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European forum of the software research community

Deliverable D2.6
Project Radar Landscape Analysis V1

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Status-Version:	Draft – v1.0
Date:	April 1, 2022
Distribution level (CO, PU):	PU

Project Number:	GA 957044
Project Title:	SWForum.eu

Title of Deliverable:	Project Radar Landscape Analysis V1
Due Date of Delivery to the EC	31.12.2021

Workpackage responsible for the Deliverable:	WP2 - Cross-fertilization and mapping
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Recommended/mandatory readers:	WP2 & WP3

Abstract:	D2.6 will take stock of the software projects funded in relevant EU funding streams and produce in-depth analyses of the resulting data. For the projects selected, the mini sites will be developed. This is the result of task T2.2 and T2.3.
Keyword List:	Technology Radar, Taxonomy, visualization
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Document Description

Version	Date	Modifications Introduced	
		Modification Reason	Modified by
V0	08/03/2022	First draft version	UOXF
V0.1	29/03/2022	Frist Draft version revisions	UOXF
V0.2	01/04/2022	First Draft Revised	UOXF
V1.0	07/04/2022	Final version	UOXF

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Terms and abbreviations

Blip	A visual placeholder for a specific EU funded project in scope for the SW Radar.
CSA	Coordination and Support Action
DoA	Description of Action
EC	European Commission
Radar	Used in conjunction with CW, SWF, or TW to denote the respective radar visualisation. For example, “SWF Radar” refers to the SWForum.eu Project Radar.
SWForum.eu	European forum of the software research community
WP	Work Package
SDLC	Software Development Life Cycle
TRL	Technology Readiness Level

Executive Summary

The SWForum.eu project is a CSA aiming to support a large number of software related projects funded by the European Commission in the H2020 programme. As such it is important that we consider what these projects have created as outputs and where they have gone in terms of exploitation, and hopefully impact, either by the projects themselves or by others who may reuse their outputs.

Utilising the "Technology Radar" methodology developed by ThoughtWorks, the SWForum.eu project used the SWForum taxonomy and a schema that describes guidance on whether a user should invest themselves in the outputs of a project, to produce the radar visualisation as below.

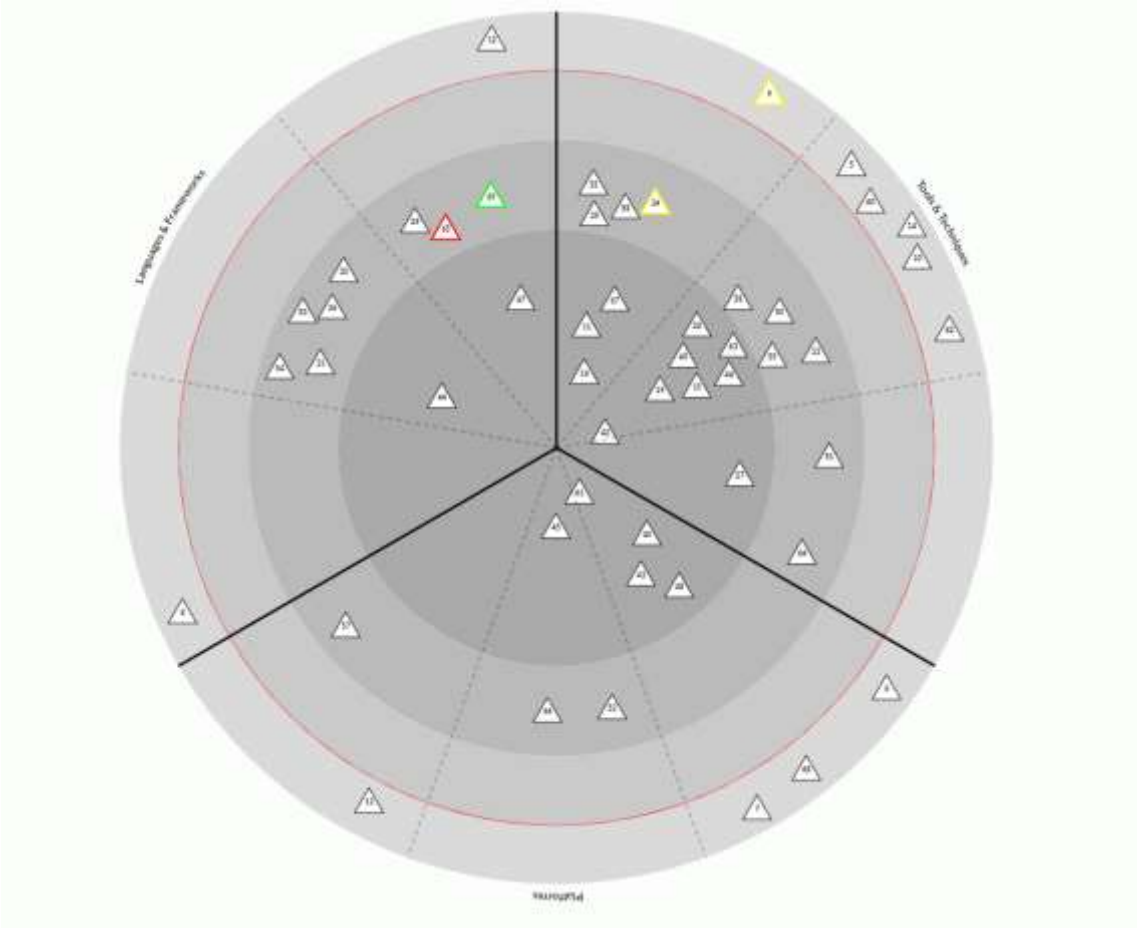

Figure 1. SWForum Technology Radar visualization

Deliverable D2.6 – Project Radar Landscape Analysis v1, which will develop with further releases, integrating product trajectories in future versions and new projects that are funded in relevant areas as they start. The radar is a live product with the visualisation created specific to the state of the landscape at the point it is viewed. As such we will create snapshots for this and future reports to capture the state and relevant analysis that is presented.

The initial landscape of the domain as captured in the first complete version of the radar tells us that most projects are still in the early stages of completion and won't be until late next year before all the projects have exhausted their life cycle. Most of the projects are working on implementing new Tools & Techniques, either as a primary focus or secondary, to aid the software development process.

Following this section, we first describe the assessment methodology used to understand the current status of the projects. This is especially important as it would not be feasible within the confines of this first edition of the radar to ask assessed projects to self-evaluate, or for us to personally walk them through in a more hands-on approach. We then describe the different visual clues that are used within this instance of the radar that was introduced previously in deliverable D2.4, Project Radar Taxonomies [1]. For this first edition of D2.6 [2], we are utilising the current status of the project itself and then, if necessary, the time since or towards project completion as the key assessment within this edition of the Radar. We then present all the projects that have been assessed within this edition of the radar, which is followed by the radar presentation itself.

1 Introduction

Many substantial investments have been made by both national governments and the European Commission to support co-ordinated programmes of research and innovation projects within the broad domain of software technologies, digital infrastructures and cybersecurity. Since some of these programmes have now completed and as the European Commission has transitioned from Framework 7 to Horizon 2020, it is important that we are able to evaluate the impact that these programmes have had, and more specifically, how ready the outputs are for utilisation by persons from outside the developing community. As such, in all three of the domains in which SWForum.eu is targeting it is essential that we are able to consider and present to stakeholders in these enterprises (potential users of the technologies, processes and policies developed) the outputs from the projects alongside a systematic method of the evaluation of the outputs, with simple commentary on ease of use of these outputs both generally and more importantly, outside of the team that originally developed them.

The method chosen by SWForum.eu to present the evaluations of the project outputs has been determined to be a type of technology radar, as pioneered by ThoughtWorks [3]. This methodology allows not only the subdivision of the items classified to be segmented depending on specific criteria, but also their radial distance from the centre allows a second classification to be presented simultaneously.

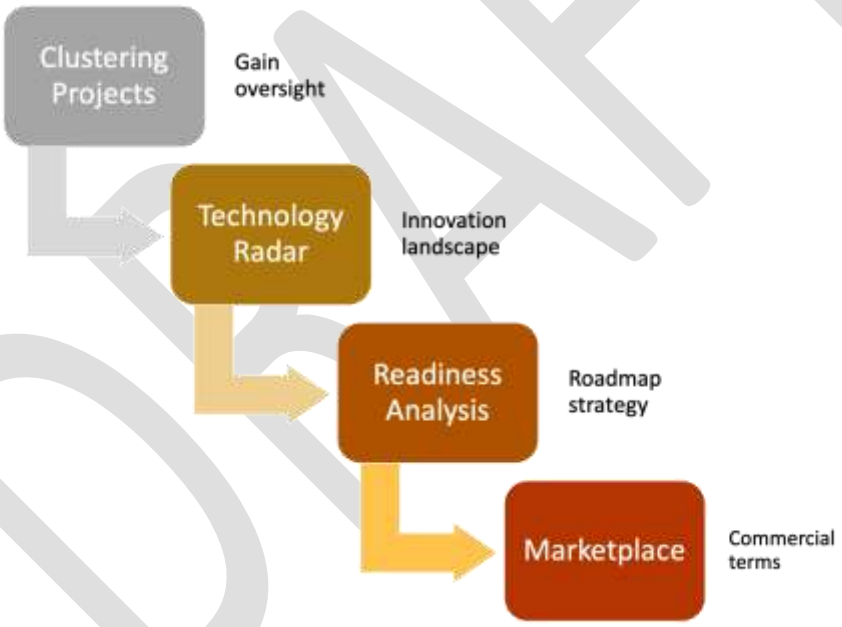

Figure 2. How WP2 tasks feed into each other and, ultimately, into WP4's marketplace

The document concludes with a discussion about an overall larger pan-project conclusions that this visualisation can give us. It also identifies the impact of the findings in the broader scope of the project and on the promotion of projects through the SME end-user club and Marketplace.

2 Methodology

The Technology Radar as a tool requires a descriptive taxonomy of general areas within a specific domain, and a schema that describes the relationship between the object and its position within the domain sector and the distance from the centre for the visualisation that is used.

In the following sections both are described, starting with the taxonomy of domains and then the actual schema and application of the Technology Radar to the cybersecurity domain.

2.1 Sectors

Within the SWForum Technology Radar, there are three sectors as described by the three categories of the SWForum taxonomy of R&I in software technologies, digital infrastructures and cybersecurity. These are summarized below for completeness of this deliverable.

2.1.1 Tools & Techniques

Tools can be components, such as databases, software development tools, such as versions control systems; or more generic categories of tools, such as the notion of polyglot persistence. Techniques include elements of a software development process, such as experience design; and ways of structuring software, such as microservices.

2.1.2 Platforms

Things that we build software on top of such as mobile technologies like Android, virtual platforms like the JVM, or generic kinds of platforms like hybrid clouds.

2.1.3 Languages & Frameworks

This can be any kind of new programming language and/or a language framework.

2.2 Technology Radar Rings

Assessing software development projects according to maturity allows the reader to make an informed decision as to where and when the project in question should be closer examined, or not examined at all.

This section describes this Technology Radar's rings and the state of maturity they capture for every project included in section 6.

2.2.1 Underlying concepts

As any visualisation technique, this Technology Radar relies on applying several design principles to the data in order to provide an intuitive reader experience. Combined with an easy-to-understand way of charging values with expressive yet generic semantics, the results allow for swift conveying on large amounts of information.

2.2.1.1 Software Development Lifecycle as a project maturity metaphor

The Software Development Life Cycle (SDLC) is a well-known concept capturing the life cycle of any software project, from idea to 'sunsetting', i.e., the discontinuation or retiring a solution, a service, a library, basically any piece of software. The SDLC is comparable to many different concepts; for example, the progression through the SDLC is closely resembling the ascension through the Technology Readiness Levels (TRL) that are ubiquitous in the technology and

engineering sectors. With the exception that TRLs do not capture the concept of sunsetting a piece of software.

Therefore, mapping the Technology Radar's *rings*, or states to the SDLC, software, or knowledge in this deliverable's context, would undergo the following sequence of assessment:

Assess → Trial → Adopt → Hold

Figure 3. Maturity progression of projects

The semantics of these terms are described in section **Error! Reference source not found.**.

2.2.1.2 Proximity to the radar's centre reflects readiness for adoption

A straight mapping of the project maturity on the rings of the radar would be counter-intuitive to the visual message of the radar where the very centre of the radar requires the most attention, the outermost ring the least attention. By contrast, the level of attention to the software maturity levels peaks with "Adopt", and dropping to lower levels at either side of it – not dissimilar to the bell curve:

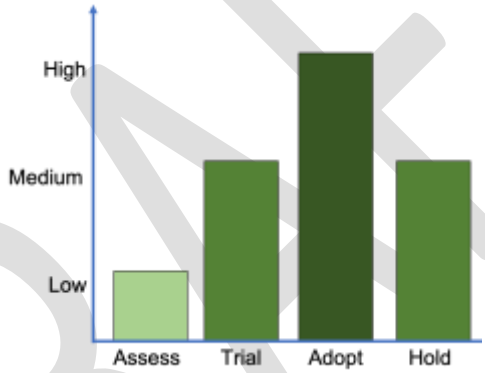

Figure 4. Attention level required for software project maturity levels

Consequently, projects will progress through the radar not in a linear succession from outermost rings towards the centre. Instead, they will "enter" the radar in the middle, gravitate to the centre (the bull's eye), then jump to the outermost rings for gradually dropping out of scope of the radar altogether:

Figure 5. Mechanics of the technology radar

2.2.2 Project Maturity: The rings of the radar

The rather generic terms that qualify the rings of the radar need to be further contextualised towards the overall purpose of the radar. In *this* instalment of the Technology Radar report, the focus lies on the introduction of the radar, how it works, and what kind of insights it may deliver.

This first Technology Radar focuses on project maturity based on its contractual timeline, relative to the point in time the report was generated. It assumes that projects generally progress satisfactorily towards their goals and outcomes – it relies on this being ensured by the funding programme's own checks and balances. In the case of EU H2020, these are the regular project reviews, and the selection of expert reviewers for the project by the Commission.

This Technology Radar report addresses the following question, therefore: "Given the current landscape and oversight of projects addressing various aspects of cybersecurity, at which point in time should I start tracking their results and reports?"

2.2.2.1 Assess

Technical criterion: The project is running and has more than 24 months until project end.

The project is still running and has still a considerable amount of time to further mature their results and outputs yet needs to think about how it will play out the final stretch of project lifetime.

Recommendation: Study the project's high-level description and designated outputs and compare with your own strategy and needs. If there is a match, put the project on a personal/specific short-list for further check-up later.

2.2.2.2 Trial

Technical criterion: The project is running and has less than 24 months but more than 12 months until project end.

The project is still running and has still a considerable amount of time to further mature their results and outputs yet needs to think about how it will play out the final stretch of project lifetime.

Recommendation: Study the project's high-level description and designated outputs and compare with your own strategy and needs. If there is a match, put the project on a personal/specific short-list for further check-up later.

2.2.2.3 Adopt

Technical criterion: The project is running and has less than 12 months to go but has not reached project end.

The project is now seriously busy finalising its planned outputs. That might be a piece of software, an innovative algorithm, or a study whose results may impact your own work. Some of the planned work might have been dropped in order to reach the stated goal for more important outputs.

Recommendation: Check back regularly with the project (either actively or passively) to see how the output you are interested in is progressing. Refine your shortlist based on the results of that

exercise; expect your shortlist getting smaller unless there are new projects in the pipeline that stock it up again. For those you consider specifically mature, you should consider first practical trials of integrating the output into your portfolio – not to accomplish it straight away, but to anticipate the level of "integration pain" you may experience later. Click on the project's score card and contact then directly through their mini site.

2.2.2.4 Hold

Technical criterion: The project finished less than 12 months ago.

If you haven't already decided to integrate the project's outputs into your own business, or more neutrally, operations at large, projects in this stage may still have value to you, but you need to understand the how the then published outputs have fared until now and may fare in the future.

Project results in the IT sector, and especially in the currently very dynamic cybersecurity domain age very quickly, as competition is fierce, and many outputs are superseded by technical innovation, or other projects simply having been faster or more efficient in their execution.

Recommendation: For projects that stayed on your shortlist unto this stage, this is the time to start serious integration trials with stable versions of the output. In the case of study results, or non-IT related outputs, the expected integration pain may affect your overall business strategy and cause changes in operations and processes, rather than technical integration challenges that present themselves with IT integrations.

2.2.2.5 Not Displayed in the Radar

Technical criterion: The project ended more than 12 months.

These projects, though present in the SWForum.eu hub, are no longer displayed in the Technical radar.

3 The Analyzed Projects

In order to obtain a first representative sample of projects to be assessed in this Technology Radar, we collected projects funded in 7 calls across the EU's major recent research and innovation programmes, i.e., FP7 and H2020, that address cybersecurity in their DoAs. These calls are, in alphabetical order:

- BG-07-2019-2020
- DS-05
- DT-GOVERNANCE-12-2019-2020
- ICT-01-2019
- ICT-11-2018-2019
- ICT-15-2019-2020
- ICT-16-2018
- ICT-2018-2020
- ICT-28-2018
- ICT-40
- ICT-40-2020
- ICT-50-2020
- ICT-54-2020
- ICT-56-2020
- SU-ICT-02-2020

The process of selecting and filtering EC funded projects was a three-step process:

1. Collection of key project data, such as start and end date, budget, call, project type (Research & Innovation Action, Innovation Action, Coordination & Support Action, etc.) coordinator, and high-level project descriptions.
2. Assessment of whether each project in fact does address aspects of digital infrastructure, software technologies, and cybersecurity directly or merely acts as a consumer of outputs of cybersecurity tools and knowledge.
3. Grouped projects according to the Swforum.eu taxonomy domains in primary and secondary classifications.

Once this final list of 51 projects was determined, we applied the methodology described above, arriving at the results provided in section 5 below.

4 The March 2022 Technology Radar

We now present the results of the Radar analysis, initially by sector and then finally bringing them all together to also see the shape of the overall landscape.

4.1 Results by Sector

Below are the results for the projects in each segment of the radar, in descending order of the number of projects in each sector.

4.1.1 Tools & Techniques

Table 1. "Tools and Techniques" Overview

# Projects	Assess	Trial	Adopt	Hold
16	0	4	7	5

Tools & Techniques is the most populated primary as well as secondary sector in the radar. This is intuitive as it is part of developing new technological solutions, protecting resources, and helping in the overall software development process.
This includes several projects that are about to finish (Adopt) and/or have already finished and deployed (Hold). In some cases, the technologies implemented are likely to have been superseded by outputs from more latterly funded activities.

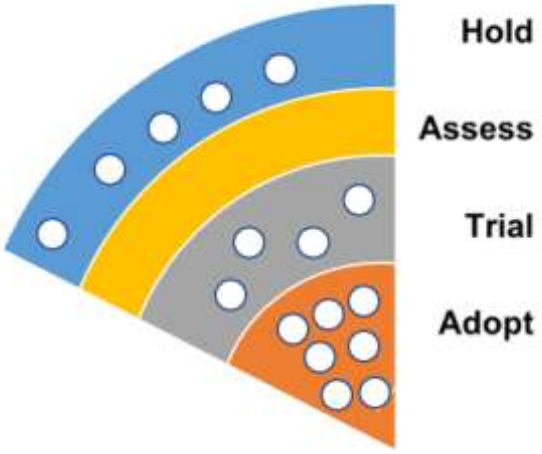

Figure 6. "Tools and Techniques" radar segment

Table 2. "Tools and Techniques" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
5	FASTEN	Jan 2019	Dec 2021				X
60	ARTICONF	Jan 2019	Dec 2021				X
14	LEXIS	Jan 2019	Dec 2021				X
7	DEEPHEALTH	Jan 2019	Dec 2021				X
15	Cyberwatching	May 2017	Jul 2021				X
33	VeriDevOps	Oct 2020	Sept 2023		X		
59	SERRANO	Jan 2021	Dec 2023		X		
50	IoT-NGIN	Oct 2020	Sept 2023		X		
38	TERMINET	Nov 2020	Nov 2023		X		
63	HUB4CLOUD	Jan 2021	Jun 2022			X	

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
46	ADMORPH	Jan 2020	Dec 2022			X	
28	FogProtect	Jan 2020	Dec 2022			X	
49	MORPHEMIC	Jan 2020	Dec 2022			X	
15	INFINITECH	Oct 2019	Dec 2022			X	
19	CPSoSaware	Jan 2020	Dec 2022			X	
42	AMPERE	Jan 2020	Dec 2022			X	

4.1.2 Tools & Techniques and Languages & Frameworks

Table 3. "Tools & Techniques and Languages & Frameworks" Overview

# Projects	Assess	Trial	Adopt	Hold
8	0	4	3	1

This sector is the second most populated segment of the radar with the primary classification still being Tools & Techniques. These projects are mostly in their Trial phase with a few that are ready to be adopted. Although their primary focus is still tools and techniques, they are also focusing on some aspects of implementing a new framework or a programming language to achieve their goals.

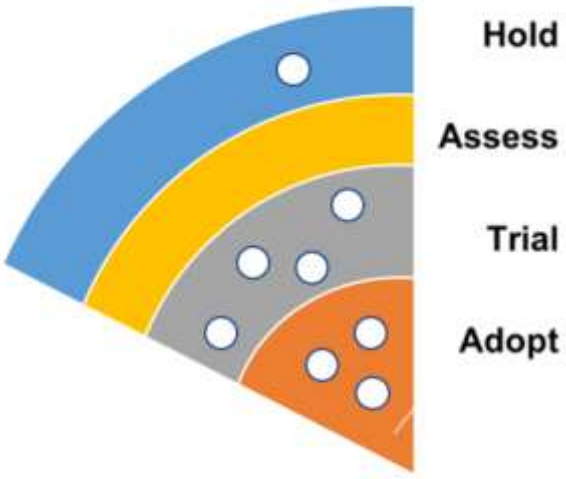

Figure 7. "Tools & Techniques and Languages & Frameworks" radar segment

Table 4. "Tools & Techniques and Languages & Frameworks" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
9	SODALITE	Feb 2019	Jan 2022				X
34	PIACERE	Dec 2020	Nov 2023		X		
58	PHYSICS	Jan 2021	Dec 2023		X		
35	ASSIST-IoT	Nov 2020	Oct 2023		X		
32	COSMOS	Jan 2021	Dec 2023		X		
67	PolicyCloud	Jan 2020	Dec 2022			X	
11	IoTWINS	Sept 2019	Aug 2022			X	
16	UP2DATE	Jan 2020	Dec 2022			X	

4.1.3 Platforms and Tools & Techniques

Table 5. "Platforms and Tools & Techniques" overview

# Projects	Assess	Trial	Adopt	Hold
7	0	0	4	3

This area also holds a significant number of projects with majority of the projects in Adopt or Hold stages. This is one of the few areas where the projects are ripe now and in the stages of ready to be deployed or already been deployed. The majority of the projects in this area provide a platform to build a software upon, but also give users a particular tool/technique to aid in the development process.

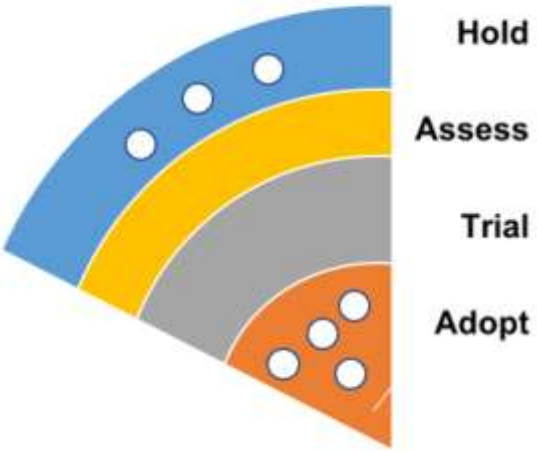

Figure 8. "Platforms and Tools & Techniques" radar segment

Table 6. "Platforms and Tools & Techniques" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
6	DECODER	Jan 2019	Dec 2021				X
68	ReachOut	Jan 2019	Dec 2021				X
7	UNICORE	Jan 2019	Dec 2021				X
48	RAINBOW	Jan 2020	Dec 2022			X	
43	ADEPTNESS	Jan 2020	Dec 2022			X	
40	TEACHING	Jan 2020	Dec 2022			X	
61	BlueCloud	Oct 2019	Sept 2022			X	

4.1.4 Languages & Frameworks

Table 7. "Languages & Frameworks" overview

# Projects	Assess	Trial	Adopt	Hold
6	0	5	1	0

This sector holds projects that are only focused on developing a programming language/framework without any secondary classification. Most of the projects in this segment are still in the earlier stages of development and are at least 18 months away from completion.

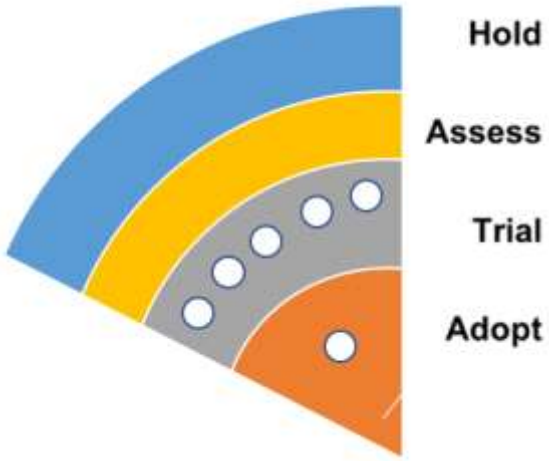

Figure 9. "Languages & Frameworks" radar segment

Table 8. "Languages & Frameworks" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
44	1-SWARM	Jan 2020	Dec 2022			X	
31	XANDAR	Jan 2021	Dec 2023		X		
54	CHARITY	Jan 2021	Dec 2023		X		
53	AI-SPRINT	Jan 2021	Dec 2023		X		
36	IntellIoT	Oct 2020	Sept 2023		X		
30	ELEGANT	Jan 2021	Dec 2023		X		

4.1.5 Languages & Frameworks and Tools & Techniques

Table 9. "Languages & Frameworks and Tools & Techniques" overview

# Projects	Assess	Trial	Adopt	Hold
5	0	3	1	1

There are a small number of projects focusing on Languages & Frameworks to provide users with the ability to code more efficiently while also incorporating other methods to aid the process of the software development process. These can be more generic types of tools or can be high level frameworks. Most projects in this category are still in the early phases of their development cycle, while a couple are ready to be adopted.

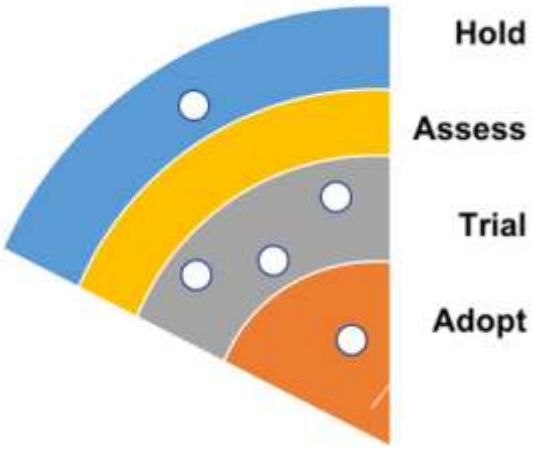

Figure 10. "Languages & Frameworks and Tools & Techniques" radar segment

Table 10. "Languages & Frameworks and Tools & Techniques" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
12	CYBELE	Jan 2019	Dec 2021				X
29	FOCETA	Oct 2020	Sept 2023		X		
65	MEDINA	Nov 2020	Nov 2023		X		
47	ACCORDION	Jan 2020	Dec 2022			X	
69	FISHY	Sept 2020	Aug 2023		X		

4.1.6 Tools & Techniques and Platforms

Table 11. "Tools & Techniques and Platforms" overview

# Projects	Assess	Trial	Adopt	Hold
3	0	2	1	0

A few projects are focusing on developing a tool/technique to aid the software development by providing the users with a platform, such as JVM, virtual platforms, etc. Most of the projects are still in the early phases of their life cycle and will take over a year before they are ready to be tested and deployed.

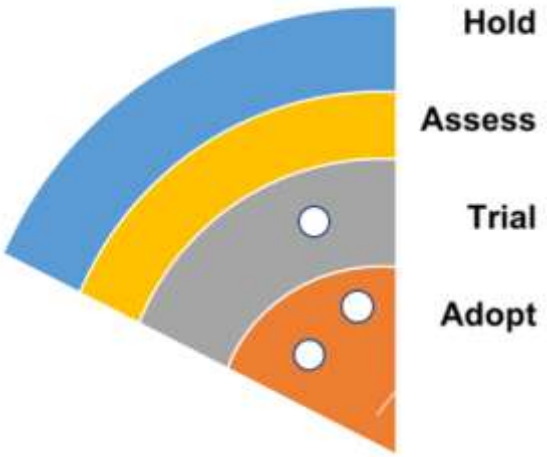

Figure 11. "Tools & Techniques and Platforms" radar segment

Table 12. "Tools & Techniques and Platforms" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
27	PLEDGER	Dec 2019	Dec 2022			X	
64	IoTAC	Sept 2020	Aug 2023		X		
51	Ingenious	Oct 2020	Mar 2023		X		

4.1.7 Platforms

Table 13. "Platforms" overview

# Projects	Assess	Trial	Adopt	Hold
3	0	2	1	0

This sector contains projects that are solely focused on developing a platform, such as JVM, hybrid clouds, or virtual platforms on which users are able to build software. These projects are still in the very early stages of their life cycle (Trial and Adopt) and will take at least 12 months before they are ready to be beta-tested and deployed.

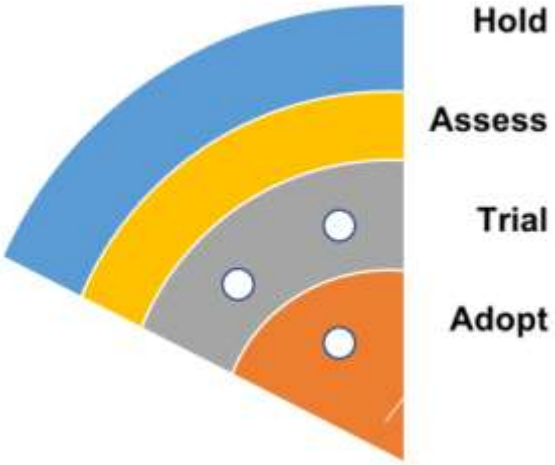

Figure 12. "Platforms" radar segment

Table 14. "Platforms" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
45	SELENE	Dec 2019	Nov 2022			X	
66	ONTOCHAIN	Sept 2020	Aug 2023		X		
52	VEDLIoT	Nov 2020	Oct 2023		X		

4.1.8 Platforms and Languages & Frameworks

Table 15. "Platforms and Languages & Frameworks" overview

# Projects	Assess	Trial	Adopt	Hold
2	0	1	0	1

This is one of the least populated sectors of the radar. Rightly so, there are not a lot of projects that focus on developing a platform while also providing a framework for users to build something with. There is one project in this that has already been finished while the other is in the very early stages of its development.

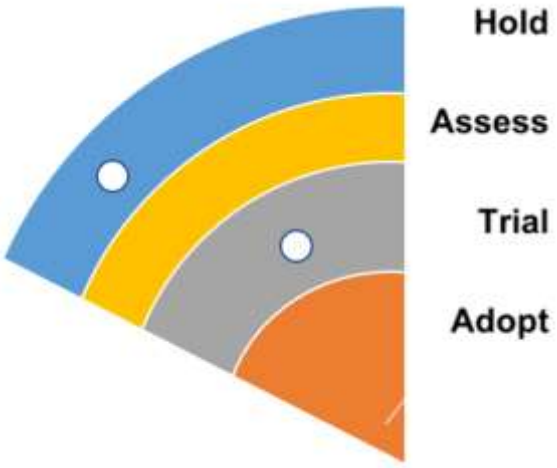

Figure 13. "Platforms and Languages & Frameworks" radar segment

Table 16. "Platforms and Languages & Frameworks" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
13	EVOLVE	Dec 2018	Nov 2021				X
57	DataCloud	Jan 2021	Dec 2023		X		

4.1.9 Languages & Frameworks and Platforms

Table 17. "Languages & Frameworks and Platforms" overview

# Projects	Assess	Trial	Adopt	Hold
1	0	0	0	1

This is the least populated segment of the radar with only project that was completed in June 2021. This is quite intuitive as developing a framework while also giving users a platform to develop on is not something very commonplace.

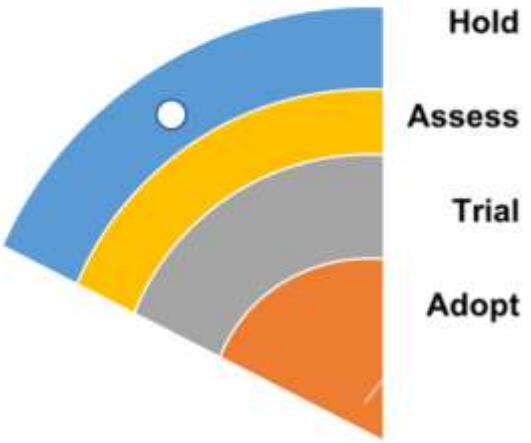

Figure 14. "Languages & Frameworks and Platforms" radar segment

Table 18. "Languages & Frameworks and Platforms" projects details

#	Project name	Start Date	End date	Assess	Trial	Adopt	Hold
8	RADON	Jan 2019	Jun 2021				X

4.2 Segments Overview

Table 19. "March 2022 SWForum Technology Radar" overview

Segment	Assess	Trial	Adopt	Hold	Total
Tools & Techniques	0	4	7	5	16
Tools & Techniques and Languages & Frameworks	0	4	3	1	8
Tools & Techniques and Platforms	0	2	1	0	3
Platforms	0	2	1	0	3
Platforms and Tools & Techniques	0	0	4	3	7
Platforms and Languages & Frameworks	0	1	0	1	2
Languages & Frameworks	0	5	1	0	6
Languages & Frameworks and Platforms	0	0	0	1	1
Languages & Frameworks and Tools & Techniques	0	3	1	1	5
	0	21	18	12	51

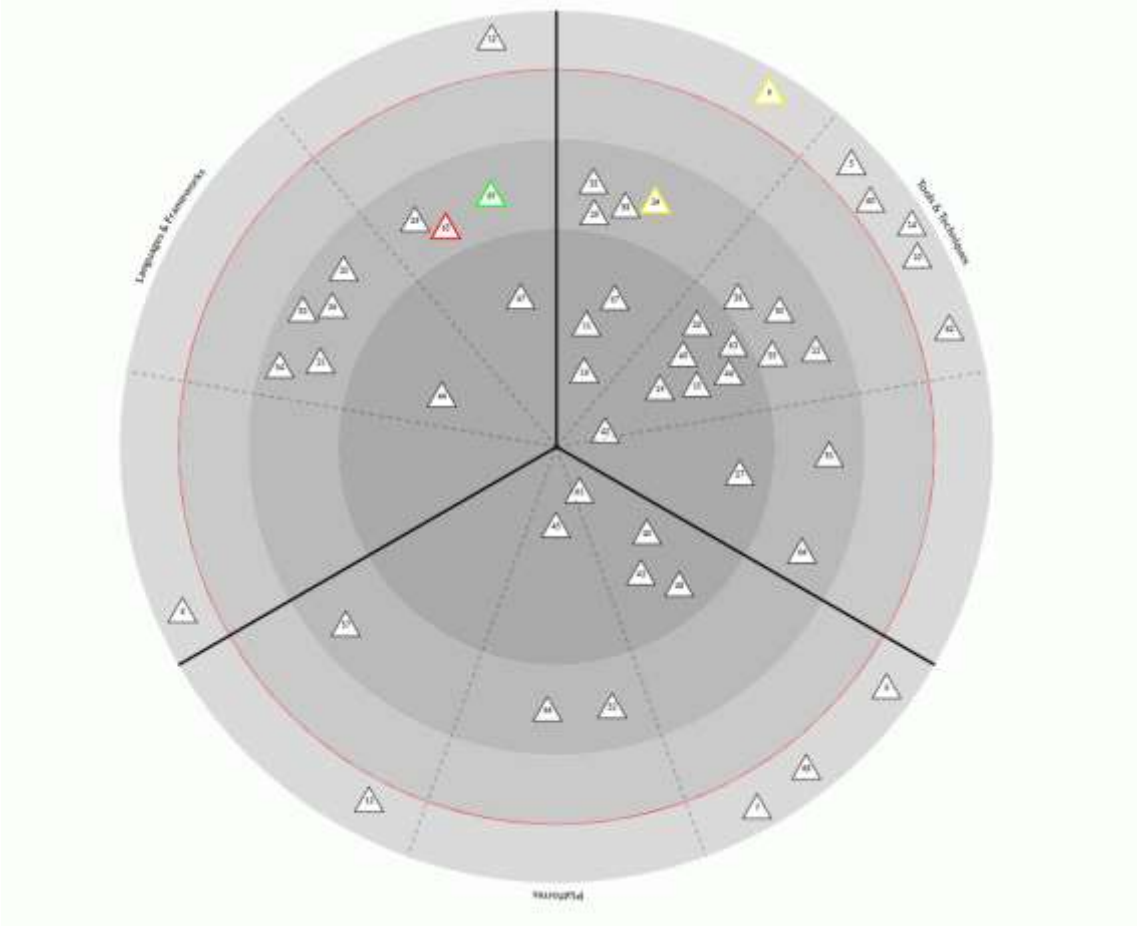

Figure 15. March 2022 SWForum Technology Radar, showing 51 analyzed projects distributed radially into bands depending on their maturity level.

5 Conclusions and Next Steps

All the projects in this radar have been classified into segments based on preliminary understanding of the projects from their descriptions as published on their project websites. They are yet to be validated by project members, after which the radar will be updated accordingly.

Looking at the full radar in its current stage, we notice that majority of the projects are still in the early stages of their development phase (Trial), immediately followed by projects that are ready to be adopted (Adopt). This shows that most projects in the radar are within 24 months of their completion cycle and will be ready to be beta-tested very soon by late next year. There are no projects currently in the Assess stage. This is because we have taken projects for this version of the radar from calls to which SWForum.eu was related and the projects were started over a year ago. This means all the projects have had some time to start the development cycle and think about the next steps. However, in future versions of this report, we hope to include newer projects in the radar, which might portray some projects in Assess.

The shape of the blips show that the projects have been added to the radar within 3 months of the render date, which will change to a circle once that period ends. As for the colour of the blips, projects that have been assigned an MTRL score have coloured edges based on the score as described in D2.4 [1], while the projects without a score have black edges.

The next version of the Technology Radar report will include the utilisation of the MTRL assessment methodology as described in deliverable D4.4 [4] on these projects which will allow us to introduce a third dimension in this which is readiness for market. This will allow the research and development community to better understand where they are and where they sit within the ecosystem.

The analysis of the 51 projects from relevant calls is very important in the broader scope of the SWForum.eu project and, particularly, introducing project results and services into the SME end-user club and marketplace. Projects categorised under Trial will be considered and contacted to provide results to the SME end-user club for potential validating and testing of results. Projects categorised under Adopt will be contacted and invited to publish their results on the marketplace where SWForum.eu can facilitate them in reaching potential adopters.

6 References

[1] D. Wallom and M. Drescher, “D2.4 Project Radar Taxonomies,” 2021.

[2] R. Agrawal and D. Wallom, “Project Radar Landscape Analysis v1,” 2022.

[3] ThoughtWorks, “ThoughtWorks Technology Radar,” [Online]. Available: https://www.thoughtworks.com/radar.

[4] D. Wallom, “MTRL Methodology and Assessment v1,” 2022.

Appendix: EC-funded Projects reference

The following projects were included and analysed in this deliverable, in alphabetical order.

Table 20. List of projects funded by EC under the broad categories of SWForum.eu

Project	Call	Type	Start	End
SWARM	ICT-01-2019	RIA	Jan 2020	Dec 2022
ACCORDION	ICT-15-2019-2020	RIA	Jan 2020	Dec 2022
ADEPTNESS	ICT-01-2019	RIA	Jan 2020	Dec 2022
ADMORPH	ICT-01-2019	RIA	Jan 2020	Dec 2022
AI-SPRINT	ICT-40	RIA	Jan 2021	Dec 2023
AMPERE	ICT-01-2019	RIA	Jan 2020	Dec 2022
ARTICONF	ICT-28-2018	RIA	Jan 2019	Dec 2021
ASSIST-IoT	ICT-56-2020	RIA	Nov 2020	Oct 2023
Blue Cloud	BG-07-2019-2020	IA	Oct 2019	Sept 2022
CHARITY	ICT-50-2020	RIA	Jan 2021	Dec 2023
COSMOS	ICT-50-2020	RIA	Jan 2021	Dec 2023
CPSoSaware	ICT-01-2019	RIA	Jan 2020	Dec 2022
CYBELE	ICT-11-2018- 2019	IA	Jan 2019	Dec 2021
Cyberwatching	DS-05	CSA	May 2017	Jul 2021
DataCloud	ICT-40-2020	RIA	Jan 2021	Dec 2023
DECODER	ICT-16-2018	RIA	Jan 2019	Dec 2021
DEEPHEALTH	ICT-11-2018-2019	IA	Jan 2019	Dec 2021
ELEGANT	ICT-50-2020	RIA	Jan 2021	Dec 2023
EVOLVE	ICT-11-2018- 2019	IA	Dec 2018	Nov 2021
FASTEN	ICT-16-2018	IA	Jan 2019	Dec 2021
FISHY	SU-ICT-02-2020	RIA	Sept 2020	Aug 2023
FOCETA	ICT-50-2020	RIA	Oct 2020	Sept 2023
FogProtect	ICT-15-2019-2020	RIA	Jan 2020	Dec 2022
HUB4CLOUD	ICT-40-2020	CSA	Jan 2021	Jun 2022
INFINITECH	ICT-11-2018- 2019	IA	Oct 2019	Dec 2022
Ingenious	ICT-56-2020	RIA	Oct 2020	Mar 2023
IntellIoT	ICT-56-2020	RIA	Oct 2020	Sept 2023
IoTAC	SU-ICT-02-2020	RIA	Sept 2020	Aug 2023
IoT-NGIN	ICT-56-2020	RIA	Oct 2020	Sept 2023
IoTWINS	ICT-11-2018- 2019	IA	Sept 2019	Aug 2022

Project	Call	Type	Start	End
LEXIS	ICT-11-2018- 2019	IA	Jan 2019	Dec 2021
MEDINA	SU-ICT-02-2020	RIA	Nov 2020	Nov 2023
MORPHEMIC	ICT-15-2019-2020	RIA	Jan 2020	Dec 2022
ONTOCHAIN	ICT-54-2020	RIA	Sept 2020	Aug 2023
PHSYICS	ICT-40-2020	RIA	Jan 2021	Dec 2023
PIACERE	ICT-50-2020	RIA	Dec 2020	Nov 2023
PLEDGER	ICT-15-2019-2020	RIA	Dec 2019	Nov 2022
PolicyCLOUD	DT-GOVERNANCE-12-2019-2020	IA	Jan 2020	Dec 2022
RADON	ICT-16-2018	RIA	Jan 2019	June 2021
RAINBOW	ICT-15-2019-2020	RIA	Jan 2020	Dec 2022
ReachOut	ICT-16-2018	CSA	Jan 2019	Dec 2021
SELENE	ICT-01-2019	RIA	Dec 2019	Nov 2022
SERRANO	ICT-40-2020	RIA	Jan 2021	Dec 2023
SODALITE	ICT-16-2018	RIA	Feb 2019	Jan 2022
TEACHING	ICT-01-2019	RIA	Jan 2020	Dec 2022
TERMINET	ICT-56-2020	RIA	Nov 2020	Nov 2023
UNICORE	ICT-16-2018	IA	Jan 2019	Dec 2021
UP2DATE	ICT-01-2019	RIA	Jan 2020	Dec 2022
VEDLIoT	ICT-56-2020	RIA	Nov 2020	Oct 2023
VeriDevOps	ICT-50-2020	RIA	Oct 2020	Sept 2023
XANDAR	ICT-50-2020	RIA	Jan 2021	Dec 2023