

# **FOSS4G 2008**

# OSGeo[1] – Open Source Geospatial

- Open Source Development
- Free Software Licensing
- FOSS Business Models
- Common Pitfalls when talking FOSS Business
- OSGeo A Community of Communities
- The OSGeo Business Proposition

[1] ...in a nutshell. For full coverage please go to

http://wiki.osgeo.org/wiki/Category:Advocacy

http://www.opensource.org and

http://www.sfs.org

September, 30<sup>th</sup> 2008 – Cape Town, South Africa



#### **Open Source Development**

- Open Source is a development methodology that aims at making **all** processes transparent.
- One central paradigm is to "Publish Early and Release" Often". This will help to "build"[1] a community of high interaction.
- Development is coordinated through roles. Roles must be managed by a clear governance model.
- Good Open Source projects are highly organized and trunk commit access is restricted to well known developers.
- Public code repositories, bug and issue trackers, mailing lists ,etc. are essential to "grow"[1] professional communities.

[1] communities cannot be "built", "managed" or "grown". They need to grow by themselves. Open Source project management can only facilitate and enable communities.



## **Free Software Licensing**

- Free Software is a software licensing model
- Open Source is a precondition to Free Software
- Different tastes of Free and Open Source licenses can be more restrictive or relaxed
- Most Free and Open Source Software licenses specify user's rights to:
- 1. run any number of copies of the software
- 2. pass on copies of the software including the license and copyright notice
- 3. look into the code, understand it and modify it to suit one's needs
- 4. pass on modified versions of the code



#### **FOSS**

For most practical purposes Free Software and Open Source can be used synonymously in the acronym FOSS.

# Free and Open Source Software

There is a (probably unintended) symbolism in this term conveying that Free Software licenses surround and thus protect Open Source development from becoming proprietary.



#### Copyright, Licenses and the Copyleft Myth

FOSS licenses protect software from becoming proprietary. The legal background of the strong protection of the GNU GPL is straight forward:

"To copyleft a program, we first state that it is copyrighted; then we add distribution terms, which are a legal instrument that gives everyone the rights to use, modify, and redistribute the program's code or any program derived from it but only if the distribution terms are unchanged. Thus, the code and the freedoms become legally

# Copyleft is not a virus but a vaccination.

[1] from: http://www.fsf.org/licensing/essays/copyleft.html

inseparable." [1]



# **Atoms, Matter and Crystallized Thought**

	Hardware	Software
	If hardware (or any physical good) is sold	If a copy of a software "product" is given
	(given away) the supplier suffers a loss of	away, the original is still there. The supplier
	that good that can be compensated by	suffers no physical loss of the "product"
	payment.	because it is only a copy.
	If hardware brakes, it becomes useless.	Software cannot brake in this sense. A data
		carrier can be scratched (for example a CD)
		but the original of the software is not
		affected [1].
	Hardware cannot be duplicated. Every copy	Software can be duplicated. Each successful
	needs the same amount of raw material and	copy of a software product is an identical
4	energy as any other. Copies of complex	reproduction of the original (the "raw
hardware will always be imperfect, not digital material" is the source code, it does not		material" is the source code, it does not run
	duplicates.	out).
	Hardware can wear, rust, or decay, and will eventually break and cease to function.	Software does not wear down, rust, decay or
		break. It may fall out of use, but it never
		loses its functionality.
	from: http://wiki.osgeo.org/index.php/Software	

FOSS4G FOSS GIS Business Session

6 / 19

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#### **FOSS Business Models**

Using Free and Open Source Software in commercial context is perfectly legal and encouraged. Revenue comes from:

- Consultation
- Installation
- Customization
- Maintenance

- Support
- Training
- Implementation
- Generic Development

95% of IT revenue are generated by providing services around software. Only 5% of revenue is generated through proprietary software usage license fees.



#### **Business outside and inside of FOSS**

FOSS is nowadays embraced by all larger businesses and enterprises but with different focus, intensity, levels of understanding and strategies:

- IBM
- Microsoft
- Sun Microsystems
  WhereGroup
- Oracle

- Autodesk
- E.S.R.I.
- Frank Warmerdam

Business models range from blunt opposition (M\$), mild ignorance (ESRI), taking away (Oracle), hybrid (IBM), to fully embracing all benefits offered by FOSS (FrankW).



#### **Common Pitfalls when Talking about FOSS**

- Free Software is not anti-business. Instead, Free Software is a business enabler as it improves availability and dissemination of code and software.
- Free Software is not unlicensed software. *Instead, it* is a well defined licensing model.
- Open Source does not mean that anybody can hack the release code. Instead, it has well defined and transparent governance processes and organization.
- Open Source is not insecure. Instead it allows for highest security through process transparency.



## The Open Source Geospatial Foundation

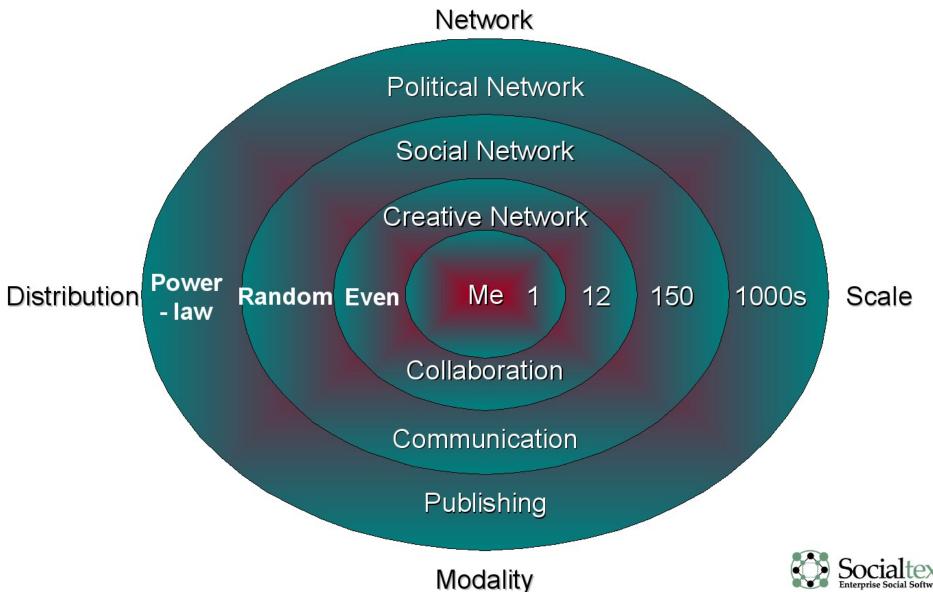
- OSGeo is a non-profit organization dedicated at promoting and furthering Free and Open Source Software for Geospatial Technology and Users
- OSGeo provides for organizational, legal and financial support in a long term perspective
- OSGeo is global and transparently governed
- OSGeo is a Community of Communities:
  - Software Projects

http://wiki.osgeo.org

- Spatial Data Projects
- Education and Research

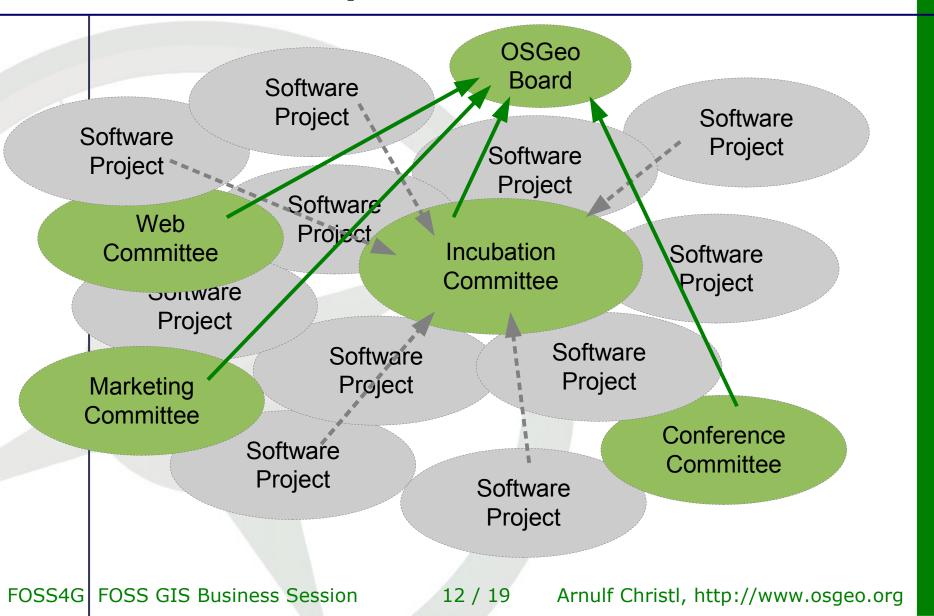
# Ecosystem of Networks

#### **Communication Economics**





## **Community of Communities**





## **Community of Communities**

Visit: http://www.osgeo.org

Collaborate: http://wiki.osgeo.org

**Discuss:** 

http://lists.osgeo.org/mailman/listinfo

Develop: http://svn.osgeo.org/

Track Issues: http://trac.osgeo.org/

Demo: http://www.telsacience.org/



#### **Coase's Law and The Business Web**

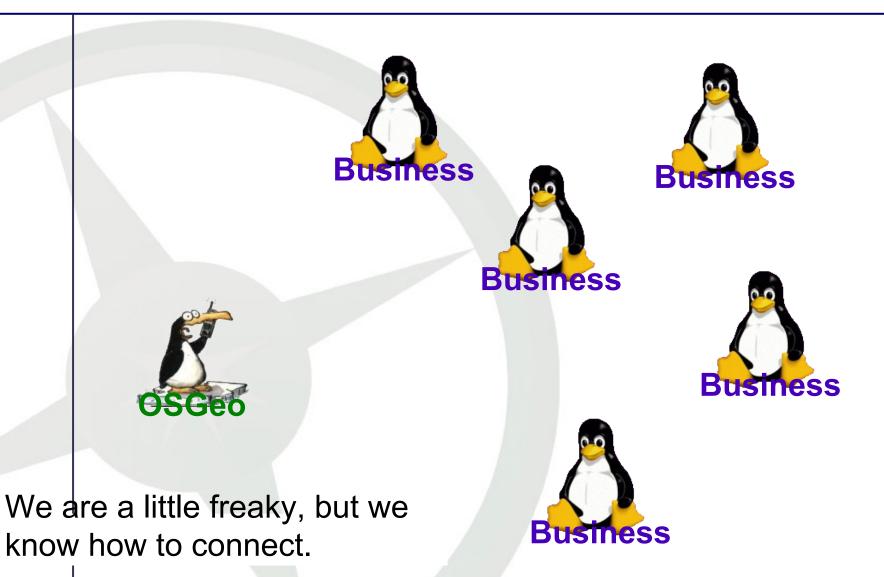
- A firm will tend to expand until the costs of organizing an extra transaction within the firm become equal with the costs of carrying out the same transaction on the open market.
- As long as it is cheaper to perform a transaction inside your firm, keep it there.
- But if it is cheaper to go to the market place, do not try to do it internally.

There is a new entity that reduces the transaction cost to almost nothing. It is the Business-Web, clusters of firms that come together over the internet. Each company retains its identity but they function together.

[1] From http://www.wikinomics.com/book/



## **The Business Proposition**





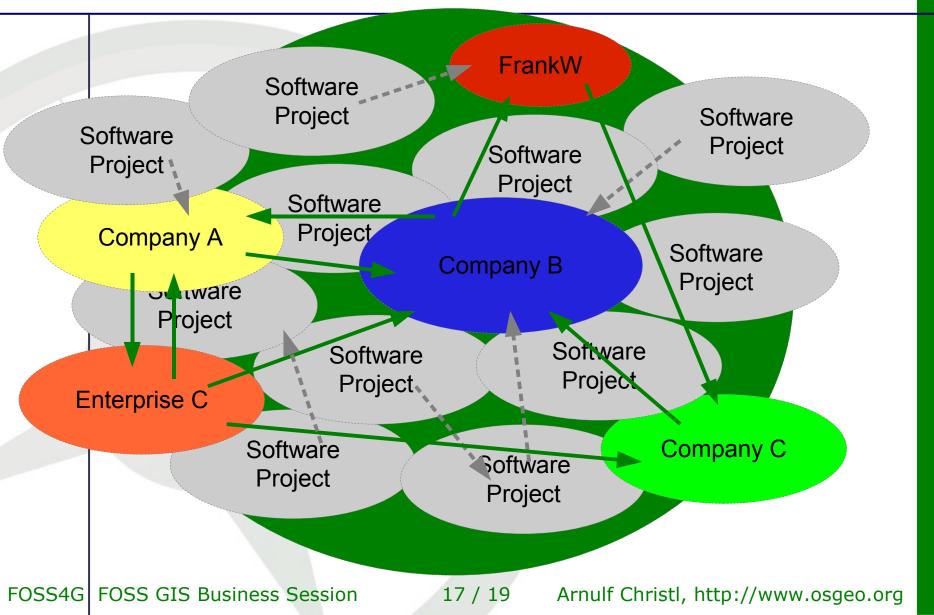
#### **OSGeo and Commercial Businesses**

- OSGeo operates a service provider directory. http://www.osgeo.org/search\_profile
- The Wiki contains advocacy information. http://wiki.osgeo.org/wiki/Category:Advocacy
- Appearances at trade shows, conferences and other events spread word and promote sponsors. http://wiki.osgeo.org/wiki/Category:Events
- With its considerable size, mature projects and stable history the foundation has built a good reputation. And you can talk to OSGeo:

What can we do for you today?



## **OSGeo's Emerging Business Web**





#### **OSGeo for Businesses**

- OSGeo has a process to evaluate legal, governance and quality of software projects.
- OSGeo has users, developer and service provider communities.
- OSGeo has software that can be used to implement government policies (INSPIRE...).
- OSGeo organizes software sprints for SME developers.
- OSGeo operates the Open Source Park at the Intergeo trade show.



# Discussion

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sponsored by: WhereGroup GmbH & Co. KG http://www.wheregroup.com





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19 / 19

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