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Plan for Exploitation and Dissemination of Results (PEDR) Draft

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Acronyms

Academic SEO Academic Search Engine Optimisation

AGPL Affero General Public Licence

Al Artificial Intelligence

AISBL Association without lucrative purpose
AIUCD Italian Digital Humanities Association
API application programming interface

BMC Business Model Canvas
B2B Business-to-Business
B2C Business-to-Consumer

CESSDA Consortium of European Social Science Data Archives

CFO Chief Financial Officer

CLARIN Common Language Resources and Technology Infrastructure

COAR Confederation of Open Access Repositories

CNR Italian National Research Council

CNR-ILC Italian National Research Council - Institute for Computational Linguistics

CNRS French National Centre for Scientific Research
DABAR Digital Academic Archives and Repositories

DARIAH Digital Research Infrastructure for the Arts and Humanities

DDI Data Documentation Initiative

DESCA Development of a Simplified Consortium Agreement
DHd Digital Humanities in the German-Speaking Countries

EGI European Grid Infrastructure
EKT National Documentation Centre



EOSC European Open Science Cloud

ERIC European Research Infrastructure Consortium

EU European Union

EU-RI European Research Infrastructures

FAIR principles Findable, Accessible, Interoperable, Reusable

FTE full time equivalent GA Grant Agreement

GDPR General Data Protection Regulation

HRČAK Portal of Croatian Scientific and Professional Journals

International Association for Social Science Information Service and Tech-

nology

IBL PAN Institute of Literary Research of the Polish Academy of Sciences

ICT Information and Communications Technology

Information and Communications Technology enhanced Social Sciences

and Humanities

IPR Intellectual Property Rights

KNOW/KC Know-Center

KPI Key Performance Indicator

LC Lexical Computing

LIDA Libraries in the Digital Age

LREC International Conference on Language Resources and Evaluation

M Month

MEOH Many Embers One Heat

MoU Memorandum of Understanding

MWS Max Weber Foundation - German Humanities Abroad

NGO Non-Governmental Organisation
NLP Natural Language Processing
NLU Natural Language Understanding

NPO Non-Profit Organisation
NURO Nuromedia GmbH

OAPEN Online Library and Publication Platform

OK Maps Open Knowledge Maps

Open Scholarly Communication in the European Research Area for Social

Sciences and Humanities

OPERAS RI OPERAS Research Infrastructure

OS Open Source

OPERAS

PEDR Plan for Exploitation and Dissemination of Results

PUBMET Publishing and Metrics



R&D research and development RI research infrastructure

ScaR Scalable Recommendation-as-a-service

SIG Special Interest Group

SME small and medium sized enterprise SSH social sciences and humanities

SSHOC SSH Open Cloud

SWOT strengths, weaknesses, opportunities, and threats

T task

TBS Trust Building System

THATCamp The Humanities and Technology Camp

TRIPLE Transforming Research through Innovative Practices for Linked Interdisci-

plinary Exploration

UNIZD University of Zadar WP work package





Publishable Summary

The "Plan for Exploitation and Dissemination of Results (PEDR) Draft" outlines the first version of a strategy for the TRIPLE project's dissemination and exploitation. It is the result of the complementary work done in work package 7 (Innovation, Exploitation and Sustainability) and work package 8 (Communication and Dissemination). The main objectives of the PEDR are:

- To build public awareness of the project
- To lay down the foundations for effective communication of the project's concept and potential benefits to interested stakeholders
- To communicate research findings to stimulate ongoing interest in the work of the project
- To build the foundations of an effective partnership model
- To identify the issues which are most important to the consortium
- To maximise exploitation opportunities of the project throughout and beyond its development.

The PEDR is a living document. Its structure mainly follows the template suggested in the TRIPLE Grant Agreement (proposal part). It will be updated during the project implementation and tailored to the project's needs and progress on demand. The PEDR is closely linked to the following other deliverables:

- D1.3 "Data Management Plan DRAFT" (work package [WP]1)-31 March 2020
- D3.1 "Report on User Needs" (WP3)–31 May 2020
- D7.1 "Report on Stakeholder and Opportunity Analysis" (WP7)–30 April 2020
- D7.2 "Intermediate Report on Exploitation and Sustainability Strategy" (WP7)–30 Sept. 2020
- D8.3 "Communication Strategy" (WP8)-31 July 2020

The current document is a first draft of the PEDR; the final version is due at the end of the project (D8.4). D8.4 will be a combination mainly of D8.6, D8.3, D7.2 and any other reports which will continually provide new inputs until the end of the project.

Section 1 of the PEDR Draft outlines some key information about the TRIPLE Project (i.e. key messages to communicate, as identified in the deliverable D8.3 "Communication Strategy"), which is relevant to contextualise the results. Sections 2 and 3 reflect our ideas for a first version of a Plan for the Dissemination of Results and for a Plan for Exploitation of Results, respectively.



1 | THE TRIPLE PROJECT

The following sections outline the core messages of the TRIPLE project: some key facts and figures about the project itself and the platform to be developed, goals and impacts as well as results of the project.

1.1 TRIPLE Key Facts and Figures

Some key facts and figures about the TRIPLE project:
TRIPLE is an acronym which stands for Transforming Research through Innovative Practices for Linked Interdisciplinary Exploration
Launch: 1 October 2019
Official kick-off: 4 December 2019
Project duration: 42 months (2019–2023)
Financed under the Horizon 2020 framework programme with approx. 5.6 million Euros
Consortium of 19 partners from 13 European countries
Coordinated from France by <u>Huma-Num</u> , a unit of the <u>French National Centre for Scientific</u> <u>Research (CNRS)</u>
Currently approx. 85 staff members working in one or more of the <u>eight work packages</u>
Some key facts about the TRIPLE platform:
is the heart of the project and will be released as a prototype in autumn 2021;
is an innovative multilingual and multicultural discovery solution for the social sciences and humanities (SSH);
will provide a single access point that allows you to explore, find, access and reuse materials such as literature, data, projects and researcher profiles at European scale;
is based on the <u>Isidore</u> search engine developed by <u>Huma-Num</u> (unit of <u>CNRS</u>)
will be one of the dedicated services of the Open Scholarly Communication in the European Research Area for Social Sciences and Humanities (OPERAS), the research infrastructure (RI) supporting open scholarly communication in the social sciences and humanities in the European Research Area.



1.2 TRIPLE Goals and Impacts

TRIPLE's main goals and impacts combined represent the project's unique selling point.

The key goals of the TRIPLE project are (Figure 1):

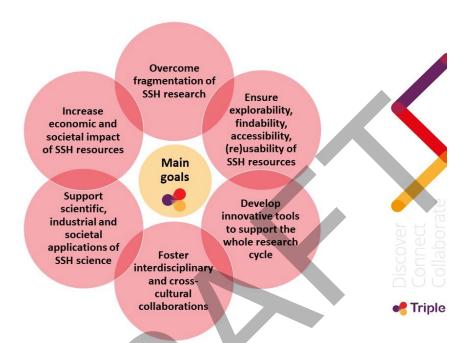


FIGURE 1. Main goals of the TRIPLE project

TRIPLE will overcome the strong disciplinary, linguistic and cultural fragmentation of SSI research by providing a single multilingual access point to material currently scattered acros local repositories.
The TRIPLE discovery platform will help users to explore, find, access and (re)use ope scholarly SSH resources: research data and publications, researcher profiles and projects.
TRIPLE will make use of innovative digital tools to support research, and it will discover new ways of funding research, for instance through a crowdfunding platform.
TRIPLE will foster new interdisciplinary collaborations in Europe and worldwide by bringin together researchers with diverse skills, practices and competencies, language and cultural backgrounds.
TRIPLE will support scientific, industrial and societal applications of SSH science by maximisin the reuse of resources through Open Science and Findable, Accessible, Interoperable, Reusable (FAIR) principles and a multidisciplinary transfer of knowledge.



TRIPLE will increase the economic and societal impact of SSH resources for the scientific community at large, but also for citizens, policy makers, the media and enterprises.

The TRIPLE project and TRIPLE discovery platform aim to have the following main impacts (Figure 2):

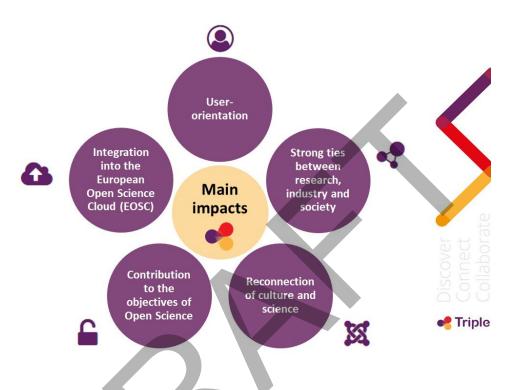
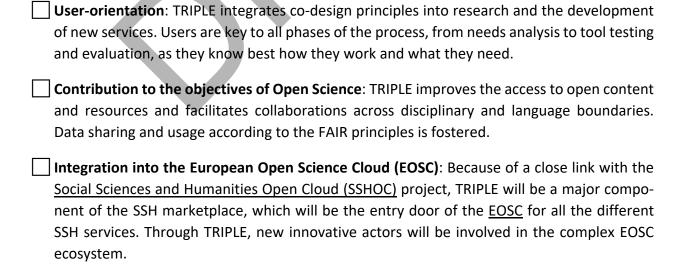


FIGURE 2. Main impacts the TRIPLE project and discovery platform aim for





Strong ties between research, industry and society: TRIPLE facilitates more efficient and effective SSH research for societies at large by involving civil society, public institutions and companies into scientific projects, thus strengthening the links between different types of stakeholders. Citizens' trust towards the sciences is strengthened, and there is an increase in the competitiveness and growth of small and medium sized enterprises (SMEs).
Reconnection of culture and science: TRIPLE is not only a platform that ensures the discoverability of SSH resources and facilitates collaborations, but also a cultural platform to discover, understand and highlight European diversity in terms of societies, languages and practices. It helps to promote cultural diversity in Europe.
1.3 TRIPLE Results
In a guideline by the <u>European Intellectual Property Rights (IPR) Helpdesk</u> project, the term "results" as used in the Horizon 2020 programme project results is defined as follows:
"'Any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights.' (Source: EC Research & Innovation Participant Portal Glossary/Reference Terms)

In a nutshell, results encompass all project outcomes that may be used by the project partners or other relevant stakeholders outside the project. They have the potential to be either commercially exploited (e.g. concrete products or services) or lay the foundation for further research, work or innovations (e.g. novel knowledge, insights, technologies, methods, data)"¹

the project duration time frame. These include:
The discovery platform itself with its innovative services
Research results, i.e. results from Surveys, qualitative research, interviews, workshops etc
Deliverables
Scientific publications (individual and joint publications relating to the project)
Other communication materials (e.g. presentations/posters/workshops) relating to the project

¹ The European IPR Helpdesk (2018). Making the Most of Your H2020 Project. Boosting the impact of your project through effective communication, dissemination and exploitation. https://www.iprhelpdesk.eu/sites/default/files/EU-IPR-Brochure-Boosting-Impact-C-D-E.pdf, p. 15.



2 | PLAN FOR DISSEMINATION OF RESULTS

The following plan for the dissemination of results outlines our current strategy of how to reach the TRIPLE stakeholders, i.e. the target audiences and the different European national communities.

TRIPLE will implement a number of dissemination measures which will focus, at first, on the communication of the project and its objectives while, at a more mature stage, these channels will be used to present and communicate the results of the project, its methodologies and workflows. Following a brochure by the European Intellectual Property Rights (IPR) Helpdesk, "dissemination" then means to "transfer knowledge and results with the aim to enable others to use and take up results, thus maximising the impact of EU-funded research"².

All project partners must disseminate the project results and ensure Open Access to all peer-reviewed scientific publications relating to its results. A more detailed description of dissemination measures can be found in D8.3 "Communication Strategy".

2.1 Target Audiences

It is important to carefully identify target audiences for the platform as this is paramount to the success of most Information and Communications Technology (ICT) projects (not only research platforms and infrastructures) to obtain a deep and qualitative understanding of the end users and to involve them in taking relevant decisions about how an ICT platform and the associated services can support the users' goals³. The design of the Transforming Research through Innovative Practices for Linked Interdisciplinary Exploration (TRIPLE) platform is based on a strong user-centred perspective with the main assumption of working in close contact with endusers, social sciences and humanities (SSH) researchers in particular, but also to work with other relevant stakeholders (such as policy makers or SMEs).

We agreed on two main differentiating criteria: academic and non-academic stakeholders. Subsequently, five representative stakeholder groups were identified for each main category, including possible subgroups as shown in Figure 3. A list of the different target audiences, along with the relevant dissemination measures that the project will take to inform each audience group, is shown in Table 1 of the deliverable D8.3 "Communication Strategy" (Section 5.2).

https://www.iprhelpdesk.eu/sites/default/files/EU-IPR-Brochure-Boosting-Impact-C-D-E.pdf, p. 26.

² The European IPR Helpdesk (2018). Making the Most of Your H2020 Project. Boosting the impact of your project through effective communication, dissemination and exploitation.

https://www.iprhelpdesk.eu/sites/default/files/EU-IPR-Brochure-Boosting-Impact-C-D-E.pdf, p. 13.

³ The European IPR Helpdesk (2018). Making the Most of Your H2020 Project. Boosting the impact of your project through effective communication, dissemination and exploitation.



ACADEMIC

Non-Academic

Researchers	CITIZENS
Associated Researchers SSH Researchers Other Discipline Researchers	Citizens Interested in SSH Community Citizens Volunteers (e.g. Developers)
Community Researchers Volunteers (e.g. Developers)	MEDIA
Universities	•Science Journalists
	ORGANIZATIONS
RESEARCH INSTITUTIONS	SMEs and SME Associations NGOs & Civil Society Associations (e.g.Red Cross) Trade Unions
Publishers	Public Authorities
•Open Access •Non Open Access	Municipalities Public Statistic Agencies National Parliaments
LIBRARIES & OTHER OPEN ACCESS REPOSITORIES	POLICY MAKERS
NEFOSITORIES	•EU & National Ministries •EU & National Funding Agencies

FIGURE 3. TRIPLE stakeholder overview divided in the categories "academic" and "non-academic"

We have also classified the stakeholders in the influence-interest matrix depicted in Figure 4. The general management strategies can be described as follows: Stakeholders with high power and low interest shall be kept satisfied. Those with low interest and low power shall be only involved with minimum effort. A stakeholder with low power and high interest in a project shall be kept informed, and finally, the high power, high interest stakeholders shall be closely involved and informed. For a detailed definition of the four quadrants, see Section 2 of the deliverable D7.1 "Report on Stakeholder and Opportunity Analysis".



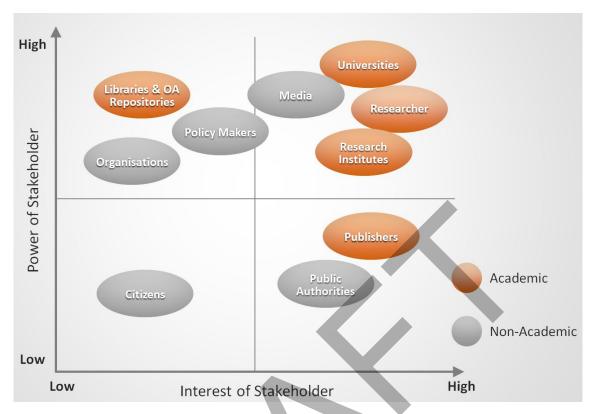


FIGURE 4. TRIPLE power-interest matrix

As researchers are the key stakeholders, the User Research undertaken as part of Task T3.1 focusses on these along with a smaller number of non-academic stakeholders to ensure we fully understand the needs of the end-users and the huge variety of the working practices that exists in the Social Sciences and Humanities research community across Europe. Clearly, this is not an easy task, due to the huge variety of disciplines and the Europe wide spread of researchers and also the heterogeneity of research practices and available resources. Task T3.1 was designed to use a mix of social sciences and design research approaches in order to tackle these challenges and then study the TRIPLE users.

User research was conducted during the first phase of the TRIPLE project. The main output of this research was the production of Personas and Scenarios; eight Personas (six for SSH researchers and two for other stakeholders), each with an associated Scenario. Personas are archetypes of users based on empirical research with end-users. Scenarios are narrative of the personas using a novel product, in this case the TRIPLE platform. The project's Personas and Scenarios are based on qualitative interviews conducted with 26 SSH researchers and 11 other stakeholders across Europe, during the period from December 2019 to March 2020. The interviews were analysed using Thematic Analysis in order to identify common patterns across all the interviews. These patterns constituted the basis for the creation of the Personas and Scenarios. From each of the Scenarios created, we have then obtained a list of end-user needs/requirements which will support the consequent design of the platform's end-user interface and will constitute the basis



for the subsequent co-design activities. The user needs have also been grouped in emerging functionalities.

Deliverable D3.1 "Report on User Needs" reports on the initial identification of the user needs for TRIPLE and on the Personas and Scenarios produced. This output will be considered in the following months by the project partners in order to identify which user needs should be prioritised and go into production and which needs are outside of the project's scope.

2.2 Dissemination Measures

The TRIPLE consortium has identified a series of main dissemination measures to support the project outreach. These dissemination measures will be public and openly accessible to all users. They will focus first on communicating about the project and what it aims to achieve, and then on the results and outcomes of TRIPLE, following the project evolution. In the bullet list below, we provide an overview of these measures, while in the subsequent Section 2.3 we tailor the dissemination measures to the various target audiences.

fc TI OI	RIPLE events: Conferences, workshops, trainings, webinars, THATcamps (i.e. an open space ormat event, a so-called "unconference" 4), book sprints and hackathons organised by the RIPLE project following the project's tasks and description of work. These events will be rganised throughout the duration of the project, aiming at creating a user community round TRIPLE.
in co aı	ublications : Scientific articles on the project, its objectives, workflows and results published in journals mainly dedicated to the Social Sciences and Humanities (SSH) research communities, but also in professional channels relevant to service providers, librarians, policy and Open Science officers and other media to increase the circulation. Also includes publication materials such as flyers, posters and infographics.
to	roject deliverables: All project deliverables will be public and deposited on Zenodo for users of openly access them. The deliverables will note the progress of the project, the different workflows, methodologies, challenges and solutions for developing the platform.
	eports on TRIPLE-initiated events : The activities listed before will be reported back to the roject, looking also towards measuring the impact of all these dissemination activities.
	eports on events that the TRIPLE consortium participates in: To keep track of the various vents at which TRIPLE is represented by its consortium, and the potential impact of this

⁴ "THATCamp stands for 'The Humanities and Technology Camp'. It is an unconference: an open, inexpensive meeting where humanists and technologists of all skill levels learn and build together in sessions proposed on the spot." (https://thatcamp.org/about/index.html). The name "THATCamp" is trademarked, and the event needs to be registered.



Training and guidelines: This is an important dissemination measure closer to the development of the TRIPLE platform, including training (virtual or face-to-face) and guidelines of how users can make best use of the platform for their research (including infographics). This step will be significant for securing the future use and sustainability of the TRIPLE platform.

participation, reports will be expected from the consortium members on participation in

Advocacy material: As Open Science lies close to the heart of the project, advocacy material on Open Access and Open Science will be prepared by the project, explaining also the wider environment of the European Open Science Cloud (EOSC) and its relation with TRIPLE.

More detailed information on dissemination measures, including a Dissemination Measures/ Target Audience Matrix, as well as on different communication channels (website, social media channels, newsletter, list of mailing lists and newsletters, the Zenodo repository and face-to-face communication) can be found in deliverable D8.3 "Communication Strategy".

2.3 Dissemination of Project Results by Partners

The TRIPLE consortium consists of a network of partners with long expertise in the SSH field. It is therefore strategic for the dissemination success of the project to leverage partners' individual contacts and related networks to multiply the effect of the outreach activities at geographical, qualitative and quantitative level. TRIPLE project partners have defined their individual dissemination measures in line with the overall project dissemination strategy. Table 1 provides an overview on how each partner plans to support the dissemination of project results in terms of a) the organisation's/institution's specific target audience, b) main measures and access channels to the identified audiences, c) contribution of the organisation to the management and implementation of the dissemination process and c) time planning of the dissemination during the project lifespan.

TABLE 1. TRIPLE project partner/dissemination measures matrix

Partner	Organisation's specific target audience(s)	Main measures and access channels to the identified target audience(s)	Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures
Abertay University	Academic audience; policy makers; SME's; journalists; other interested stakeholders	Academic journals; conference proceedings; Abertay University website; project website; social media	Collaboration with TRIPLE colleagues; participation in the joint writing up of relevant material for dissemination	Continuously throughout the project's lifespan and thereafter; dissemination of initial findings at specific events



Partner	Organisation's specific target audience(s)	Main measures and access channels to the identified target audience(s)	Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures
CESSDA ERIC	SSH researchers and research institutions; national Service providers; libraries; SSHOC project consortium	Website; service providers' websites; social media channels; annual report; CESSDA ERIC and SSHOC mailing lists; CESSDA events and webinars (IASSIST 21); DDI community	Active participation in WP8 activities and promoting project results via CESSDA ERIC communication channels	Continuously throughout the project's lifespan
CLARIN ERIC	SSH community; research infrastructures	Website; social media; training material; face- to-face events	To be specified by the WP for dissemination	Continuously throughout the project's lifespan (website and social media)
CNR (Italy)	Researchers from SSH and other disciplines	CNR-ILC and CLARIN-IT websites; CLARIN-IT social media (Twitter, Facebook); mailing lists; external events; advocacy materials	Spreading the project progress and results in major events of the sector (LREC Biennial Conference, CLARIN Annual Conference, AIUCD Annual Conference,)	Dissemination measures will (roughly) take place at M13, M16, M25, M28, M32, M37, M4. (could not take place at LREC 2020 (M8) due to the suspension of all events worldwide because of the COVID-19 emergency)
CNRS	French SSH researchers	Social media; mailing lists; specific events	To be defined; mainly done through OPERAS network (more than in Huma-Num)	Continuously throughout the project's lifespan
DARIAH ERIC	Research communities (Arts & (Digital) Humanities); policy makers; Open Science stakeholders; research infrastructures; project partners (SSH)	Website; mailing list; monthly newsletters; social media (Twitter); Members channels (websites, mailing lists, social media); Project partners channels (websites, mailing lists, social media); Training materials; Events (DARIAH events, TRIPLE	Active participation in the dissemination activities under the coordination of WP8; provision of content for the TRIPLE website when requested, dissemination of the project updates through DARIAH's channels; presentation of project's results in conferences and co-	dissemination. Planning to be more active in



Partner	Organisation's specific target audience(s)	Main measures and access channels to the identified target audience(s)	Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures	
		events, external events); conferences	authoring scientific articles and papers		
EGI	EGI researchers in SSH area; policy makers; SMEs; developers	Newsletter; booklet; conferences; mailing list; social media (LinkedIn, Twitter, Blog); community forum	Presentation of TRIPLE results in EGI conferences; newsletter issues to introduce TRIPLE and its services; joint organisation of workshops/events; communication of TRIPLE news via EGI social media	Continuously throughout the project's lifespan; article about TRIPLE in EGI newsletter in 4th quarter of 2020; EGI conference Nov. 2020	
IBL PAN	Researchers from SSH and other disciplines; service providers, e.g. libraries, scientific publishers; public authorities; policy makers	Mailing lists; social media; "Polish Studies Newsletter" website; IBL PAN website; project deliverables; reports; advocacy materials; TRIPLE, IBL PAN and external events	Translation of materials into Polish; sharing information via mailing lists, social media channels and institutional website	Continuously throughout the project's lifespan	
Know- Center	Scientific communities in the areas of computational social science, Open Science and recommender systems (WP4 & WP5), innovation management & business model innovation (WP7); Open Science	Social media (Twitter, Facebook, LinkedIn); website; deliverables; scientific publications; KC summer academy 2020 (online sessions to ScaR and business modelling)	Distributing information through different channels; collaborative work on TRIPLE publications	Summer academy 2020; ongoing (social media, scientific papers)	



Partner	Organisation's specific target audience(s)	Main measures and access channels to the identified target audience(s)	Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures
	communities and other researchers; data-driven business that benefits from recommender systems or innovative business modelling			
Lexical Computing	Corpus linguists; translators; terminologists; marketing and branding specialists; SEO specialists; NLP, NLU & AI specialists	Website; social media channels; mailing lists; publications	Dissemination related activities on website and social media, presenting TRIPLE as part of our other presentations and networking activities	Continuously throughout the project's lifespan; social media and mailing list communication can be published at TRIPLE's request
МЕОН	All individuals and all stakeholders	Trust Building System (TBS) - word of mouth; company website; TRIPLE website and related events	Through personal newsfeed in the TBS; through website; mailing list; online events; social media	Mostly once the TBS codesign workshop and their technical implementation have happened, i.e. roughly around M30
MWS	Researchers (esp. history, art history, sociology) in MWS's institutes worldwide, with a focus on German researchers, German DH community, German governmental representatives and policy makers on federal and regional levels	MWS website and social media channels (Twitter); MWS blogs, newsletter, printed magazine; OPERAS and TRIPLE websites and social media channels (e.g. Twitter, Facebook, LinkedIn); attendance at relevant conferences (e.g. annual DhD conference)	MWS-internal public relations department; WP8 leadership's regular work; connection with OPERAS RI communication; management of OPERAS communication	Continuously throughout the project's lifespan



Partner	Organisation's specific target audience(s) Main measures and access channels to the identified target audience(s)		Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures
National Documentati on Centre (EKT)	Greek SSH researchers; librarians; publishers; policy makers; funders	Website; social media; mailing lists; external events; advocacy material; training material; conferences	Distribution of information through different channels (mailing lists, social media channels, etc.); participation in the writing of relevant material for dissemination; translation of relevant material into Greek	Continuously throughout the project's lifespan
Net7	SSH academics; possibly other audiences such as academic audience from other domains, policy makers and public authorities.	Direct mailing to company's direct contact in the field; relevant networks where Net7 is involved (e.g GO FAIR); specific newsletters/mailing lists; SSH related conferences. Secondary target audience: direct email (e.g. in case of local public authorities); Net7 general communication channels (e.g. corporate social media, website)	Active participation under the coordination of the WP8 leader; provision of content for dissemination including writing scientific articles and papers; sharing project updates through the company's social media channels; sharing updates with relevant Net7 customers that could be interested in the project outputs	Continuously throughout the project's lifespan and in conjunction with relevant scientific events; in line with project's main output delivery
Nuromedia	Research communities; public authorities and enterprises	External events; trade shows	Dissemination of the project and project progress at trade shows	-
OAPEN	Researchers from SSH and other disciplines; service providers such as libraries or scientific publishers; public	OAPEN and DOAB channels: websites, mailing lists, blog, social media, OAPEN toolkit	Sharing information through OAPEN dissemination channels	Continuously throughout the project's lifespan and after project close



Partner	Organisation's specific target audience(s)	Main measures and access channels to the identified target audience(s)	Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures	
	authorities and policy makers				
OK Maps	Researchers; students; librarians, educators; science journalists; practitioners; stakeholders (e.g. libraries, repositories, funding organisations, publishers)	Website; newsletter; social media (e.g. Twitter, Facebook); github; webinars (usually hosted by third parties such as COAR or Wikimedia); mailing lists; press releases; surveys; conferences and other events; community programme (the Enthusiasts programme); participation in networks (e.g. GO FAIR, citizen-science.at); training materials (e.g. presentations slides, workshop concepts that can also be run autonomously)	Contributing to papers and posters; presenting TRIPLE as part of other presentations and networking activities; dissemination of TRIPLE-related activities via mailing lists and social media accounts	Continuously throughout the project's lifespan	
Universidade de Coimbra	Research communities (Arts & Digital Humanities); policy makers; Open Science stakeholders; research infrastructures and project partners (particularly in the area of SSH)	TRIPLE website; social media; mailing lists; OPERAS events; publications; reports; project deliverables; external events; advocacy materials; training services and guiding materials	Active participation in the dissemination activities; promotion of meetings/training on specific topics; co-authoring presentations, papers and reports	Started in July 2019; continuously throughout the project's lifespan (see e.g. the website " <u>UC</u> <u>Open Science</u> ")	



Partner	Organisation's specific target audience(s)	Main measures and access channels to the identified target audience(s)	Contribution of the organisation to the TRIPLE dissemination process	Period of dissemination measures
UNIZD	Croatian SSH community; publishers; institutional and national service providers; libraries; citizens	Institutional and national mailing lists (researchers, librarians, publishers, journals, OS); social networks (institutional); national OS portal (otvorenaznanost.hr); national and international conferences, summer schools organised by UNIZD (PUBMET, LIDA); webinars; workshops; face-to-face events; training materials	Dissemination of information through different channels; participation in research projects and publications; promotion of Open Science practices in general; other dissemination models defined by WP8	Continuously throughout the project's lifespan

2.4 Dissemination Management

Work package 8 is responsible for the communication and dissemination of results and is supported by all TRIPLE partners in this task.

Dissemination feedback and evaluation: To align the dissemination activities, communication channels and key messages, it is necessary to regularly review the whole process and to generate feedback on each step. Together with the monitoring of the communication activities, this will help to enhance the communication and dissemination of TRIPLE. For that purpose, reports will be completed after each event that the TRIPLE consortium organises, and regular evaluation meetings between the project management team and the communication officer will provide opportunities to discuss the strengths and weaknesses of the dissemination process and to adapt it accordingly. Finally, success indicators will be used on which the feedback can be based (Key Performance Indicators [KPIs]). KPIs measure the effect of dissemination strategies and evaluate the success of communication activities. The first step will be to choose the right KPIs for each activity. For example, the number of users of the social media channels, as well as the number of inquiries received and the responses to publications, e.g. on Zenodo, will be taken into account to evaluate the interest. In case of oral communication channels, like a workshop, the KPIs will be, among others, the audience attending the event, their feedback, their participation at future events.

Internal coordination: As the dissemination activities will facilitate both the building of a community of users and the entry into the market, it is necessary to establish a strong internal



organisation of the consortium. Most of the tasks will be led by WP8. WP8 needs to work closely with WP1 (Management), WP3 (Co-design and user research) and WP7 (Innovation, exploitation and sustainability). To assure the quality of dissemination activities, a knowledge and protection management has been constituted at the very beginning of the project. It will be organised in five value streams:

Skills (metric examples: fit with future needs, team compositions)
☐ Networks and relations (stability of networks, quality and quantity of relationships)
Processes, infrastructure and organisation (efficiency and quality)
Products, services and integrated systems (research and development [R&D] strategy, quality of products and services)
Intellectual property rights, Open Access and data management (those aspects are developed in the Exploitation plan part below).

3 | PLAN FOR EXPLOITATION OF RESULTS

Exploitation is recognised as one of the key enablers for the success of the TRIPLE project. Hence all partners within the project are aware of and committed to the exploitation of the project results, and the proposed focus of the project research and development (R&D) strongly adheres to their research and business strategies. The consortium, with their diverse and complementary research and business contexts and capabilities, provide all potential exploitation modalities and routes to bring TRIPLE results to all targeted user communities.

In general terms, the exploitation strategy depends on the actual exploitable assets. The exploitation strategy of the TRIPLE project will follow a stepwise approach and will be based on the combination of a bouquet of activities which will span throughout the project duration. It will vary in intensity based on the amount of information that can be made available and the results that will be produced during the project lifetime. In addition, different exploitable assets may be exploited by different stakeholders based on the management of the intellectual property rights (IPR).

Exploitation Models: The TRIPLE consortium recognises three main exploitation models for the project results: 1) The **commercial exploitation model**, which implies the partly paid provision of the project results to specific customer segments, complying with a pricing scheme which will be defined in the TRIPLE business plan, 2) The **research exploitation model**, which implies the reutilisation of the research know-how acquired in future research activities, and 3) The **technological exploitation model**, which implies the re-utilisation of the technological know-how acquired for the development of innovative products and the provision of advanced services built on top of them. However, not all project partners and interested stakeholders may exploit all project results using the three models defined above. The exploitation models of the TRIPLE



project results will be dependent upon three main parameters: a) the nature and interests of the project partners and stakeholders in general, b) the distribution model (commercial or non-commercial) of the project results and c) the distribution of the IPRs amongst the project partners.

The exploitation model 1 (commercial) will be further elaborated in the subsequent Section 3.1. Model 2 (research) and 3 (technological) are further specified in Section 3.2.

3.1 Joint Exploitation Strategy

The exploitation strategy of TRIPLE is based upon the "Innovation Management for Practitioners—How to Convert Research into Commercial Success Story" report⁵, issued by the European Commission aiming to tackle the European Paradox, namely a strong science base yet weak innovation performance, and has been tailored to the specificities, needs and results of the project. Throughout the tailoring process, the consortium paid special attention to the identified impact factors for market-oriented exploitation, and integrated them in its overall strategy, from setting up the consortium to support future commercialisation, to performing a preliminary market scan to identify the market targeted and the strength of the market demand. Work package (WP) 7 is dedicated to the question of the business model and sustainability of the discovery platform. However, it will rely on the outputs of European Open Science Cloud (EOSC)-related projects about commercial services and governance and will depend on the Open Scholarly Communication in the European Research Area for Social Sciences and Humanities Research Infrastructure (OPERAS RI).

The general objective of the joint exploitation strategy is to ensure the sustainability of the future TRIPLE platform. This is achieved through a viable business model which is essentially based on the interests of the project partners and their willingness to contribute after the project ends. To have an insight on the partners' contribution plans, the current interests and opinions have been collected in a survey by asking the following questions:

Is your organisation willing to contribute actively to the maintenance of the future TRIP	LE
platform after project end? (yes/yes, if/no)	
Specify what this contribution could look like (time, money, expertise, specific tasks like software updates, bug fixing, user support, etc.)?	
What costs (in Euro per year) do you estimate for these maintenance activities?	
What role could you imagine for the operation of the future TRIPLE platform (software development, support team, marketing, CFO, coordinator, other)	

⁵ European Commission (2013). Innovation-How to Convert Research into Commercial Success Story. https://ec.europa.eu/research/industrial_technologies/pdf/how-to-convert-research-into-commercial-story_en.pd.



Do you see your institution as an official (i.e. legal) part/partner of a future (legal) organisation of the TRIPLE platform?

The results of the survey show that there is a high willingness to contribute to any kind of maintenance activities after the project ends. This contribution (mainly in-kind) amounts to a current rough estimate of about 40,000 Euro per year. Many partners are also prepared to participate in various roles in a future operating organisation for the TRIPLE platform. These insights are a valuable foundation for the business model considerations in Section 3.7. The detailed results of the survey are presented in Table 2.

TABLE 2: Joint Exploitation Survey Results

Partner	Contri- bution after project end?	Concrete contribution?	Cost estimation for contribution?	Role within future TRIPLE platform?	Official/legal role in future TRIPLE organisation?
Abertay University	Yes, if contributio n leads to scientific output	Continue with the user research/evaluation of the use of the platform; study better how the users use the platform in their work, once this is fully operational	Circa 3,000 Euro/year, as a low end estimation	Continuous research with intent of improving the service	Needs to be discussed at a more advanced time in the project
CESSDA	No	Expertise; continue to provide compatible metadata endpoints and be involved in future metadata developments, particularly with respect to Controlled Vocabularies.		Consultancy; data provider	No, but a formal collaboration with OPERAS as the future service provider would be desirable
CLARIN	Yes	Expertise; user support	Hard to specify, probably all contributions will be in-kind	Collaboration on interoperability issues and user engagement	Unclear at this stage; interested in a MoU specifying the models of collaboration rather than becoming part of something else



Partner	Contribution after project end?	Concrete contribution?	Cost estimation for contribution?	Role within future TRIPLE platform?	Official/legal role in future TRIPLE organisation?
CNR (Italy)	Yes	Time and expertise for platform maintenance	For these maintenance activities CNR estimates a cost equal to 4,000 Euro/year.	Support team for the operation of the future TRIPLE platform	Yes
CNRS	Yes	Time; money; software updates; bug fixing etc. This has to be discussed in the context of OPERAS as Huma-Num is a Core Member.	10,000 Euro/year (for hosting) + at least 1 FTE	Coordinator; support team; host	Yes
DARIAH	yes, depending on the governanc e structure	Expertise; eventually user support when relevant; community engagement if applicable; possible involvement in content participation	Hard to specify, probably all contributions will be in-kind	DARIAH would like to play a role but it is difficult to say which one. This will depend on many factors (needs, governance, etc.).	No, a MoU between both RIs would maybe make more sense than becoming a partner
EGI	Yes	Continue technical support for EGI Check-in. Provide EGI Cloud resources for hosting TRIPLE services	0.5 PM per year/5,000 Euro/year via EGI funded projects e.g. INFRAEOSC-07/EGI- ACE	Cloud resource provider; technical support	Yes
IBL PAN	Yes, in terms of work with local providers	Adding and mapping other providers	Approximately 2,000 Euro/year (in- kind)	Providers' support coordinator	Yes
Know- Center	Yes	Since the implemented recommender framework ScaR will be constantly further developed at KNOW, updates and bug fixes	Approximately 5,000 Euro/year (in- kind)	Provider of software component (ScaR Recommender)	In principle yes, but it depends on the general conditions



Partner	Contri- bution after project end?	Concrete contribution?	Cost estimation for contribution?	Role within future TRIPLE platform?	Official/legal role in future TRIPLE organisation?
		will be provided for the TRIPLE platform.			
Lexical Computing	Yes	Expertise	-	Consultancy regarding language technology and data	No
МЕОН	Yes	Trust Building System bug fixing; user support; software updates (if minor); overall advice on the business management of the platform; in-kind contribution unless contribution becomes systematic and/or frequent	For the TBS management, bug fixing, development incl. back-end and front-end, security issues fixing: 5,000 Euro/month and for project management 2,000 Euro/month	Trust Building System manager and support team; marketing of the TBS	Yes
MWS	Yes	Time; if possible parts of FTE for data export from perspectivia.net; continuation of outreach activities etc.	Difficult to specify, probably more likely parts of FTE than money	Communication support	Yes, in the context of the AISBL OPERAS
National Documenta tion Centre (EKT)	Yes	User support; data provider; time; software updates	-	Data provider; support team	Yes
Net7	Yes	In-kind contribution for minor technical adjustments, e.g. bug fixing, user support, software updates	4,000 Euro/year	Technical support for the current platform; technical partner for the platform software evolution	Yes
Nuromedia	Yes	Maintenance of the front-end part we developed and the TBS; bug fixing; user support in case of technical questions	-	Software developer	Yes



Partner	Contri- bution after project end?	Concrete contribution?	Cost estimation for contribution?	Role within future TRIPLE platform?	Official/legal role in future TRIPLE organisation?
OAPEN	Yes	Time; expertise	In-kind support	-	No
OK Maps	Yes, if the tasks are well-defined and the work is fully funded	Maintenance: software updates, bug fixing, adaptation to API/framework changes	Heavily depends on the extent of the maintenance tasks (frequency of updates, extent of API/framework changes etc.)	Maintainer of platform services developed by OKMaps	No, not as this point, maybe as associate partner
Universida de de Coimbra	Yes, in particular by its direct involveme nt in the keeping of the catalogue of services provided	In-kind support and expertise, in particular the keeping of a Multilingual Translation Platform, based at the University of Coimbra	10,000 Euro/year	Coimbra is ready to play a role, depending on the needs and future governance of the TRIPLE platform.	Yes, in the context of the AISBL OPERAS
UNIZD	Yes	UNIZD contribution could consist in time, expertise and data provision. Also, there is a possibility to involve our students in user support and website maintenance if applicable.	5,000 Euro/year (in-kind)	Data provider; continuous research; member of support team; coordinator of different activities related to the development and maintenance	Yes, although it needs to be discussed with the university management

3.2 Individual Exploitation Strategies

The main purpose of the individual exploitation plan is to ensure, for each partner, the effective use of project results. The foundation for the individual exploitation are the diverse and complementary research and business contexts and capabilities of the consortium partners and their willingness to make available TRIPLE's project results to all targeted user communities. To concretise and update these ambitions we administered a survey with the following questions:



gains/benefits do you expect?

How would you prioritise your exploitation ambitions (e.g. scientific, business, technical progress, knowledge gain, visibility, image/reputation etc.)? Please rank and start with the most important one.
 What concrete (if possible measurable) results do you expect for your organisation? What

The results of the first question are presented in Figure 5. Universities and research institutions have a main focus on scientific exploitation. Non-profit organisations (NPO) and small and medium enterprises (SME) plan to exploit the TRIPLE results to support their businesses. European Research Infrastructure Consortiums (ERICs) have a more balanced ratio between business and scientific exploitation ambitions.

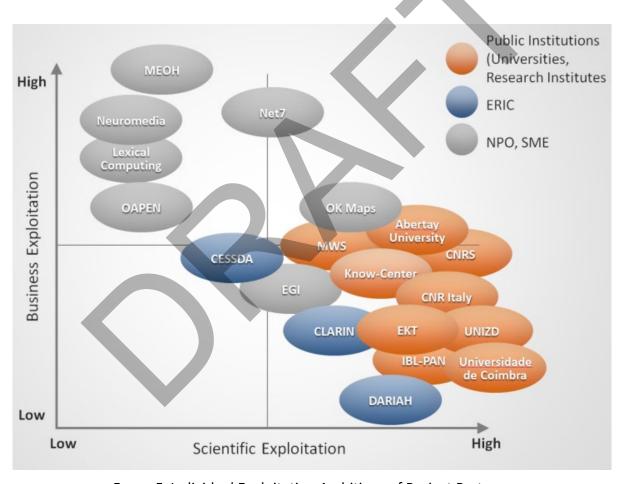


FIGURE 5. Individual Exploitation Ambitions of Project Partners

Table 3 shows in detail the current status/plan of the individual exploitation ambitions of each consortium partner. This wide range of expected benefits and results form a solid basis for an effective exploitation of TRIPLE's project results.



TABLE 3. Individual Exploitation Survey Results

Partner	Partner Type	Prioritisation of exploitation ambition	Concrete expected benefits/results
Abertay University	Public Institution	 Scientific Reputation Knowledge gain Visibility 	As an academic/research partner Abertay sees the main exploitation of the project results in terms of scientific publications and in the increased research reputation that derives from participation in a large European project. Publications obtained from the research will facilitate the University's future successful applications toward research grants in the areas of co-design and user research.
CESSDA	ERIC	Visibility Technical compatibility	CESSDA and its national Service Providers will benefit from the alignment on metadata and the inclusion of CESSDA in the future. The TRIPLE platform will increase the re-use of its data holdings.
CLARIN	ERIC	 Scientific Technical progress Visibility Knowledge gain 	TRIPLE's discovery services that link together research data, documents, people and projects will be of benefit to the CLARIN infrastructure, as the outcome of the project will create an additional layer of interaction and collaboration with the broader community. Moreover, the integration of TRIPLE in EOSC will increase the visibility of the CLARIN infrastructure in the wider European ecosystem of SSH and Open Science.
CNR (Italy)	Public Institution	 Scientific Technical progress Knowledge gain Visibility Image Business 	CNR will exploit the TRIPLE discovery platform to complement its features with the features and services offered by the CLARIN-IT national node and the CLARIN infrastructure, at large. TRIPLE, indeed, will allow not only to discover research data but also to connect projects and people, thus allowing people to engage and interact. TRIPLE is also expected to facilitate integration into the EOSC and implementation of services in the EOSC marketplace.
CNRS	Public Institution	1. Scientific 2. Knowledge gain 3. Technical progress 4. Business 5. Image/ reputation	CNRS will exploit TRIPLE platform at two levels: 1. As a pilot to implement new features to the French national platform ISIDORE, 2. To extend the OPERAS services portfolio as planned in the OPERAS-D project. TRIPLE will then be one of the core services OPERAS will offer to the research community at European level which, in return, will engage more stakeholders with the OPERAS infrastructure.
DARIAH	ERIC	 Scientific Knowledge gain Visibility Reputation 	Deepen and expand relations with the other partners involved in the project. Draw inspiration from the deliverables to continue building DARIAH's tools & services. Make sure that the currently developed SSH Open Marketplace and TRIPLE are compatible and complementary. Promote further Open Science in SSH



Partner	Partner Type	Prioritisation of exploitation ambition	Concrete expected benefits/results			
			communities. Offer visibility for DARIAH's projects and communities.			
EGI	Foundation	 Technical progress Science Business Visibility 	TRIPLE services will be integrated with the EGI Check-in. EGI will support to make the TRIPLE services optimally visible in the EOSC portal and marketplace, providing access to a marketplace for data intensive research services that aim at reaching tens of millions of data analysis experts in Europe in the near to medium term future.			
IBL PAN	Public Institution	 Scientific Technical progress Knowledge gain 	Increasing discoverability and usage of Polish language resources (mapping providers from PL); IBL PAN will have an easier and faster access to materials and information in their fields of expertise in different languages.			
Know- Center	Research Institution	 Scientific Knowledge gain Visibility Reputation 	KC will leverage the work from TRIPLE in order to further develop its recommendation framework ScaR. Furthermore, KC will strengthen its knowledge base in the area of data-driven business models.			
Lexical Computing	SME	1. Business 2. Technical progress	LCC will benefit from the alignments between the different thesauri at a European level and from other language data sets created within the project. LC will use the data for further research, to strengthen its Sketch Engine machine and to increase its offers.			
МЕОН	Non-profit organisation	 Reputation Business Visibility Knowledge gain Technical progress 	MEOH will further exploit the results of the trust building system for B2B and B2C applications. The trust model being general-purpose, it can be applied to build trusted relationships within any type of multi-stakeholder environments such as between multiple organisations, between businesses and customers, and between the public sector and citizens. Second, additional layers and plugins will be developed to support B2C solutions such as scouting for reliable partners and talents beyond the known trusted horizon, disseminating products and ideas within social clusters of high value, and enabling collective decision making at scale.			
MWS	Public Institution/ Foundation	 Visibility Knowledge gain Scientific 	Growing commitment of MWS institutes to OPERAS and other European research infrastructures, thus fostering the role of MWS as national contact point			
National Document ation Centre (EKT)	Public Institution	 Knowledge gain Scientific Business Technical 	The main benefits for EKT will be the following: improvement of the portal OpenArchives.gr which is the main provider of Greek content for the TRIPLE platform. Increased discoverability and usage of Greek Open Access content (EKT is the main provider of such content).			



Partner	Partner Type	Prioritisation of exploitation ambition	Concrete expected benefits/results	
		progress 5. Image/visibility		
Net7	SME	 Business Knowledge gain Technical progress Reputation Visibility 	Net7 will develop a business plan and deploy its service Pundit into the EOSC marketplace as well as into external markets. Pundit has been released as Open Source (under AGPL 3.0) to foster use and customisation in distinct domains and settings. In terms of segmentation, we plan to address the following main classes of target users: 1) Scholars/researchers, 2) Students/teachers	
Nuromedia	SME	 Business Technical progress 	Nuromedia plans to exploit the results of the TRIPLE project and the applications and methodologies. Key NURO personnel are doing a lot of sales activities participating in lots of matchmaking events, conferences, workshops and trade shows, where they will promote and disseminate the project and the results with the aim to also generate interest in the further exploitation of TRIPLE, starting with the very beginning of the project. NURO will extend its client base using the knowledge gained during the project.	
OAPEN	Non-profit organisation / Foundation	1. Visibility 2 Technical compatibility	OAPEN will leverage the TRIPLE discovery platform to increase discovery and usage of its Open Access monographs collection, thereby increasing the impact of OA models for monographs. In addition, TRIPLE will improve integration with EOSC.	
OK Maps	Non-profit organisation	 Technical progress Visibility Knowledge gain Scientific Business Image 	OKMAPS will use the results from TRIPLE to further develop its visualisation framework Head Start. OKMAPS will also enhance its discovery services with innovative technologies developed in TRIPLE and deploy these services on the Open Knowledge Maps platform and the EOSC marketplace. In addition, OKMAPS will refine its own business model based on the outcomes of TRIPLE.	
Universida de de Coimbra	Public Institution	 scientific knowledge gain technical progress visibility reputation business 	Coimbra University (through the digital ecosystem UC Digitalis) will exploit the TRIPLE discovery platform to enhance the visibility of its contents and the compliance with FAIR principles. It will as well strongly facilitate the integration in the EOSC and the market place, particularly in the area of SSH.	
UNIZD	Public Institution	 Scientific Knowledge gain Visibility Image/reputation 	UNIZD will leverage the TRIPLE platform to increase discovery and usage of Croatian Open Access publications (journals, monographs and others) and research data promoting higher publishing standards and integration with EOSC. Furthermore, sharing	



Partner	Partner Type	Prioritisation of exploitation ambition	Concrete expected benefits/results
		5. Technical progress	different practices and knowledge of TRIPLE partners could foster improvements of the services provided by UNIZD (e.g. MorePress publishing platform) and national OS infrastructure (HRČAK, DABAR).

3.3 Target Audiences

Based on the available results from the stakeholder analysis conducted in task T7.1 (reported in deliverable D7.1 "Report on Stakeholder and Opportunity Analysis") and the results of the user requirements survey reported in deliverable D3.1 "Report on User Needs", the following main stakeholders were identified: social sciences and humanities (SSH) researchers (the main target group), researchers from other disciplines, service providers (esp. scientific publishers and libraries) and socio-economic actors, such as small and medium sized enterprises (SMEs), public institutions, non-governmental organisations (NGOs) and journalists. The TRIPLE and OPERAS consortia will also be targeted. Actors may take multiple roles, e.g. they can be a researcher and at the same time a service provider or part of the OPERAS consortium.

3.4 Competition Analysis

A list of competitor platforms was created in collaboration with the project members of WP7 (Innovation, exploitation and sustainability). This list features competitors' platforms that offer similar services and share target markets. In order to get a broad overview of the competitive environment, 26 scholarly communication platforms were evaluated through web-based research. The analysis covers an overview of offered features and functions, organisational insights, strengths and weaknesses as well as impressions on usability and user experience. The Alexa rank score was used to determine these platforms' popularity. The Alexa rank is a global ranking system (www.alexa.com) which considers the estimated average of daily unique visitors and the number of pageviews over the past three months. The main benefit for the exploitation plan is to learn if and how our platform differs from our competitors' platforms.





FIGURE 6. Analysed competitor platforms including location and launch year

Our analysis shows that the main competitors have an established presence in the market, and the brands are well known. We need to pay the most attention to platforms such as Frontiers, Lens.org, Academia.edu, ResearchGate, Iris.ai, due to their innovation strategy and constant release of new innovative features. However, we were unable to identify very successful platforms which target specifically the SSH community. Looking at the products and services provided by the competitors, we recognise that the annotation tool and the visual discovery feature represent unique features that will distinguish TRIPLE from the competition. An extensive report on the competitor analysis can be found in Section 4 of deliverable D7.1 "Report on Stakeholder and Opportunity Analysis".

Within task T7.1, we conducted a first strengths, weaknesses, opportunities and threats (SWOT) analysis to derive strategic directions and get first building blocks for a sustainable TRIPLE business model. In order to get the appropriate input for the four SWOT categories, the WP7 team discussed relevant questions for each category within WP7 coordination calls. The results of this process are described in detail in Section 6 of deliverable D7.1.



3.5 Exploitation Management

In general, TRIPLE exploitation will mainly rely on OPERAS RI, since TRIPLE will be one of its three principal platforms. This governance model will be elaborated in detail in task T7.5 and reported in deliverable D7.4 "Final Report on Exploitation and Sustainability Strategy".

Exploitation strategy: The strategy will comprise of a range of exploitation activities which include:

- 1. the identification of the innovative exploitable assets, which the project will deliver through its results to its target users,
- 2. the conduction of a thorough market analysis (initial analysis is already reported in deliverable D7.1 "Report on Stakeholder and Opportunity Analysis") which will aim at the identification of the market towards which TRIPLE is targeted, its segmentation, the positioning of current competitors and all corresponding emerging trends,
- **3.** the analytical definition of all possible commercial and non-commercial exploitation models, which have been preliminarily identified and will be outlined in detail in the forthcoming deliverable D7.2 "Intermediate Report on Exploitation and Sustainability Strategy",
- 4. the analytical definition and evaluation of the sustainability and viability of possible business models and alternative solutions that may be followed for the provision of the project solution and services to the identified stakeholders, including licensing schemes, pricing, etc., and the corresponding tactical revisions as deemed necessary throughout the project lifecycle,
- 5. the establishment of relationships of trust with customers/users early within the project, who can facilitate the quicker adoption of the solution and provide valuable feedback which can be used in the commercialisation phase, and
- **6.** the identification of financial support from diversified funds (including for example institutional funds or other private and/or public funds) that can be used to support direct and/or indirect commercial transformation, ranging from additional research activities to bug fixing and to technology integration in existing or future solutions.

Exploitation intensity: The exploitation activities will vary in intensity based on the delivery of the project results and the acquisition of research and development (R&D) know-how. Towards this end, the exploitation activities have started mildly with the identification of the innovative exploitable assets of the project and the conduction of a preliminary market analysis identifying potential stakeholders and competitors. Prior to the delivery of the intermediate project results, we will intensify our activities with the more analytical definition of all possible commercial and non-commercial exploitation models and definition and evaluation of the sustainability and viability of possible business models and alternative solutions. The peak of exploitation activities will be prior to the delivery of the project's final results, when the project dissemination activities will also be intense. The main task will be reaching and attracting potential stakeholders and customers. Following the project end, the TRIPLE consortium will aim at creating appropriate business networks and at exploiting all project results.



Exploitation objectives: The exploitation strategy of TRIPLE will follow three main stages of expansion with specific short-term, medium-term and long-term objectives:

- 1. Short-term objectives: This first stage corresponds to a period beginning with the start of the project activities and ends in parallel with the project. During this period, the main objective is to develop a highly accepted platform (exceptional usability and user experience) in order to gain a solid data inflow from the researchers. Furthermore, we verify and validate the TRIPLE results, concepts, models, tools and services.
- 2. Medium-term objectives: This second stage corresponds to a period beginning with the end of the project and ending after two or three years, depending on the maturity and completion of the project results. The main objective includes the commercialisation of the "to date" results and developments of semi-commercial products and services, while it further relates to potential fine-tuning, or expansion of the TRIPLE platform and services.
- **3.** Long-term objectives: The last stage corresponds to the commercialisation of the TRIPLE platform and services derived from the first and second stage.

3.6 Intellectual Property Rights Management

The knowledge and protection management plan is in the final phase during the preparation of the Consortium Agreement. The purpose of the Consortium Agreement is to establish a legal framework for the project in order to provide clear regulations for issues within the consortium related to IP ownership, confidential information, Open Source issues, standard contributions, and access rights to background and foreground IP for the duration of the project and any other matters of the consortium's interest. The TRIPLE consortium uses the DESCA 2020 model. Although the Consortium Agreement is a basic and stable document, it will be modified in the course of the project duration to take into account any updated consensus on the project results. The TRIPLE project plans to contribute to the debates and evolutions that are currently taking place in the crucial domain of intellectual property rights and to propose new solutions and help standardise norms and rules on Open Access and Open Data at a European level. TRIPLE will deposit its aggregated data, in respect of the General Data Protection Regulation (GDPR), in a specific research data repository, taking measures to make it openly available for access, analysis, exploitation and dissemination freely (especially by publishing it under Creative Commons licences) and provide information about tools and equipment of significance for the validation of the results. This underlines the baseline of the TRIPLE project: "to generate an impact on the European knowledge economy at short-term."

3.7 Business Model

In general, a well-designed and tested business model is the key success factor for a sustainable exploitation of the TRIPLE platform. The TRIPLE business model must be thought in relation to the global EOSC business model. To do that, the TRIPLE project will carefully follow the work done in the EOSC governance project (answer to Infraeosc-5a), where the consortium has strong links



(through the GO FAIR Implementation Network) and in the project lead by GEANT which answers to the call Infraeosc-1 about public procurements and access to commercial services. We consider the TRIPLE platform as a specific service provided and sustained by OPERAS RI; its business model will also take this part into consideration.

A business model describes the way in which organisations create, communicate and capture values. The description of the TRIPLE platform in the form of a business model is intended to help understand, analyse and communicate the key factors of the organisation. In the TRIPLE project, we use the Business Model Canvas (BMC) from Osterwalder & Pigneur⁶ to visualise our Business Model considerations. The BMC (see Figure 7) consists of nine building blocks:

Customer Segments: describes the different customer/user groups we want to reach and serve with the TRIPLE platform
☐ Value Proposition: describes the TRIPLE services that create value for a specific customer/user group
Channels: describes how the TRIPLE platform communicates with and reaches its customer/user groups.
Customer Relationships: describes the types of relationships TRIPLE establishes with specific customer segments/user groups or stakeholder.
Revenue Streams: describes the possible monetary and non-monetary income streams.
Key Resources: describes the most important assets required to make the TRIPLE platform work.
Key Activities: describes the most important (business) processes to make the TRIPLE platform work.
Key Partners: describes the network of partners (stakeholders) that is necessary to make the TRIPLE platform work.

⁶ Osterwalder, Alexander & Pigneur, Yves (2010). Business Model Generation. A Handbook for Visionaries, Game Changers, and Challengers. Hoboken, New Jersey: John Wiley & Sons.



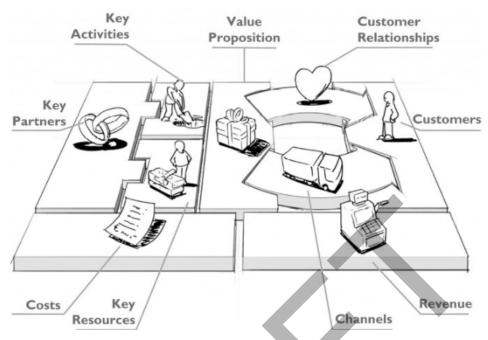


FIGURE 7. Business Model Canvas according to Osterwalder & Pigneur (image: CC BY-SA 3.0)

As already outlined in deliverable D7.1 "Report on Stakeholder and Opportunity Analysis", within the TRIPLE project we are primarily guided by Alan Cooper's interaction design principle: "A successful digital product needs to be desirable, viable and buildable." In our exploitation considerations, we are also applying this principle to business models (see Figure 8). The TRIPLE business model needs to be feasible, desirable and viable in order to be sustainable after the project end. The main responsibility for "desirability" lies with work package (WP) 3 (Co-design and user research), which takes care that the offered TRIPLE platform services are in line with the user requirements. WP4 (Integration and building of TRIPLE platform) and WP5 (Development and integration of innovative services) take care of "capability" and are liable for the development and integration of the TRIPLE platform (core) and its innovative services. Last but not least, WP7 (Innovation, exploitation and sustainability) is accountable for "viability" and takes care of a sustainable business.

⁷ Osterwalder, Alexander & Pigneur, Yves (2010). Business Model Generation. A Handbook for Visionaries, Game Changers, and Challengers. Hoboken, New Jersey: John Wiley & Sons.

⁸ Cooper, Alan, Reimann, Robert, & Cronin, David (2007). About face 3: the essentials of interaction design. New York: John Wiley & Sons.



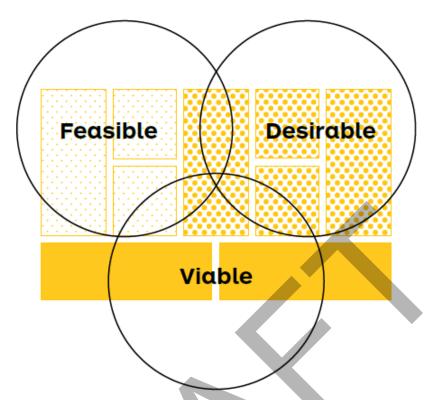


FIGURE 8. Interaction Design Principles applied to BMC by Bland & Osterwalder⁹

Initial TRIPLE Business Model: For the development and the presentation of the initial TRIPLE Business Model, we apply the Lean Canvas (see Figure 9), an adaption of the BMC, created by Ash Maurya¹⁰. The Lean Canvas is meant for entrepreneurs and deeply focuses on startup factors such as uncertainty and risk. These conditions fit perfectly with the actual development status of the TRIPLE project. The structure is similar to the well-known BMC, but some parts have been exchanged.

⁹ Bland, David J. & Osterwalder, Alexander (2020). Testing business ideas. Hoboken, New Jersey: John Wiley & Sons, p. 33.

¹⁰ Maurya, Ash (2012). Running lean: Iterate from plan A to a plan that works. Sebastobol, CA: O'Reilly Media.



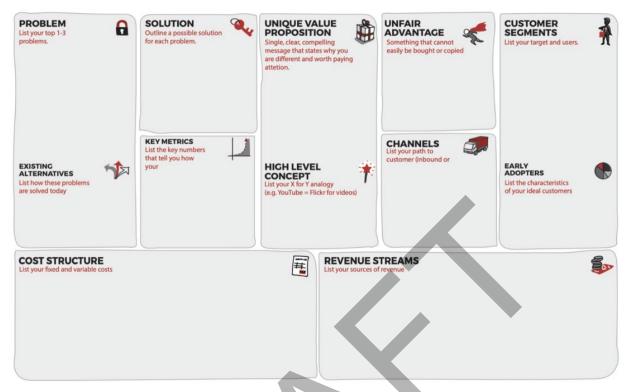


FIGURE 9. Lean Canvas by Ash Maurya¹¹ (image: CC BY-SA 3.0)

The TRIPLE business development follows the iterative process of business concept design (see Figure 10) according to Bland & Osterwalder. The first design activity is to transform our TRIPLE business ideas into a unique value proposition and develop it further into a complete business model. This first initial business model consists of many risky assumptions e.g.

Do TRIPLE services really solve high-value customer/user problems?
Do we have the right value proposition for the user groups we are targeting?
Can we perform all promised TRIPLE functions and features (at scale) at the right quality?
Are customers willing to pay for a dedicated service TRIPLE offers?
Can we generate revenues that at least cover the costs?

These hypotheses cover three types of risk. First, that users/customers show a low interest in our TRIPLE services (desirability). Second, we have problems to build and deliver our services at the right quality level (feasibility). Third, we can not realise enough revenues to cover the incurred costs (viability). To reduce uncertainty and risk, we need to test the most important hypothesis with appropriate experiments. Each experiment generates evidence and insights that allow us to

¹¹ Lean Canvas is adapted from The Business Model Canvas and is licensed under the Creative Commons Attribution-Share Alike 3.0 Un-ported License (<u>CC BY-SA 3.0</u>) and available at https://leanstack.com/leancanvas.



learn and decide. Based on the evidence and insights we need to decide to adapt/change our business ideas or we are getting confirmation that our direction is sound.

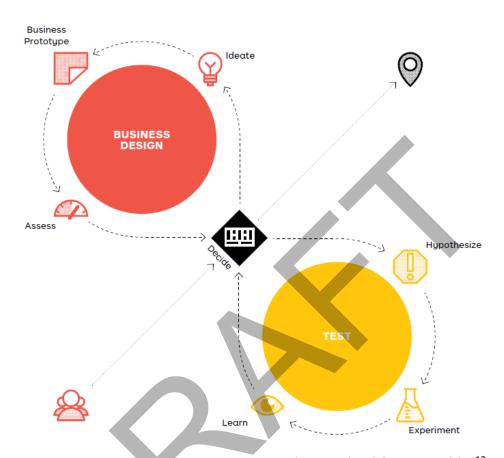


FIGURE 10. Business Concept Design according to Bland & Osterwalder¹²

Figure 11 shows the initial TRIPLE Business Model assumptions at this point of time. As the project progresses, the assumptions made are regularly reviewed, tested and if necessary adapted. Next update will be provided in deliverable D7.2 "Intermediate Report on Exploitation and Sustainability Strategy" at the end of M12.

¹² Bland, David J. & Osterwalder, Alexander (2020). Testing business ideas. Hoboken, New Jersey: John Wiley & Sons, p. X.



PROBLEM	SOLUTION	UNIQUE VALUE PROPOSIT	ION UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
Low visibility of SSH research output Low usage of SSH research output appart from academia (SME, Journalists, Citizens, Policy Makers) Low perceived impact on SSC research Lack of digital literacy in SSH community	Search (publications & data, projects, people) Recommendations Trust Building System New Visualisations Annotation Service API Crowd Funding	A new discovery service allowing customers to find SSH research out (publications, data, projects), people and new ways of funding research.	advanced technologies	Researchers Science Journalists Policy Makers SMEs (SME Associations) NGOs Science interested citizens
	KEYMETRICS		CHANNELS	
existing alternatives different discovery platforms with specific functions and features which are currently not focussing on SSH	Platform Site Analytics (unique users, amount of searches) Number of services Size (number of research projects, publications, data sets, etc.) Number of paying Customers	HIGH-LEVELCONCEPT TRIPLE Platform = Goog Scholar + ResearchGate SSH		EARLY ADOPTERS Inexperienced researcher from a discipline other than SSH looking for an overview on a SSH topic.
Platform hosting and mainte Personnel costs for operatio development, bug fixing) License costs in case of usin software	nal activities (admin, business	Near-te In-K and Fund Spoi	m: d contributions from partners rganisations ing (projects) sorship and/or donations Men feat feat Pat Adv Adv	nership Fee nbership Fee for accessing premium

FIGURE 11. Initial TRIPLE Business Model presented in form of a Lean Canvas