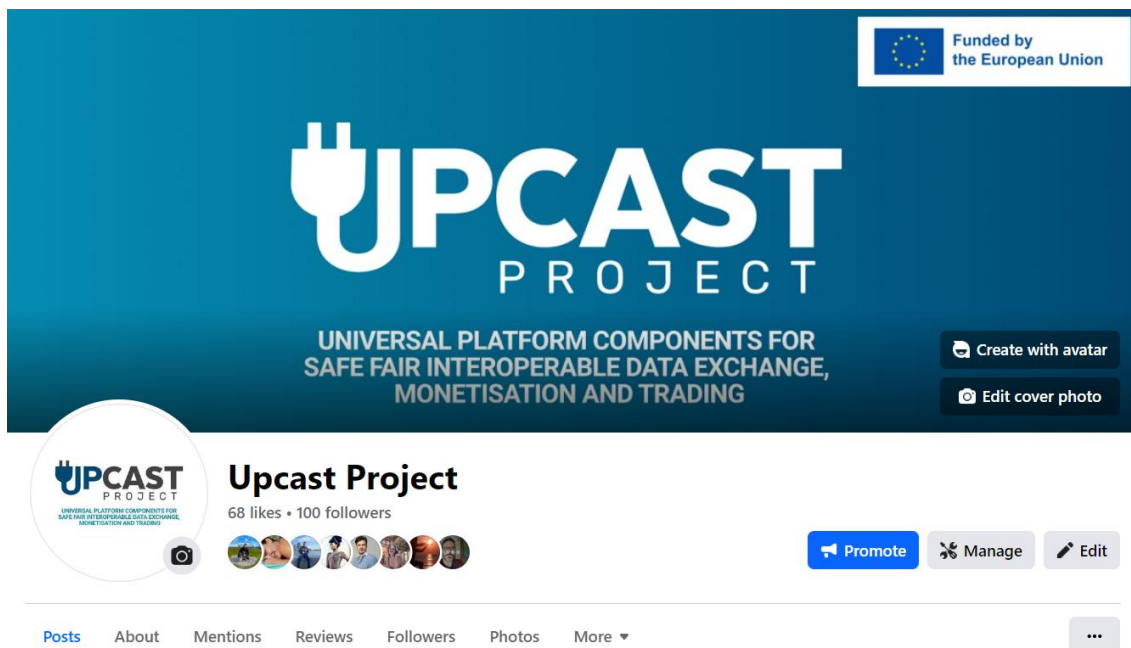
www.facebook.com/upcastprojecteu

Figure 34 UPCAST Facebook Page

7 KPIs and Impact

The table below includes the list of KPIs shared in the Grant Agreement of the project. This list is continuously enriched and revised based on feedback received and the results of different KPIs. The list incorporates communication tools (i.e. social media, newsletters), which the UPCAST project aims to leverage to reach target audiences and increase efficiency.

Table 7 Communication KPIs Overview

Tool	Metric	Year 1	Year 2	Year 3
Website	N. of unique visitors (average per year)	>1000	>2500	>4000
Facebook	N. of followers	100	>300	>800
LinkedIn	N. of followers	80	250	>500
Twitter	N. of followers	150	250	>350
YouTube	N. of uploaded videos (webinars, tutorials)	2	4	8
Events	Speech or presence in relevant forums	1	4	6
	Booth at exhibitions with live demos	-	2	4
	Poster presentations	1	3	3
	Organize project and pilots' events	-	2	3
	Communication material (Brochure, flyer, poster, roll-up, pitch deck, etc)	1(general)	5 (pilot specific)	1 (general)
Publications	N. of scientific / peer-reviewed publications	3	5	8

Press	N. of press releases N. articles in sectorial magazines	1 -	4 2	8 3
Newsletters	One issue every six months	2	2	2

In this chapter we delve into a comprehensive examination of each Key Performance Indicator (KPI), providing an in-depth exploration of their current status and elucidating the methodologies employed to achieve them.

The tables below precisely outline the Year 1 (January -December 2023) KPIs, presenting their up-to-date statistics as of December 2023. These KPIs, strategically chosen, function as pivotal checkpoints for evaluating the efficacy of the project's communication and dissemination accomplishments. They serve us the opportunity to reevaluate and reassess our planned activities, ensuring they align with our objectives and enabling a nuanced understanding of whether we are effectively targeting the intended audience.

Table 8 KPIs status Year 1

Tool	Metric	Year 1 KPI	Status end of Year 1 (as of 26 December 2023)
Website	N. of unique visitors (average per year)	>1000	**3055**
Facebook	N. of followers	100	**100**
LinkedIn	N. of followers	80	**140 (+60)**
Twitter	N. of followers	150	**175 (+25)**
YouTube	N. of uploaded videos (webinars, tutorials)	2	**4 (+2)**
Events	Speech or presence in relevant forums	1 -	23 speaking engagements in 2023
	Booth at exhibitions with live demos	1	**1 booth at EBDVF 2023**
	Poster presentations Organize project and pilots' events	-	1 poster presentation
	Communication material (Brochure, flyer, poster, roll-up, pitch deck, etc)	1(general)	**3**
Publications	N. of scientific / peer-reviewed publications	3	5
Press	N. of press releases N. articles in sectorial magazines	1 -	**1**
Newsletters	One issue every six months	2	**2**

7.1 Website KPIs Monitoring

In year one of the project the website, www.upcast-project.eu, has recorded a substantial total of 5,419 visits and has been accessed by 3,055 unique visitors during the period from January 1, 2023. Notably, we observe that the spikes in website traffic directly correlate with our active engagements and interactions with the community. These metrics underscore the impact and resonance of our initiatives, highlighting the significance of direct community involvement (for example Data Week in June and various events in the fall) in driving interest and participation.
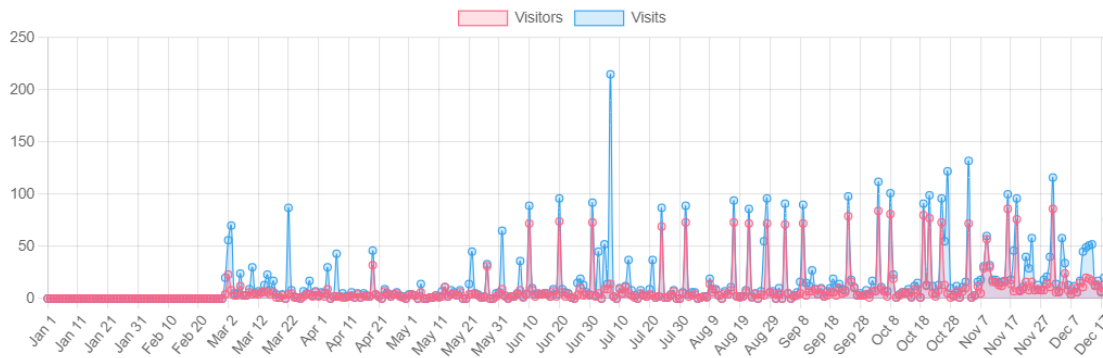

Figure 35 Visitors and Visits from January-December 2023

7.2 LinkedIn KPIs Monitoring

LinkedIn, as the most active professional networking platform, provides a comprehensive overview of visitor analytics, allowing us to analyse the number of visitors and their backgrounds. This data helps us identify monthly peaks, particularly in relation to project events or activities. The background information also assists in understanding the geographic and professional distribution of stakeholders. Notably, our top three stakeholders predominantly represent the fields of engineering, project management, and research, as indicated by the figures below. This information is vital for tailoring our engagement strategies to align with the specific interests and priorities of our key stakeholders.

Our initial goal for the first year was to attain a minimum of 80 followers on LinkedIn. Presently, our project claims 140 followers on the platform, and our aim is to further enhance this following in the second year.

We view LinkedIn as the most effective and dynamic platform for disseminating and communicating the activities and results of the UPCAST project. Notably, we observe a heightened level of engagement, with this being the sole KPI where we have exceeded expectations.

Visitor metrics ⊘

Page views ▾   All pages ▾ | All filters

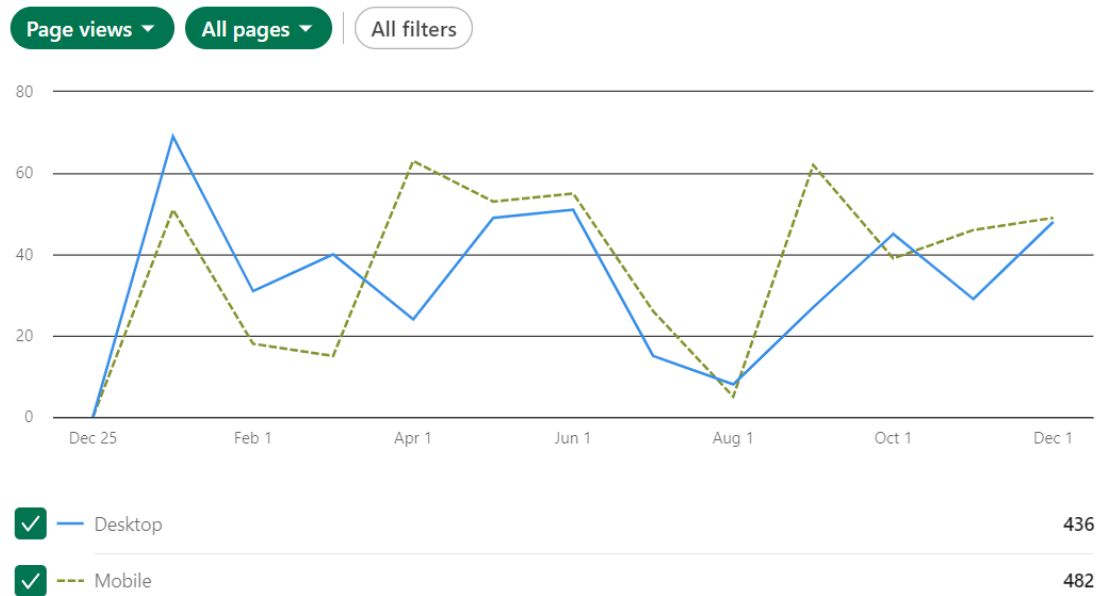|	
✓ — Desktop	436
✓ --- Mobile	482

Figure 36 Visitors Metrics December 2022-2023

The UPCAST project engages primarily with LinkedIn profiles of engineers, researchers, and program/project managers as shown on the diagram below. This intentional focus ensures alignment with the project's goals and maximizes relevance for decision-makers involved in engineering and research initiatives.
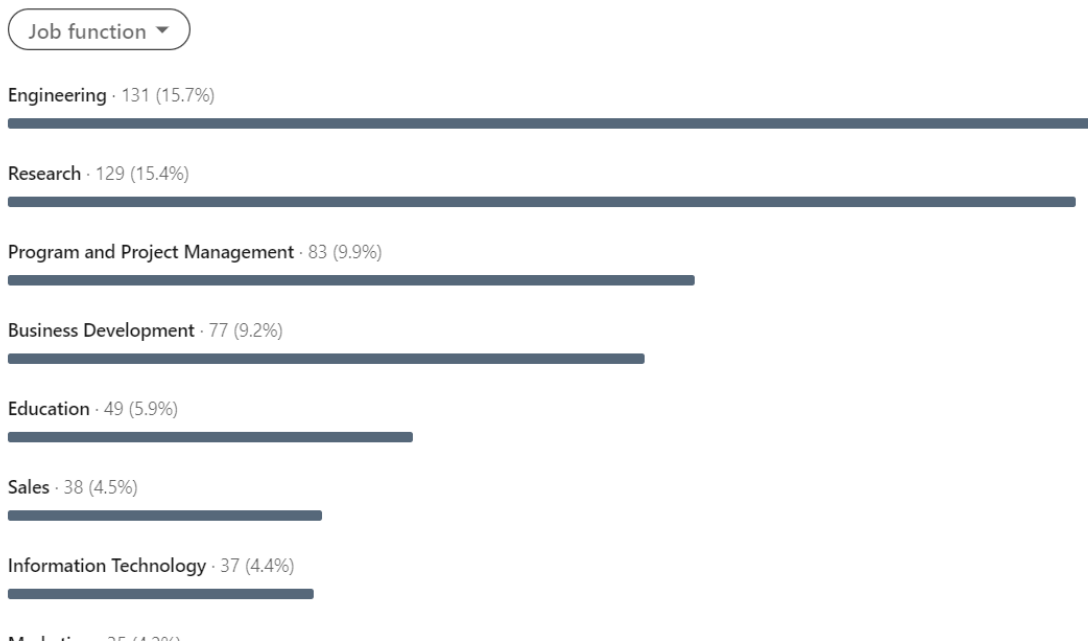
Visitor demographics ⊘

Job function ▾

Engineering · 131 (15.7%)

Research · 129 (15.4%)

Program and Project Management · 83 (9.9%)

Business Development · 77 (9.2%)

Education · 49 (5.9%)

Sales · 38 (4.5%)

Information Technology · 37 (4.4%)

Figure 37 LinkedIn Page Visitors Background December 2022-23

7.3 X (Twitter) KPIs Monitoring

We successfully achieved our targeted number of followers on the X social media platform, gaining over 170 followers in the first year of the project. However, the activity level of the profile associated with the UPCAST project was lower than anticipated. The consortium is currently in discussions regarding the continuation of active engagement on this platform. This consideration takes into account recent changes on the platform, including the name change, the profile verification process, and the proliferation of misinformation and disinformation.

As an alternative, we are exploring the possibility of utilizing other decentralized social media platforms like Mastodon or Threads. Additionally, we are considering intensifying our efforts on other platforms, particularly LinkedIn, to enhance our project's visibility.

Figure 38 Extract of Twitter KPIs 2023

7.4 Facebook KPIs Monitoring

During the initial phase of the project, we acquired 100 followers on Facebook. However, similar to the previous platform, we observed lower engagement and interaction with stakeholders. Below, we share an extract on the number of times the project's page or profile was visited, resulting in 2492 visits. We identified three peaks during the year. The first occurred at the beginning of the year when the project was introduced and presented on social media. The second peak is linked to the Thessaloniki Data Economy Days, which involved various promotions on social media. The last peak was at the end of the year when we shared the closing of the year summaries and activities.

In Phase 2, we will continue to share updates on the platform. After 6 months, the consortium will assess whether a revaluation of strategy and activity is necessary. The project's Facebook channel is managed by CACTUS
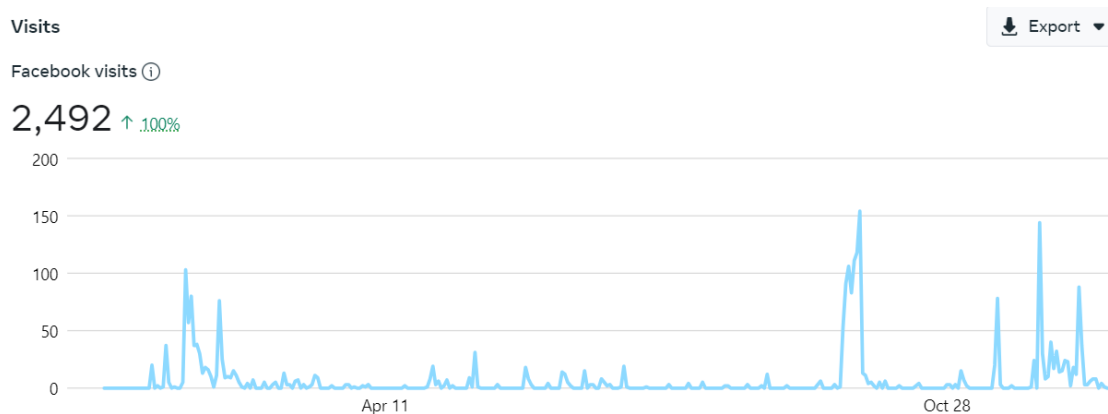
Figure 39 Extract of Facebook Visits

8 Plan for Phase 2

8.1 Overview

In the upcoming Phase 2 (January 2024 M13- December 2024 M24) of the project, our communication and dissemination efforts will strategically build upon the results and accomplishments from the initial year. The primary objective is to extend and deepen our engagement with other Horizon Europe projects, fostering collaborative initiatives and knowledge exchange. Moreover, we aim to sustain our active involvement in events, conferences, and forums, ensuring a continuous and visible presence. This approach aligns with our commitment to effectively communicate and share the project's results and contribute to a broader dissemination of activities and the establishment of valuable connections within the research and innovation community.
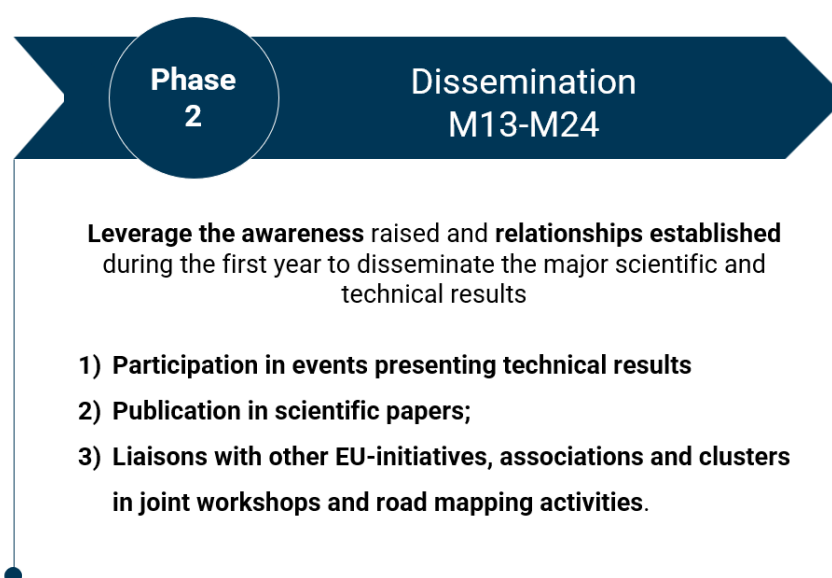

Figure 40 Phase 2 Dissemination Plan

In the figure below, we present an updated version of the key activities foreseen for Phase 2. Drawing from the insights gained in Phase 1, we have revised the initial plan outlined in D6.2. This revision involved adjusting the timing and associated actions, aligning them with the deliverables and milestones established within the framework of various Work Packages, such as the dissemination of research results.

To better promote the pilots related to the project, Phase 2 will kick off with targeted online interview videos and descriptive materials explaining their role in the project. Additionally, two events are foreseen in this phase, initiated by the project. However, the timeline for these events may be adjusted to align with other relevant community events, such as the DSSC Symposium. The planning and timeline for the newsletters remain unchanged.

Overall, this strategic alignment ensures a more synchronized and effective implementation of our communication and dissemination plan in the upcoming project phase.
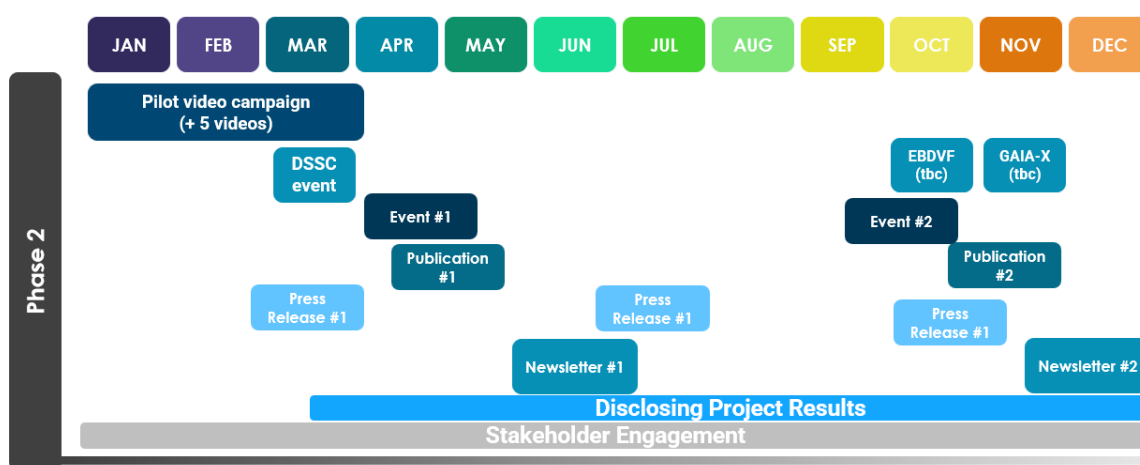
Key actions | Phase 2

Figure 41 Key Actions Phase 2

8.2 Upcoming events in 2024

In Phase 2, we have identified several upcoming events (see the table below) that are relevant to the project's activities. We anticipate active participation from partners, including speaking engagements and attendance during Phase 2. The list below is preliminary and will be continuously updated based on feedback and new entries introduced into the project's event tracker.

Table 9 Initial list of upcoming events in 2023

Events list in 2024			
Event title	**Date**	**Focus / topic / short description**	**Link to external website organization**
Data Sharing Festival	6-7 February 2024	Data sharing, data spaces	IDSA Winterdays & Data Sharing Festival - International Data Spaces

Data Spaces Symposium – Data Week 2024	12-14 March 2024	Data spaces, digital platforms	[Data Spaces Symposium | Unite. Innovate. Adopt. - International Data Spaces](#)
GAIA-X Summit	TBC	-	-
Data Week 2024	TBC	-	-
EBDVF 2024	TBC	-	-

8.3 KPIs

In the table below, we present the KPIs foreseen for Year 2 of the project and indicate the differences from the targets set in Year 1. This table provides a more detailed overview of the expected KPIs and, in addition, describes the activities foreseen to support their achievement. As the project gradually enters its next phase, along with the foreseen deliverables, etc., the targets are also set higher than in the initial phase of the project. In the upcoming deliverable on the dissemination and communication plan (V3), we will reflect on these numbers and report back on whether their achievement was realistic.

Table 10 KPIs Year 2

Tool	Metric	Year 1 difference	Year 2	Plan and key activities
Website	N. of unique visitors (average per year)		>2500	Share news, articles accessible from the website
Facebook	N. of followers	+200	>300	Social media campaigns focusing on pilots further campaigns to be developed
LinkedIn	N. of followers	+170	250	
Twitter	N. of followers	+100	250	
YouTube	N. of uploaded videos (webinars, tutorials)	+2	4	Video campaign with the pilots Explanatory videos about project developments
Events	Speech or presence in relevant forums	+3	4	Identifying relevant events and conferences.
	Booth at exhibitions with live demos	-	2	Data Spaces Symposium and EBDVF booths (TBC)
	Poster presentations	+2		
	Organize project and pilots' events	+2	3	
			2	
		+5		

	Communication material (Brochure, flyer, poster, roll-up, pitch deck, etc)		5 (pilot specific)	
Publications	N. of scientific / peer-reviewed publications	**+2**	5	Planned with the coordination of the Technical Coordination
Press	N. of press releases	**+3**	4	Specific topic and magazines to be identified with the support of the Consortium Members.
	N. articles in sectorial magazines	**+2**	2	
Newsletters	One issue every six months	**+2**	2	Continue the promotion of the newsletter and the timing.

9 Conclusions and next steps

The UPCAST dissemination and communication activities will continue to aim to enhance visibility within key stakeholders and support the promotion of outputs and activities within the data sharing and data spaces ecosystem. The dissemination and communication activities reported in this deliverable are aligned with the plan of action of the project, as well as with the dissemination and communication strategy outlined in deliverable D6.2.

As outlined in the deliverable, the project has accomplished a range of effective dissemination initiatives. These initiatives covered both online channels, including the project website, newsletter, and social media, as well as offline platforms, encompassing various events organized and attended by project representatives, which were accompanied by greater levels of engagement on social media channels and the webpage.

In this document, we have also outlined the initial plan for Phase 2, scheduled to commence from M13 (January 2024). Drawing from the lessons learned in Phase 1, the project will continue in its communication and dissemination activities, aiming to achieve the defined Key Performance Indicators (KPIs) and accomplishing the overarching objectives outlined in the project's strategic plan.

ANNEX 1: Background on WP6

WP6 on Dissemination, Communication and Outreach

This work package achieves project **objective 9** and via the following sub-objectives:

- **Obj. 6.1** To **develop and implement the dissemination and communication strategy** and plan, plan and perform the expected activities, assess their efficacy and ensure yearly improvements in the delivery and channel optimisation.

- **Obj. 6.2** To **promote exploitation of the approach to the ecosystem** including SMEs with new applications to leverage platform to generate new business ideas and opportunities.

- **Obj. 6.3** To ensure the **transferability of the UPCAST toolkit to other businesses** (including SMEs) through dedicated training and educational actions.

- **Obj. 6.4** To **ensure** that the UPCAST toolkit and the applications developed leverage and adopt the state-of-the-art standards in the area of data spaces, data modelling, interfaces and data exchange.
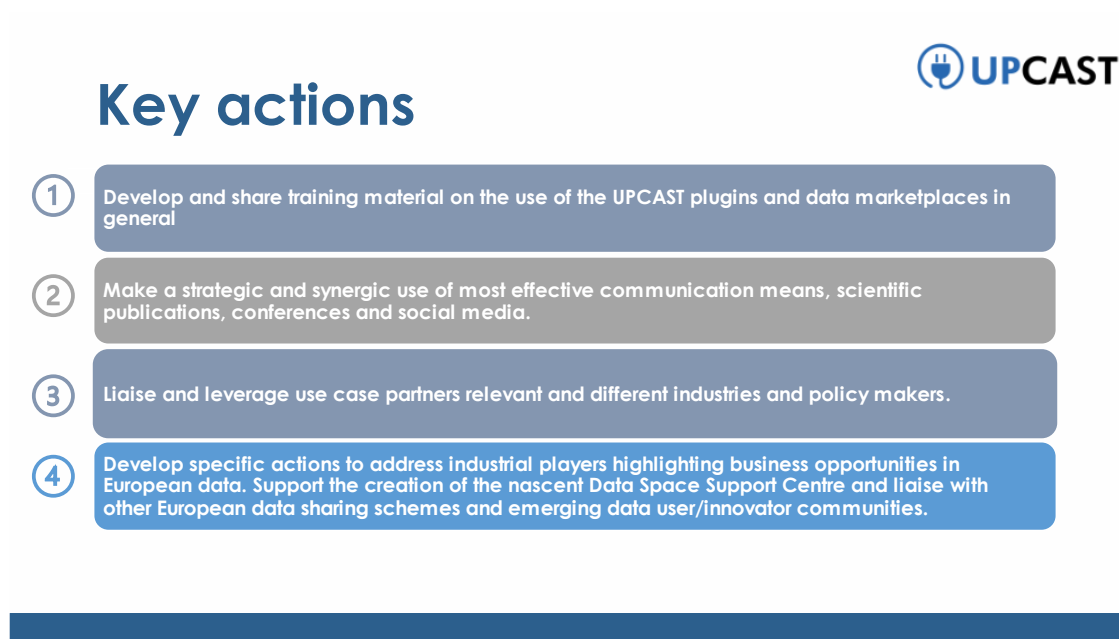

Figure 42 Key Actions of WP6

UPCAST PROJECT

UNIVERSAL PLATFORM COMPONENTS FOR SAFE FAIR INTEROPERABLE DATA EXCHANGE, MONETISATION AND TRADING

Press Release

UPCAST Project - Universal Platform Components for Safe Fair Interoperable Data Exchange, Monetisation and Trading

Milan, May 2023- A new EU funded project has officially launched with an aim to provide a set of universal, trustworthy, transparent and user-friendly data market plugins for the automation of data-sharing agreements.

Digital technologies play a pivotal role in maximising the benefits of a data-driven society and a data-based economy, but they must be firmly grounded in reliable, legal, privacy-preserving, and environmentally sound data exchange methodologies, architectures, and processes. These will enable citizens, businesses, and public administrations to process and leverage the value of an ever-increasing amount of data safely and efficiently.

"Economic and societal benefits coming from the implementation of AI and data analytics are clearly demonstrated in nearly all economic sectors and applications. Trading and monetizing data provides financial and operational advantages for all the partners in 'data as a service' and data marketplaces value chain, although contracting, pricing, security and ethics issues represent significant hurdles for smaller less experienced players. UPCAST project will help overcome these challenges, allowing European organisations to take a more proactive stance in exploiting their data" says Richard Stevens, VP Director of Government Consulting, IDC and UPCAST Project Coordinator.

1

"UPCAST aims at providing tools to reduce the friction of sharing and selling data products that can be used in any Data Space, Data Marketplace, or even for bilateral agreement. UPCAST plugins will help dataset and data operations owners to solve questions such as: How to describe them for others to discover? How to define and enforce usage policies? How to valuate them? How to ensure data processing is ethical and environmentally efficient? How to negotiate data access and pricing conditions? All these questions to be resolved are at the heart of the European policies aiming to ensure Europe's global competitiveness and data sovereignty" says George Konstantinidis, Assistant Professor in AI at the School of Electronics & Computer Science of the University of Southampton, UPCAST Project Scientific Coordinator.

The EU is striving to make data the key asset to empower our society and to enable businesses and the public sector to make better and quicker decisions. The European Strategy for Data introduced the concept of the Common European Data Spaces, with the aim to provide a seamless common digital market of personal and commercial data to facilitate value creation and growth for businesses and organizations.

The **high-level objective** of UPCAST is to design and deploy a set of universal plugins for Data **sharing, monetization and trading platforms** that enable actors in the Common European Data spaces to collaboratively **negotiate, improve and enforce data sharing contracts automatically,** providing **dynamic fair pricing** mechanisms while implementing **energy-efficient data exchange**, ensuring **privacy, confidentiality** and **legislation compliance** and adhering to **ethical** and **responsibility guidelines.**

How will UPCAST support the deployment of the Common European Data Spaces?

UPCAST will support the deployment of Common European data spaces by consolidating and acting upon mature research to solve the burning challenges of data management, privacy, valorisation, fair compensation, , exchange and automated negotiation, considering environmental efficiency as well as compliance with EU and national initiatives, relevant laws and regulations (including the upcoming EU AI Act) and ethical principles.

UPCAST Pilot demonstrations

Four real-world pilots across Europe will operationalise a set of working platform plugins for data sharing, monetisation and trading, deployable across a variety of different data marketplaces and platforms, ensuring digital autonomy of data providers, brokers, users and data subjects, and enabling interoperability within the Common European Data Spaces.

The four pilots featured by UPCAST highlight a series of data-related challenges, such as:

➢ **Data providers and consumers are not always adequately compensated for the value of their data** and don't have the tools to address the requirements underpinning secure data sharing and data processing.

2

- Several disparate data platforms and marketplaces are emerging, but **the data spaces still miss the interoperability tools** to exploit synergies and solve data tasks across users and platforms.
- Data sharing is commonly **impeded by the complex process of drafting and implementing formal contractual agreements** specific to privacy, regulation and other custom requirements of data sharing. These contracts quickly become obsolete for new applications or different stakeholders, discouraging new transactions.

Pilot 1 - Digital Marketing Data and Resources: Integration and monetisation

Digital marketing is a rising industry with a high economic and sociocultural impact. Thanks to the data collection about the impact and performance of the active marketing campaigns done by the SME JOT Media, interested parties can detect and analyze market trends based on a broad range of criteria: from location to business verticals for different timespans.

Pilot 2 - Biomedical and Genomic Data: Privacy-preserving sharing

This pilot concerns the Metabolic Engineering and Bioinformatics Group of the Institute of Chemical Biology, National Hellenic Research Foundation (NHRF). NHRF is exploring genomic data, generated either from molecular profiling of cancer tissues or from *in vitro* cancer models, along with Next Generation Sequencing (NGS) public datasets, aiming to elucidate molecular mechanisms altered in cancer pathophysiology. To this end, NHRF leverages computational tools for the data-driven analysis and integration of a large volume of high complexity genomic data, aiming at the holistic description of complex biological processes.

Pilot 3 - Shared Public Administration Data for Climate across Thessaloniki Metropolitan area

This pilot involves the 11 municipalities that comprise the Metropolitan Area of Thessaloniki and their need to realise data-driven environmental policy making. Working under their umbrella organisation, Major Development Agency Thessaloniki – Organisation for Local Development (MDAT S.A.), and Open Knowledge Foundation Greece (OKF Greece), work together for this pilot that will use the UPCAST plugins to integrate and exchange all data related to Thessaloniki's public administration environmental policy use case.

> "Data-driven climate action and decision making is a key challenge for the city of Thessaloniki today, as participant city of the EU Mission for 100 climate-neutral cities by 2030. Municipalities and local authorities need to have a strong scientific support to improve data-driven environmental policy, that's why UPCAST is a valuable project for us", says Maria Karagianni, Chair of MDAT Directors Board and Deputy Mayor of the Municipality of Thessaloniki (Pilot 3)

Pilot 4 - Health and Fitness Data Trading: valuation for fair compensation

Nissatech's Smart4Fit platform is a system for real-time fitness monitoring that solves the "isolation" issue: wearables (smartwatches) are part of a bigger IoT ecosystem (fitness clubs equipped with IOT-enabled exercise machines) and are used in collaborative scenarios, like group training and team-basedgamification. To incentivise data sharing among users, UPCAST will provide insights to establish value-based data transactions

3

ANNEX 3: Newsletters

UNIVERSAL PLATFORM COMPONENTS FOR SAFE FAIR INTEROPERABLE DATA EXCHANGE, MONETISATION AND TRADING

UPCAST Project Newsletter: Issue #1

UPCAST: Universal Platform Components for Safe Fair Interoperable Data Exchange Monetisation and Trading

Welcome to the inaugural edition of the UPCAST Newsletter, a valuable resource for staying updated on the latest developments and gaining insights into the UPCAST project funded by the European Union's Horizon Europe Programme, the UPCAST project aims to revolutionize the way data is shared, processed, and monetized.

UPCAST Kick Off Meeting in Milano, January 2023

Digital technologies play a pivotal role in maximising the benefits of a data-driven society and a data-based economy, but they must be firmly grounded in reliable, legal, privacy-preserving, and environmentally sound data exchange methodologies, architectures, and processes. These will enable citizens, businesses, and public administrations to process and leverage the value of an ever-increasing amount of data safely and efficiently.

"Economic and societal benefits coming from the implementation of AI and data analytics are clearly demonstrated in nearly all economic sectors and applications. Trading and monetizing data provides financial and operational advantages for all the partners in 'data as a service' and data marketplaces value chain, although contracting, pricing, security and ethics issues represent significant hurdles for smaller less experienced players. UPCAST project will help overcome these challenges, allowing European organisations to take a more proactive stance in exploiting their data" says **Richard Stevens, VP Director of Government Consulting, IDC and UPCAST Project Coordinator.**

"UPCAST aims at providing tools to reduce the friction of sharing and selling data products that can be used in any Data Space, Data Marketplace, or even for bilateral agreement. UPCAST plugins will help dataset and data operations owners to solve questions such as: How to describe them for others to discover? How to define and enforce usage policies? How to valuate them? How to ensure data processing is ethical and environmentally efficient? How to negotiate data access and pricing conditions? All these questions to be resolved are at the heart of the European policies aiming to ensure Europe's global competitiveness and data sovereignty" says **George Konstantinidis, Assistant Professor in AI at the School of Electronics & Computer Science of the University of Southampton, UPCAST Project Scientific Coordinator.**

The **high-level objective** of UPCAST is to design and deploy a set of universal plugins for Data **sharing, monetization and trading platforms** that enable actors in the Common European Data spaces to collaboratively **negotiate, improve and enforce data sharing contracts automatically,** providing **dynamic fair pricing** mechanisms while implementing **energy-efficient data exchange**, ensuring **privacy, confidentiality and legislation compliance** and adhering to **ethical** and **responsibility guidelines.**

Read the Press Release

EVENTS 2023

Data Week 2023

Session organised at the Data Week 2023 on **Technological Enablers of the future Data Economy** with Data 01-04 projects and DSSC.

Read More»

Lecture at the International Hellenic University

Scientific Coordinator, Dr. George Konstantinidis, Assistant Professor in AI at the School of Electronics & Computer Science of the University of Southampton presented UPCAST project.

Read More »

MyData 2023

Julia Palma presented CeADAR Ireland contributions to UPCAST Project tools for empowering citizens in their data-sharing decisions at the MyData conference in Helsinki.

Read More»

Semantic Conference in Greece

Technical director, Dr. Luis Daniel Ibáñez from University of Southampton attended the Extended Semantic Web Conference in Crete, Greece from 28th May to 1st June.

Read More »

Opendata.ch 2023 annual forum

On June 15th, Evangelos Chondrokostas had the honor of delivering an insightful presentation on behalf of the Open Knowledge Foundation Greece.

Read More»

Symposium on AI, Data, and Digitalization

Scientific coordinator, George Konstantinidis presented upcast project at t the Symposium on AI, Data and Digitalization at the Norwegian fjords

Read More »

UPCOMING EVENT

Data Science Summer School, 4th edition
Organized by Bucharest University of Economic Studies, in collaboration with the GATE Institute at Sofia University "St. Kliment Ohridski" and the projects DataCloud, enRichMyData, Graph-Massivizer, UPCAST, and InterTwino.

datascience.ase.ro

PUBLICATIONS

The **UPCAST team published three research works: In** Data Marketplaces in the AI Economy **we provide an overview of the UPCAST approach to improve Data Marketplaces' core functionalities. In** "Consent Management in Data Workflows: A Graph Problem" **we present an approach to automatically satisfy fine-grained privacy constraints of a user in a way which optimises the service provider's gains from processing. In** "Selling Decentralised Knowledge Graphs" **we position the challenges and opportunities of the intersection of KGs and Data marketplaces across two dimensions: (i) How to effectively sell KGs and (ii) how to decentralize the management of KG sale transactions.**
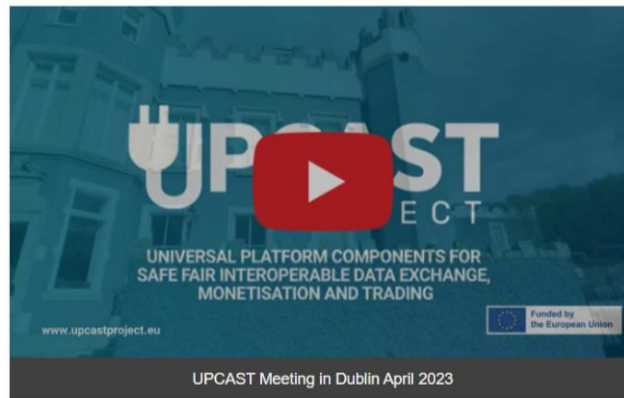
UNIVERSAL PLATFORM COMPONENTS FOR SAFE FAIR INTEROPERABLE DATA EXCHANGE, MONETISATION AND TRADING

www.upcastproject.eu

Funded by the European Union

UPCAST Meeting in Dublin April 2023

Consortium

UPCAST Project Newsletter: Issue #2

UPCAST: Universal Platform Components for Safe Fair Interoperable Data Exchange Monetisation and Trading

Welcome to the second edition of the UPCAST Newsletter, featuring the most recent developments and activities.

🎄☀️ On behalf of the UPCAST Consortium, we extend our warmest wishes for a joyful holiday season ☀️🎄.

Thank you for the support and contributions you have provided throughout the inaugural year of this project.

We look forward to continue our ongoing collaboration. Thank you for being a valued part of the UPCAST community.

Key Highlights in H2 2023
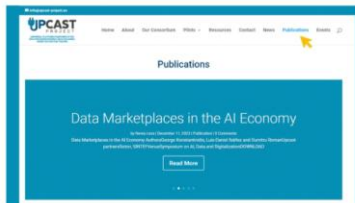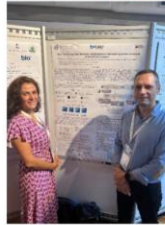

Thessaloniki Data Economy Day 2023

In September 2023, our project organized the a one day event called **"Thessaloniki Data Economy Day"**. This event brought together professionals, experts, and enthusiasts to explore the role of data in our evolving world.
The event started with a keynote session featuring **Stathis Konstantinidis**, *the Vice Minister of Interior, Sector of Macedonia & Thrace*, and **Maria Karagianni**, the *Deputy Mayor of Culture and Tourism, and Chair of MDAT S.A.* Their insights set the tone for the event, offering valuable perspectives on the significance of data in Greece and in Europe.

Read the article

Events in 2023

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