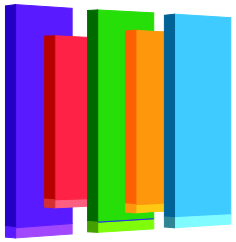

GEOSPARC

HOW OPEN SOURCE AND INSPIRE CAN BE USED AS A TACTICAL WEAPON FOR ECONOMICAL GROWTH IN EUROPE

Dirk Frigne

May 26, 2015

Based on work in progress by Dirk Frigne, Torsten Friebe, Giacomo Martirano

Menu

Appetizer (Assumptions)

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Hotchpotch of observations (context)

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The main course (on Topic)

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Dessert: Conclusion and takeaway

***

Coffee

Appetizer (Assumptions)

Assumptions

- We know what GIS is
- We know what INSPIRE is
- We know what open source is
- We know everything about open source business models

Assumptions

- Wrong assumptions?
- Maybe:
- Some will not know what GIS is (I don't)
- Some will not know what INSPIRE is (I don't)
- Some will not know what open source is (I have some modest experience)
- Some will not know everything about open source business models (and also here some modest experience)

Very short: what is GIS?

A geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.

But being active for more than 15 years in the Geo-ICT industry, it is still hard for me to define the borders of the subject.

Different people have different perspectives.

Very short: what is INSPIRE?

fill (someone) with the urge or ability to do or feel something, especially to do something creative.

breathe in (air); inhale.

Different people have different perspectives.

What is the INSPIRE directive?

The INSPIRE directive aims to create a European Union (EU) spatial data infrastructure. This will enable the sharing of environmental spatial information among public sector organisations and better facilitate public access to spatial information across Europe.

My perspective: create the use cases possible with this directive in place

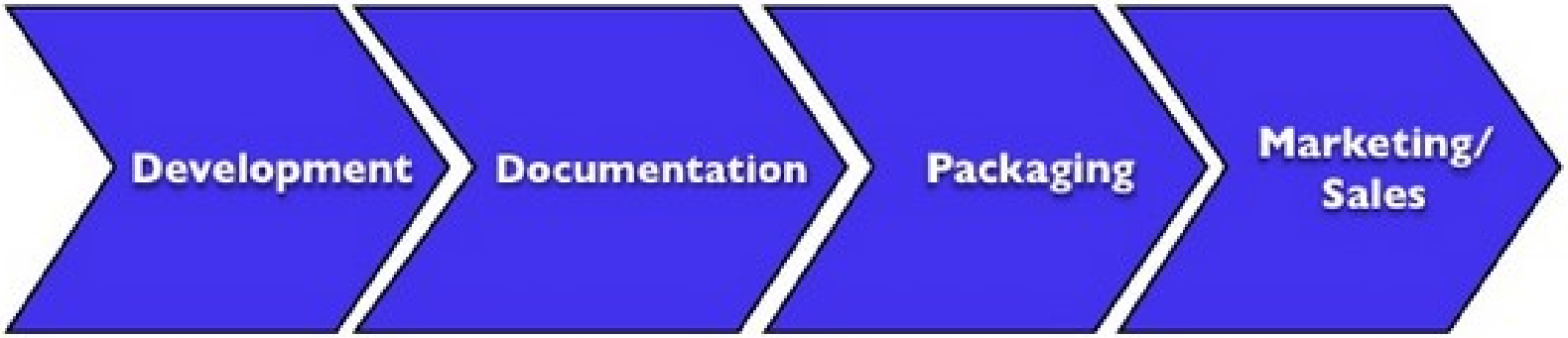
Very short: what is Open Source?

Open Source is a certification mark owned by the Open Source Initiative (OSI). Developers of software that is intended to be freely shared and possibly improved and redistributed by others can use the Open Source trademark if their distribution terms are conform to the OSI's Open Source Definition.

Better speak about FLOSS: 'Free and libre'
Different people have different perspectives.

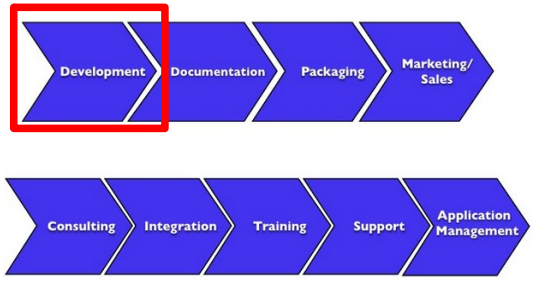
Very short: what are Open Source business models?

Software Value Chain

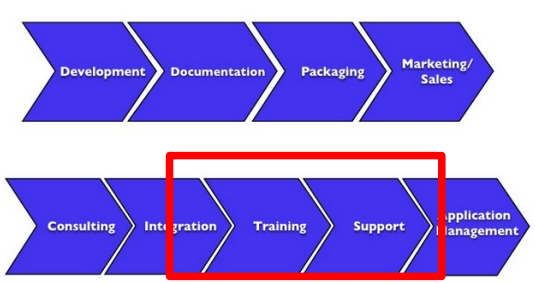


CASCADOSS: Model of Berlecon Research (2002)

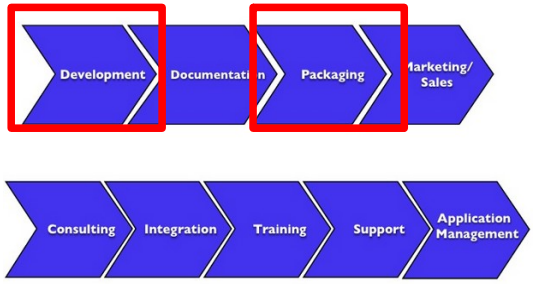
Business models & open source



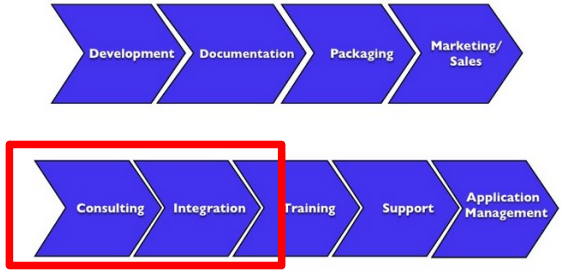
Dual-licensing



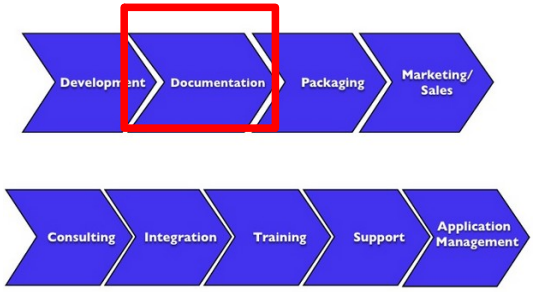
Support-selling



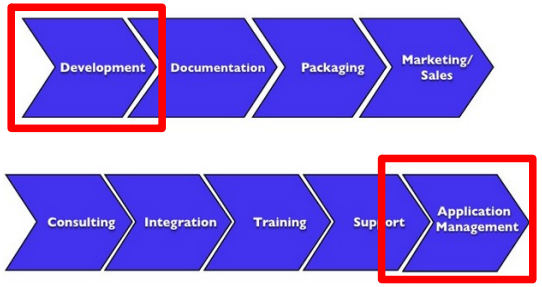
Platform provider



Consulting



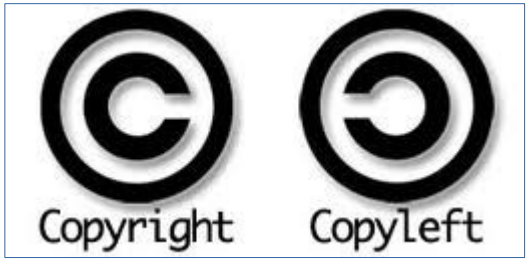
Accessorizing



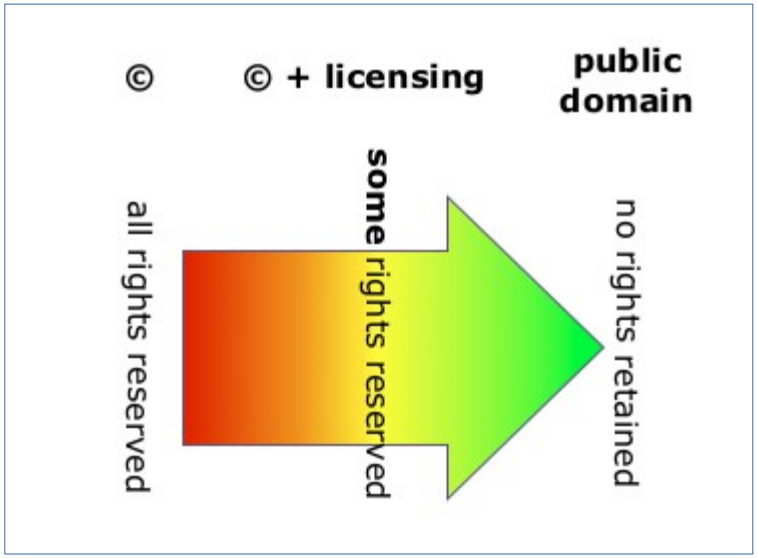
Software as a service

Licenses

The copyleft principle



License as weapon



Hotchpotch of observations (context)

Observations

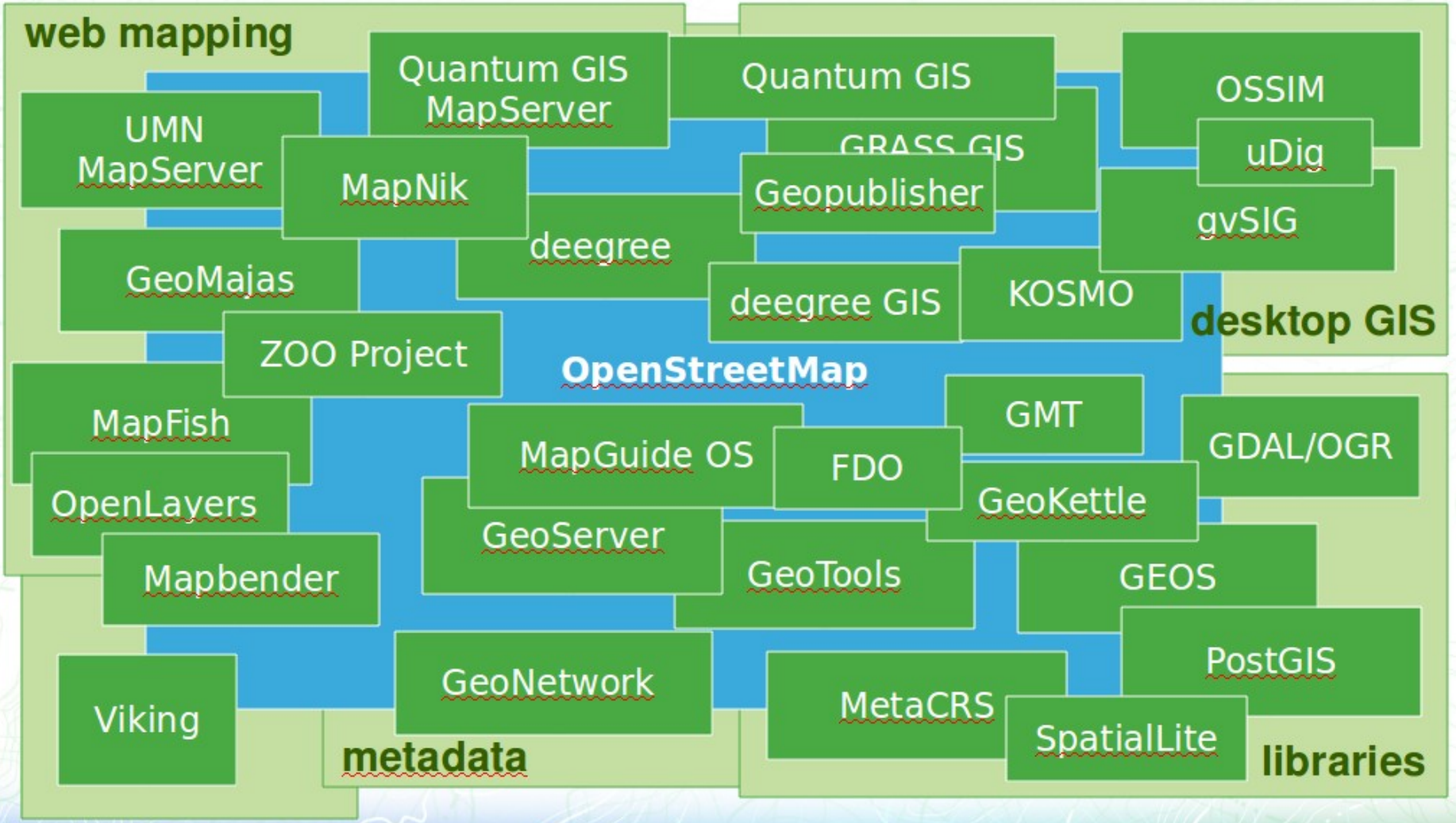
Open source software is used by a lot of companies and organisations

Open source & proprietary

Today, Open source is used everywhere

- Webserver (Apache, Tomcat, ...)
- Android phone
- Apple computer

OSGeo Live Mix '10



TIBCO
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BROCADE
spike
spring
iWay
STAR
CapeClear
tensilica
RCP Company
IDG
itemis
BZ Media
SYBASE
SIEMENS
ORACLE
Google
Telelogic
GEOSPARC
Klocwork
aptana
NOKIA
Novell
GERHARDT
BANDXI
ACTUATE
metallect
nexaweb
JASPERSOFT
SKYWAY SOFTWARE
gentleware
nexB
DSDM consortium
jiva
PALAMIDA
LSI
Business Objects
PARASOFT
DDC-I
ARM
HITACHI
OCDemon
MICRO FOCUS
cisco
ACCESS
COMPUWARE
BREDEX
slickedit
sas
CWI
DEVZUZ
NetApp
Carleton
redhat
OW2 Consortium
LYNUXWORKS
IBM
metafinanz
EADS
compeople
IONA
Lombardi
RoweBots
NEC
PERFORCE
MB Project
PROGRESS SOFTWARE
brox
genuitec
FUJITSU
OpenMake Software
AdaCore
ENEA
teamprise
SOPERA
SERENA
ALGO
SOFTWARE
instantiations
REMAIN
intervoice
TicloEnator
AOL
etisho
OpenSystems Publishing
Addison Wesley
MySQL
IBS
OSL
empolis
INNOOPRACT
ETRI
DC SYSTEMS
anyware
ONX
Laszlo
virtualLogix
ILOG
ProSyst
TEXAS INSTRUMENTS
froglogic
FOKUS
mds
SIGS DATACOM
blackduck
virtutech
TimeSys
eteration
KPIT Cummins Infosystems Limited
ANCIT CONSULTING
mValent
Sony Ericsson
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webtide
MANCHESTER
S&S
intel
software
MICRODOC
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montavista
ERICSSON
COLLABNET
krugle
THALES
WIND RIVER
vector
TOSHIBA
AccuRev
queue
ObjectWeb
Agitar
ALDON
SAP
symbian
Zend
VTT
TROLLTECH
INGRES
Borland
INTALIO
AMD
hp
Adobe

Observations - Software Industry

- No big software companies in Europe
  - Although industry is large, also in Europe
- Many examples in US based companies
  - No big players in Europe (SAP, Nokia and TomTom being the bigger players)
  - Although: a lot of SME's producing software
  - (ex SMESpire)

Observations: OSS used by many

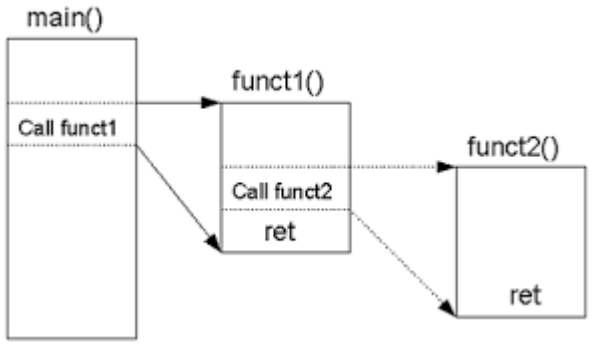
Observations (Geo OSS projects)

- Many countries/ region have their own framework / project / (local) community
  - projects are more location based than we should expect
- OSGeo Webmapping examples
  - Deegree (focus in Germany)
  - Geomajas (focus in Belgium)
  - MapBender (focus in Germany)
  - MapFish (focus in France (CH))
- other examples:
  - gvSIG (focus in Spain)
  - Oskari (focus on Finland)

Observations (Project Funding)

- Many projects stop when funding stops
- Other projects never become an OSGeo project (why is not clear, should fulfill a couple of conditions, resulting in a 'quality label')
- Not many 'private' initiatives, by real entrepreneurs

Subroutine – real entrepreneurs



Real entrepreneurs

- Definition of real entrepreneurs (by Dirk Frigne):
  - fools who think they can change the world
  - and they really do!

Example of a Real entrepreneurs

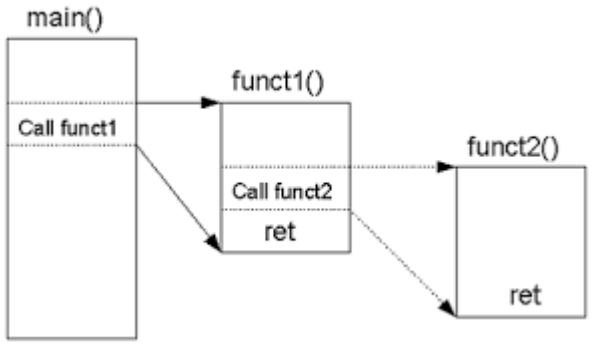
Example of a Real entrepreneurs

Observations: new economy

- The world is changing
  - Environmental challenges
  - Migration challenges
  - Evolutionary challenges
- Software is becoming extremely important
- What is the future of software companies
  - More and more of the industry is based on software
  - Data (and predicting the future) are the next big evolutions where software becomes extremely important
- Free access to resources becomes extremely important

The main course (on Topic)

Subroutine 2 – Value of Obesitas



The Value of obesitas in the US

- Question: how many liter excess fat is there if every US-citizen should have only a body mass index of 25 (this is the upper limit of a healthy weight)
- Calculation by Daniel Reidpath:
  - 2.6 Billion Liter
  - Equals 1.038 Olympic Swimming pools
  - With this fat, it is possible to produce electrical energy for 90.000 Households
  - This has a value of 162 Million $

Different people have different perspectives.

Software Industry is big business

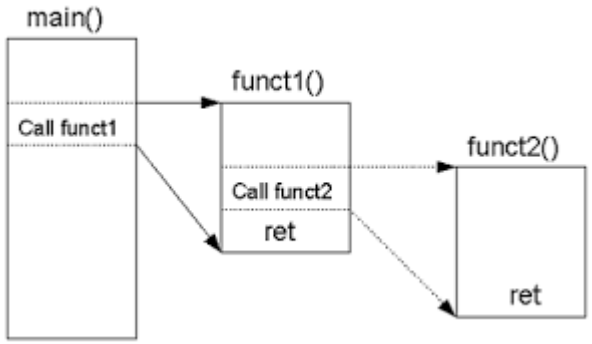
- Software Industry – Facts and figures
  - Dixit BSA: Software industry USA: 261 B$ (2007)
  - USA is world leader in Software Industry
    - 60% of global spending on PC software: USA Based companies (2008)

European (software) industry

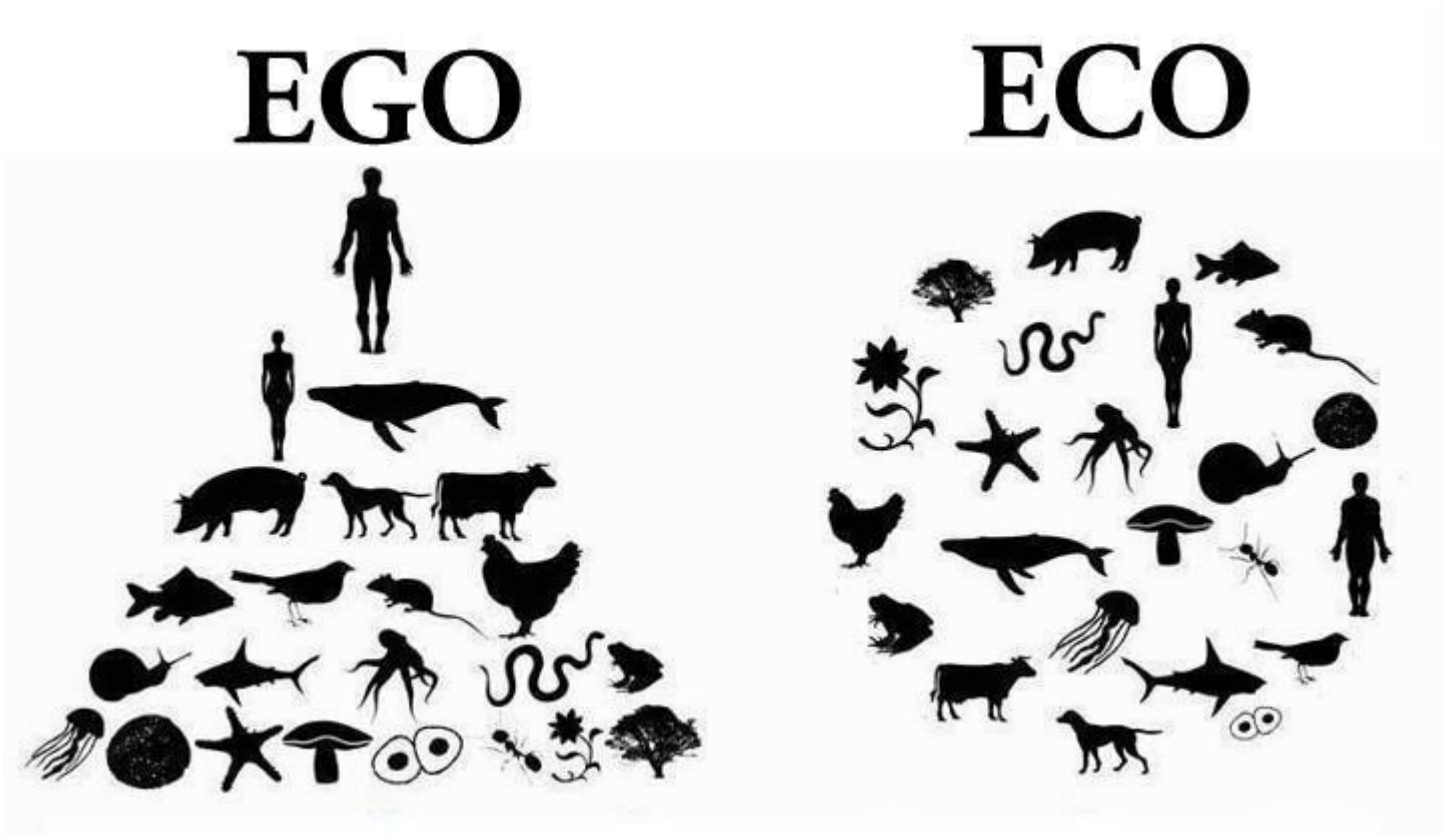
- Europe is driven by SME's
  - > 99% of all European business are SME's
    - As a small company (SME), protection of your product is important (USP)

    This can be your business model, a product, a service, etc....
    - Sharing information and co-creation is also important (working together)
  - How to combine these two contradictory demands?

Subroutine 3 – EGO vs ECO



EGO vs ECO



European FLOSS industry

- Build networking business as an ecosystem
- Building communities
- Respect and value are equally important
- Yes we can!
- But how?
  - By using open source (and in our case INSPIRE) as a tactical weapon for economical growth in Europe.
  - There is proof that open source generates value(1)

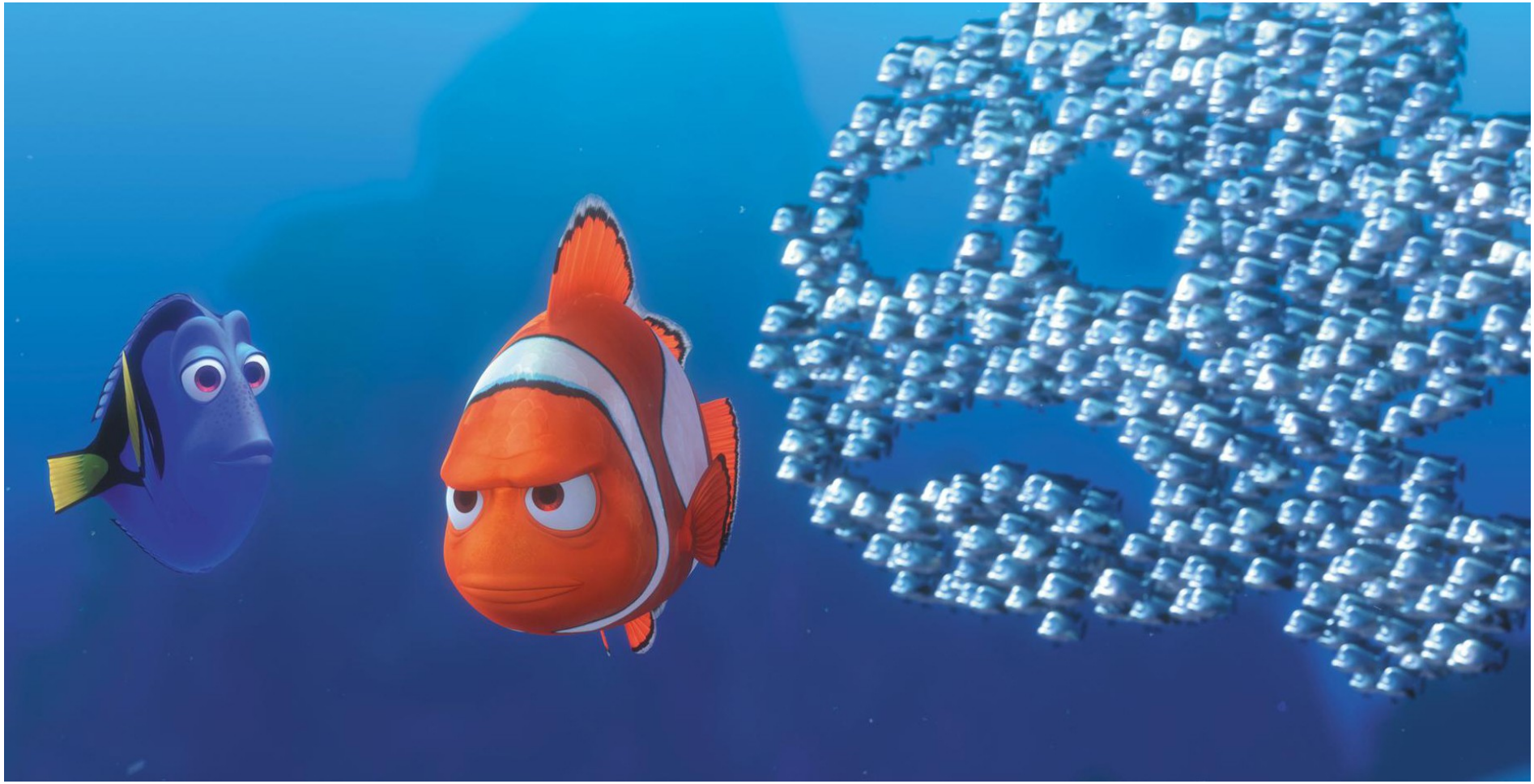
- http://pt.slideshare.net/cdaffara/economic-value-of-open-source-14861646 Carlo Daffara

Open source software generates value

- But …
- Already a good and interesting trend, but still 13% of the total budget flows to US licenses

  So …
- Europe should have the ambition to become also a major player in this industry

Europe SME Open source Industry



European FLOSS industry

- Answer: using OSS with a protective OSS license (to be discussed and validated)
  - Using a more protective license such as GPL or AGPL has some benefits:
    - The party investing in the software remains the owner.
    - Protect the investment trough the copyleft mechanism:
      - or it remains open source and shared
      - or there should be some return on investment if used in a proprietary way.

European FLOSS industry

- Investments in FLOSS in AGPL or GPL could be used to give the users the choice to use the technology in an open way,
- or use them in a closed way trough the protection mechanism, possible with the copyleft principle. In this case, the user should donate something in place.
- For industry outside Europe this can be a license fee payed to the investor (SME, Europe, ...)
- For the industry inside Europe, this can be part of a subsidiary plan in an H2020 context.

Dessert

Conclusions and takeaway

Conclusions

- We should have the ambition in Europe to create a strong software eco-system, based on FLOSS.
- INSPIRE is an interesting scale to test this for the whole industry.
- Work is already in progress to evolve in this direction (SMESpire initiative, AR3NA initiative, …)
- This presentation has only the ambition to start the discussion and will be published on my personal blog (www.frigne.be)

Discuss during further coffee time?