



OSS Projects Market Readiness Assessment

Open Project and (Kind of) Request For Comments

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FOSS Backstage

Berlin, 13-14 June, 2018

Open Source for the Business Decision Maker







Developer







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Customers Want Products







The Ecosystem Generates Value







From Data to Analysis to Decision













80% to 90% of a typical application is composed of components.





The Busy Landscape of OSS Metrics



OW2 OMM forms **ODOPENCHAIN** 🍫 spago4 IS IT MAINTAINED? Biterg **Bus Factor Calculator** Clearly Defined **BLACK**DUCK | Open HUB **sonar**qube GCC MELT _ppcheck mancosi Jenkins Crowd testing DejaCode nexB Ð **TripleCheck** fossology

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OW2 OSCAR

- A methodology and a platform
- Quality assessment tools
- Raw data + risk assessment models
- Transparent information on projects
- Check-list of best practices to reach market maturity









When a Lot of Data Can Be Too Much Data

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Toward a Synthetic Indicator









NASA's Technology Readiness Levels



A type of measurement system used to estimate the maturity level of a particular technology

► In technology, there are usually nine readiness levels. TRL 1 is the lowest and TRL 9 is the highest.

►A TRL number is obtained once the description has been achieved.

► For example, successfully achieving TRL 4 does not move the technology to TRL 5.

▶ Pioneered by NASA in the 80's.

Adopted by the DOE and DOD for procurement and management of complex systems.







NASA/DOD Technology Readiness Level



Actual system "flight proven" through successful mission operations

Actual system completed and "flight qualified" through test and demonstration (Ground or Flight)

System prototype demonstration in a space environment

System/subsystem model or prototype demonstration in a relevant environment (Ground or Space)

Component and/or breadboard validation in relevant environment

Component and/or breadboard validation in laboratory environment

Analytical and experimental critical function and/or characteristic proof-of-concept

Technology concept and/or application formulated

Basic principles observed and reported



OW2 OSS Market Readiness Template

"flight proven" "flight qualified" "prototype in space" "proven demo" "relevant envt validation" "Lab validation" "proof of concept"

"application formulation"

"Basic principles"



Established player

Actively competitive

Business build-up

Broadening market

Opening market

Usefulness verified

Fledgling usefulness

Basic early stage

Established product with properly financed and organized Business

Early customer base and fledgeling financing or active community

Proven product recent, market opening, untested governance

Several users, project leadership well established

Some customers recent, market opening, un-proven governance

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

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

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support Customer base, Repeat sales and Market recognition Early customer base, appropriate financing or active community

support, recognized software

support

documentation

Basic R&D code developed

Developing This Collaboratively





Defining Metrics







Collecting Data







Processing Data







Publishing Results







Reaching Out







Questions, Challenges and Pitfalls



Metrics: Possible vs Workable Criteria list must be manageable Project support: Community vs For-Profit ► One rationale fits all? Perspective: Engineering vs Business ► End-user angle is the new thing **Context**: Scientific vs Enterprise Different worlds evaluated differently? **Process:** Data collectors vs Forms Some of it will be manual **Rationale:** Measurement vs Evaluation Measurable facts vs Opinions **Data**: Snapshot vs Updates Static or dynamic assessment Representation: Levels vs Radar Vs Status Avoid hierarchies





Collaboration Outlook



Infrastructure

- https://oscar.ow2.org/view/MRL/
- ► Wiki, web pages
- Mailing list

Research

- ▶ References
- Dashboard representation

Stakeholders

- Involve actual users and project leaders
- Set-up advisory board (Developers, VCs, Academics, Users)





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Thank You

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

CW2

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