

# Is that Project Ready for You?

Open Source Maturity Modeling

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# **Open Source? Why worry?**

Open Source Software == Innovative, exciting, available

But

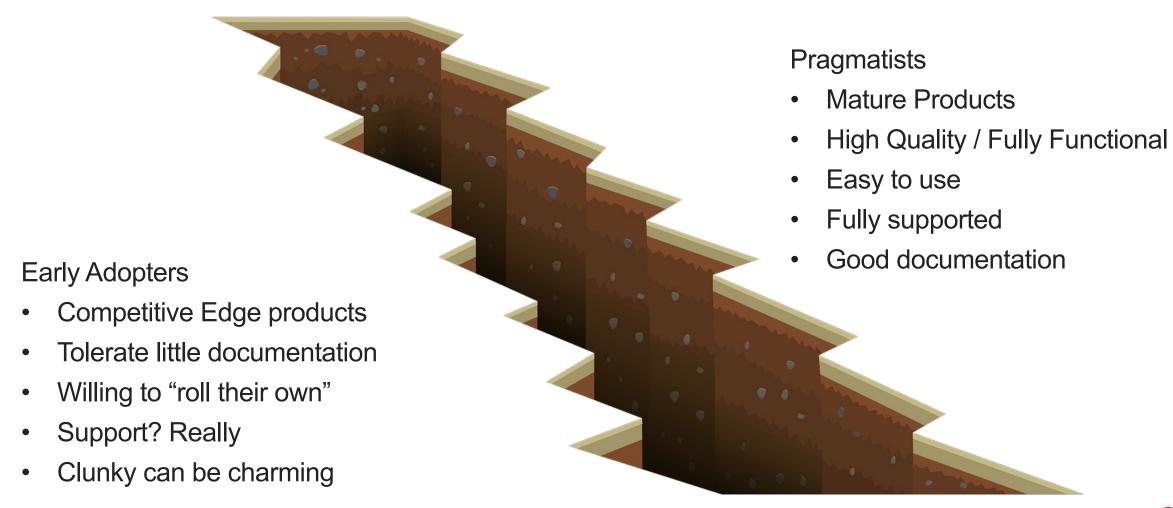
Is it ready for Prime Time?

- Is it stable?
- Is it supported?
- Is it advancing?





#### What's Your Chasm?



#### Maturity model to the rescue!

#### A brief history

1993 : Software Engineering Institute Capability Maturity Model

2003 : Open Source Maturity Model (OSMM) from Cap Gemini

2004 : Open Source Maturity Model (OSMM) from Navica

2004: Methodology of Qualification and Selection of Open Source software

2005 : Open Business Readiness Rating (OpenBRR)

2007 : Open Business Quality Rating (Open BQR)

2008: QualiPSo OpenSource Maturity Model (OMM)



#### **The Common Elements**

- Maturity models should describe
  - The Current State
  - The Desired State

#### Important Issues for consideration

- Functionality
- Quality Control and Assurance techniques
- Testing
- Risk Assessment
- Usability



# **Breaking it down**

#### Three Assessments to make

- What are the product <u>elements</u>?
- What are your weighting factors?
- What is the overall score?

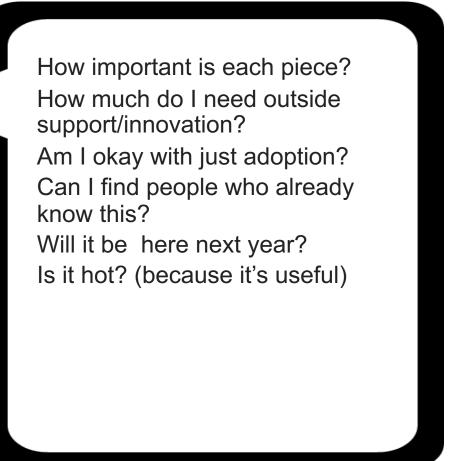




# **Breaking it down**

#### Three Assessments to make

- What are the product elements?
- What are <u>YOUR</u> weighting factors?
- What is the overall score?





# **Breaking it down**

Three Assessments to make

- What are the product elements?
- What are your weighting factors?
- What is the overall <u>score</u>?

Item Score = Rating \* Weight

Sectional Score = Sum (Item Scores) / Count (Item Scores)

Final Score = Sum(Sectional Scores)





#### Part 1: Product factors

- Packaging
- Training
- Integrations (to other products/projects)
- Dependencies on other products/projects
- Services

- Functionality (software)
  - Code
  - Design
  - Architecture
- Testing Practices
- Product/project support capability
- Docs
- Usability



# People (and other) Factors

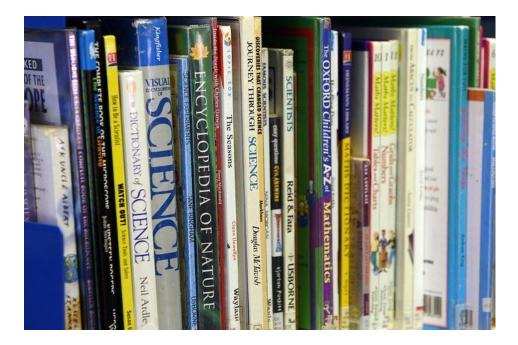
- Momentum
- Support for standards
- License type and conflicts
- Corporate commitment (if applicable)

- Leadership and culture
- Community maturity
- Community vitality
- Talent pool
- End-user support



#### **Assessment criteria**

- Define your requirements
- Locate resources
- Decide availability
- Assign score







# **Your Weighting Factors**

- What are your required factors
- How important are they?



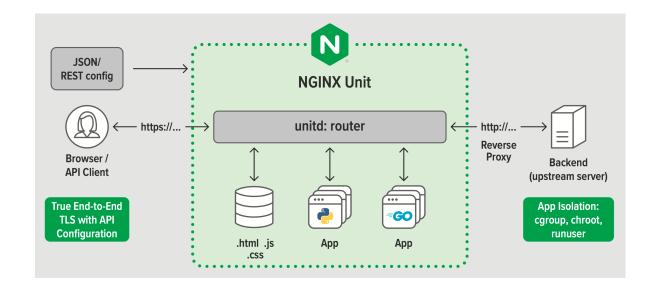
#### **Example: NGINX Unit**

simplifies the application stack

#### **NGINX Unit**

Open source Universal Web App Server

- Serves static assets
- Runs application code
- Proxies to backend



#### Sources

Github – https://github.com/nginx/unit

Mercurial

Website - https://nginx.org

SO and Reddit

Mailing list & archives

Changelogs

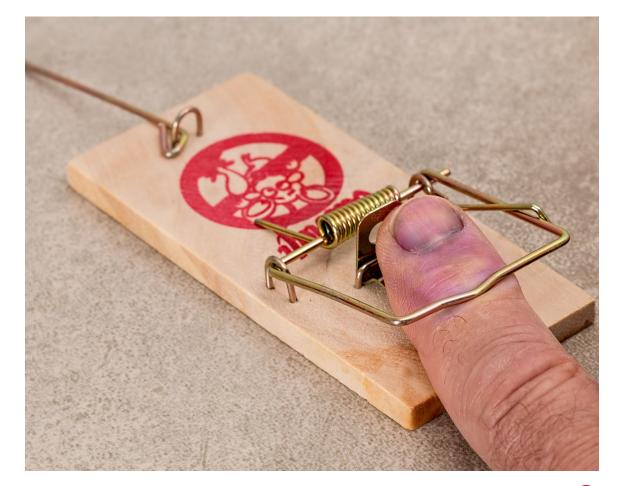
Other miscellaneous



	Rating (1.0 - 5.0)	Weight (1.0 - 5.0)	Score (1.0 - 5.0)	Power ranking	Notes
ategories					
Project					
Functionality	4.1	4	16.4	82%	
Testing (Practices)	2.7	3	8.1	54%	no clearly defined testing processes
Usability	3.7	2.5	9.25	74%	
Support	2.5	3	7.5	50%	only commercial found
Documentation	3.6	3.5	12.6	72%	great docs, needs continual extension
Packaging	4	3	12	80%	
Training availability	2	2	4	40%	
Integrations	3.3	2	6.6	66%	
Dependencies	3	4	12	60%	
License choice (conflicts =					
lower rating)	4	4.5	18	80%	
Corporate commitments	4	3.5	14	80%	
		Sectional Score	10.95		
People					·
Leadership and Culture	3	3	9	60%	NGINX leads. But no community
Community maturity	2.7	3.5	9.45	54%	E/U focus
Community vitality	2.8	3	8.4	56%	E/U focus
Talent pool (hiring)	1.7	2.5	4.25	34%	
End user support	2.5	1	2.5	50%	reddit, SO, other
Momentum	3.1	3	9.3	62%	
Support for Standards		4	14.8	74%	
Support for Standards	3.7	Sectional Score	8.24	74/0	
		Sectional Score	0.24		
		Final Score	19.19		

#### So what's the catch?

- Maturity models oversimplify reality
  - But in overly complex cases this is useful
- Maturity models assume that there is only one true path
  - With open source though, that path may allow us to learn from those before us
- Maturity models presume there is an end state of nirvana
  - No nirvana, but are highly indicative of the current trends





# Summing up

- OSMM can give you a framework for comparison
- OSMM can indicate the maturity of your own project
- There is no silver maturity bullet

And finally,

A tool is only useful when used appropriately. OSMM depends on you using it for comparison to other projects or to an acceptable risk point





# Thanks for listening

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