



## **Open source development model and involvement strategies**

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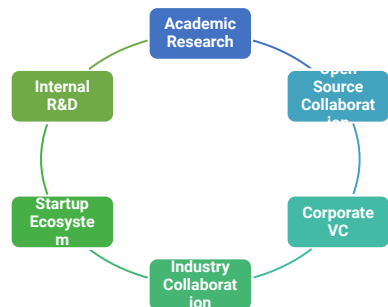


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 LF ENERGY

# Why open source?

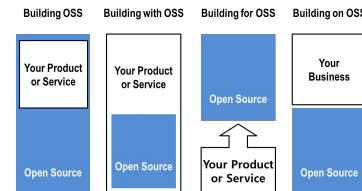
Open source is essential to any company's development strategy.



Open source is eating software!



Adaptability to various business models



Open source is ubiquitous.



Open source delivers value.

## Direct enablement

Fulfill open source development requests from R&D and product teams.  
Upstream internal code into open source projects.  
Implement and upstream related drivers.  
Support open source compliance efforts.

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## Indirect enablement

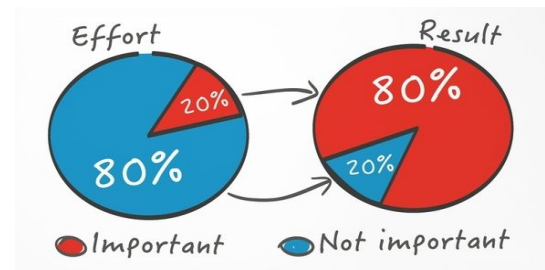
Stabilize upstream projects used in products.  
Participate in internal policy discussions.  
Effectively influence the upstream projects via thought leadership and code contributions.  
Participate in upstream technical discussions.

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## Upstream enables better products

Less work for product teams.  
Minimized cost to maintain source code.  
Better quality code.  
Faster development cycles.  
More stable code bases.  
Improved reputation in upstream projects.

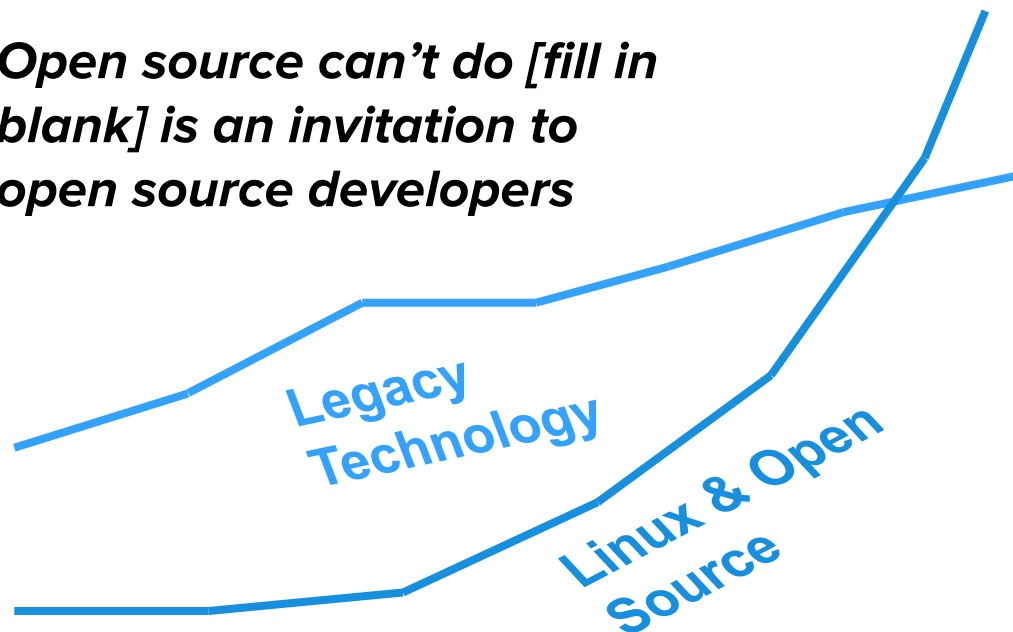
Innovation enabler: Pareto Principle



THE POWER OF TOGETHER

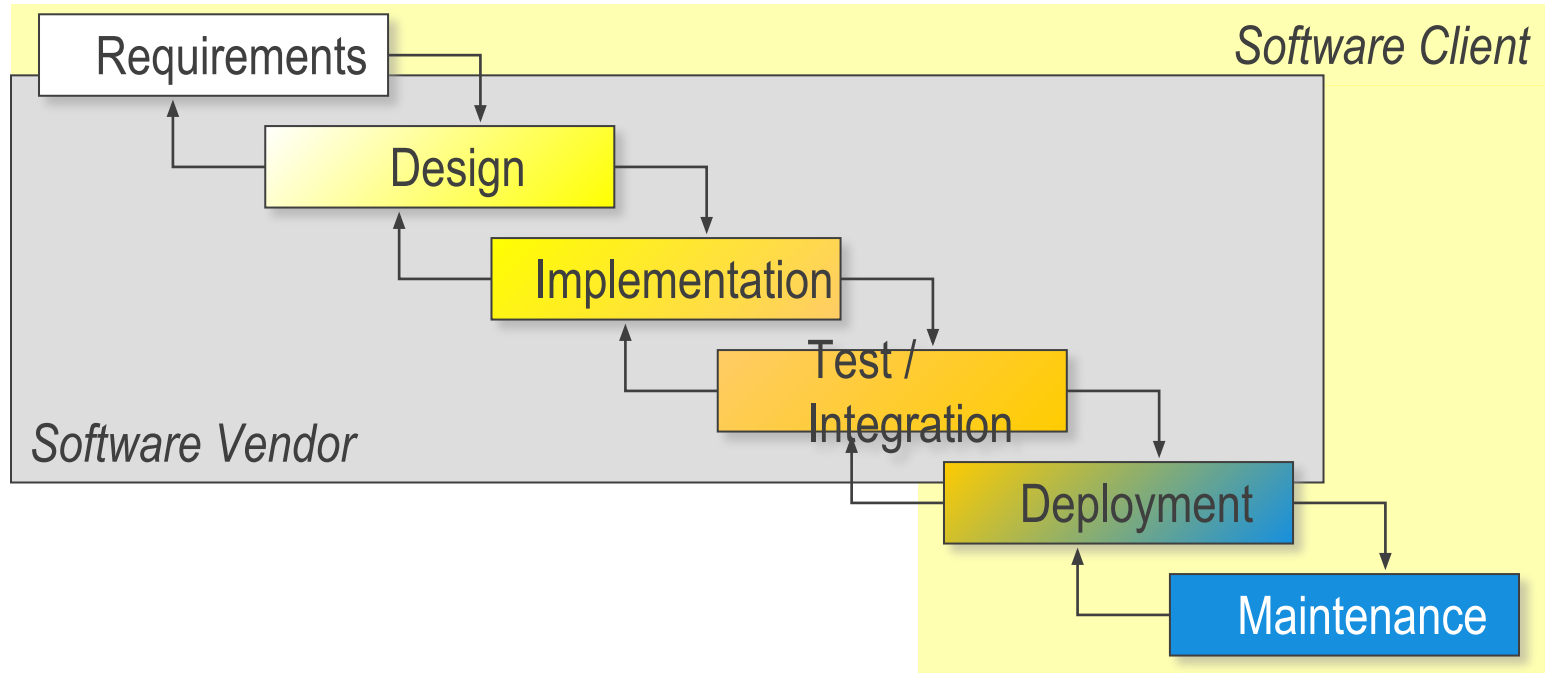
# Open source is disruptive!

***Open source can't do [fill in blank] is an invitation to open source developers***

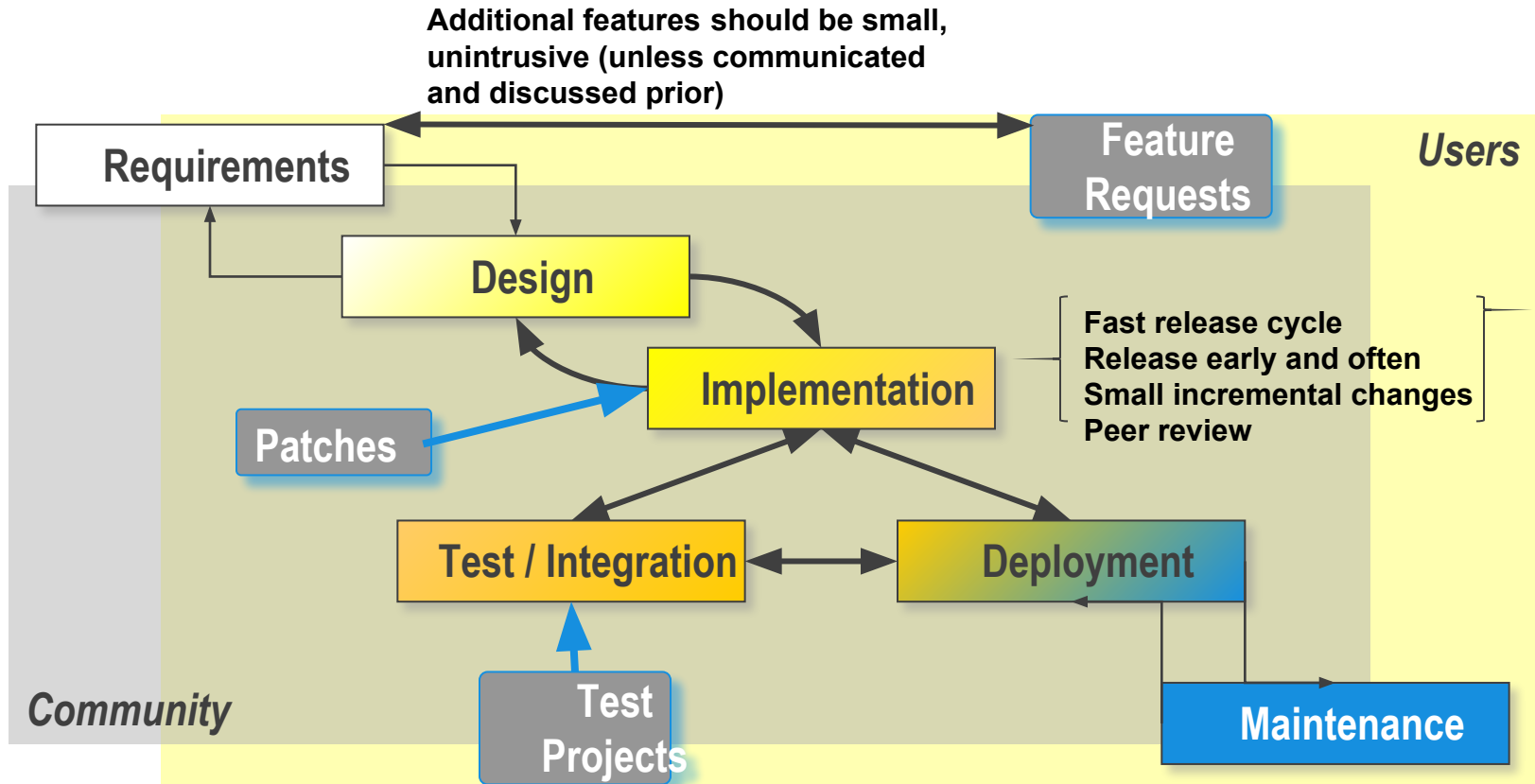


- Reinvent business models
- Decentralize vertical markets
- Clarify market vision
  - Open source help identify real value-added
  - Those who do not provide clear value are automatically out of the market

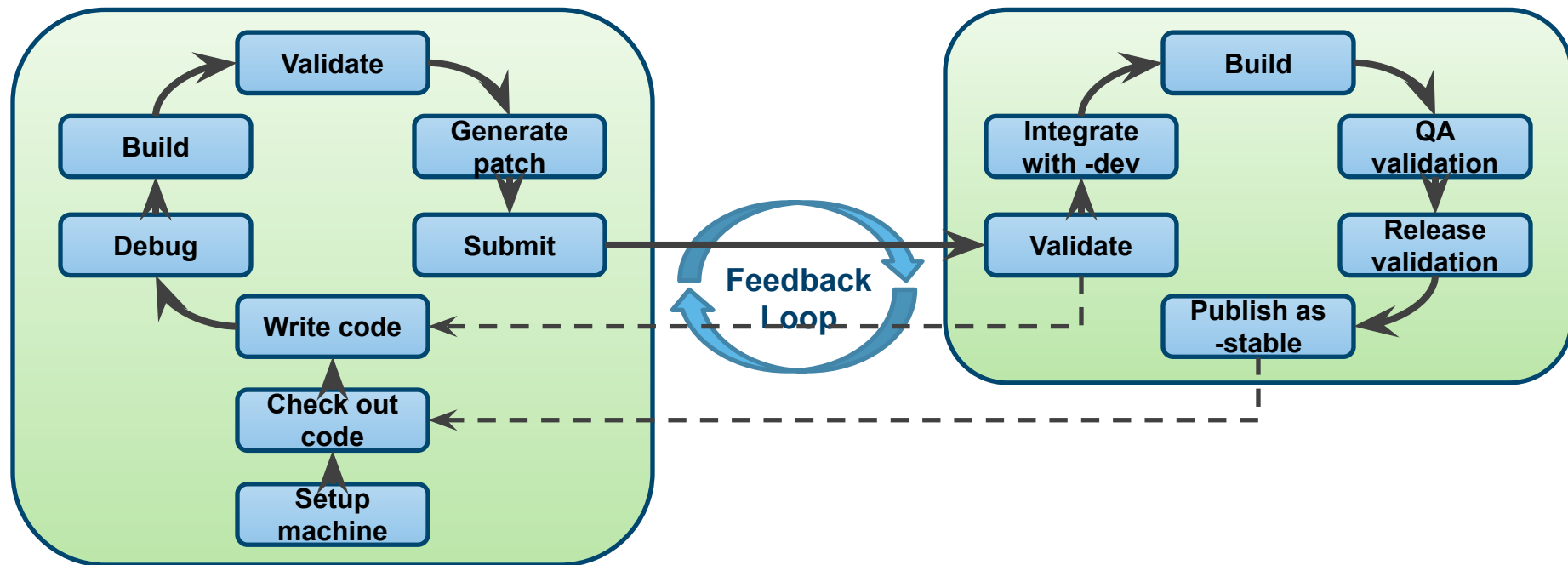
# Traditional development model



# Open source model



# Sample open source release cycle

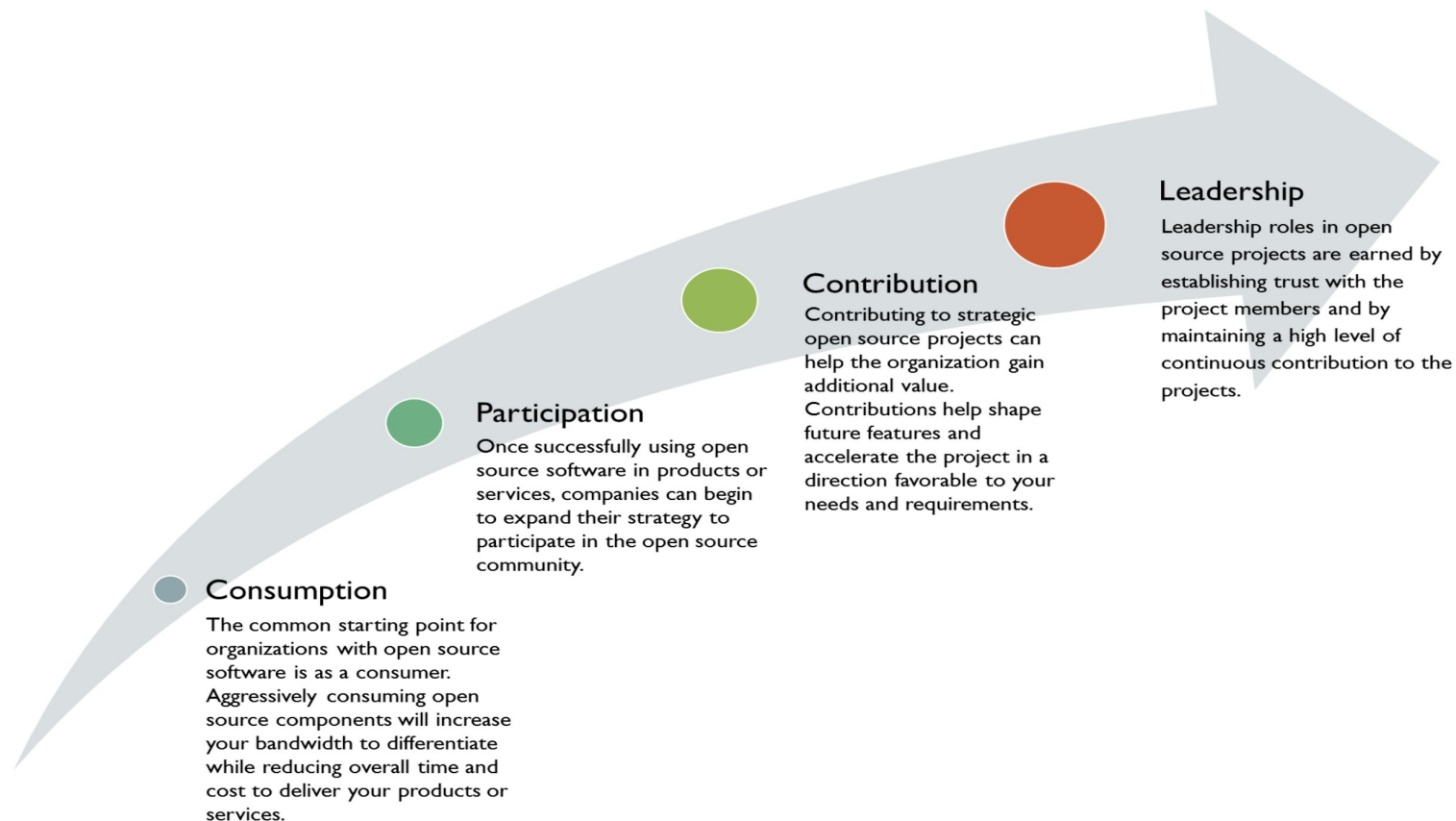


# Community best practices

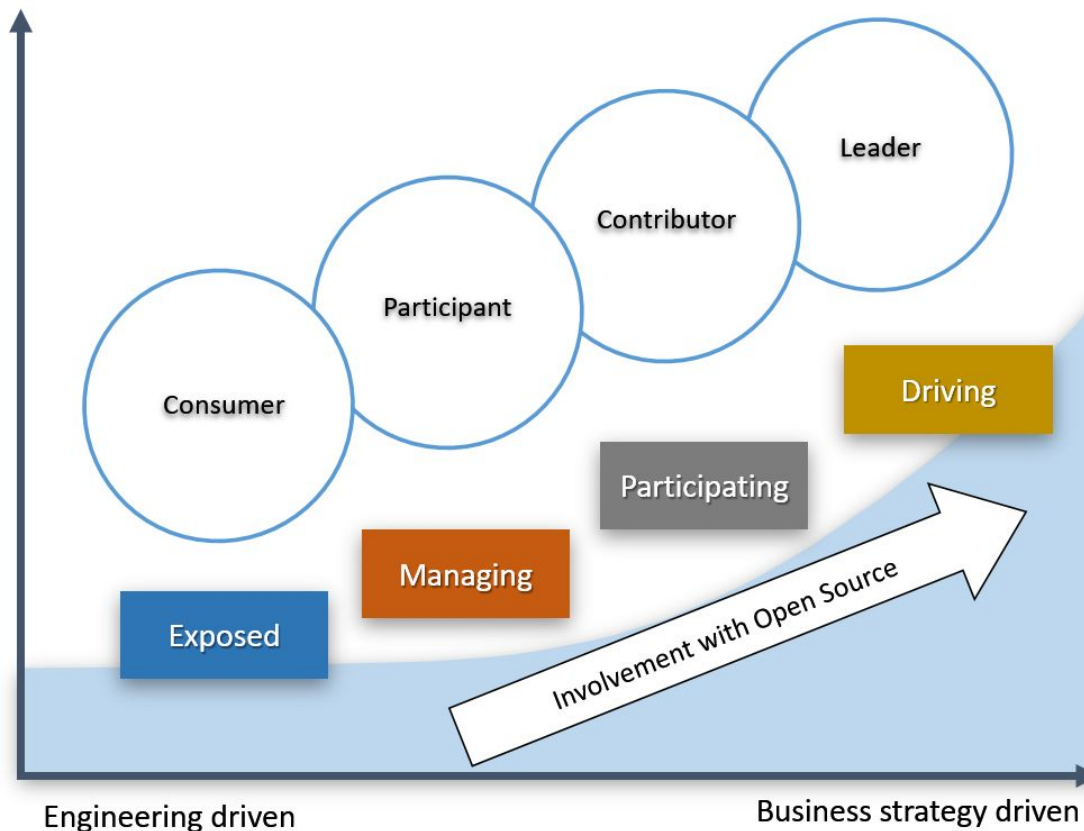
- › Release early and often
- › Peer code review
- › Cyclical and ongoing testing
- › Bug tracking
- › Fast iterations
- › Changes quickly integrated into code base
- › Continuous quality improvement



# Enterprise open source strategies



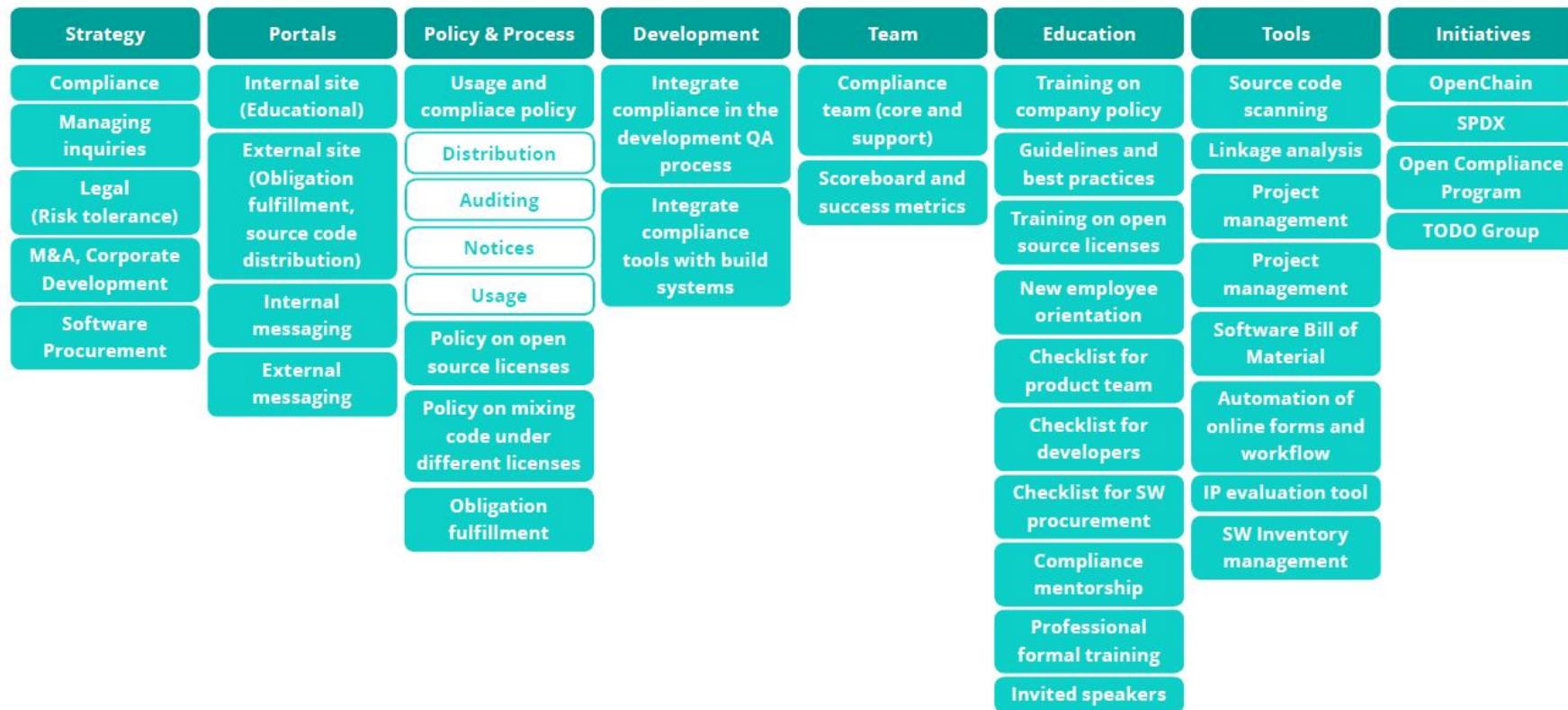
# Identify your current position



# Phase 1: Open Source Consumption

- › The most common starting point for organizations is as an open source software user in their products/services.
- › Aggressively consuming open source components will increase your ability to differentiate and reduce overall time and cost to deliver commercial products.
- › Necessary enabling elements for a healthy open source consumption strategy:
  - › Use a strategic classification scheme to guide decisions on what open source software to consume
  - › Ensure the company meets all obligations of its use of open source software
  - › Deploy automated workflow software for evaluating/approving open source usage
  - › Establish an Open Source Review Board (OSRB) to serve as a clearinghouse for all Open Source activities
  - › Create incremental investment in headcount and infrastructure in engineering, product management, and legal to manage the mix of closed source / open source software

# Consumption and Compliance Supporting Elements



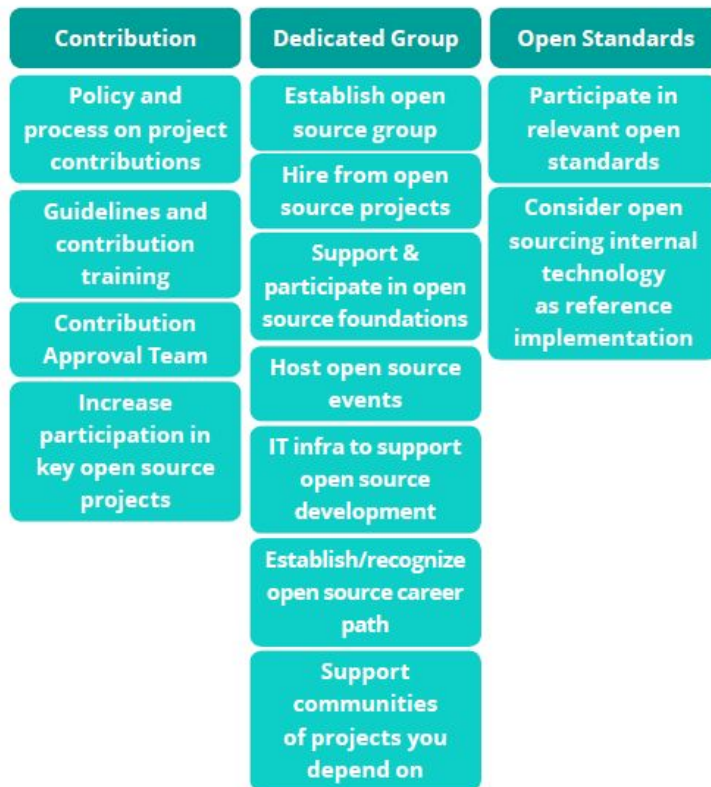
## Phase 2: Open Source Participation

- › Engage more closely with the community to increase your visibility and to begin attracting the talent you need.
- › Necessary enabling elements for a healthy open source participation strategy:
  - › Monitor and participate in community communication platforms like chat servers, mailing lists, forums, and websites to stay informed about project developments
  - › Attend relevant conferences and meetups to establish a relationship with the community
  - › Sponsor project events and foundations to improve visibility within the community
  - › Educate developers on how to participate in and contribute to open source projects
  - › Contribute at a small scale as a way to learn each project community norms and ways of working together

## Phase 3: Open Source Contribution

- › Once you are ready to build on your company's participation and begin contributing code to an open source project, you need to selectively engage with targeted projects and communities to drive your company's needs.
- › Contribute to strategic open source projects that can help shape future features in the project that meet a company's needs.
- › Necessary enabling elements for an open source contribution strategy:
  - › Hire a staff director to lead open source strategy and manage the OSRB
  - › Hire contributors and committers to key open source communities that are critical to your products
  - › Deploy open source collaboration tools to support open source usage and contributions
  - › Add open source developer resources
  - › Incrementally invest in engineering, product management, and legal to scale with your contribution efforts

# Contribution Supporting Elements

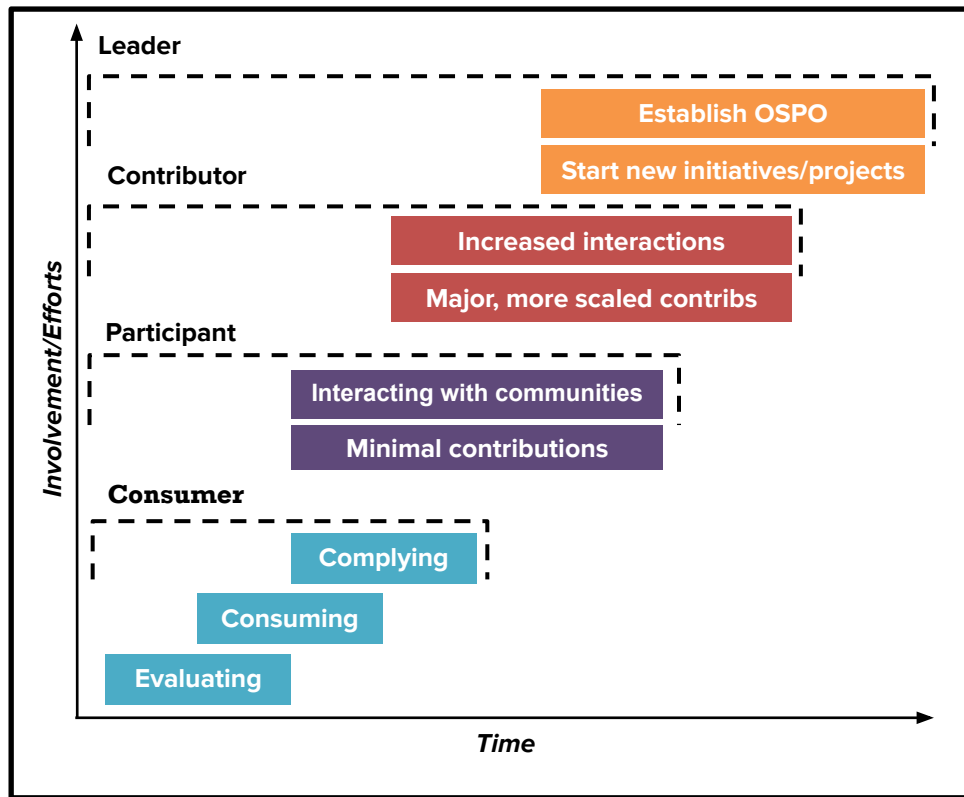


## Phase 4: Open Source Leadership

- › This scenario builds on all of the prior scenarios to capitalize on emerging trends in technology to establish a leadership position.
- › This scenario requires significant investment in:
  - › Targeted open source communities and consortia to establish leadership agenda
  - › Engineering, product management, and legal to establish leadership in external communities and industry consortia
- › Necessary enabling elements for a open source leadership strategy:
  - › Increase engagement with targeted open source communities
  - › Engage with open standards to drive the company's needs
  - › Engage with open source foundations
  - › Drive the creation of new open source projects
  - › Continue to invest in engineering, product management, and legal



# Transitioning, 4 Key Pillars



- **Leader**
  - Increase engagement with open source communities, open standards bodies, and foundations.
  - Launch new open source initiatives and increase your visibility in open source communities.
- **Contributor**
  - Hire or train developers that focus specifically on open source contributions and deploy the necessary tools to support internal open source engineering.
- **Participant**
  - Begin engaging with the open source community on communication platforms and at events.
  - Sponsor projects and organizations that are important to open source software you rely on for your products.
- **Consumer**
  - Establish internal infrastructure that enables proper open source practices and incorporates open source policies, processes, checklists, and training.

# Where and how to start?

- › Identify gaps in existing open source software that you need to build your product/service
- › Prioritize the projects you need to contribute to based on your needs
- › Sponsor development in existing open source projects
- › Explore opportunities to release internal code and to launch new projects



## **Working with upstream open source projects**

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