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Open Source Software – How to Help Your Lawyers and Execs Become Enthusiastic Supporters

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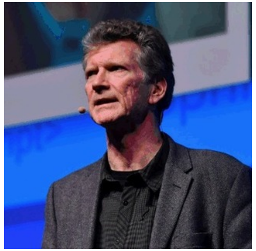
About Us



Stephen Walli is a principal program manager in the Azure Office of the CTO at Microsoft. Prior to that, he has been a distinguished technologist (HPE), technical executive, a founder, a consultant, a writer, a systems developer, a software construction geek, and a standards diplomat.

Eddie Satterly, Co-founder of Datanexus, has served in a variety of roles including developer, engineer, architect, and CTO over his 28+ year career for startups to Fortune 500 companies. As a strategic advisor and consultant, Mr. Satterly transforms businesses using open source software.

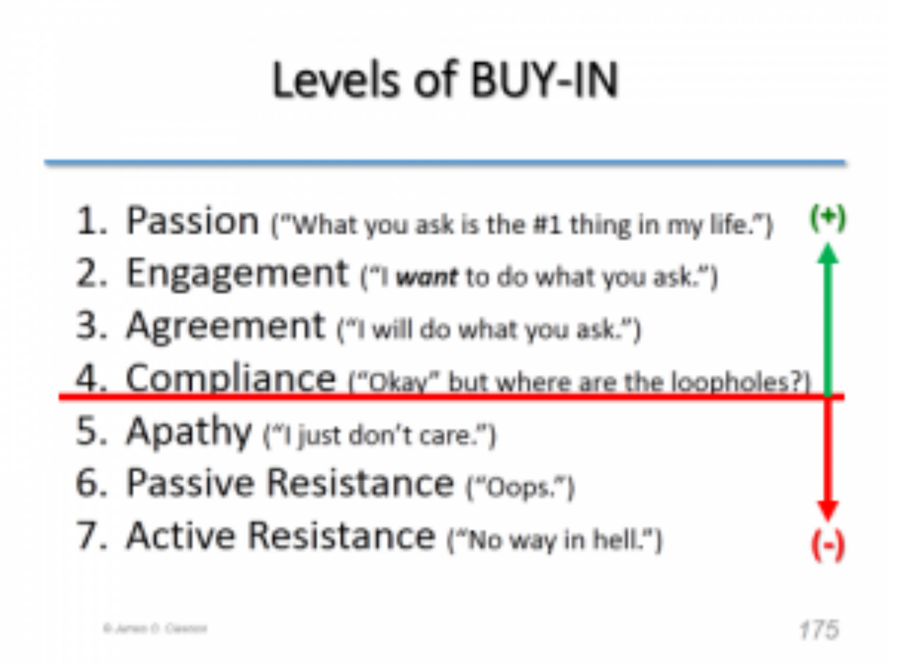
Joanna Lee, Partner at Gesmer Updegrove LLP, advises open source software foundations, technology standards consortia, and tech companies in various stages of engagement with open source software.

Stages of Open Source Engagement

No Engagement	Consumer	Contributor	Community Leader	Strategic Influencer
- No conscious use of or engagement with OS - Either lacking in policies and direction regarding use of OS, ***or*** there is an express prohibition on its use	- Uses OS - Does not contribute to OS (contributions might even be prohibited) - Usually focused on compliance and immediate cost savings	- Extensively uses OS - Contributes to OS projects on a controlled basis - Might be small-scale sponsorship - Limited community engagement	- Uses and contributes to OS meaningfully and strategically - Participates in leadership of projects and key foundations - Helps grow project communities - Actively markets its OS engagement	- Uses position of leadership to shape the ecosystem - Helps define standards for the industry - Influences commercialization decisions

Increasing Open Source Engagement

- To progress from one stage to the next, you need to get buy-in from all stakeholders:
  - Business/Strategy
  - Product/Technology
  - Legal
  - Cybersecurity/Risk Management
- It takes a champion (or several)
- It takes time (and a lot of meetings)



Levels of BUY-IN

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1. Passion ("What you ask is the #1 thing in my life.")
2. Engagement ("I *want* to do what you ask.")
3. Agreement ("I will do what you ask.")
4. Compliance ("Okay" but where are the loopholes?)
5. Apathy ("I just don't care.")
6. Passive Resistance ("Oops.")
7. Active Resistance ("No way in hell.")

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James G. Clawson, Professor at University of Virginia Darden School of Business

Getting Started

- Successful evangelization of greater open source engagement within a company starts with articulating a ***clear business objective***
- The business objective will be highly dependent on context, including your industry, company, culture, overall intellectual property strategy, and the role that software plays in your business model
    - e.g., if you are a vendor or customer of software, and/or if your primary business is selling complementary products and services

The Basics: Consumers and Producers

When You Consume

- It’s all about engineering economics
- Orders of magnitude of value capture
- Living on a fork is brittle & expensive

When You Produce

- Don’t confuse projects & products
- Community has time and no money; customers have money and no time
- Freeloaders means you’re doing it right
- Build on ramps (users, devs, contributors)
- Community doesn’t happen – it’s built

The Advanced Program: Strategy and Foundations

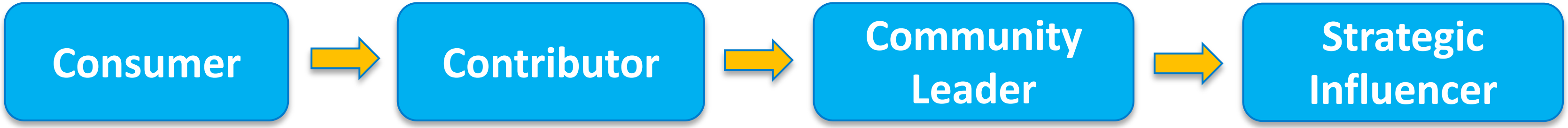
Strategy

- Culture eats strategy for breakfast
- Strategy is the budget decisions you made
- Know the objective(s)
- Think beyond your intellectual property strategy to your intellectual asset strategy

Foundations

- Project-centric exchange vs ‘ecosystem’ building
- Open source foundations are not SDOs but …
- Foundations = competitors collaborating protected from anti-trust problems

Getting Buy-In From Legal: Primary Concerns



Consumer → Contributor → Community Leader → Strategic Influencer

- Compliance
- Risk management
- Controlling use of copyleft software

- **Intellectual Property Protection**

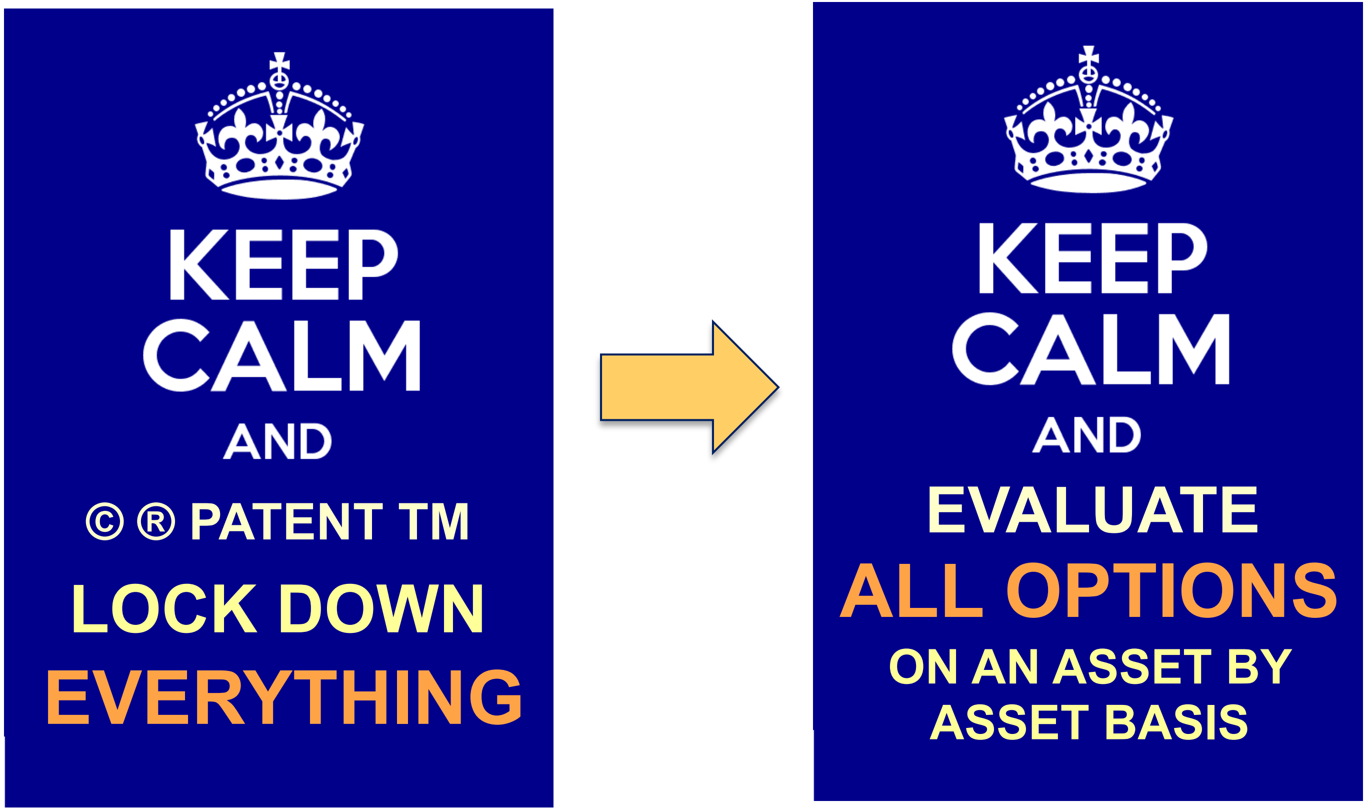
- **Intellectual Property Protection**
- How to scale
- If an Open Source Program Office doesn’t already exist, its need will become apparent at these stages

Getting Buy-In From Legal: The Million Dollar Question

Is it more strategically beneficial to exclusively control this asset or share it, and why?

You must be able to clearly articulate the answer in order to get buy-in from legal.

A More Nuanced Intellectual Property Strategy



To Share or Not Share? Factors to Consider

- What role does this asset play in helping to generate revenue? Does the asset itself directly generate revenue, or is it complementary to products and services that generate revenue?
- Does this asset support a shared ecosystem that enhances demand for your products and services (e.g., through interoperability)?
- Is this asset a key competitive differentiator?
  - *If not, exclusive control has limited value.*

Factors to Consider (Continued)

- Is it easy to design around or independently develop a substitute?
  - *If so, IP protection would be largely ineffective and have limited value.*

- Can this asset be used to create meaningful barriers to entry?
  - *Do not assume proprietary ownership is the only way to use an asset to create barriers to entry.*

- If exclusive control of this asset (i.e., right to control how it is used, who can use it, and how it is modified) is even possible, how can control be exercised in a strategically beneficial way?

It’s a Balancing Act

Potential Benefits of Sharing:

- Engage a community to build cheaper & faster
- Improve interoperability
- Help shape the ecosystem
- Encourage broad adoption
- Enhance demand for your related products & services

Potential Benefits of Exclusivity:

- Control evolution of your product
- Prevent competitors from using your innovations
- Generate revenue from licensing

An Example

- Revenue Generators: Google Ads and sales of mobile apps through the Google Play Store.
- Shared Asset: Android Operating System
- Benefits of Sharing:
  - Android is more valuable as a shared community asset because it supports an interoperable ecosystem that enhances demand for Google products & services that generate revenue.
  - Note that the ecosystem itself (size, network effects, openness) is a competitive differentiator.
  - This is an example of how an open ecosystem can be leveraged to create barriers to entry.

Another Example

- Revenue Generator: Microsoft Azure.
- Shared Assets: Microsoft contributes to Linux and other open source projects that run on Azure Cloud. Linux usage on Microsoft Azure cloud has surpassed Windows usage.
- Benefits of Sharing: Azure's built-in support for popular Linux distributions, container runtimes, MySQL, PostgreSQL, and other open source tools is itself an important feature of Azure. Supporting open source projects has technical benefits (ensuring optimization for performance on Azure Cloud), and is also essential to appealing to a wider group of developers to help grow demand for Azure and pique their interest in writing apps that dovetail with Microsoft products or that are housed in the Azure Cloud.

Another Example

- About Puppet: Provider of IT automation software.
- Shared Assets & Benefits of Sharing: Puppet releases much of its code as Open Source so that it can leverage a broader community to help evolve its software.
- Revenue Generator: Supported enterprise versions of its software products, which include a few proprietary features.

Additional Considerations Related to Patents

- Does your company own software patents that might read on the open source projects you want to contribute to?
- If so, how does your company intend to use those patents?
  - If your company intends to use the patents **defensively**, it is easier to reconcile patent strategy with contributing to Open Source. In some situations, Open Source license enforcement can be used as a defensive tactic in patent lawsuits.
    - *Jacobson v. Katzer (settled in 2010)*
    - *Twin Peaks Software Inc. v. Red Hat, Inc. (settled in 2013)*
  - If your company intends to use the patents **offensively** or to **generate licensing** revenue, the intellectual property protection analysis will be more complex.
    - *Legal will need to evaluate the project license terms and scope of the project (and depending on the license terms, how the scope of the project might evolve)*

Many Benefits of Contributing to Open Source

- **If you don't contribute to the projects that you use, you're a passenger on a plane with someone else setting the destination.**

  -Matt Assay, TechRepublic
- A community can build and maintain software faster and cheaper
- Quality: “Given enough eyeballs, all bugs are shallow” ~*Eric Raymond*
- A rising tide lifts all boats

- Collaborative development can improve interoperability across vendors
- Enhance your reputation as a technology leader
- Attract and retain the most talented developers
- Influence the ecosystem to increase demand for your related products and services

Questions?

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Thank You