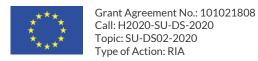


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	Dissemination Level			
PU Public, fully open, e.g., web			√	
CL	Classified, information as referred to	o in Commission Decision 2001/844/EC		





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* R: Document, report (excluding the periodic and final reports)
DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

OTHER: Software, technical diagram, etc





EXECUTIVE SUMMARY

Research innovation is a driving force for economic growth, creating new job opportunities and enhancing the standard of living. It is therefore important to ensure that the knowledge generated within research and innovation projects is properly diffused and that the means through which such knowledge can be delivered to society are being effectively explored. This is achieved through the commercial exploitation of products and services, which is the primary way of delivering research results to the citizens (end-users). In addition, communicating research results can effectively accelerate research and technical development (RTD) towards increasing the Technology Readiness Level (TRL), going beyond the current state of the art, and even creating new research horizon lines on future and emerging trends. Furthermore, dissemination activities, such as participation in workshops or publication of information on websites, enable participants "to get feedback on the economic potential and recommended market-oriented exploitation pathways"

The main scope of this document is to outline the actions implemented and the outcomes achieved with them in the project's first period (M6-M19) in terms of engagement, dissemination, and communication strategies and to present the plan for the next period.

During the first 18 months of the project, WP6 invested considerable effort to make SPATIAL known in the European ecosystem of projects dealing with AI and trustworthy cybersecurity, carrying out a well-structured and planned series of activities.

Some key results that underlie this effort are:

In terms of **ENGAGEMENT**, we identified our primary stakeholders, created our internal database with more than 250 contacts (GDPR compliant), selected several H2020 projects dealing with the same topic, and built up a solid strategy to engage them, as explained in Section 2.

In terms of **DISSEMINATION AND COMMUNICATION ACTIVITIES**, the main results can be summarised as follows:

- Publications of more than 39 blog posts/news/articles on the website;
- Publication of 15 scientific publications (peer-reviewed and conference papers);
- Building up a recognisable brand;
- Creation of several Promotional and multimedia material elements;
- Reinforcement of our presence on social media, with more than 1000 followers on Twitter and 300 followers on LinkedIn;
- Preparation of five project newsletters and participation in four external newsletters.





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1 INTRODUCTION

RELATIONSHIPS WITH THE DOA

The efforts described in this report are directly linked to the execution of WP6 – Impact, Outreach and Collaboration, as described in the Description of Action (DoA).

This document details the activities of ecosystem building, dissemination and communication carried out during the first year and a half of the SPATIAL project as part of the master plan to maximise the project's impact, outlining the schedule for the next period (M19-M36).

It comprises the following sections:

- Ecosystem building and stakeholders management activities, where we present the strategy put in place to engage with our stakeholders;
- Dissemination activities, where we report the dissemination activities carried out by the project;
- Communication activities, where we detail the communication and promotional activities realised;
- Next steps where we explain the dissemination and communication plans for the second half of the project.





2 ECOSYSTEM BUILDING AND STAKEHOLDERS' MANAGEMENT ACTIVITIES

2.1 SPATIAL COMMUNITY BUILDING

As introduced in D6.1 SPATIAL Impact Masterplan, identifying and engaging with the most relevant stakeholders is an activity often referred to as 'community building', and it is a crucial aspect of every H2020 project, such as SPATIAL. Indeed, the programme relies on communities, initiatives and projects that will either use the outcomes or relate and possibly liaise with its activities along its course.

During the first half of the project, we focused our effort on the following activities and regrouped in three phases:

PHASE 1 (M1-M6)

- Identification of the relevant stakeholders resulted in the STAKEHOLDERS MAP
- Scouting relevant initiatives and other funded projects dealing with similar topics

PHASE 2 (M7-M8)

• Build the strategy to engage and inform the stakeholders and to transfer the knowledge acquired during the first stage of the project

PHASE 3 (M9-M18)

Implement the strategy and contact the stakeholders

At the time of writing this deliverable, we concluded the first "sprint", composed of all three phases.

During the second half of the project, we will focus our effort on engaging the stakeholders with a set of defined activities, as explained in the chapters below.

2.2 STAKEHOLDERS MAP

During the project's first months, we worked on the Stakeholder map, which graphically summarises all the identified stakeholders at this stage. The current version of the Stakeholder Map is shown below in Figure 1.







FIGURE 1 SPATIAL STAKEHOLDERS PICTURE

2.3 BUILD & IMPLEMENT THE STRATEGY

After the identification of our main stakeholders, we built up a strategy composed of three lines of activities (direct engagement, dissemination and communication activities) and we implemented it, as described in Table 1 below.

TABLE 1 SPATIAL STAKEHOLDER ENGAGEMENT IMPLEMENTATION

Activity	Implementation & Next steps	Stakeholders engaged
Direct engagement	Ongoing activity – AUSTRALO, the partner in charge of this activity, prepared different emails to our stakeholders. We tailored the content of each email to the specific message we wanted to share with the particular stakeholder.	ALL





2 of				
We briefly explained our project and its main objectives in these emails and gave them the link to subscribe to our newsletter, follows us on social media and visit our websites. This activity results in +200 emails sent, and an increase of followers on SM (+1000 followers in total) During the project's second half, we will increase the effort on direct engagement to promote the Educational module.				
Thanks to a structured dissemination plan, we make our activities and first results available to many stakeholders, as detailed in the paragraphs below. The technical partners have already reached the KPIs related to scientific dissemination, participated in several events to show the results and organised a joint workshop with other EU projects. These activities will be reinforced during the second half of the project, presenting the project's results at several conferences and continuing with the publication of scientific results.		ALL		
To inform and reach out different stakeholders – including general public and media - about the project, we studied a detailed communication strategy and implemented several successful activities, as explained in the chapters below. During the first period, we invested effort in increasing the number of our followers on social media, the number of subscribers to our newsletter and a structured editorial plan. In the second period of the project we will also focus on specific activities to reach the general public and the media, as the podcasts and video series, while continuing publish interesting pieces in our website explaining the project and the team behind it.		ALL		
Transfer of Knowledge (Educational module) One of the main objectives of the project is to create educational modules that provide technical skills, ethical and socio-legal awareness to current and future AI engineers/developers to ensure the accountable development of security solutions.		AI engineers/devel opers (mainly) AII		





The educational modules will be delivered in the second half of the project. Specific effort will be dedicated to disseminate and promote the modules to our stakeholders
modules to our stakeholders

To reach more stakeholders, SPATIAL joined efforts with the other Su-ds02-2020 projects and participated in the joint communication & dissemination calls led by the ARCADIAN IoT project. Thanks to this, SPATIAL was featured in four different newsletters and amplified the stakeholders reached.

- Arcadian IoT newsletters (2)
- IDUNN project newsletter (1)
- AI4 EU project newsletter (1)

In addition, a joint workshop has been organised by ARCADIAN-IoT, ELECTRON, ERATOSTHENES, IDUNN, IRIS, KRAKEN, SECANT, SENTINEL, SPATIAL, TRUST aWARE projects, to provide an overview of how novel solutions can protect the complex ICT infrastructures and create a stronger, more innovative and resilient European industry.

It will take place on the 27th of February. SPATIAL will present and talk about the topics 5G and 6G in a 15-minute time slot. At the end of the workshop, our speaker Madhusanka Linage, from the University College of Dublin will join the discussion panel. A report will be prepared after the workshop following a specific template provided by PO Georgios Kaiafas.

In addition, a policy brief will be provided to our PO Georgios Kaiafas. This will help guide the discussion in the cluster and present a structure as a result to EC (particularly CNECT – cybersecurity unit). will serve as a statement of the cluster's purpose, synergies and plans in a concrete format that can be presented to EC.

All the projects involved in the call, and some others, address the cybersecurity needs of the EU industry and society, so it was decided to organise a joint workshop. Each project has concrete applications which focus on different verticals/application domains: education, energy, healthcare, manufacturing mobility, 5G and 6G networks, emergency and vigilance or smart cities.

SPATIAL have published the agenda and registration link on the website.¹

¹ <u>Joint Workshop EU-made cybersecurity for safe, resilient and trustworthy applications and services – SPATIAL H2020 (spatial-h2020.eu)</u>







FIGURE 2 BANNER TO PROMOTE THE WORKSHOP

To reach as many stakeholders as possible, a social media campaign has been put in place.



FIGURE 3 TWEET PROMOTING THE WORKSHOP





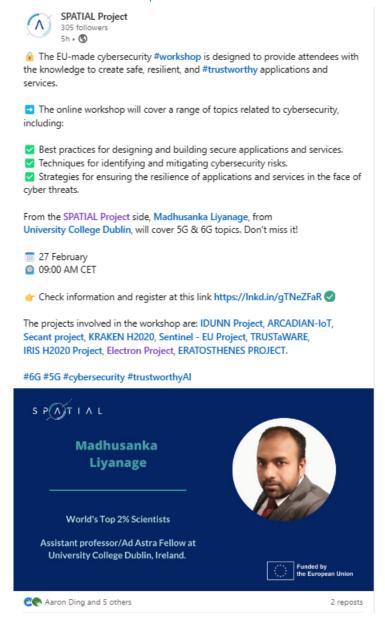
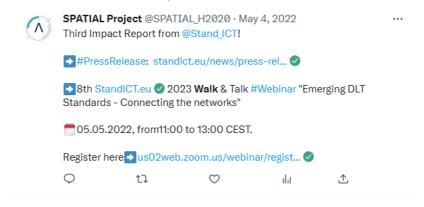


FIGURE 4 LINKEDIN POST TO PROMOTE THE WORKSHOP

To engage and collaborate with other projects not directly involved in the call but related to some of the topics SPATIAL has to address, we have created a strategy to cross collaborating in important milestones and specific events.







 $FIGURE\ 5\ EXAMPLE\ OF\ CROSS-COLLABORATION\ WITH\ PROJECTS\ NOT\ DIRECTLY\ INVOLVED\ IN\ THE\ CALL$





3 DISSEMINATION ACTIVITIES PERFORMED

Following the dissemination strategy reported in D6.1, the SPATIAL team carried out several activities with the objectives of 1) making the results available and 2) informing the target stakeholders about the results.

The dissemination activities carried out in the first period were structured following the order of:

WHAT: the activities planned
TO WHOM: the target audience
HOW: the dissemination performed

In addition, for each activity performed, we carefully monitored the KPIs.

TABLE 2 DISSEMINATION MEASURES

WHAT	TO WHOM	HOW	STATUS AT M18
Peer-reviewed publications	Scientific stakeholders	To publish and contribute to peer-reviewed publications in scientific journals and conferences	1. Peer-reviewed scientific research publications in international journals (10) STATUS AT M18: 6 published, 2. Peer-reviewed publications and presentations in international conferences (30) STATUS AT M18: 9 published More information in the TABLE 3 below
Non-peer- reviewed Publications (blogs, websites)	All stakeholders	To publish blogs posts and article on the SPATIAL website and other blogs/websites	KPI to be reached: 50 Status at M18: 12 pending More information in the SECTION 3.2 below
Open Access	Scientific stakeholders	Following the principle "as open as possible", SPATIAL will make all the project's material (including scientific publication) available on ZENODO	At M18, more than 20 elements were uploaded on the SPATIAL Zenodo page Total views: 470 and total downloads: 1,587.





Events	All stakeholders	SPATIAL will participate in scientific events to disseminate its results to a broader audience of stakeholders	KPI to be reached: 20 events Status at M18: 10 pending More information in the TABLE 4 below
Workshops organized (internal and external)	Scientific stakeholders + Consortium partners	SPATIAL will organize internal and external workshops during the entire duration of the project for 1) project's partners to work together on certain topics and for 2) external stakeholders	KPI to be reached: 10 workshops (half of them external) Internal workshops: KPI reached External workshops: 3 pending

3.1 LIST OF PEER-REVIEWED AND CONFERENCE PUBLICATIONS

TABLE 3 SPATIAL PEER-REVIEWED AND CONFERENCE PUBLICATIONS

Publications			
No.	Туре	Title	Title of the Journal/Proc./Book
1	Article in Journal	Social-aware Federated Learning: Challenges and Opportunities in Collaborative Data Training	IEEE Internet Computing Magazine
2	Article in Journal	Roadmap for edge AI: a Dagstuhl perspective	ACM SIGCOMM Computer Communication Review
3	Publication in Conference proceedings/Work shop	Characterising the Role of Pre- Processing Parameters in Audio- based Embedded Machine Learning	SenSys '21: Proceedings of the 19th ACM Conference on Embedded Networked Sensor Systems
4	Publication in Conference proceedings/Work shop	Subversion-Resilient Enhanced Privacy ID	Lecture Notes in Computer Science





5	Publication in Conference proceedings/Work shop	Bias in Automated Speaker Recognition	FAccT '22: 2022 ACM Conference on Fairness, Accountability, and Transparency
6	Article in Journal	Privacy-preserving Al for future networks	Communications of the ACM Volume 65 Issue 4April 2022
7	Publication in Conference proceedings/Work shop	A Large-scale Examination of "Socioeconomic" Fairness in Mobile Networks	COMPASS '22: ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS)
8	Article in Journal	Dynamic-IMD (D-IMD): Introducing activity spaces to deprivation measurement in London, Birmingham and Liverpool	Cities Volume 127, August 2022, 103733
9	Publication in Conference proceedings/Work shop	FLAME: Taming Backdoors in Federated Learning	
10	Article in Journal	The Many Faces of Edge Intelligence	IEEE Access (Volume: 10)
11	Publication in Conference proceedings/Work shop	Trustworthy and Sustainable Edge Al: A Research Agenda	2021 Third IEEE International Conference on Trust, Privacy and Security in Intelligent Systems and Applications (TPS-ISA)
12	Publication in Conference proceedings/Work shop	Robust and Resilient Federated Learning for Securing Future Networks	2022 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit)
13	Publication in Conference proceedings/Work shop	Federated Learning based Anomaly Detection as an Enabler for Securing Network and Service Management Automation in Beyond 5G Networks	2022 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit)
14	Publication in Conference proceedings/Work shop	Towards Trustworthy Edge Intelligence: Insights from Voice- Activated Services	2022 IEEE International Conference on Services Computing (SCC)
15	Article in Journal	A survey on privacy for B5G/6G: New privacy challenges, and research directions	Journal of Industrial Information Integration





3.2 LIST OF NON-PEER-REVIEWED PUBLICATIONS

3.2.1 SPATIAL ARTICLES, BLOG POSTS AND EDITORIALS

WP6 put a structured editorial calendar in place from the beginning of the project to keep the audience and stakeholders always interested in our activities.

We structured the publications as "series" to continuously diversify the content, tell exciting stories and transfer the knowledge acquired in the project.

The series published until M18 can be regrouped as follows:

- Meet the team: interviews with partners
- Meet the Advisory board: interviews with the AB members
- What is SPATIAL: articles about the project, its achievements and next steps
- PhD Editorial: to give voice to the PhD students working on the project
- Technical blogs: technical articles covering the topic of AI, X-AI, trustworthy cybersecurity etc.
- Collabs & Event: collaboration with other initiatives & participation in events

TABLE 4 SPATIAL BLOGS AND PUBLICATIONS

TITLE	LINK	Series
SPATIAL at the 2021 IEEE 5G World Forum	https://spatial-h2020.eu/spatial-at- the-2021-ieee-5g-world-forum/	Collabs & Events
What the oldest Dutch technical university is doing in cybersecurity and artificial intelligence	https://spatial-h2020.eu/what-the- oldest-dutch-technical-university-is- doing-in-cybersecurity-and- artificial-intelligence/	Meet the team
SPATIAL to test their progress in four pilots	https://spatial-h2020.eu/spatial-to- test-their-progress-in-four-pilots/	What is SPATIAL?
Designing, developing and evaluating methods for enhancing the resilience of Al- based technologies	https://spatial-h2020.eu/designing- developing-and-evaluating- methods-for-enhancing-the- resilience-of-ai-based-technologies/	What is SPATIAL?
Memorandum of Understanding signed between SPATIAL & StandICT.eu 2023	https://spatial- h2020.eu/memorandum-of- understanding-signed-between- spatial-standict-eu-2023/	Collabs & Events
Characterising the Role of Pre- Processing Parameters in Audio-based Embedded Machine Learning	https://spatial- h2020.eu/characterising-the-role- of-pre-processing-parameters-in- audio-based-embedded-machine- learning/	What is SPATIAL?





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Deeptech SMEs have a say in SPATIAL	https://spatial-h2020.eu/deeptech- smes-have-a-say-in-spatial/	Meet the team
Security, one of the central points of Mainflux platform	https://spatial-h2020.eu/security- one-of-the-central-points-of- mainflux-platform/	Meet the team
Do you want to know how FRAUNHOFER FOKUS makes the networked world safe, reliable, scalable and trustworthy?	https://spatial-h2020.eu/do-you- want-to-know-how-fraunhofer- fokus-makes-the-networked-world- safe-reliable-scalable-and- trustworthy/	Meet the team
Calling TELEFONICA in SPATIAL	https://spatial-h2020.eu/calling- telefonica-in-spatial/	Meet the team
Privacy-preserving AI on the Edge and beyond	https://spatial-h2020.eu/privacy- preserving-ai-on-the-edge-and- beyond/	What is SPATIAL?
TUT-7: 6G security and privacy vision towards reality	https://spatial-h2020.eu/tut-7-6g- security-and-privacy-vision- towards-reality/	Collabs & Events
University of Tartu: Data training trustworthiness for Al model	https://spatial-h2020.eu/university- of-tartu/	Meet the team
More cybersecure 5G networks	https://spatial-h2020.eu/more- cybersecure-5g-networks/	What is SPATIAL?
Hola Barcelona!	https://spatial-h2020.eu/hola- barcelona-mwc2022/	Collabs & Events
UCD: a look into the security impat	https://spatial-h2020.eu/university- college-of-dublin-a-look-into-the- security-impact/	Meet the team
NEC: Markedting the path for future european efforts in trustworthy Al	https://spatial-h2020.eu/marking- the-path-for-future-european- efforts-in-trustworthy-ai/	Meet the team
Emergency e-call systema and accountable Al	https://spatial- h2020.eu/emergency-ecall-system- and-accountable-ai/	What is SPATIAL?
EUR: Combining technological and educational tools for future AI development practices around IoT and security	https://spatial-h2020.eu/combining- technological-and-educational- tools-for-future-ai-development- practices-around-iot-and-security/	Meet the team
Cyberattacks detected	https://spatial- h2020.eu/cyberattacks-detected/	What is SPATIAL?





	·	
AUS: maximising the impact of SPATIAL across a wide range of stakeholders	https://spatial- h2020.eu/maximising-the-impact- of-spatial-across-a-wide-range-of- stakeholders/	Meet the team
"Connecting" at the EUCNC and 6G Summit 2022	https://spatial- h2020.eu/connecting-at-the-eucnc- and-6g-summit-2022/	Collabs & Events
Our collaborators events for the month of June	https://spatial-h2020.eu/our- collaborators-events-for-the- month-of-june/	Collabs & Events
UCD presented two accepted papers at EuCNC	https://spatial-h2020.eu/university- college-of-dublin-presented-two- accepted-papers-at-the-eucnc/	Collabs & Events
SPATIAL at the IoT week 2022	https://spatial-h2020.eu/spatial-at- the-iot-week-2022/	Collabs & Events
Digital services act and digital markets act set a new cornerstone for digital in Europe	https://spatial-h2020.eu/digital- services-act-and-digital-markets- act-set-a-new-cornerstone-for- digital-in-europe/	Other news
SPATIAL at the Projects to policy seminar in Brussels	https://spatial-h2020.eu/spatial-at- the-projects-to-policy-seminar-in- brussels/	Collabs & Events
Interview with Jon Crowcroft	https://spatial-h2020.eu/interview- with-jon-crowcroft-from- cambridge-university/	Meet the Advisory Board
Interview with Eve Schooler	https://spatial-h2020.eu/interview- with-eve-schooler-principal- engineer-and-director-emerging-iot- networks-at-intel/	Meet the Advisory Board
Interview with Stefan Schmid	https://spatial-h2020.eu/stefan- schmid-at-university-of-berlin/	Meet the Advisory Board
SPATIAL Consortium meeting in Berlin	https://spatial-h2020.eu/spatial- consortium-meeting-berlin-20-21- 09-2022/	Collabs & Events
IoT and data protection	https://spatial-h2020.eu/iot-and- data-protection/	Collabs & Events
SPATIAL Y1 achievements	https://spatial-h2020.eu/spatial-y1- achievements/	What is SPATIAL?
PhDs Editorial – TU DELFT	https://spatial-h2020.eu/phds- editorial-tu-delft/	PhDs Editorial
PhDs Editorial – UNIVERSITY OF TARTU	https://spatial-h2020.eu/phds- editorial-university-of-tartu/	PhDs Editorial
PhDs Editorial - UCD	https://spatial-h2020.eu/phds- editorial-university-college-of- dublin/	PhDs Editorial





PhDs Editorial - ERASMUS	https://spatial-h2020.eu/phds- editorial-erasmus-university-of- rotterdam/	PhDs Editorial
An overview of the vulnerabilities of machine learning systems	https://spatial-h2020.eu/an- overview-of-the-vulnerabilities-of- machine-learning-systems/	What is SPATIAL?
Joint workshop	https://spatial-h2020.eu/joint- workshop-eu-made-cybersecurity- for-safe-resilient-and-trustworthy- applications-and-services/	Collabs & Events

3.2.2 PUBLICATIONS FROM PARTNERS

In addition to the non-peer-reviewed blog posts and articles carried out by WP6, the partners also published the following pieces:

- EU project SPATIAL on Trustworthy AI
- Cybersecurity through AI SPATIAL project launched
- Start of SPATIAL project: Balancing the benefits and risks of Artificial Intelligence
- The University of Tartu joins the SPATIAL project
- F-Secure aims for more secure AI as a part of SPATIAL
- Montimage participated in SPATIAL Kickoff Meeting
- EU SPATIAL Project Aims to Create Trustworthy Artificial Intelligence
- Mainflux Labs is a Member of EU Funded Consortium Which Aims Toward Trustworthy AI In Cyber Security
- Scientists from Fraunhofer Fokus business unit Quality Engineering are part of the #SPATIAL team
- Threat modelling geospatial machine learning systems
- A security self-assessment questionnaire for machine learning-based systems
- Tessa Oomen reflects on her experiences in the SPATIAL project

3.3 LIST OF EVENTS

Events have played an important role within the project. The partners have presented SPATIAL in some events, have participated in webinars and workshops and have attended some events important for the cybersecurity and 6G topics.

TABLE 5 SPATIAL LI	ST OF EVENTS
--------------------	--------------

	TITLE	ABSTRACT	PARTNER involved
	FCN 2021 (December 2021)	\circ 1	TU Delft, UCD,
		European and Asian institutes since	University of Tartu
١		2014	





Webinar of 6G mobile network security and privacy: vision towards reality	A webinar organized by IEEE Signal Processing Society Sri Lanka	UCD
EuCnc & 6G Summit	Federated Learning based Anomaly Detection as an Enabler for Securing Network and Service Management Automation in Beyond 5G Networks- conference paper acceptance in the 2022 Joint European Conference on Networks and Communications. Attending workshops	UCD & AUS
Projects to policy seminar in Brussels	Event with EC and PO	TU Delft and AUSTRALO
ICC 2022 Security and Privacy 6G: Towards reality	Tutorials at the ICC event	UCD
ECSO Awareness Calendar	WithSecure Featured: Cybersecurity and Machine Learning Supporting Each Other.	WithSecure
Surveillance Studies Network Conference 2022	Academic presentation by EUR	EUR
IoT Week	Presenting SPATIAL	AUS
TAROT Summer School at Ávila, Spain	MI gave a 90-minute-long speech on Security Testing and Monitoring of 5G networks, in which MI presented SPATIAL project and their pilot/ use case	Montimage
IEEE Globecom 2022	TU-27: Open RAN Security and Privacy: Opportunities and Challenges	UCD
Algocare virtual workshop	Algocare virtual workshop "Building an interdisciplinary Vocabulary: Explainability, Transparency and Fairness in AI in Care Settings"	EUR
ACM IoT conference	PhD researcher Prachi Bagave presenting her work and SPATIAL	TU Delft
Urban Transition 2022	Telefónica presenting a poster at the conference. A poster will be used at the conference. It includes the logo of SPATIAL.	Telefónica
ECREA pre-conference Algorithmic Antagonisms	Presentation titled "Algorithmic Perceptions, Practices, and Empowerment" acknowledged SPATIAL	EUR
ECREA main conference	European Communication conference - an acknowledgement of SPATIAL project	EUR





ESHCC Lunch Seminar	Presentation on SPATIAL-affiliated work for the ESHCC academic community	EUR
CitySCAPE Joint Cyber Security Webinar	AUS joined this webinar in which Secant and Sentinel participated	AUS
BDVA Data Week 2022	WithSecure co-organized the Workshop on Cybersecurity of Alpowered systems	WSC

The participation in these events allowed us to gather the first feedback from our stakeholders via informal discussions and explanations about the preliminary stages of the project and future activities. However, since the project is now entering a more mature phase, more structured feedback shall be collected during the events.

After each event, the partner will be asked to reply to the following questions via an online form:

- Please, let us know about the number and type of participants (industry, academia etc..).
- Summary of the discussions held
- Benefits (for the project and for the stakeholders)
- Could you give feedback from stakeholders about the SPATIAL project and solution?
- Add anything else you think it might be positive for the event's reporting

Thanks to the information collected, we will be able to better analyse the feedback received and implement it in our workpackages and tasks.





4 COMMUNICATION ACTIVITIES PERFORMED

The primary purpose of the communication activities is to inform the stakeholders about the activity of the project and its main results and achievements.

As indicated in D6.1, WP6 put in place a well-structured communication plan composed of specific measures (branding, digital channels, promotional material) and defined objectives (Supporting the external promotion of SPATIAL and its outcomes, managing the branding, delivering top-level messages about the project to all identified and relevant stakeholders, raise awareness to non-specialised audiences of the added value of SPATIAL and its application in pilot activities, increase awareness and interest about the project.)

4.1 BRANDING

SPATIAL built up a brand at the very beginning of the project that has been used and protected throughout the project.

A recognisable visual identity was provided, composed of the following elements:

- LOGO & ICONS: the project logo and icons, with 16 variations
- SPATIAL SLIDE DECK to be used during external project presentations
- SPATIAL PITCH DECK: the project PPT template
- <u>SPATIAL COMMUNICATION GUIDELINES</u>: a document created to guide the partners in their comms and dissemination activities
- <u>SPATIAL BRANDING GUIDELINES</u>: a document explaining how to correctly use the SPATIAL logo and branding elements, such as colour palette, logo, templates etc.









4.2 DIGITAL CHANNELS

4.2.1 WEBSITE

From February 2022, some updates have been made on the website: a new section (Publications) has been added to the website, an animated banner has been published and some sections of the website have been updated: the team and the collaboration section.



FIGURE 7 SCREENSHOT OF THE PUBLICATION SECTION



FIGURE 8 ANIMATED BANNER

The website shows the cross-collaboration projects and some project updates have been implemented on this section.







FIGURE 9 COLLABORATION SECTION ON THE WEBSITE

Electron and Trust-aware have been added as SPATIAL collaborators.



Summary

ELECTRON aims at delivering a new-generation EPES platform, capable of empowering the resilience of energy systems against cyber, privacy, and data attacks through four main pillars (risk assessment and certification, anomaly detection and prevention, failure mitigation and energy restoration, and addressing internal threats and gaps through AR-VR-based personnel training and certification), while fostering the cyber protection standardisation and certification.

FIGURE 10 ELECTRON PROJECT INFORMATION HAS BEEN ADDED TO THE WEBSITE



Summary

TRUST aWARE mission is to provide a holistic and effective digital Security & Privacy (S&P) framework comprising a set of novel and integrated tools and services cocreated by citizens and stakeholders – Computer Emergency Response Teams (CERTs), Data Protection Authorities (DPAs), organisations, developers and policymakers) – to identify, audit, analyse, prevent, and mitigate the impact of the various S&P threats associated with citizen's digital activities in a timely manner, while enhancing software trust and regulatory compliance.

FIGURE 11 TRUSTAWARE INFORMATION HAS BEEN ADDED TO THE COLLABORATIONS SECTION ON THE WEBSITE

The team webpage has been updated to remove or add some new members of the team.





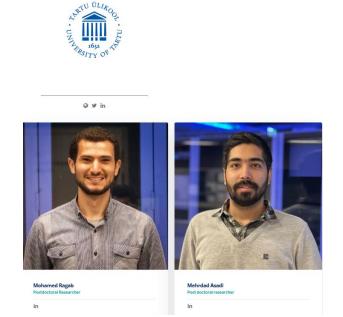


FIGURE 12 SCREENSHOT FROM NEW MEMBERS OF THE TARTU UNIVERSITY TEAM

From February 2022, the SPATIAL website has received more than 1,880 visits (157 monthly average visits).

And the most visited section is "What's new" getting the 10,42% of the website traffic.

/whats-new/ 5 (10.42%)

FIGURE 13 INFORMATION TAKEN FROM GOOGLE ANALYTICS

In other to improve the views of the website, the communication team has designed a strategy that consists of tagging all partners in the consortium and other collaborators in some of the social media post so that they can repost and spread the information between their networks.

A LinkedIn strategy has also been put in place to get more visits. The SPATIAL team has identified the most prominent artificial intelligence LinkedIn groups and posted the SPATIAL articles in order to get visits from this social media channel.

Group

Link

European Cybersecurity Industry

Artificial Intelligence & Neuroscience Researchers, Faculty + Professionals

Artificial Intelligence & Neuroscience Researchers, Faculty + Professionals





Artificial Intelligence Deep Learning Machine Learning	https://www.linkedin.com/groups/45655/
Applied Artificial Intelligence	https://www.linkedin.com/groups/127447/
Cybersecurity Community	https://www.linkedin.com/groups/6532848/
Cyber security worldwide community	https://www.linkedin.com/groups/2628286/
Artificial Intelligence - Advancing the Pharmaceutical and Medical Device Industries	https://www.linkedin.com/groups/12078247/
Al User Forum Artificial Intelligence Al Machine Learning Cybersecurity LMS EDU IoT ESG	https://www.linkedin.com/groups/2314174/
Artificial Intelligence (AI) - Machine Learning, Deep Learning, NLP, Computer Vision & Data Science	https://www.linkedin.com/groups/6773450/
Cybersecurity Frameworks and Maturity Models	https://www.linkedin.com/groups/6624427/
IT Specialist Cybersecurity Network	https://www.linkedin.com/groups/3090362/
Global cybersecurity forum	https://www.linkedin.com/groups/137157/
Cybersecurity Community	https://www.linkedin.com/groups/3799371/
IoT cybersecurity and privacy community	https://www.linkedin.com/groups/35629/
Big Cyber : Cybersecurity for the Internet of Things	https://www.linkedin.com/groups/8335272/
Medical Device and HealthCare Cybersecurity	https://www.linkedin.com/groups/8700339/

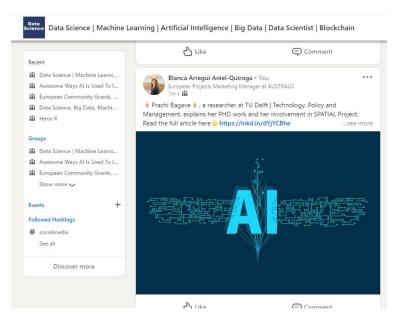


FIGURE 14 SPATIAL PROJECT WEBSITE ARTICLE PUBLISHED ON AN ARTIFICIAL INTELLIGENCE GROUP ON LINKEDIN





Some guidelines were also designed and explained during a WP6 meeting to show the partners how to get more visits to the SPATIAL website by posting on LinkedIn. (In Appendix).



FIGURE 15 COVER OF THE LINKEDIN GUIDELINES

4.2.2 SOCIAL MEDIA

WP6 continue managing the social media channels in its communication and dissemination strategy. There are daily publications on both social media accounts. Those channels are one of the ways to get visits to the website.

From February 2022 to February 2023 the social media channels got a monthly average of more than **5,000 impressions**.

LinkedIn

SPATIAL has more than 300 followers on LinkedIn.



SPATIAL Project

Achieving trustworthy, transparent and explainable AI for security solution development in Europe ϵu Information Technology & Services \cdot 305 followers



FIGURE 16 SPATIAL LINKEDIN ACCOUNT





During this period, LinkedIn has become the most used social media channel in this project, but users access more often and more times from Twitter to the SPATIAL website as we can see in the figure below.

Social Network ?	Acquisition		
	Users ? ↓	New Users	Sessions ?
	179 % of Total: 23.61% (758)	155 % of Total: 21.00% (738)	492 % of Total: 28.65% (1,717)
1. LinkedIn	112 (60.22%)	96 (61.94%)	174 (35.37%)
2. Twitter	67 (36.02%)	53 (34.19%)	296 (60.16%)

FIGURE 17 GOOGLE ANALYTICS STATISTICS

Twitter

SPATIAL has more than 1,000 followers on Twitter.

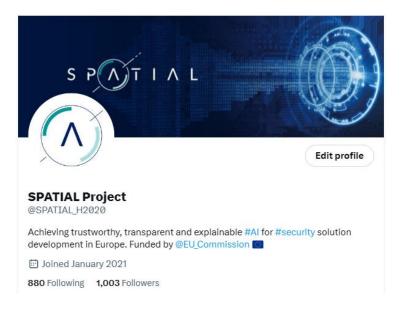


FIGURE 18 SPATIAL TWITTER ACCOUNT

The strategy on this social media channel is to create lists with interesting profiles to target as SPATIAL stakeholders and keep an eye on the information published by them. The aim is to finally get as much impact as possible by publishing SPATIAL results and milestones through those social media channels.





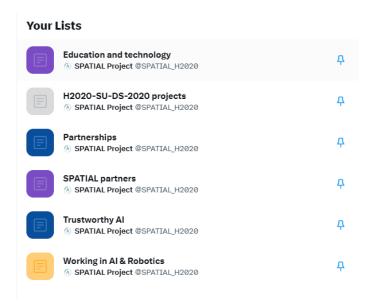


FIGURE 19 SPATIAL TWITTER LISTS

Some social media campaigns have been put in place since February 2022.

 Website interviews with SPATIAL partners: WP6 put in place a social media campaign at the beginning of the project. In order to continue showing the partners involved in SPATIAL, specific banners have been recently created to promote the partners. Example below with 492 impressions.





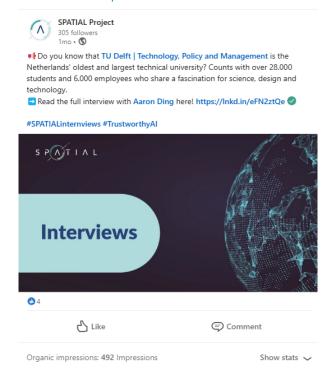


FIGURE 20 SOCIAL MEDIA INTERVIEW BANNER

• 1st year achievements: Specific banners have been created to promote the results obtained during the 1st year of SPATIAL. This campaign got very good numbers in terms of impressions and social reach. The example below shows the number of views of the tweet: 1,320.

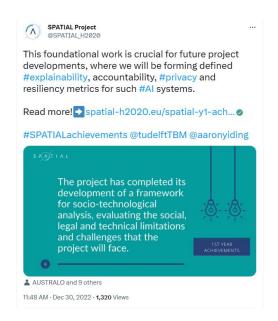


FIGURE 21 1ST YEAR ACHIEVEMENT CAMPAIGN — TWEET





• Publications' campaign: Once the Publications section was ready on the website, a parallel campaign was put in place to promote each of the scientific publications published. Example below: the tweet got 68 views.



FIGURE 22 PUBLICATIONS CAMPAIGN POST

• PhDs editorial series: To promote the PhDs editorials, a specific social media campaign has been put in place: quotes banners have been created to get more impact on the posts. Example below: 282 impressions on the post below.

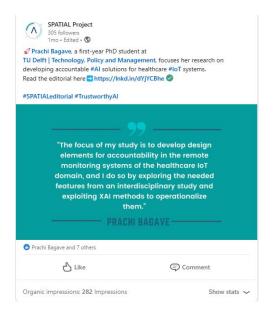


FIGURE 23 LINKEDIN POST - PHDS EDITORIAL SERIES





WP leaders' articles: In this period of the project, we have put in place a WP leaders' series. WP1 has already submitted its first deliverable and an article has been published on the website. A social media campaign has been designed to promote the article. Example below showing 448 impressions.

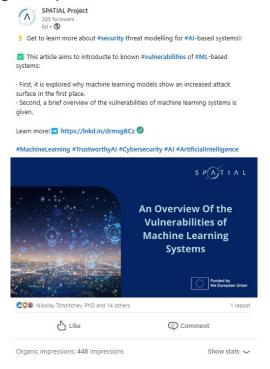


FIGURE 24 WP1 ARTICLE PROMOTED ON SOCIAL MEDIA

4.2.3 NEWSLETTERS AND PRESS RELEASES

WP6 released five newsletters promoting the project, its results, the participation in events and the scientific publications.

- SPATIAL first newsletter
- SPATIAL second newsletter
- SPATIAL third newsletter
- SPATIAL fourth newsletter
- SPATIAL fifth newsletter





FIGURE 25 SPATIAL NEWSLETTER EXAMPLE

In addition, SPATIAL was featured in the following newsletters, amplifying its audience and reaching more stakeholders:

- AI4EU 17 December Newsletter (a)(b)
- Arcadian-IoT project Newsletter (1)
- IDUNN Newsletter
- Arcadian IoT Newsletter (2)





SYNERGIES

The ARCADIAN-IoT project has fruitful collaborations with other EU-funded projects! Here you can find news from other projects.



SPATIAL project

ONE YEAR ON:
achievements, lessons learnt
and the way forward

One year of achievements, challenges,
confrontations and new ambitions.

FIGURE 26 ARCADIAN IOT NEWSLETTER WITH ONE OF THE SPATIAL ARTICLES

Collaboration with other European projects

Bridging the security, privacy and data protection gap for smalles enterprises in Europe

Autonomous Trust, Security and Privacy Management Framework for IoT

Achieving trustworthy, transparent and explainable Al for cybersecurity solutions

FIGURE 27 IDUNN NEWSLETTER

As far as the press releases, WP6 published one <u>press release</u> at the beginning of the project and it was sent also to journalists (the list cannot be shown as AUSTRALO IPR).

As a result, the PR has 426 unique downloads on Zenodo and more than 1000 in total

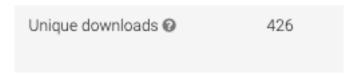


FIGURE 28 SPATIAL PRESS RELEASE UNIQUE DOWNLOADS

4.3 PROMOTIONAL MATERIAL

SPATIAL BANNERS

As part of the SPATIAL branding strategy, WP6 created some flyers to be used on social media, articles, presentations and partners' websites and social media.





Four versions – composed of two subversions each – were produced by WP6 at the beginning of the project.

V1





V2





V3





V4









FIGURE 29 SPATIAL BANNERS

SPATIAL FLYER

WP6 created a simple flyer with two objectives: 1. Accompanying email campaigns and 2. Be shown online and during conferences and events. To be more environmentally friendly, we made it available online, and during events, we will recommend our partners not to print it but make it accessible via a QR code.

A new version of the SPATIAL flyer will be created to promote the EDUCATIONAL MODULE.







SPATIAL is a consortium led by TU Delft, consisting of 12 partners from 8 EU member states



FIGURE 30 SPATIAL FLYER

SPATIAL ANIMATED BANNER

On the SPATIAL website homepage, we added an animated banner briefly introducing and explaining the project. This lets our website visitors immediately have an idea of our project by just reading the captions on the animated banner.





5 NEXT STEPS

5.1 DISSEMINATION ACTIVITIES & STAKEHOLDERS ENGAGEMENT

The primary purpose of the **dissemination** is to make the project results available to the stakeholders and to transfer the knowledge acquired to them.

During the second part of the project, where the results and products of SPATIAL will be finalised, the partners will increase their effort to ensure all the stakeholders will be aware of the project's outcomes.

The following activities will be reinforced:

- Participation in events, conferences, and non-technical events: SPATIAL will participate in events and present the results during meetings, per the dissemination plan presented in D6.1.
- Peer-reviewed publications: SPATIAL will continue submitting papers in the last part of the project to make the final results available to our stakeholders.
- Emailing campaigns: WP6 will run emailing campaigns (M19 M24 M34) to inform the stakeholders directly about 1) the educational module and 2) project outcomes. In addition, in these emails, we will invite our stakeholders to meet with our technical team to discover more about the project.
- **Podcasts:** this activity is more a "communication" related activity (its scope is also to promote the results), but some episodes will also have the objective of transferring the knowledge to the audience, which will not be composed of just technical stakeholders, but also general public and media.
- Workshops: At least two technical workshops will be organised in the latest part of the project to reach the KPI settled in Table 1.

In terms of community building and stakeholder engagement, more effort will be dedicated by WP6 to increase the community and involve the stakeholders in the project's activities, whit particular emphasis on the EDUCATIONAL MODULE. Targeted emailing campaigns with accompanying infographics and banners will be prepared together with ad hoc newsletters. In addition, WP6 will be the facilitator of meetings between the stakeholders and the SPATIAL research team.

5.2 COMMUNICATION ACTIVITIES

One of the main objectives of the communication activities of the second part of the project will be to promote the EDUCATIONAL MODULE and the PROJECT' FINAL RESULTS widely. In addition, specific effort will be dedicated to make the results more easy-to-understand for the general public and media, in order to reach a broader audience.





To do so, the following activities will be performed:

5.2.1 PODCAST SERIES

These impact series will bring the work SPATIAL is doing to society with a combination of the work SPATIAL performs and current topics which could interest the general public. There will be max 6 impact series until the project ends, and they will be iterative, with different speakers. The format will be similar to podcasts, this is why we called it the "podcast series".

Format: To set a way of recording the content speaker will have two ways of recording it: WAV, FLAC, AIFF, or ALAC or MP2, MP3, AAC, AMR, and WMA.

SPATIAL members have planned the first two episodes and their topics: "Gender bias" and "Is ChatGPT Use Of Web Content Fair?". The other episodes will follow the content delivered by the educational module.

The aim is to reach our stakeholders like the end use sectors and society as a whole and show the SPATIAL impact and results. In addition, this will also help SPATIAL to be known by a non-specialised audience.

5.2.2 MULTIMEDIA MATERIAL

Now that the project activities are more mature, WP6 will organise, during the in-person meeting scheduled at M18 at Telefonica's premises, more than 10 video interviews to gather material for realising the following videos:

- Impact Video: where the Project coordinators will talk about the project in a nutshell, its main results and challenges and the impact it will generate on different levels.
- WPs videos: WP1, 2, 3, 4 and 5 leaders will be interviewed; they will explain the WP's status, the next steps and how the WP fit with the project's other activities.

 This material will also be used to run the social media campaign titled "LEARN ABOUT SPATIAL" which will start this summer.
- Educational module video: in this video, MinnaLearn will explain the educational module, its benefits and how it will be structured. Some extracts of this video will also be used to promote the educational module on social media and newsletters.
- Use cases videos: these videos will be a mix of explanations and concrete videos/images
 of the Use cases. This material will also be used to run the "LEARN ABOUT SPATIAL"
 social media campaign, which will start this summer.





5.2.3 SOCIAL MEDIA CAMPAIGNS

We will continue to structure ad-hoc social media campaigns to promote the project's activities, results, and achievements.

The following social media campaigns will be run, periodically renewed and adapted to the news and projects' activities:

- Women in science campaign: to promote the women working on the project and to give attention to the existing gender gap in science. Some topics that will be addressed: Why are women important in AI? Is artificial intelligence gendered? What is the role of AI in boosting gender equality? And then, we add information about SPATIAL, the women working in the project, etc. (calendar: February-March 2023)
- Learn about SPATIAL: a campaign to transfer the knowledge to our stakeholders, with the support of the video material that will be created (tentative calendar: May-August 2023)
- Educational module campaign: specific effort will be dedicated to promoting the educational module on social media. This will be supported by video material (calendar: April 2023 end of the project)
- PhDs editorials campaign: specific banners and posts on social media will be created to continue promoting the PhDs series.
- WP leaders' articles: As we already did with the WP1 article on the website "An Overview of the Vulnerabilities of Machine Learning Systems" we will create specific social media banners to promote the results the WPs are obtaining and sharing on the articles.

5.2.4 NEWSLETTERS & PRESS RELEASES

During the second half of the project, we will work on 1) increasing the number of subscribers to our newsletter, targeting at least 100 subscribers by the end of the project, and 2) being featured in more third-party newsletters since this has proven to be an effective tool to reach more stakeholders and 3) continuing to create our newsletters according to this calendar:

Month	Newsletter n.
19	n.6
24	n.7
30	n.8
36	n.9





An extra newsletter will be dedicated to promoting the educational module. In addition, we will launch and distribute to journalists, blogs, EU press, and specialised press, a press release entirely dedicated to informing them about the educational module.

Even though SPATIAL newsletters have a good number of opens (82,61%) and clicks (47%) we will continue encouraging SPATIAL social media community to subscribe to the newsletter by posting specific banners.



FIGURE 31 SOCIAL MEDIA BANNER- NEWSLETTER SUBSCRIPTION CAMPAIGN





APPENDIX A

1.GUIDELINES FOR EFFECTIVE POSTING ON LINKEDIN GROUPS



LinkedIn groups - Relevant examples



LinkedIn Groups provide a place for professionals in the same industry or with similar interests to share their insights and experiences, ask for guidance, and build valuable connections.

Opportunity to reach <u>a large number</u> of professionals beyond your existing LinkedIn network

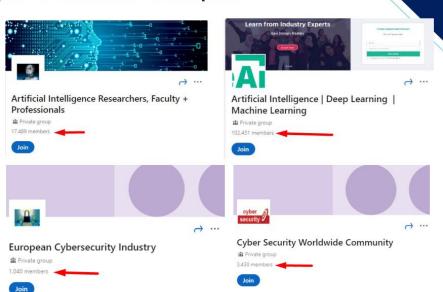




LinkedIn groups - Relevant examples

Opportunity to reach a large number of professionals beyond your existing LinkedIn network





Basic principle



Always Consider What Is Value For The Group Members





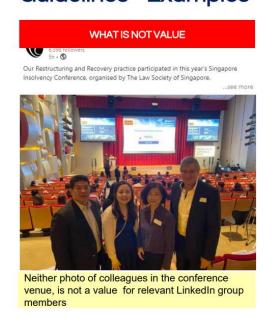
Guidelines - Examples

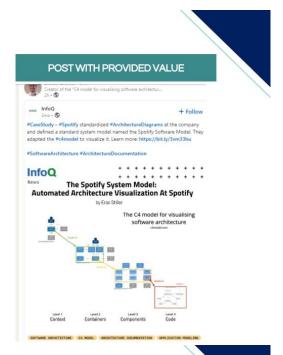


Guidelines - Examples

Photo of

members







tually presented in International Conference on Geo-Spatial Technology and th Resources I GTER 2022 organized by Hanoi University of Mining and ology, Hanoi, Vietnam. The title of my presentation was "Predicting"see more

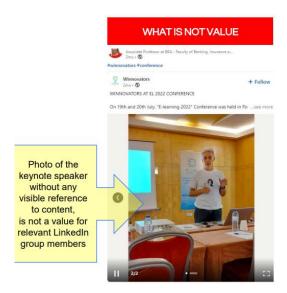


A presentation from the conference with a visible headline is a value.



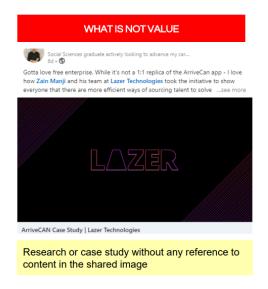


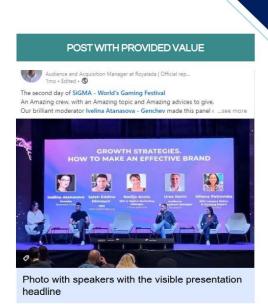
Guidelines - Examples











POST WITH PROVIDED VALUE





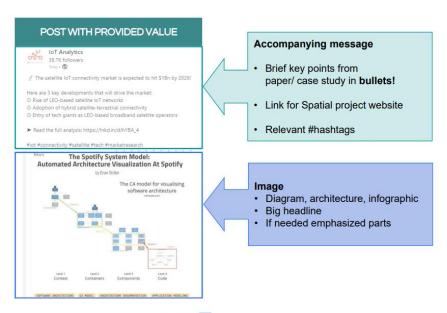


Never post "chunk"

of unstructured text

D6.2 Dissemination & Communication Interim Report

Guidelines - Structure of effective post



Guidelines





Diagram, architecture...

Accompanying message
• Brief key points from

Relevant #hashtags

paper/ case study in bullets!

Link for Spatial project website

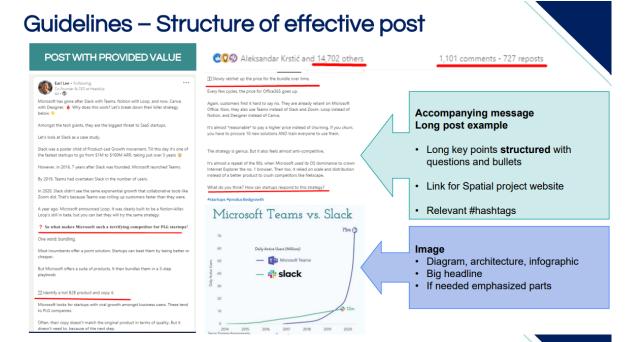
- Big headline
- If needed emphasized parts

Assistantly of now of the second of the seco

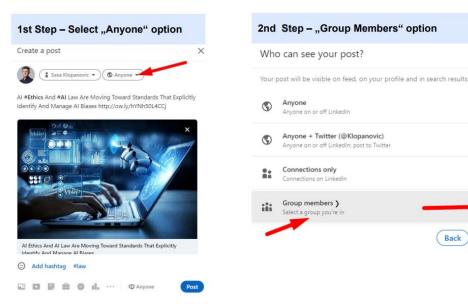


SPATIAL project is funded by the European Union's Horizon 2020 research and innovation programme under grant agreement N° 101021808.





Guidelines - How to post on LinkedIn Groups









Guidelines - How to post on LinkedIn Groups 4th Step - Repeat the same process for every 3rd Step - Select LinkedIn Group next LinkedIn group Artificial Intelligence | Digital Transformation Data Science, Automation Machine Learning Analytics Awesome Ways Al Is Used To Improve Our World Alai Artificial Intelligence, Deep Learning, Machine Learning Big Data, Data Science, Al, IoT, Cyber Security & Blockchain Back Save Back Save Thank you **MORE INFO**



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