Sustainability of Open Source in International Development

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FOSDEM: Free & Open Source Software Developers' European Meeting
Brussels, Belgium
IMAGINE ...

a world without sustainable free & open source software projects.

Today, open source software is used in critical roles in countries you might not think about.

Small business loans & financial management

Charities connecting with beneficiaries

Patient record management in hospitals and clinics
TODAY’S GOALS

1. **Understand FOSS risks** in development
2. Explore these **projects’ wants & needs**
3. Share **our goals** for them
4. Learn **what we’re building** together
5. How **you can make a difference**
6. Consider **your own projects**
“Questions at the End,” but...

1. Similar programs now or in past?
2. What services are we missing?
3. Funding models that work?
4. Potential partners or projects?
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Today’s global climate of international development funding cuts, along with growing challenges in sustainability of FOSS projects generally, means we need to focus on co-investment in shared resources for those projects...

the mission of the DIAL Open Source Center.
Who am I? Why am I here? Why do I care?

Focus on Governance & Participation
Community Management Best Practices
Contributor Inclusion, Retention & Engagement

Electrical & Computer Engineering
Human-Computer Interaction

Corporate Health IT
Financial Services
International Development
OpenMRS
DEVELOPMENT ... aka
DIGITAL DEVELOPMENT ... aka

ICT4D

Information & Communication Technology for Development

- mission-oriented
- mobile & cloud based
- health, financial inclusion, agriculture, education, civic engagement, and more
Why does ICT4D matter?

- Accelerate peoples’ awareness, utility and adoption of life-enhancing and life-enabling technology
Why is funding broken?

Example: Number of mobile health launches per year

But, no more than a few have successfully scaled!

Note: Figures based only on mobile-enabled products and services in developing world tracked by GSMA (including those merged/closed). Excludes services in pipeline with an impending launch. Sources: Bill and Melinda Gates Foundation, based on GSMA Mobile for Development Intelligence data; GSMA Mobile for Development deployment tracker, accessed 4 October 2014.

• When technology and data are institutionalized into how partners deliver development services.
“Pilotitis in Uganda: mHealth Mapping” by Sean Blaschke
ONE LAST TIME, IMAGINE ...

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To realize a more inclusive digital society in developing markets.
SUSTAIN?

- Hedge against *maintainer burnout*
- Survive organizational *strategic shifts*
- Catalyze *more resources* for projects
- Minimize *single points of failure*
- Balance *chasing “new & shiny things”*
9 Key Recommendations from SustainOSS

- Create sustainable communities
- Free the maintainer
- Optimize project governance
- Raise value of non-code contributions
- Commit to the commit
- Use money as an incentive
- Recognize, value, and invest
- Lower barriers to manage finances
- Prepare maintainers for future

Read the report: https://SustainOSS.org
Our 10 Key Findings: What Projects Need

1. Mentorship
2. Consulting/advising
3. Direct assistance
4. Professional services
5. Tactical funding
6. Collaboration facilitation
7. Peer review for proposals
8. Interoperability
9. Community of practice
10. Sharing contributor pools
4 Open Source Sustainability Goals
DIAL Open Source Center’s vision for software development projects

- Community Effectiveness
  - Distributed Leadership
  - Governance & Community Process

- Product Development
  - Appropriate Feedback Process
  - Behavior-Based Success Measures

- Robust Tech Architecture
  - Appropriate Collaboration “Tools”
  - Structured & Unstructured Content

- Sustainable Org Base
  - Organizationally Neutral Home
  - Deliberately Managed Culture
8 reasons sustainability should matter to a project

1. Continuity
2. Avoid power vacuums
3. Project Longevity
4. Reduce leader “stress”
5. Talent development
6. New member inspiration
7. New ideas & thoughts
8. True meritocracy

co·op·er·a·tive /kōˈærətiv/ 

**adjective** Involving mutual assistance in working toward a common goal.
MISSION

- Inclusive **OSS meta-community** for knowledge sharing, collaboration, and co-investment.
- Support **positive social change**.
- **Overcome key barriers** in conceptualizing, designing, and building T4D software products.
- Collectively build a **public commons**.
Technical Assistance: Lifecycle-Based

- Structural assessment
- Financial/asset stewardship
- License and IP planning
- Product mgmt and roadmap
- Comms platforms

- Structural assessment
- Contributor onboarding
- Diversity and inclusion
- Code review processes
- Documentation systems and planning

- Structural assessment
- Product mgmt and roadmap
- Engagement and retention
- Recognition programs

- Financial and asset stewardship
- SQA infra
- Metrics and evaluation
- Testing and continuous delivery
Technical Assistance: Need-Focused

**Financial Stability**
- Structural assessment
- License & IP planning
- Financial/asset stewardship
- Contributor onboarding
- Code review processes
- Communications platforms

**Contributor Success**
- Structural assessment
- Engagement & retention
- Diversity & inclusion
- Recognition programs
- Code review processes
- Communications platforms

**Product Optimization**
- Structural assessment
- Product mgmt & roadmap
- Metrics & evaluation
- Testing/continuous delivery
- SQA tools & systems
- Docs systems/planning
First Participating Member Projects

- These are our earliest “members” … we’re actively bringing on more as we speak!
First Service Delivery & Program Partners

- Many more strategic partners to come as we grow ... do you have ideas?
FOSS-Style Program Governance

(Fiscal Sponsor & Financial Supporters)

Governance Advisory Board

Technical Steering Committee

- Independent Project Leadership Groups
- Technical Interest / Working Groups

Community Steering Committee

- Sustainability Advisory Groups (SAG’s)
- Community Working Groups

• Key Feature: Distributed, public, participant-driven decision making
And Now The Work Begins: Execution

1. Mentorship
2. Consulting/advising
3. Direct assistance
4. Professional services
5. Tactical funding
6. Collaboration facilitation
7. Peer review for proposals
8. Interoperability
9. Community of practice
10. Sharing contributor pools
OUR NEEDS?

- Demand: Identify the **most promising projects**
- Supply: Gathering **financial & in-kind resources**
- Identify more **service delivery partners**
- Recruit more **contributors working across projects**
- Work with donors+projects to develop plans for **long-term program funding**
- Get the word out, aka **marketing**
SUSTAINABILITY

“No one has a right to sit down and feel hopeless. There is too much work to do.”

— Dorothy Day

http://osc.dial.community

osc@dial.community
Let’s Talk: Questions & Ideas

- Similar programs now or in past?
- Funding models that might work?
- What services are we missing?
- Potential partners or projects?
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