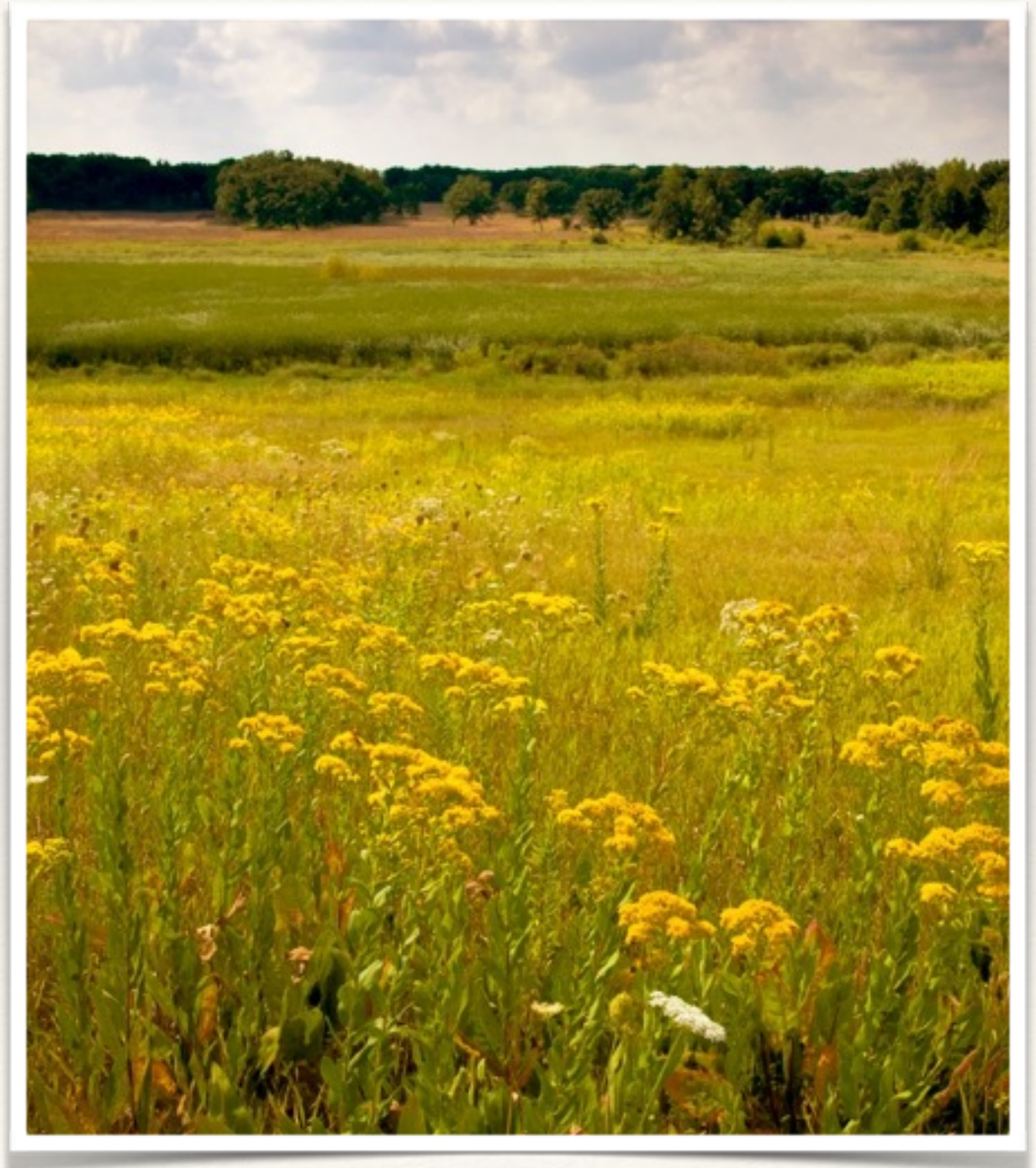

Open Source Software

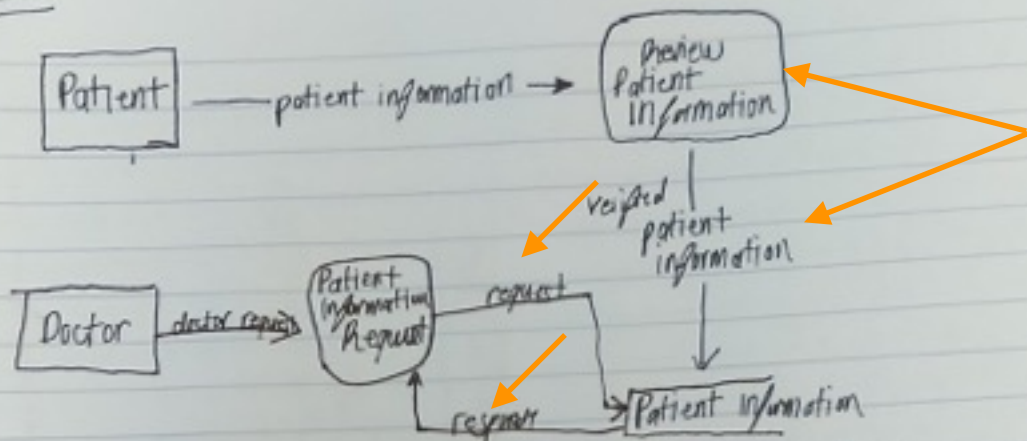
Professor Germonprez
ISQA3420

First, DFD Revisited

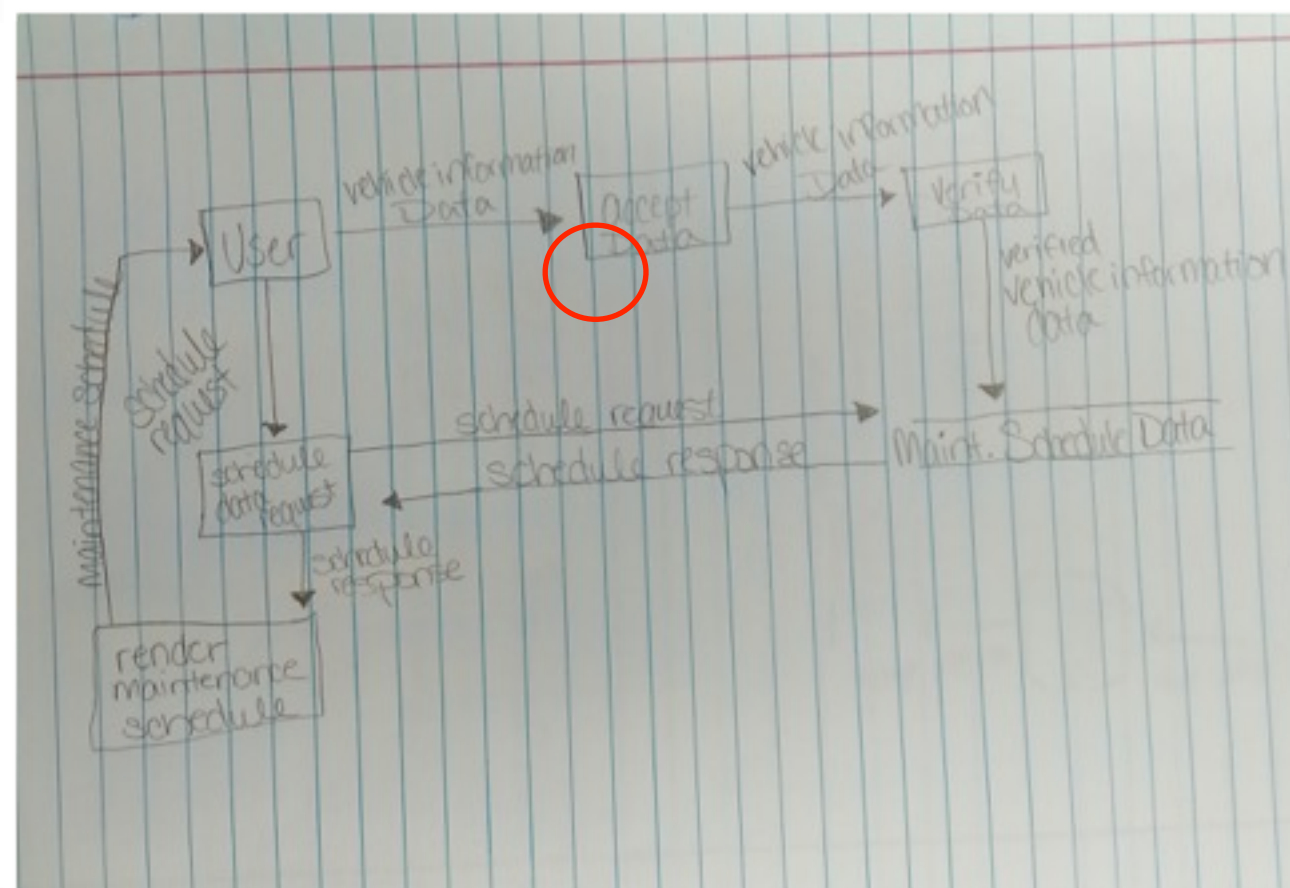
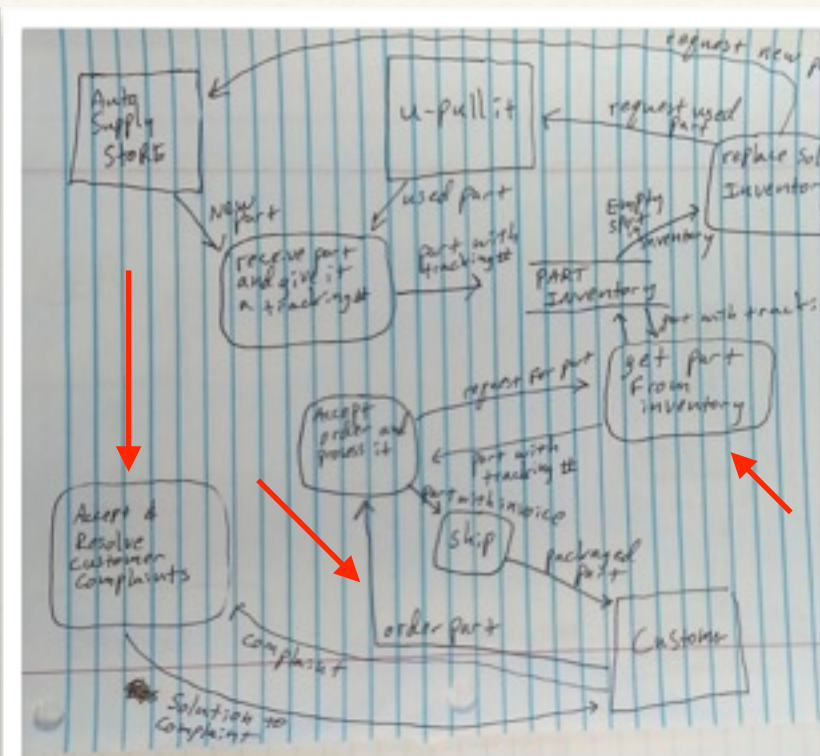
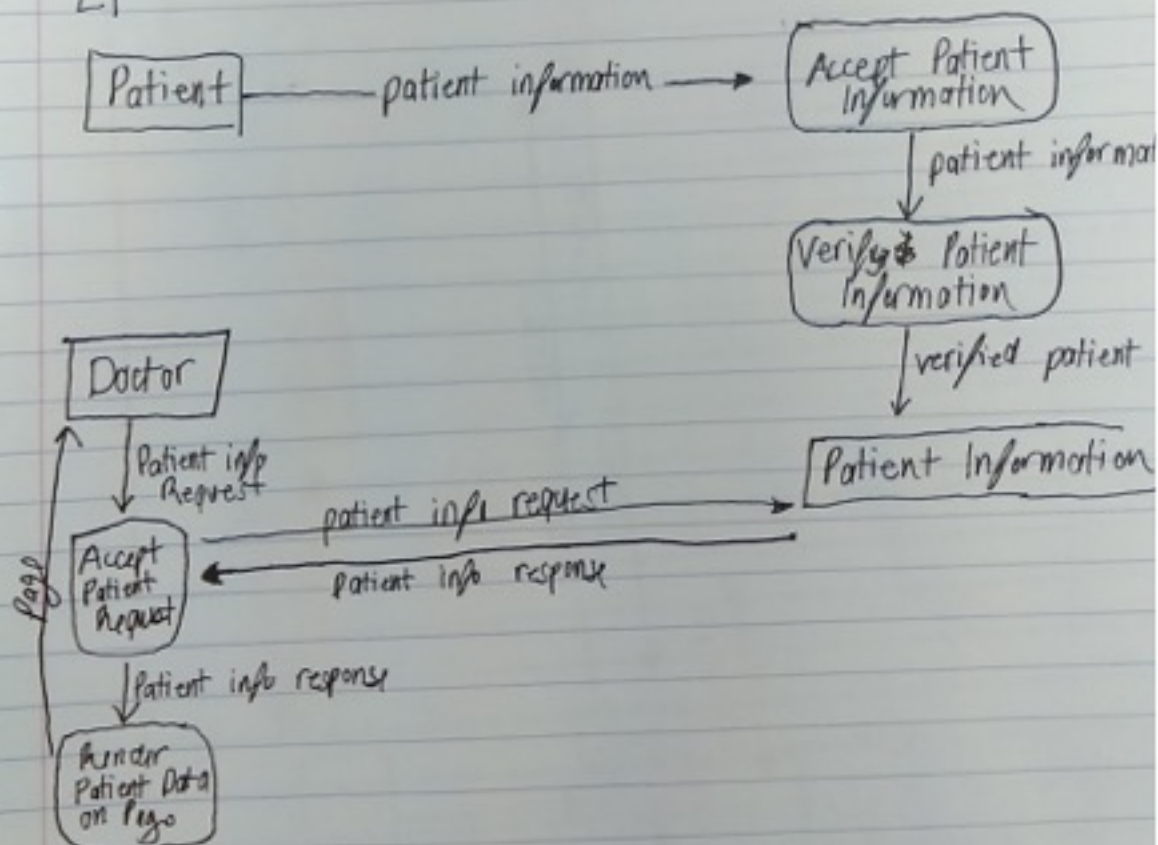
- ❖ I took some of the DFDs from the in-person class. I can point out a few things with respect to the models.



L0



L1

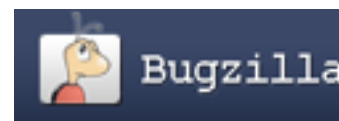
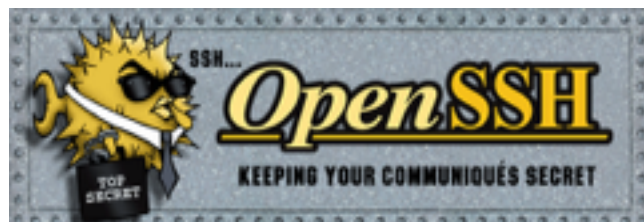


DFD Reminders

- ❖ Don't put verbs on your data flows (arrows)
- ❖ Sometimes processes can become very complicated. This is OK with the Level0 of the DFD. Consider splitting processes if they are doing more than one thing.



Examples of Open Source Software



Benefits of Using Open Source Software

Participation in the Open Source Community can bring many benefits to an organization's business

Software has zero marginal cost

Source code can be customized to meet specific needs

Low-cost tools for software development and distribution are widely available

Minimize development costs

Decrease time-to-market for software products and solutions

Open Source Software is Three Things



Licenses

Obligations set forth by owners of a particular work – such as software – that govern the use of their work.



Community

An Open Source Community is a collection of developers and users with a common interest in the creation, enhancement, and support of a specific piece of Open Source software.



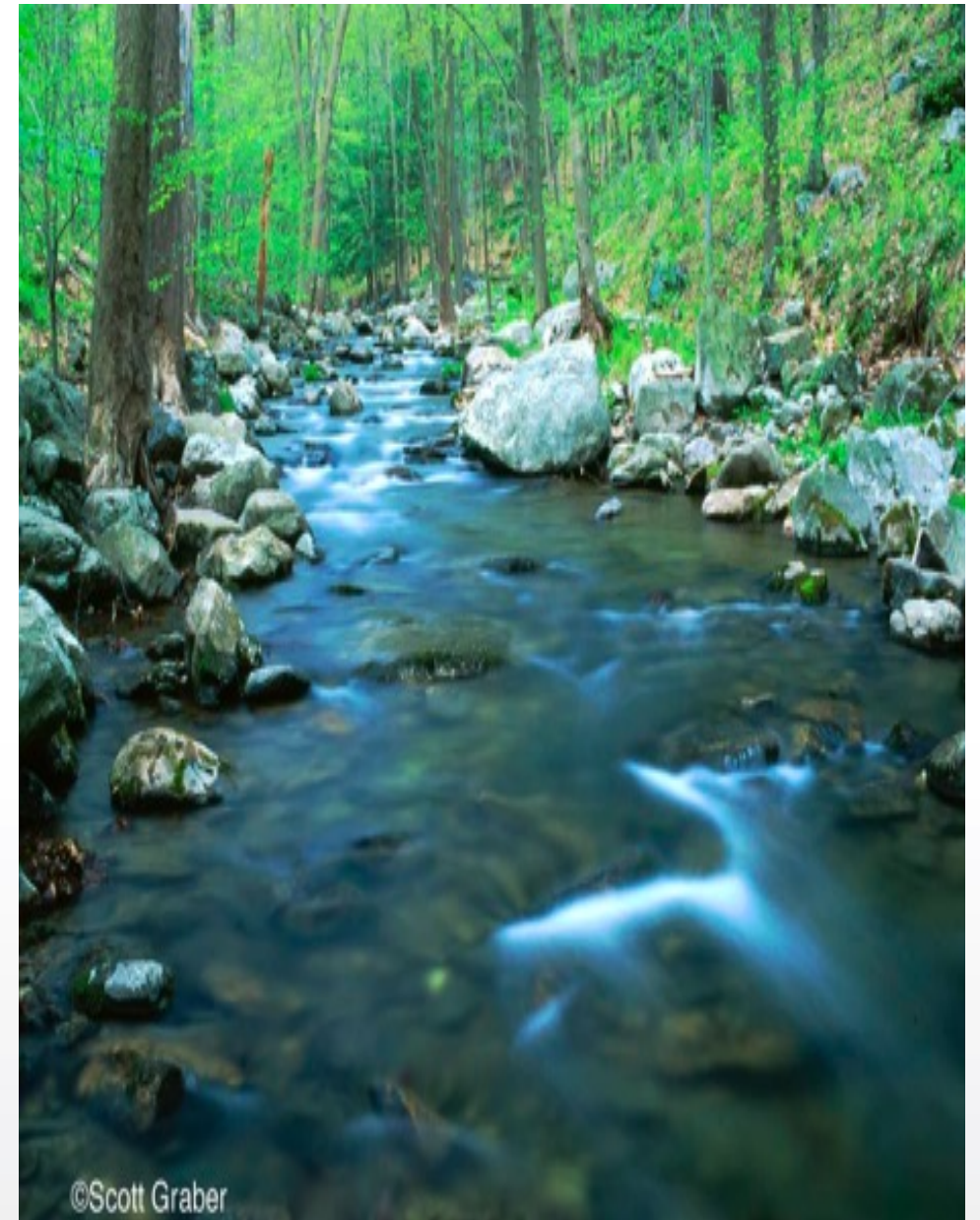
Methodology

Working with Open Source software requires a general methodology that guides Open Source development by the community. Although there is more than one Open Source methodology, most share certain characteristics such as open development.

- You can use all three as a competitive advantage
- The business model shifts to contribution and support
- The more you get involved, the more you can influence/control
- If you don't understand the licensing, you may expose proprietary information unintentionally

FOSS is Like a Natural Resource

- Think of Open Source as a “commons” of code similar to a natural resource
- Any Open Source project requires an ecosystem to survive
- Many businesses utilize the “commons” to bring products to market in some way
- Businesses that try to take without concern for the overall ecosystem get repelled by others
- Organizations exist for the sole purpose of protecting the commons (such as SFLC, OSI, FSF, Apache, LF, OW2, Eclipse)
- To succeed as a continuing resource, the “commons” must be protected from bad actors (poachers) and replenished over time (repopulation)
- A company’s relationship should be a symbiotic one



Rights to Software

You find software on the Web that has no license. What can you do with it?

1. Anything you want – it is public domain
2. Nothing – you've been given no permissions

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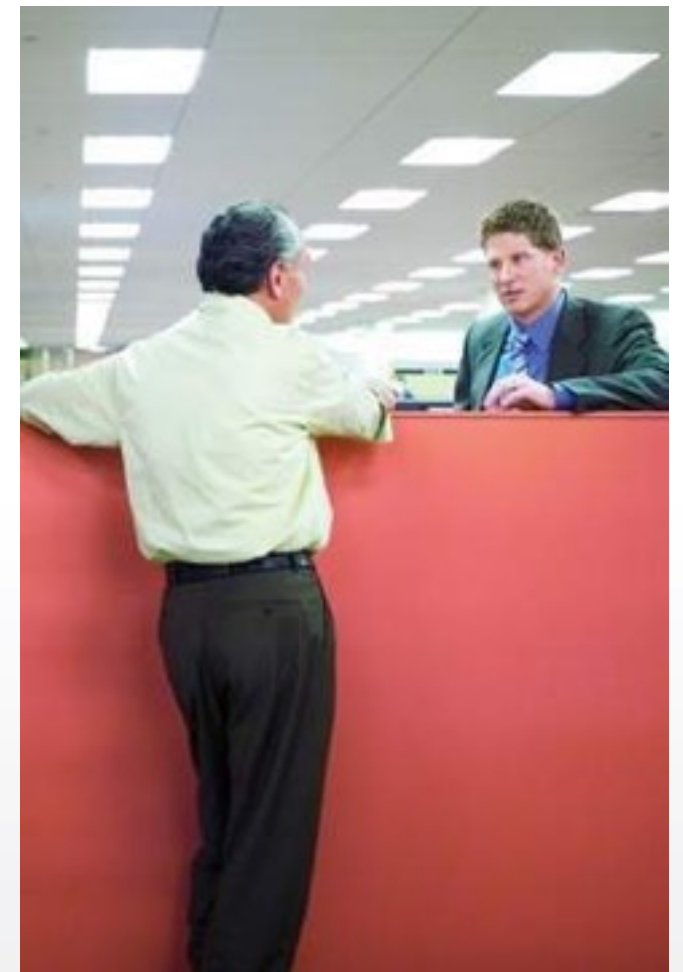
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- That permission is expressed in a license.
- You need a license for any software that was not developed by your organization.
- Need to do what the license requires in order to have the permission provided by the license.

FOSS is Different than Commercial Software

To use commercial software in your development process, you must go through

Procurement!



Evaluating Open Source Projects

Is the project healthy? Some things to consider are:

Determine the age of the project



Identify people. Who is involved in the project?



Know the date for last release.



Find out if questions on mailing list get answered.



Are developers open to ideas from others on mailing list?

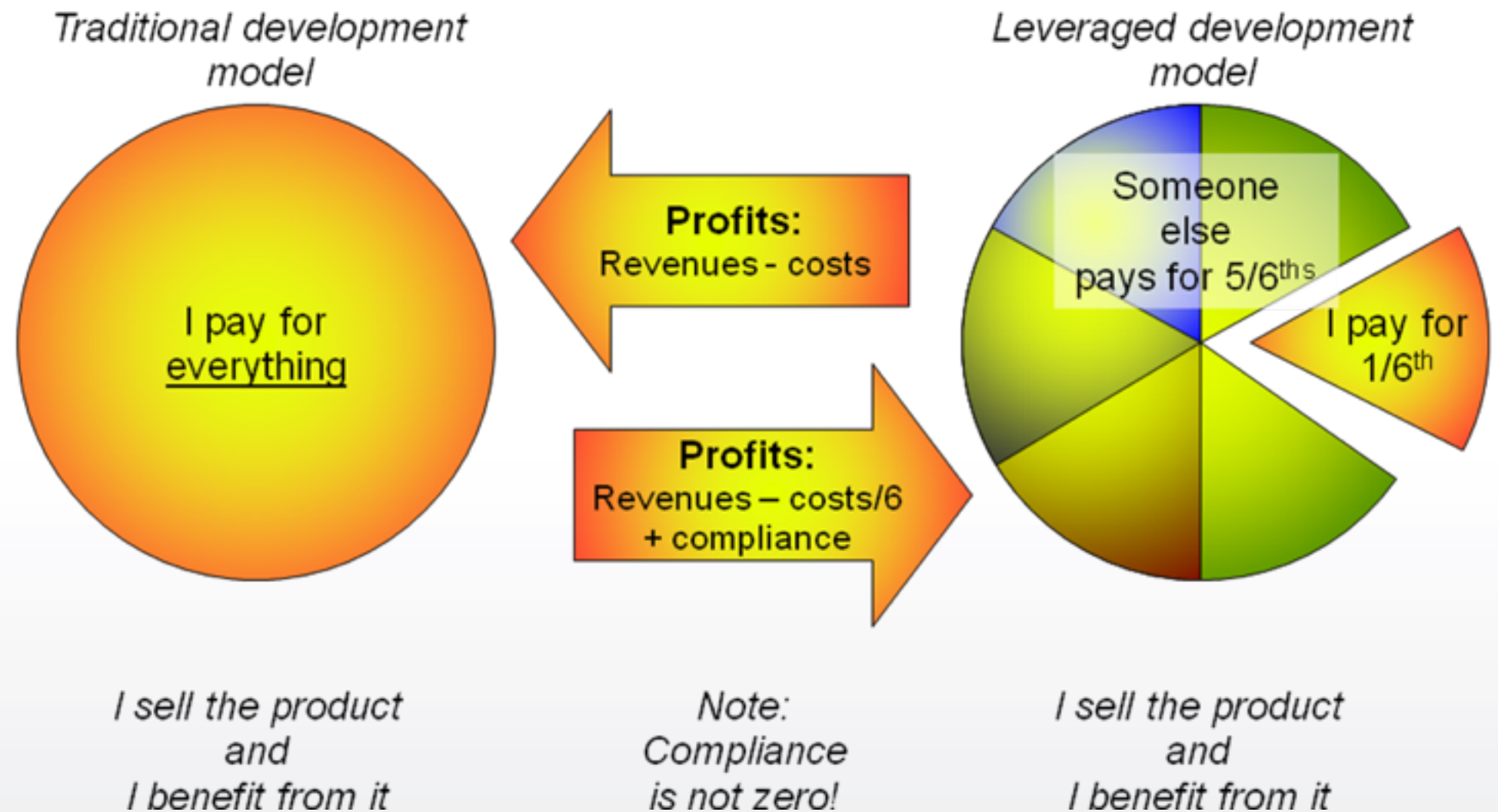


Do developers have a roadmap (formal or informal) for the project?

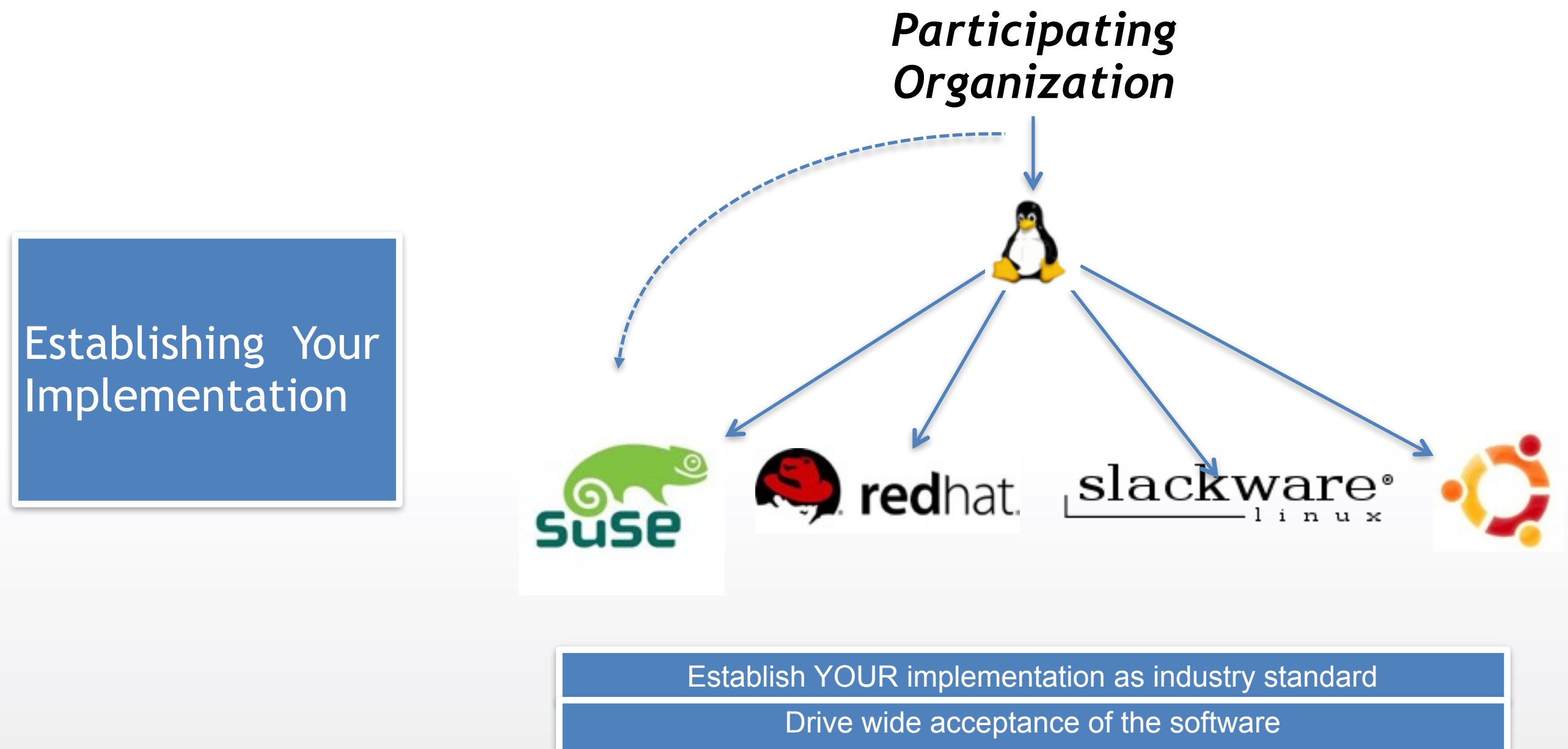


Why Participate in the Open Source Community?

Leveraged Development



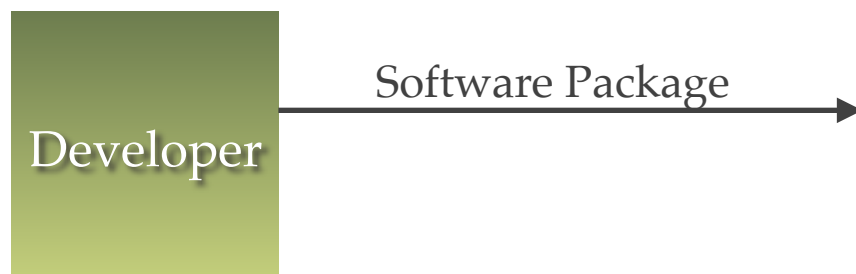
Why Participate in the Open Source Community?



DFD Practice #1

Developer Submits Software Package to be Checked for OSS Components

Process Scans Software and Writes Results to DB and Returns Results to Developer



- First 7 to get this uploaded to your GH repo. Post the link to the repo in the Discussion board.
 - I'll comment on your DFD. If it's good, you're done
 - Just respond that you saw my comment
 - If I have suggested changes to your DFD, make the changes and post a new version/image.

“Have a Great Weekend”

- *Matt Germonprez*