

# Building Open Source Teams

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This presentation highlights the challenges of building and managing an open source team of volunteers. Topics include motivation, communication, and project management.

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# My Open Source Experience

- Cofounder of the Postgres Internet development team
- Postgres core team member since 1996
- Worked for three companies as an open source manager

# Outline

1. Motivation
2. Open source management
3. Development process

# Open Source Motivations

- Professional advancement, learn new skills
- Practical need for the software
  - *Business needs the enhancement*
  - *Business wants the software to thrive*
- Mental Stimulation
- Belief in open source

Concepts derived from a survey conducted by OSDN and reported in “Open source a needed outlet for programming pros”, *The Register*, May 2, 2002, <http://www.theregister.co.uk/content/4/23935.html>.

# Why Is Programming Fun?

- Joy of making things
- Joy of making useful things
- Fun of a complex puzzle
- Joy of learning
- Tractable medium

Concepts derived from *The Mythical Man-Month* by Frederick P. Brooks, Jr.

# Open Source Management Challenges

- Communication
- Travel distance
- Time zones
- Culture
- Language
- Funding

# Communication

- Email
- Phone
- Instant messaging
- Group chat
- Wiki
- Software configuration manager
- Conferences

# Travel Distance

- Expensive
- Time-consuming
- Often only a few people in any one location



# Time Zones

- Work beyond business hours
- Use your cell phone for communicating off-hours
- Time zone variances allow 24-hour activity

# Culture

- Show interest in other cultures
- Utilize culturally-effective communication methods
- Build per-culture teams

# Language

Consider the creation of per-language:

- Email lists
- Chat channels
- Conferences
- Documentation

# Funding

You don't have any, so work around it.

# Development Process

- Involve everyone
- Find each person's motivator
- Reach out to individuals
- Harvest the strength of the team
- There is always someone smarter than you
- Produce work people can be proud of

# Clean Code

- People can't work on the code if they can't easily understand it
- You aren't paying people to work, so make it as easy and interesting as possible
- Produce quality documentation

# Manage the Team

- Lead by example, not from authority
- See value in other people's opinions
- Accept failure gracefully
- Seek consensus
- Don't be ruled by deadlines

# Conclusion



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