Open Source User Foundations

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Open Source User Foundations

An open source user foundation is a non-profit organization that is managing the development of non-differentiating open source software. [DR]

Problems with Vendor Lock-in

- High license fees
 - because of switching costs / lack of competition
- Limited innovation
 - because only one company, the vendor, is innovating
- Limited customization resources
 - because for the vendor the customer is only one of many
- Increased dependent-project risks
 - because the vendor may go out of business

Motivation for User Consortia

- Lower license fees
 - because of ensured competition, limited switching costs
- Broader and faster innovation
 - because of a broader ecosystem driving innovation
- Faster and cheaper customization
 - because of broader competition, available resources
- Lower dependent project risks
 - because the consortium maintains the software

Motivation for Open Source Foundations

- Defined and well-understood legal framework delivers
 - faster and cheaper operation of foundations
 - more legal predictability in the courts
 - more trust and ease-of-operation
 - lower risk of competitive exclusion lawsuits
- Defined and well-understood development processes
 - lower costs through broadly available skills
 - higher likelihood of development success

Examples of Open Source User Foundations

















Products

Foundation

Downloads

Support

Get Started

Our History

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Kuali Bel	hind the Scenes
News	
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Jobs	

Kuali was announced in August 2004 as a community source initiative to build a financial accounting system for higher education, by higher education. However, Kuali's story requires one to look back further, through the history of Community Source software initiatives that set the stage for Kuali to emerge, and helped shape the structure of the Kuali Community.

Community Source Software Initiatives

Community Source is a hybrid open-source software development model, pioneered by the Higher Education community, that combines aspects of the Cathedral and Bazaar models. Dr. Brad Wheeler's paper, "Open Source 2010: Reflections on 2007 provides a detailed overview of the Community Source Model", including the basic concepts, challenges posed and how the model has evolved in recent years.

Although Community Source Software is often perceived as a recent phenomenon, collaborative efforts in the Higher Education community date back to the 1960s, and the first Community Source projects such as Sakai and uPortal benefited from those early projects. In turn, Kuali learned from the experience of the first Community Source projects, which strongly influenced Kuali's structure.

Kuali's name is, in part, a tribute to this history of collaboration. "Kuali" is a Malaysian word that refers to a cooking utensil -- essentially a small wok -- that is often described as a humble, but essential tool. On one hand this description is appropriate for Kuali software, which performs imperative business functions behind the scenes. On the other hand, the cooking reference is a nod to Sakai, named after a Japanese chef, and University of Michigan's CHEF system, which was the basis for Sakai.

Kuali Emerges

(source: IU's FMS Newsletter)

Motivation for Kuali Foundation [1] [2]

- According to [1] higher ed administrators were dissatisfied with
 - high costs (license, implementation)
 - lacking performance (fit-to-needs)
 - opportunity to influence development
- According to [2] open source is a good approach because of
 - modest resource growth (requires keeping costs down)
 - rising demand (requires ability to influence)
 - marketplace dominance (monopolization in limited market)
 - growing distance between users and software developers
- Open source enables shared value creation [1] [2]

^[2] Wheeler, B. (2007). Open Source 2010: Reflections on 2007. EDUCAUSE Jan/Feb 2007, 49pp.

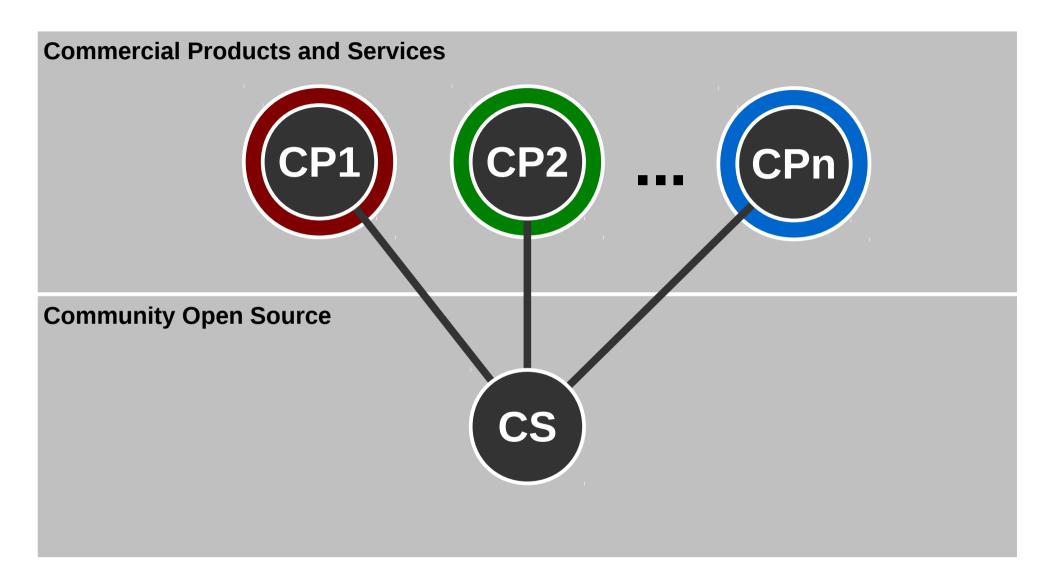
The Kuali Foundation Time-Line

- In early 2000, Indiana University faced a legacy ERP replacement
 - In 2002, a gated collaborative approach with partners failed
 - Decided to develop Kuali Financial System using open source approach
 - In 2005, received Mellon Foundation grant for development
- In 2006, with many new University partners, created foundation
- In 2006, adapted MIT Coeus to Kuali Coeus, received grant
- In 2007, started Kuali Student, using another US\$ 2.5m grant
- In 2009, for multiple projects, started Kuali Rice infrastructure
- Since then, various other projects have been set on their way
- The Kuali Foundation manages "community source" development

More About the Kuali Foundation

- Core Values (from Bylaws)
 - Kuali Foundation software is open
 - Kuali Foundation projects and communities are functionally driven
 - Kuali Foundation projects are community source
 - Investors and partners in Kuali Foundation projects determine priorities
 - Kuali Foundation projects value community diversity
- Foundation Membership
 - Basic membership is open to any party that shares values, pays dues
 - As of 2014-02-08, **66 higher education institutions, 11 commercial members**
 - Commercial members are mostly service companies
 - Members can advance to become partners, contribute to development

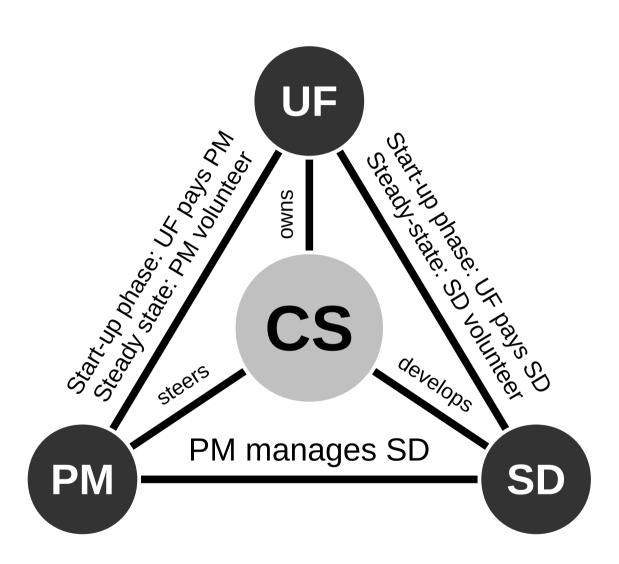
Community Open Source Ecosystem



Kuali Software Ecosystem

- General Kuali implementation services
 - HTC Global Services, The Meher Group, Navigator Management Services, opencollab Collaborative Software Solutions, Polus Solutions, rSmart, Sigma Systems, Vivantech
- Specialized higher education services
 - EBSCO, eThority
- All of these companies...
 - are members of the Kuali Foundation
 - generate revenue from products and services
 - contribute incremental modifications back to projects

Community Open Source Development

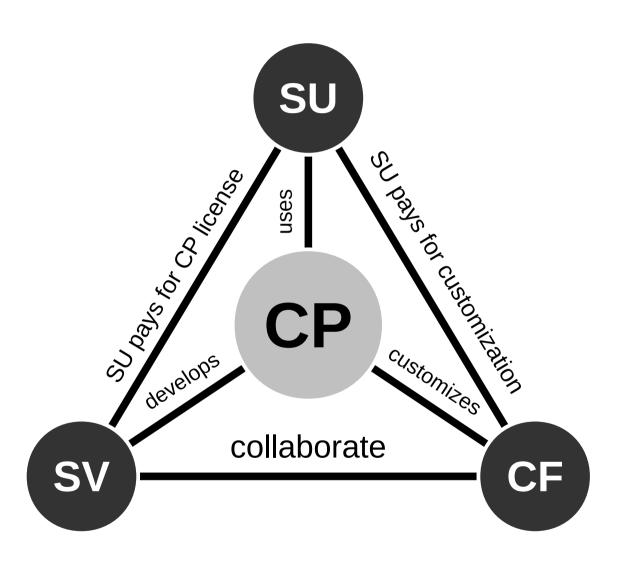


UF = User Foundation

PM = Project Management

SD = Software Developer

Commercial Product Provision

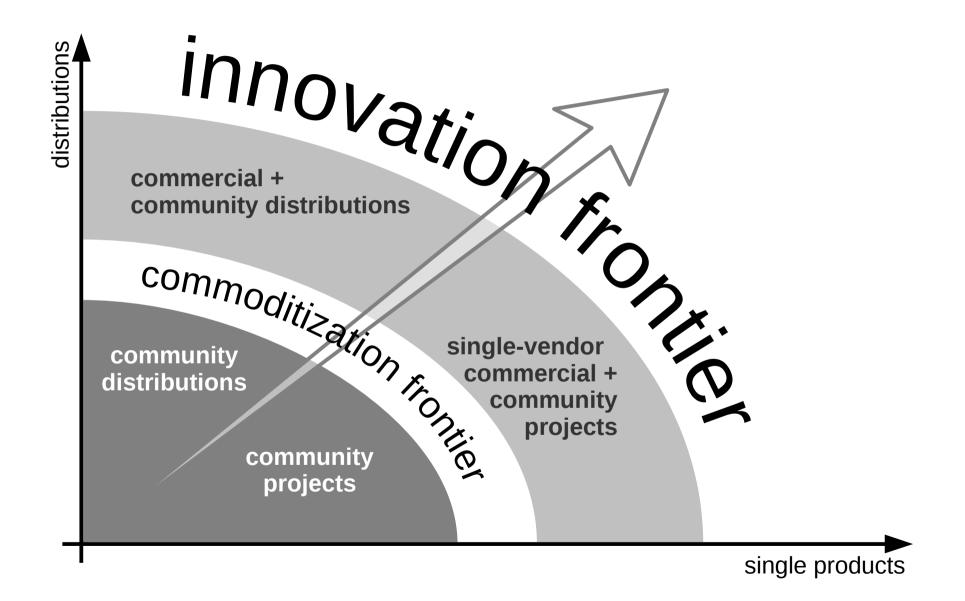


SU = Customer

SV = Software Vendor

CF = Consulting Firm

Innovation and Commoditization



Lessons from Kuali's 10 Year History

- Getting started lessons
 - Open source rather than closed collaboration
 - Some internal funding, a lot of external grants
- Ecosystem lessons
 - Almost exclusively services companies
 - Products are not extensions but integrations

Designing User Foundations

- 1. Vision + Mission
- 2. Scope / Opportunity
- 3. Business Model

Blueprint for User Foundations

- 1. General
 - 1. Vision
 - 2. Beneficiaries
 - 3. Incorporation
 - 4. Membership
- 2. Philosophy
 - 1. Exploitation
 - 2. Transparency
- 3. Intellectual Property
 - Artifact license
 - Patent handling
 - 3. Source code
 - 4. Other rights
 - 5. Warranties

- 4. Organization Governance
 - 1. Foundation membership
 - 1. Natural member careers
 - 2. Juristic member levels
 - 2. Board
 - 1. Membership
 - 2. Decision process
- 5. Project Governance 1/2
 - 1. Project membership
 - 1. Project members
 - 2. Member roles
 - 3. Member role acquisition
 - 4. Member role binding

- 5. Project Governance 2/2
 - 1. Software development
 - 1. Project agenda
 - 2. Project management
 - 3. Decision process
 - 4. Project tooling
 - 5. Intervention rights
- 6. Financing
 - 1. Of organization
 - 2. Of Projects
- 7. Operations
 - Of infrastructure
 - 2. Of foundation processes

[1] Riehle, Dirk; Berschneider, Sebastian (2012). A Model of Open Source Developer Foundations. In Proceedings of the 8th International Conference on Open Source Systems (OSS 2012). Springer Verlag, 2012, 15-28.

Thank you! Questions?

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1. General Category

1. Vision

Vision of organization

2. Beneficiaries

- For public benefit
- For member benefit

3. Incorporation

- No explicit incorporation
- Incorporation, for example, as
 - United States: 501(c)3 or 501(c)6
 - Germany: e.V. or gemein. GmbH

4. Membership

- Natural persons
- Juristic persons, for example,
 - Software vendors
 - Consulting firms
 - User firms

2. Philosophy

1. Exploitation

- Community property
 - Implies reciprocal license
- Partial community property
 - Implies weak reciprocal license
- Proprietary exploitation
 - Implies permissive license

2. Transparency

- Open project model
- Closed project model, e.g.
 - Completeness of artifacts
 - Completeness of history
 - Availability in time

3. Intellectual Property

1. Artifact license

- Reciprocal license
- Weak reciprocal license
- Permissive license

2. Patent handling

- Patent license
- Patent retaliation

3. Source code

- No copyright transfer
- Contributor agreement
 - With copyright transfer
 - With relicensing rights grant

4. Other rights

- Trademarks
- Domains

5. Warranties

- Required from contributors
- Explicitly none to user

4. Organization Governance

1. Foundation membership

- 1. Natural member careers
 - Career stages, for example,
 - User, contributor, committer, PMC member, PMC leader, foundation member, board member (Apache)
 - Advancement process
 - How to advance?
- 2. Juristic member levels
 - By type of organization
 - By desired influence, for example,
 - Associate, solution, enterprise, strategic members (Eclipse)

2. Board

- 1. Membership
 - Who may be a member?
 - How to get appointed?
 - When to leave; tenure?
- 2. Decision process
 - How are decisions made?

5. Project Governance

1. Project membership

- 1. Project members
 - Always natural person, even if they represent a company

2. Member roles

- Typically one of
 - User, contributor, committer
 - PMC member, PMC leader

3. Member role acquisition

- Decision making process, for example, committer election
- 4. Member role binding
 - Typically tied to natural person, not employer

2. Software development

- 1. Project agenda
 - Defines purpose, scope of project
- 2. Project management
 - Defines development process
- 3. Decision process
 - Defines how decisions are made
- 4. Project tooling
 - Defines development tool setup
- 5. Intervention rights
 - Defines board rights to intervene

6. Financing

1. Financing of organization

- Through members
 - Commensurate with level
- Through public grants
- Through sponsorships
- Through for-profit subsidiary

2. Financing of projects

- Through members
- Through organization funds

7. Operations

1. Project Infrastructure

- Operated by
 - Foundation itself
 - Foundation members
 - On a by-project base

2. Foundation processes

- Operated by
 - Employees
 - Volunteers

Business Model Canvas



Cost Structure

Revenue Streams