



PARIS  
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SUMMIT



# The OW2 Market Readiness Levels

## Improving Productivity and Market Readiness of OW2 projects

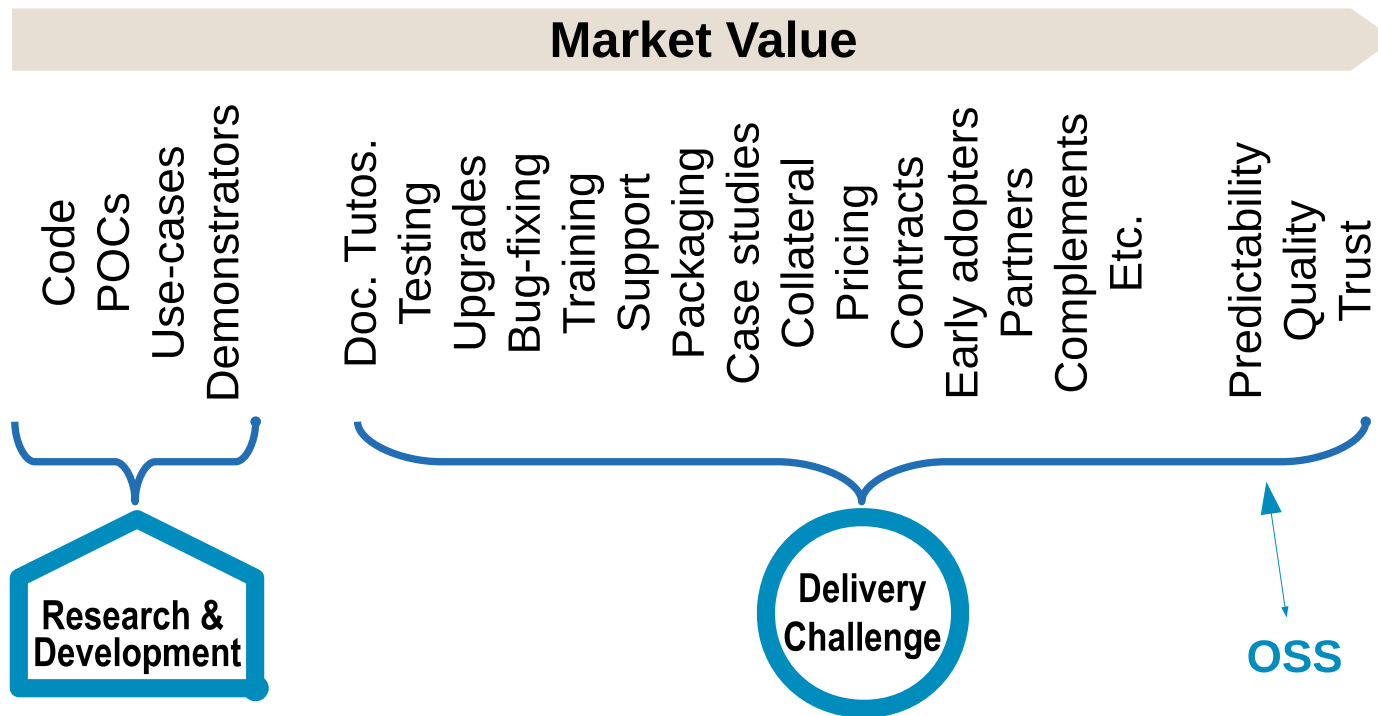
*Cedric Thomas, OW2 CEO*

***Paris Open Source Summit***

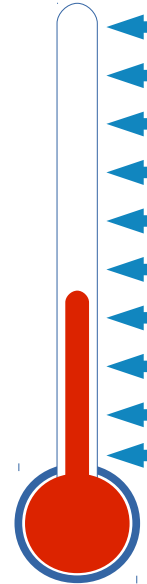
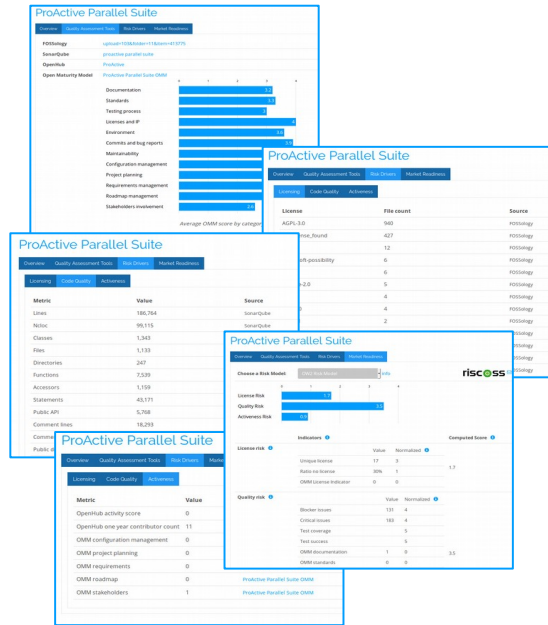
Paris, December 11, 2019

# Creating Value for OSS Projects

- ▶ Users do not want just code
- ▶ *Product attributes* create value



# From Data to Market Readiness Levels

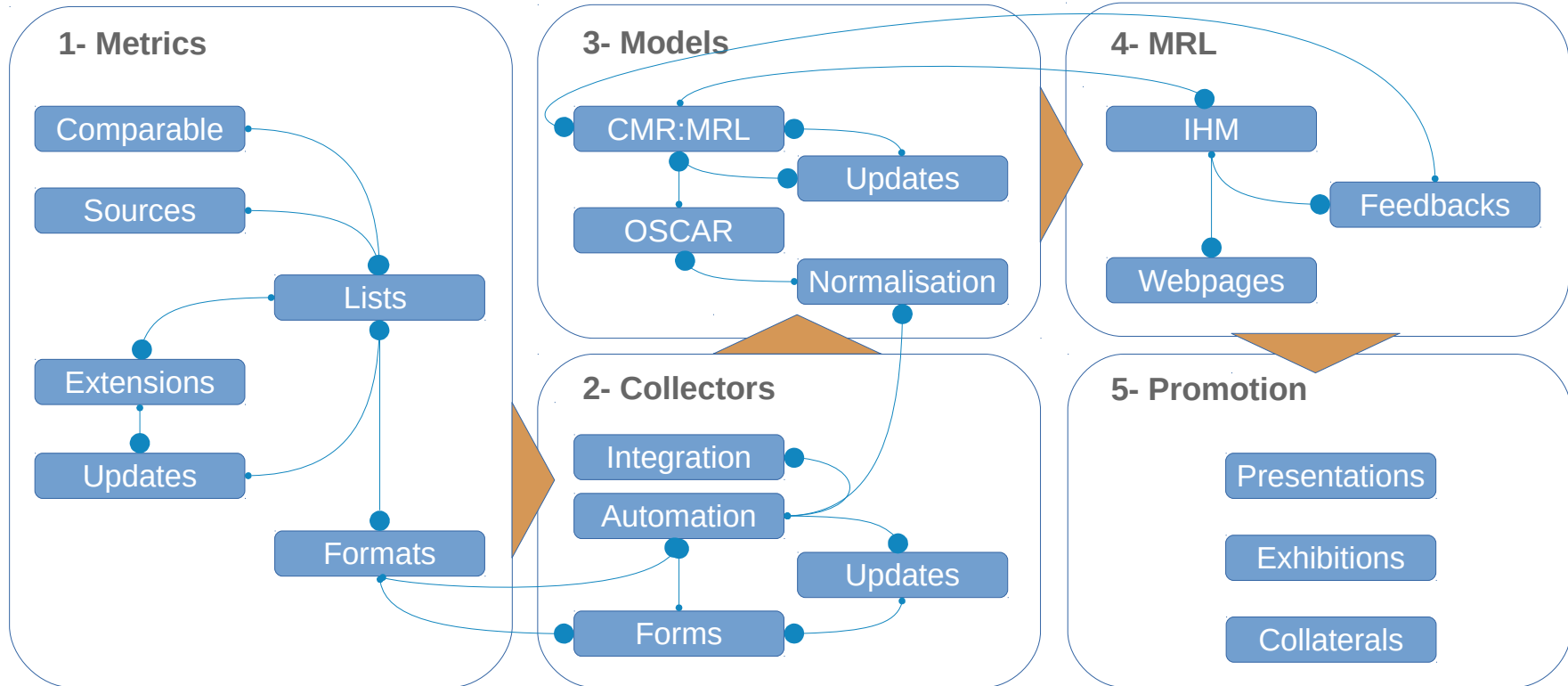


Fully Supported Product  
(useful)

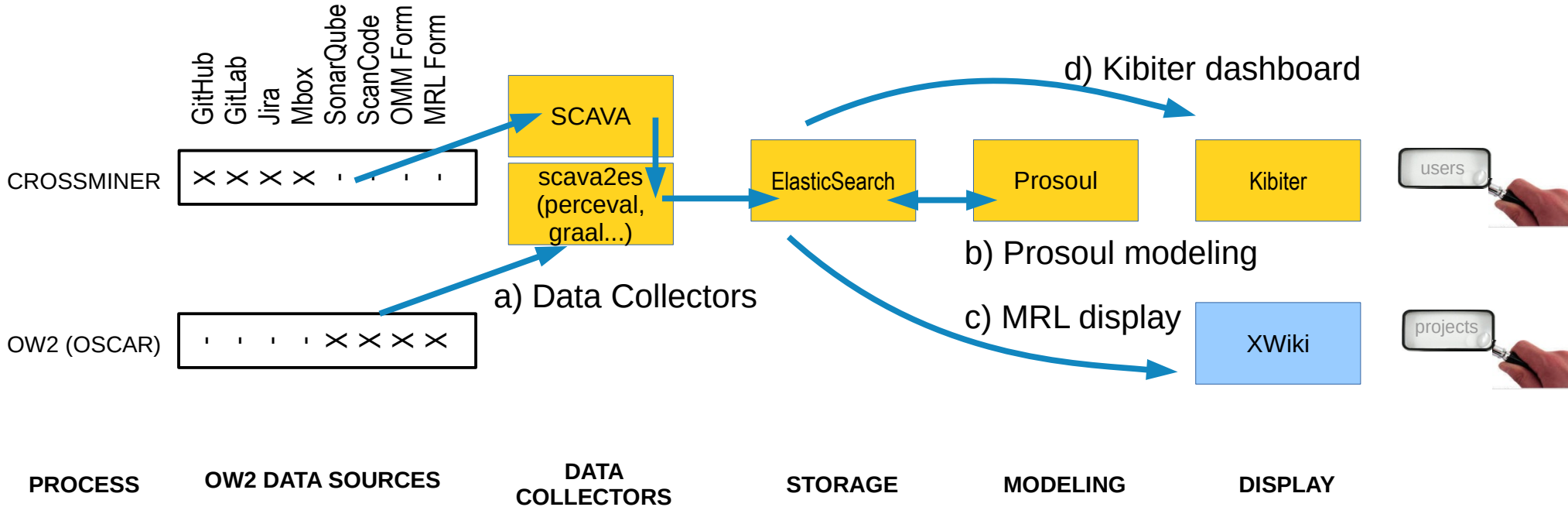


Rough Code  
(useless)

# Methodology

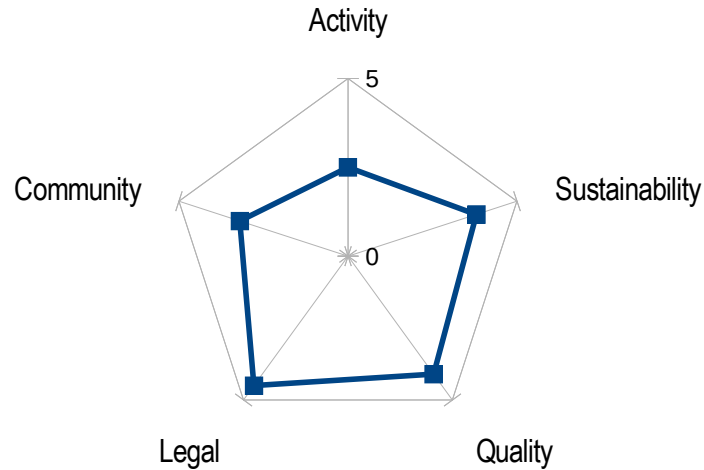


# Architecture

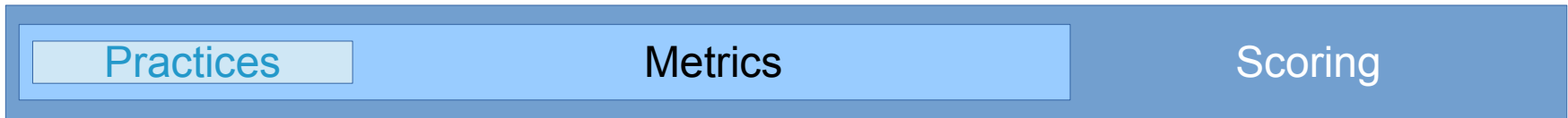


# OW2 MRL Three-Stage Assessment

- COM
- CTY
- DOC
- ENV
- MGT
- OPN
- DEV
- TST
- REL
- SEC



- Established Player
- Actively Competitive
- Business build up
- Market Broadening
- Market Opening
- Usefulness
- Demonstrated
- Fledgeling Usefulness
- Development
- Research





# Stage 1 Best Practices Mapping

Project Communication	Willingness and ability of the project to communicate, to be easy to deal with.
Project Community	Status of the community and mechanisms that support third party contributions.
Project Documentation	Documentation facilitating usage of the project and contribution to it.
Development Environment	Provisioning of development resources and facilitation of bug reports and commits contribution.
Project Organisation and Mgt	Management of requirements and planning and estimates of project activities.
Project Openness	Open source compliance of the project and use and implementation of open standards and open technologies.
Development Process	Development practices that help improve code quality.
Testing Process	Provisioning, implementation quality and maintenance of the testing process.
Release Management	Enablement and maintenance of the integrity of the product and its releases.
Security and Vulnerability Mgt	Attention to security vulnerabilities, mechanisms and resources to deal with them.




## Project Communication

### Willingness and ability of the project to communicate, to be easy to deal with.

COM-1	The project maintains a website, there is a project URL.	Status: Yes
COM-2	The project website provides a high-level, non-technical introduction of what the software does (what problem does it solve?).	 Status: Yes
COM-3	The project's website provides an easy-to-find link to the source code of its latest release.	 Status: Yes
COM-4	The project can provide evidence of at least one event participation or press release in the last 12 months, plus recent social network activity.	Status: No
COM-5	The project's dashboard on the OW2 web site is completed and up to date.	Status: Yes

## Project Community

### Status of the community and mechanisms that support third party contributions.

CTY-1	The project has at least two unassociated active code committers.	 Status: No
CTY-2	The project can provide evidence of active discussions around the project on one or several public communication channel(s) over the last three months.	Status: Yes
CTY-3	The project is open to third-party contributions.	 Status: Yes
CTY-4	The project recognizes as contributions not only source code, but also documentation, constructive bug reports, constructive discussions, marketing and generally anything that adds value to the project.	Status: Yes
CTY-5	The project maintains a list of easy contributions suitable for new contributors.	 Status: No



# Stage 2 Modeling with Prosoul



Prosoul Editor

scava-dev.ow2.org:8000/prosoul/select\_goal

Prosoul View Edit Visualize Assess Admin (admin/admin for login) Logout

QualityModel: OW2-MRL:CMR-v0.1.9 + Add Edit Import Export

Goals + Add Edit

- MRL\_Activity
- MRL\_Community
- MRL\_Compliance
- MRL\_Quality
- MRL\_Sustainability

Attributes + Add Edit

- Activity\_Bugs\_CMR
- Activity\_OMM
- Activity\_OpenHub
- Community\_OMM
- Community\_OpenHub
- Community\_Polarity\_CMR
- Community\_Users\_CMR
- Compliance\_IPR\_OMM
- Compliance\_Number of Uniques Licenc
- Compliance\_Percent\_FilesWithoutLicen
- Quality\_Code\_CMR
- Quality\_Good\_Smells\_CMR
- Quality\_Metrics\_CMR
- Quality\_QUAL\_OMM
- Quality\_SonarQ\_Issues
- Quality\_SonarQ\_Test\_Coverage
- Quality\_SonarQ\_Test\_Success
- Quality\_Unanswered\_Bugs\_CMR
- Sustainability\_CMR
- Sustainability\_OMM

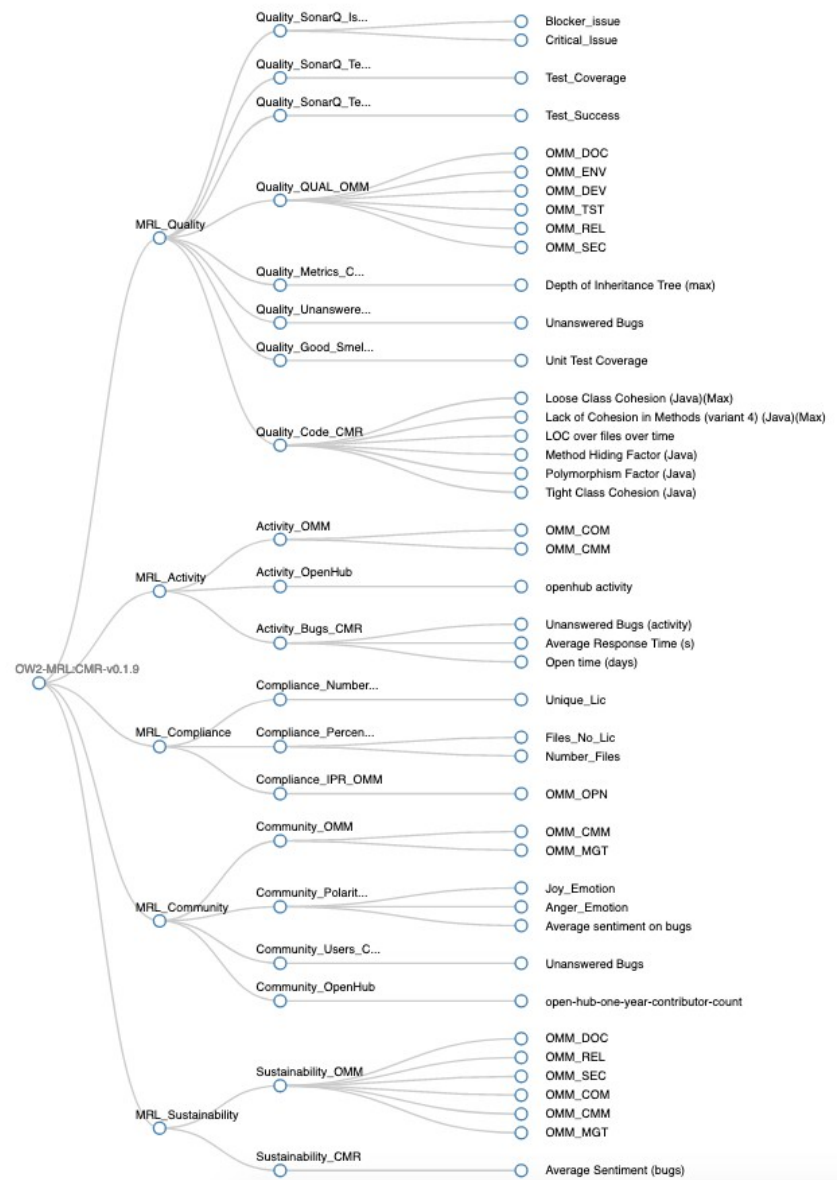
Metrics + Add Edit

- Blocker\_issue
- Critical\_Issue
- Test\_Coverage
- Test\_Success
- OMM\_DOC
- OMM\_ENV
- OMM\_DEV
- OMM\_TST
- OMM\_REL
- OMM\_SEC
- Depth of Inheritance Tree (max)
- Unanswered Bugs
- Unit Test Coverage
- Loose Class Cohesion (Java)(Max)
- Lack of Cohesion in Methods (variant 4
- LOC over files over time
- Method Hiding Factor (Java)
- Polymorphism Factor (Java)
- Tight Class Cohesion (Java)
- OMM\_COM

# The OW2 Model (provisional)



MRL Quality  
MRL Activity  
MRL Compliance  
MRL Community  
MRL Sustainability



## Stage 3 Market Readiness Scoring

Form ID	Attributes	Variable	0	1	2	3	4	5
MRL-1	Product establishment	mrl-pdt	R&D, POC		UI and Interoperability	Full Q&A, Doc etc.	Product Range	
MRL-2	Financing	mrl-fin	R&D subsidies	No commercial financing	Fledgeling financing		Appropriate financing	Generates own financing
MRL-3	Customer base	mrl-cus	No Customers	Users, no real customers		Early customer base		Established customer base
MRL-4	Repeat sales	mrl-sal	no repeat sales		fledgeling sales		Sales new customers	Repeat business
MRL-5	Market recognition	mrl-rec	No market recognition	Basic	Developing marketing	Active marketing		Leadership recognition
MRL-6	Contributors	mrl-ctr	Research partners	Open source license		Active OSS project leader	Third party contributors	Active project community
MRL-7	Support	mrl-spt						

# Market Readiness Levels

*“flight proven”*

***Established player***

Established product with properly financed and organized Business support Customer base, Repeat sales and Market recognition

*“flight qualified”*

***Actively competitive***

Early customer base, appropriate financing or active community support, recognized software

*“prototype in space”*

***Business build-up***

Early customer base and fledgeling financing or active community support

*“proven demo”*

***Broadening market***

Proven product recent, market opening, untested governance

*“relevant envt validation”*

***Opening market***

Some customers recent, market opening, un-proven governance

*“Lab validation”*

***Usefulness verified***

Several users, project leadership well established

*“proof of concept”*

***Fledgling usefulness***

One declared user (can be internal) with declared project leader

*“application formulation”*

***Product development***

Basic R&D code developed with one demonstrated use case, some documentation

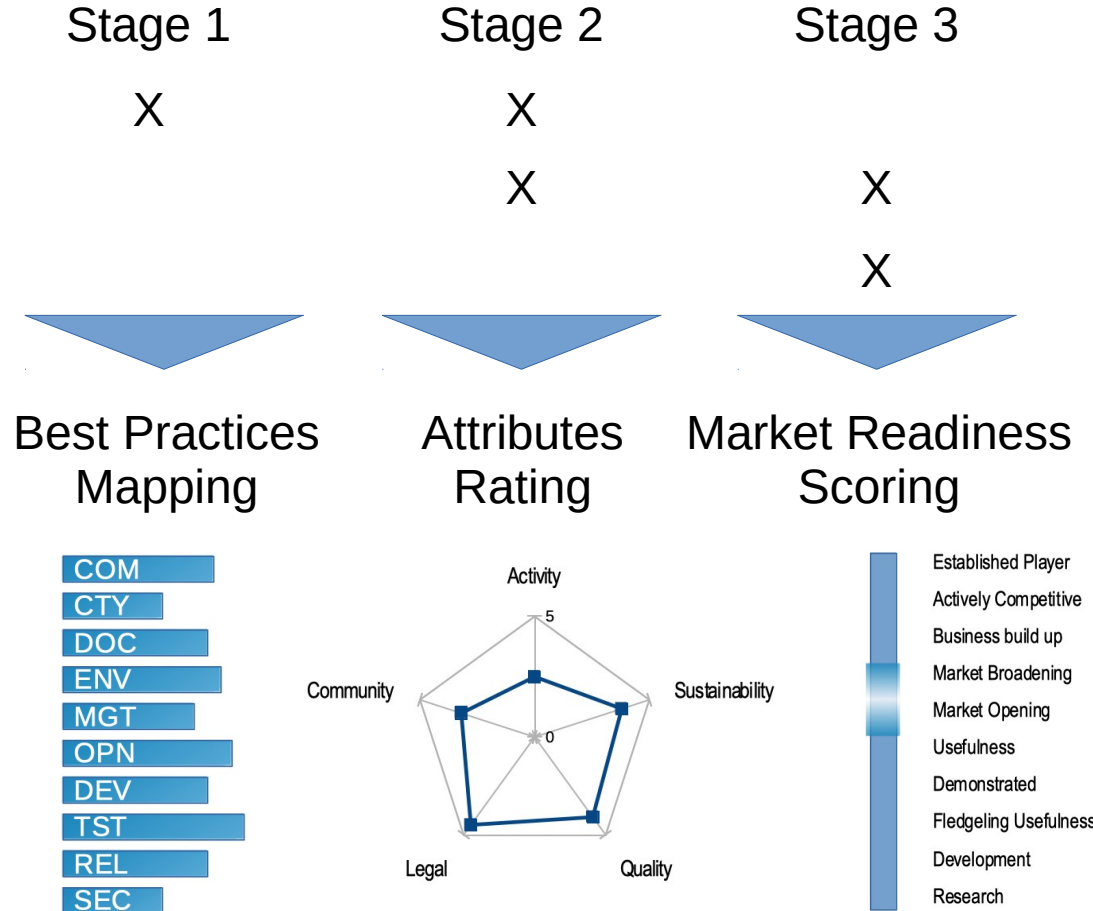
*“Basic principles”*

***Basic early stage***

Basic R&D code developed

# Computing the Score

- Self declared form
- Metrics from the platform
- Expert evaluation



## Summary



- ▶ Composite index to help promote OW2 projects
- ▶ Enabled by OW2 governance
- ▶ Leverages OW2 platform and tools
- ▶ Comprehensive three-stage evaluation approach
- ▶ From raw data to decision-support information

## Appendix: Real-life results shown at POSS 2019

*Currently on the development platform so not yet publicly available as of POSS 2019.*

# OW2 Project Marketplace

OW2 Project Marketplace



## OW2 Project Marketplace

Welcome to the OW2 Project Marketplace. OW2's activities for software development are organized into Projects. Projects are developed with and without projects, OW2 would not exist. The addition of new Projects within the OW2 Marketplace and their lifecycle is managed by the [OW2 Technology Council](#). OW2 endeavours to integrate solutions helping Projects to produce assessment reports on the quality of their governance, as described on the [Quality assessment](#) page. Active OW2 projects are listed in the directory below, categorized by maturity level, functionality, standards and license.

Project Directory

Latest News

Maturity level

Project	Description
<a href="#">ADR App</a>	ADR App enables anyone to identify dangerous transports. It embeds a small DB to identify projects on trucks.
	ARTIST is a tool-supported methodology for software modernization and migration towards the cloud.
	ASM is an all purpose Java bytecode manipulation and analysis framework.



# Project Dashboard

The screenshot shows a web browser at the URL `projects.dev.ow2.org/view/lutece/#overview`. The page features the OW2 logo at the top left and a navigation menu with items: ABOUT, PROJECTS, INITIATIVES, MEMBERS, NEWS, and a settings gear. The breadcrumb trail is `/ projects / Lutece`. The main heading is "Lutece". Below this are three tabs: "Overview" (selected), "Metrics", and "Market Readiness". The "Overview" tab contains the following text:

*Lutece is a portal engine which allows you to easily create your websites or intranets based on HTML or XML content.*

LUTECE is a java based CMS/Portal providing a very modular approach by its plugin architecture. It may also be used as a framework to build web application.

**Web site** <http://dev.lutece.paris.fr/>

**News**

- 2019/08/27 - [lutece-core-6.2.0](#)
- 2019/03/26 - [lutece-core-6.1.2](#)
- 2018/07/11 - [lutece-core-6.1.1](#)
- 2018/02/16 - [lutece-core-6.1.0](#)
- 2017/08/08 - [lutece-core-6.0.1](#)
- 2017/08/07 - [lutece-core-5.1.6](#)
- 2017/07/11 - [lutece-core-6.0.0](#)
- 2017/06/01 - [lutece-core-6.0.0-RC-04](#)
- 2017/04/14 - [lutece-core-5.1.5](#)

On the right side of the page, there is a blue square icon with a white letter 'L' inside an orange circle.

# Best Practices Evaluation

→ [projects.dev.ow2.org/view/lutece/omm3](https://projects.dev.ow2.org/view/lutece/omm3)

OPN-4	The project has a process to vet the copyright ownership of every code contributions integrated into the software.	Status: No
OPN-5	Libraries and components that are mandatory dependencies of the project's code are available as open source software.	Status: Yes

## Development Process

### Development practices that help improve code quality.

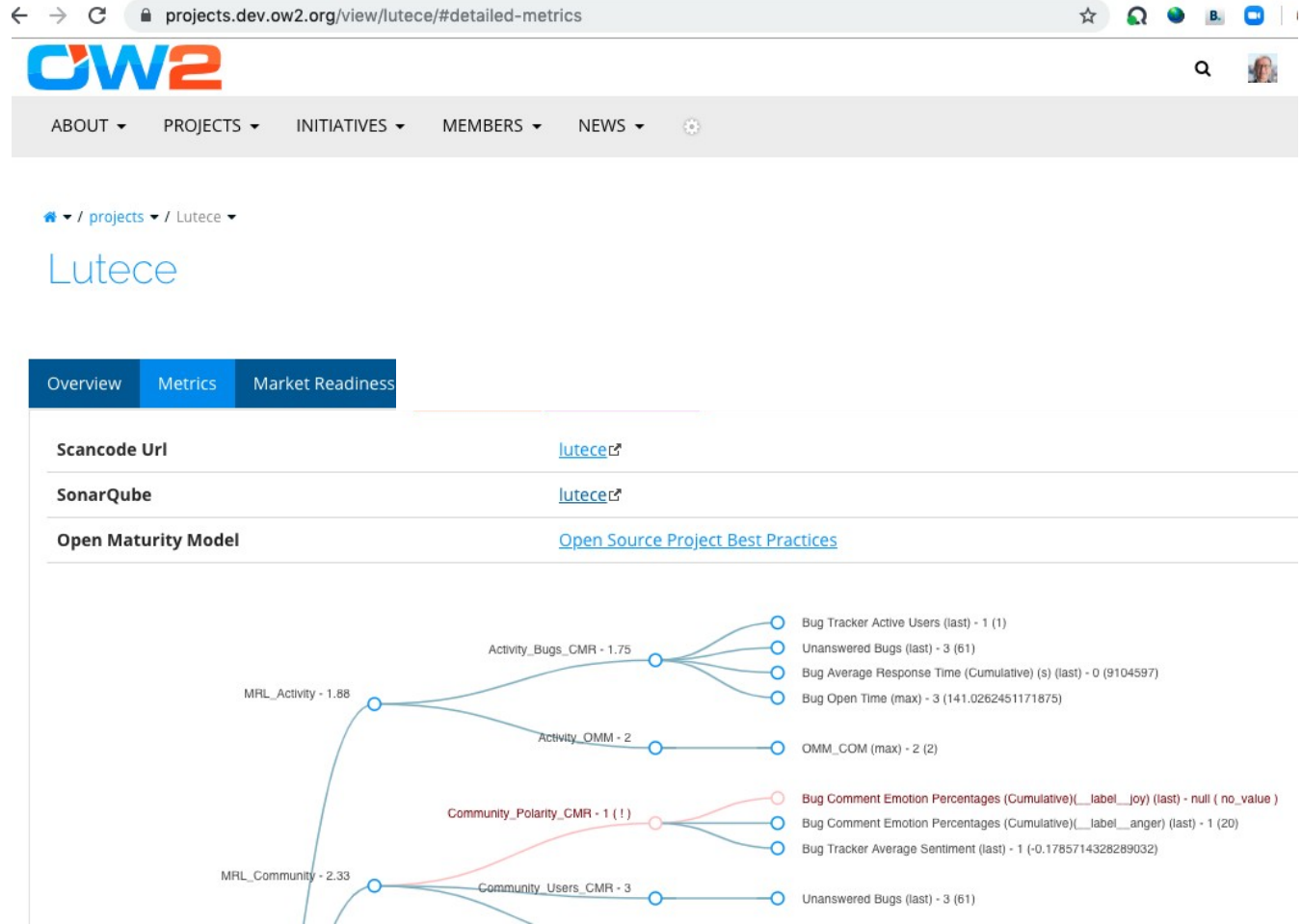
DEV-1	The project process for users to submit bug reports, feature requests and improvement ideas is documented and supported by a tool (e.g. an issue tracker or a mailing list).	Status: Yes
DEV-2	The project maintains at least one stable version of the software, different from the development version.	Status: Yes
DEV-3	The project quality control process is defined and publicly documented.	Status: Yes
DEV-4	The project's source repository includes interim versions to enable collaborative review between releases, development for public releases happens publicly.	Status: Yes
DEV-5	The project can provide evidence of the use of agile methodology or any well-documented software development methodology.	Status: No

## Testing Process

### Provisioning, implementation quality and maintenance of the testing process.

TST-1	The project applies at least one FLOSS static code analysis tool to any proposed major production release of the software before its release.	Status: Yes
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# Metrics Collection

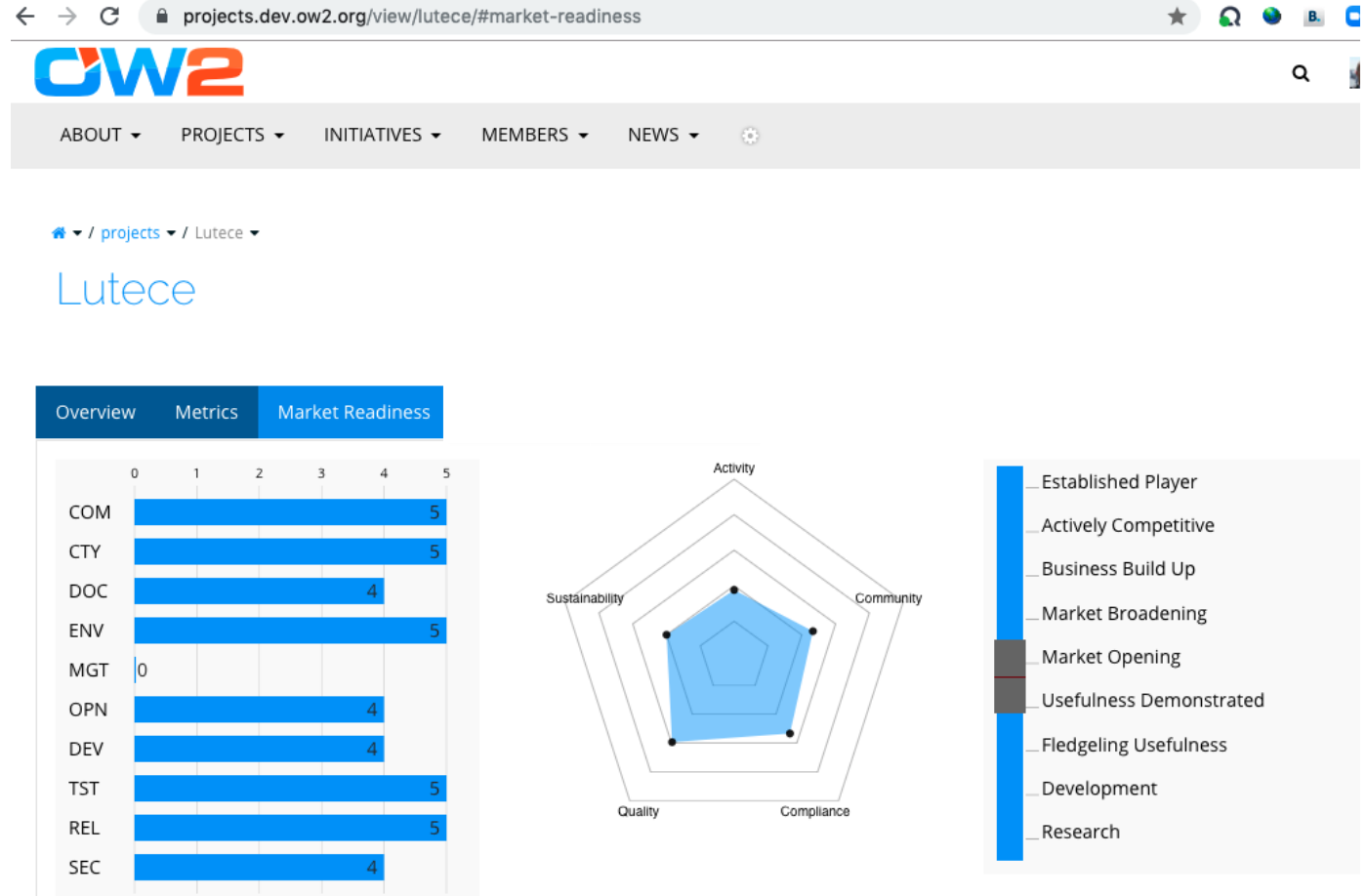


# Market Status Evaluation

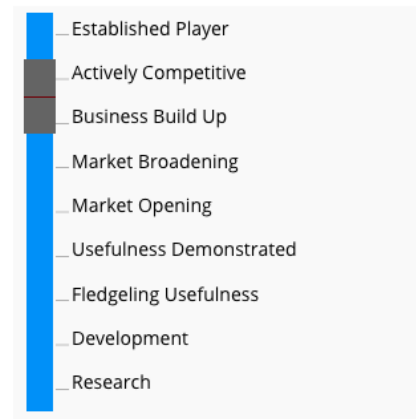
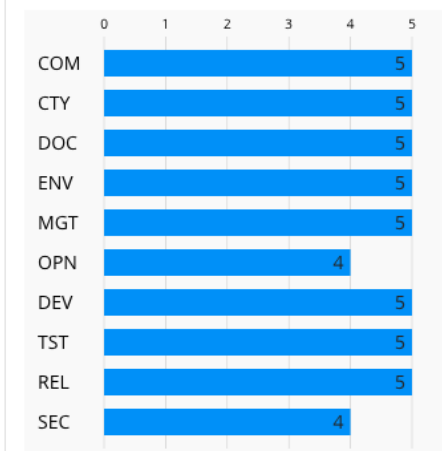
The screenshot shows a web browser at the URL [projects.dev.ow2.org/edit/lutece/MRLForm](https://projects.dev.ow2.org/edit/lutece/MRLForm). The page features the OW2 logo and a navigation menu with items: ABOUT, PROJECTS, INITIATIVES, MEMBERS, NEWS, and a settings icon. A breadcrumb trail indicates the path: Home / projects / Lutece / MRLForm. On the right side, there are buttons for 'Edit', 'Create', and a user profile icon. The main content area is titled 'MRLForm' and contains three rows of data, each with a project ID, a category, and a status list.

Project ID	Category	Status Options
MRL-PTD	Product	<p>Status:</p> <ul style="list-style-type: none"><li><input type="radio"/> 0: No-user, R&amp;D, POC</li><li><input type="radio"/> 1: Beta, Packaged, Documentation</li><li><input type="radio"/> 2: Full Q&amp;A, Doc etc.</li><li><input type="radio"/> 3: UI, APIs and Interoperability</li><li><input type="radio"/> 4: Product Range</li><li><input checked="" type="radio"/> 5: Platform Sub-Project Generation</li></ul>
MRL-CTR	Contributors	<p>Status:</p> <ul style="list-style-type: none"><li><input type="radio"/> 0: Research partners</li><li><input type="radio"/> 1: Declared OSS</li><li><input checked="" type="radio"/> 2: Active OSS project leader</li><li><input type="radio"/> 3: Occasional third party contrib.</li><li><input type="radio"/> 4: Regular third party contributors</li><li><input type="radio"/> 5: Broad active project community</li></ul>
MRL-SPT	Support	<p>Status:</p> <ul style="list-style-type: none"><li><input type="radio"/> 0: No support</li><li><input type="radio"/> 1: Help contact identified</li><li><input checked="" type="radio"/> 2: Community best effort</li></ul>

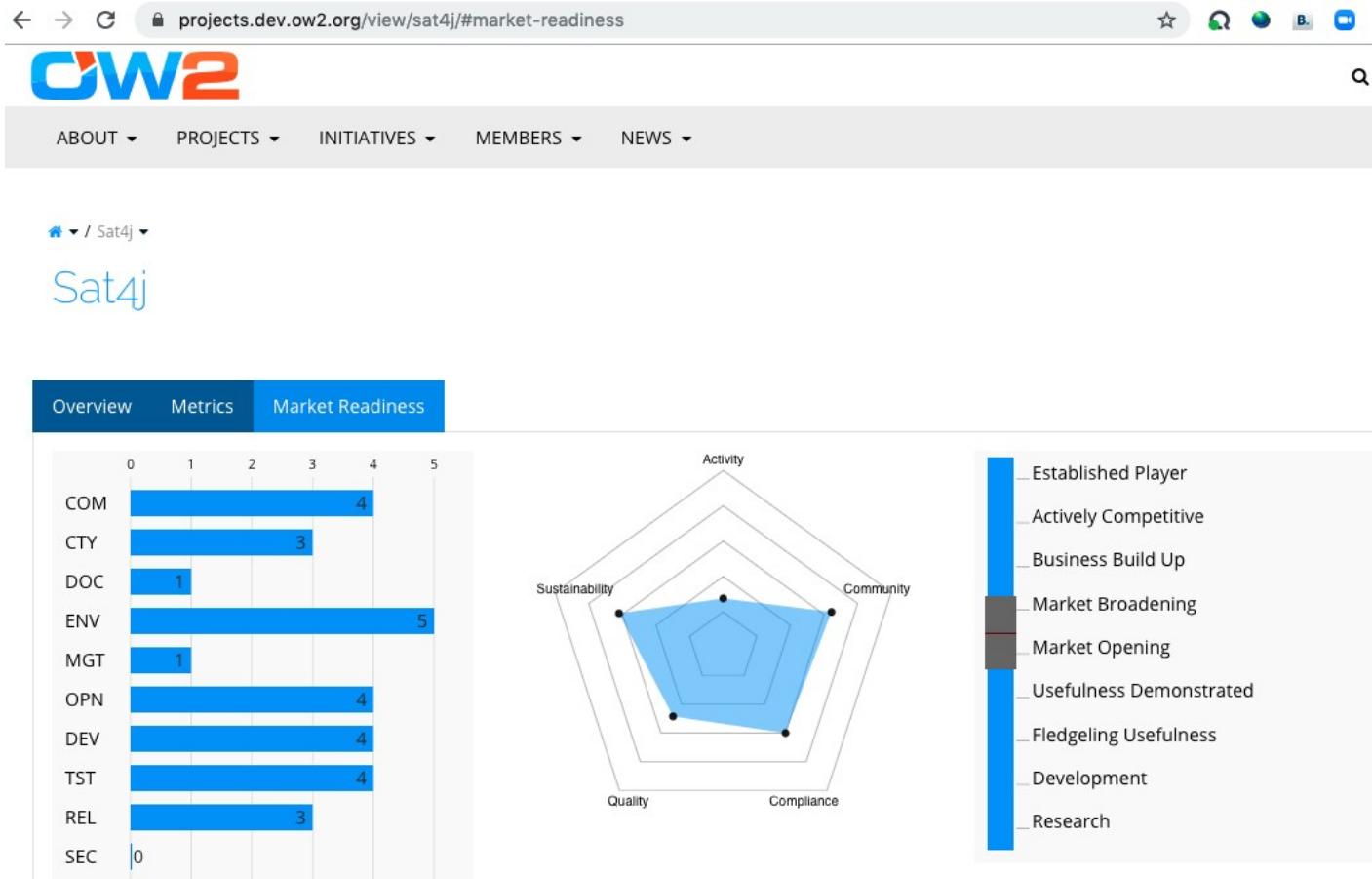
# Complete Results for Lutece



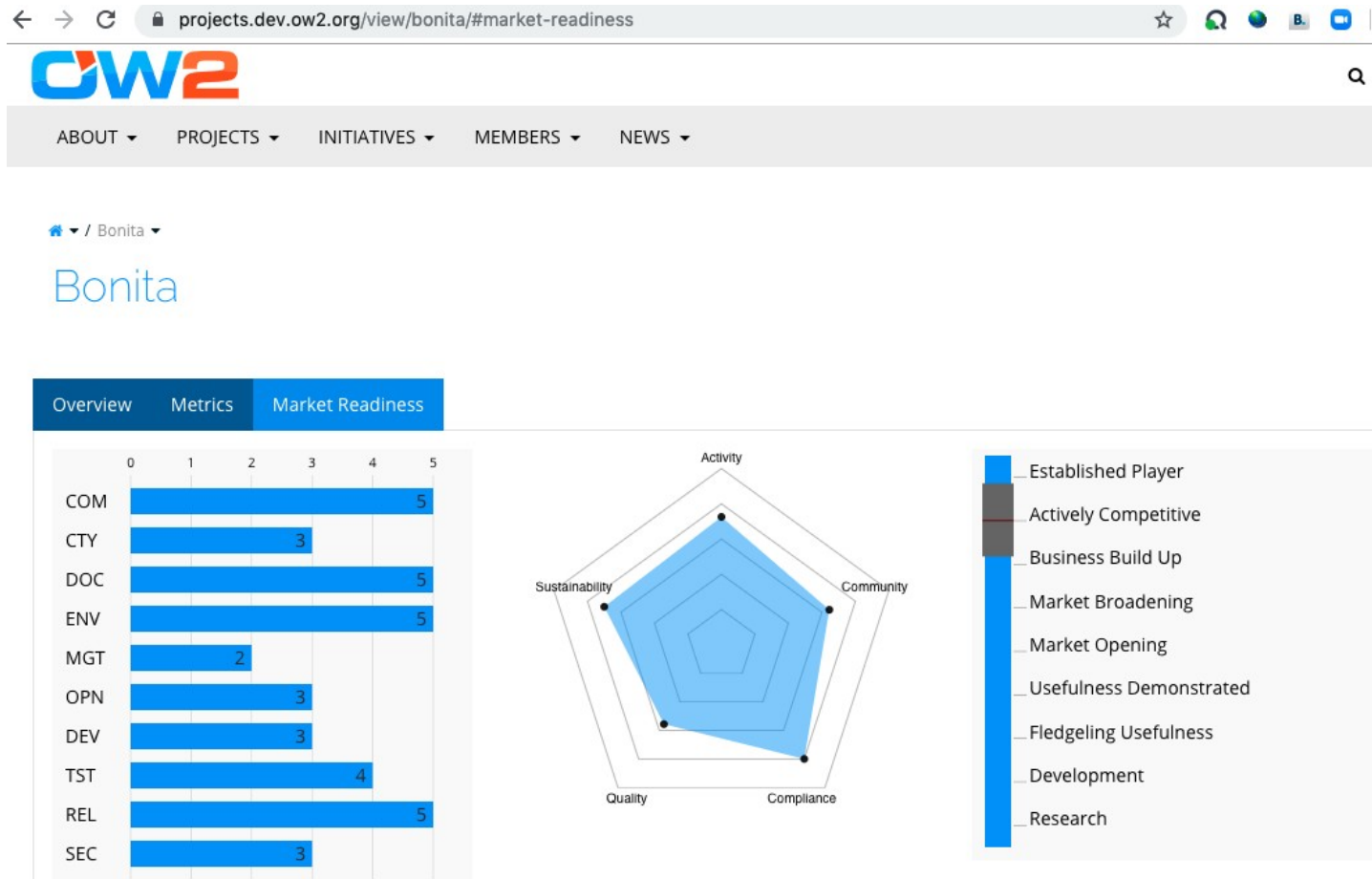
# Complete Results for XWiki



# Complete Results for Sat4j



# Complete Results for Bonita





A world map with numerous small blue stars scattered across the continents, primarily concentrated in North America, Europe, and Asia. A large blue circle is overlaid on the map, framing the central text.

# Thank You

And now let's talk  
Q&A  
Disagreements  
Complements  
Feedback  
etc.

**OW2**  
[www.ow2.org](http://www.ow2.org)