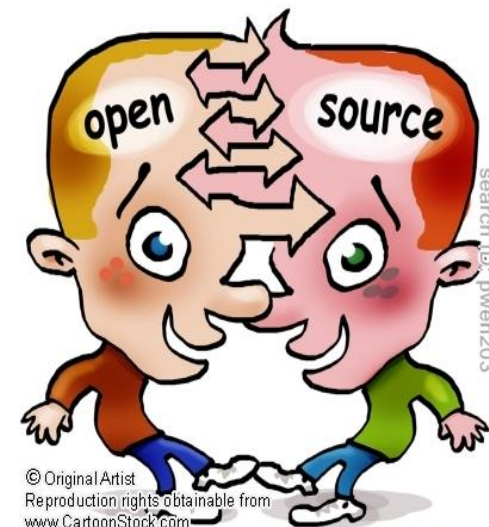




# The Value and Effectiveness of Open Source Software and Open Standards to Public Sector Organisations.

By: Anthony Tuffour BSc, MSc  
GIS Technical Manager  
London Borough of Hackney

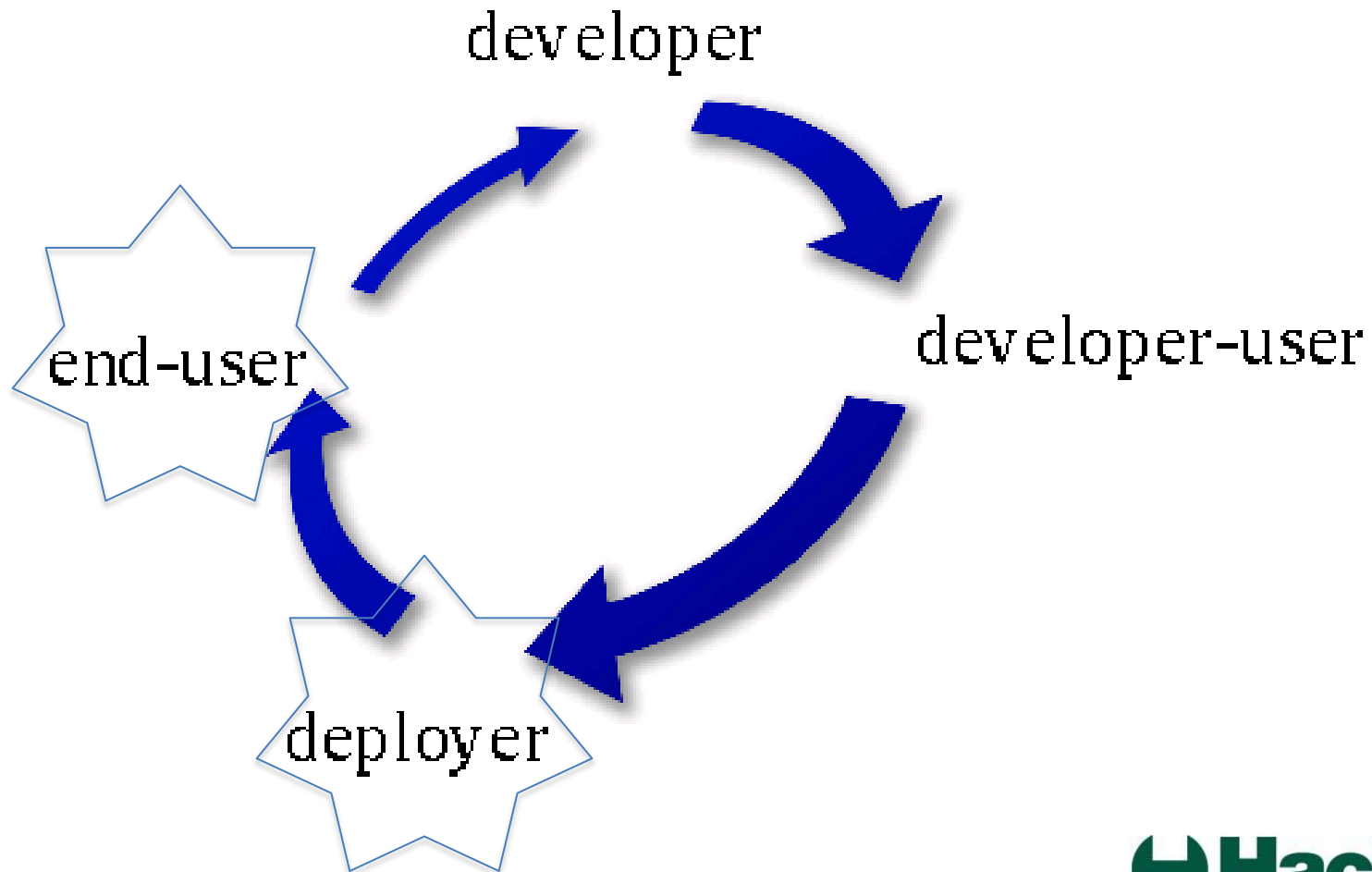
Date: 25/04/2012



# London Borough of Hackney (LBH)

- ❖ One of Inner London Boroughs situated in East London, UK
- ❖ Has a workforce of about 4,000 that caters to a population of 220,000
- ❖ One of the most improved boroughs
- ❖ One of the 2012 Olympics Boroughs
- ❖ Research estimates that public sector in the UK spends about 30% to 40% of their IT budgets on software licensing

# The Concept of Open Source Software



# LBH – Open Source Policy

*The Council's policy is to "buy-not-make business applications as this allows it to focus on its core business and take advantage of the economies of scale that buying from the marketplace brings with it."*



According to  
company rules  
there can be no:

- \* Bug report
- \* Patch
- \* Creativity
- \* Change

Now run along.

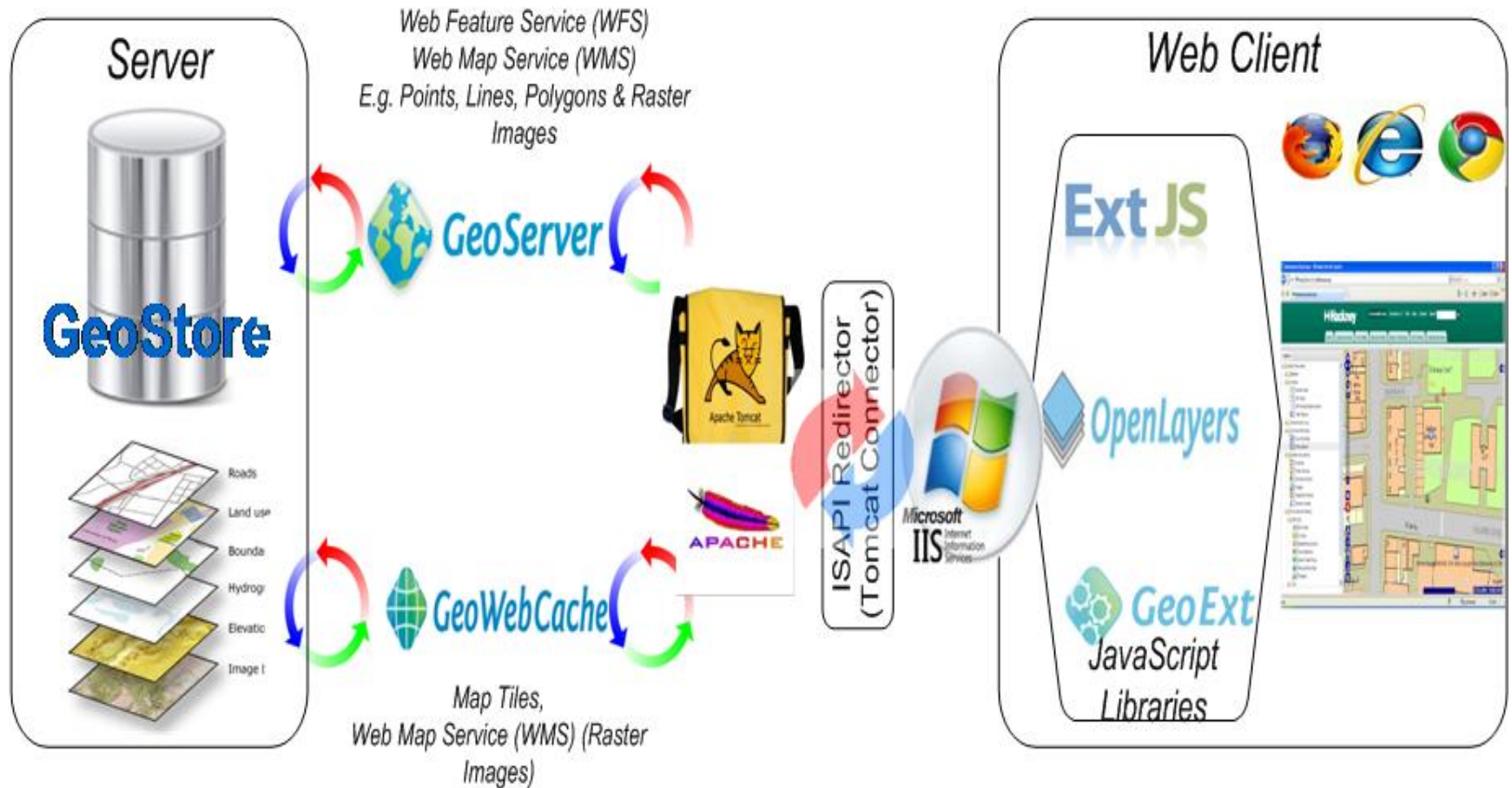


# Case Study – Interactive Web Mapping Application

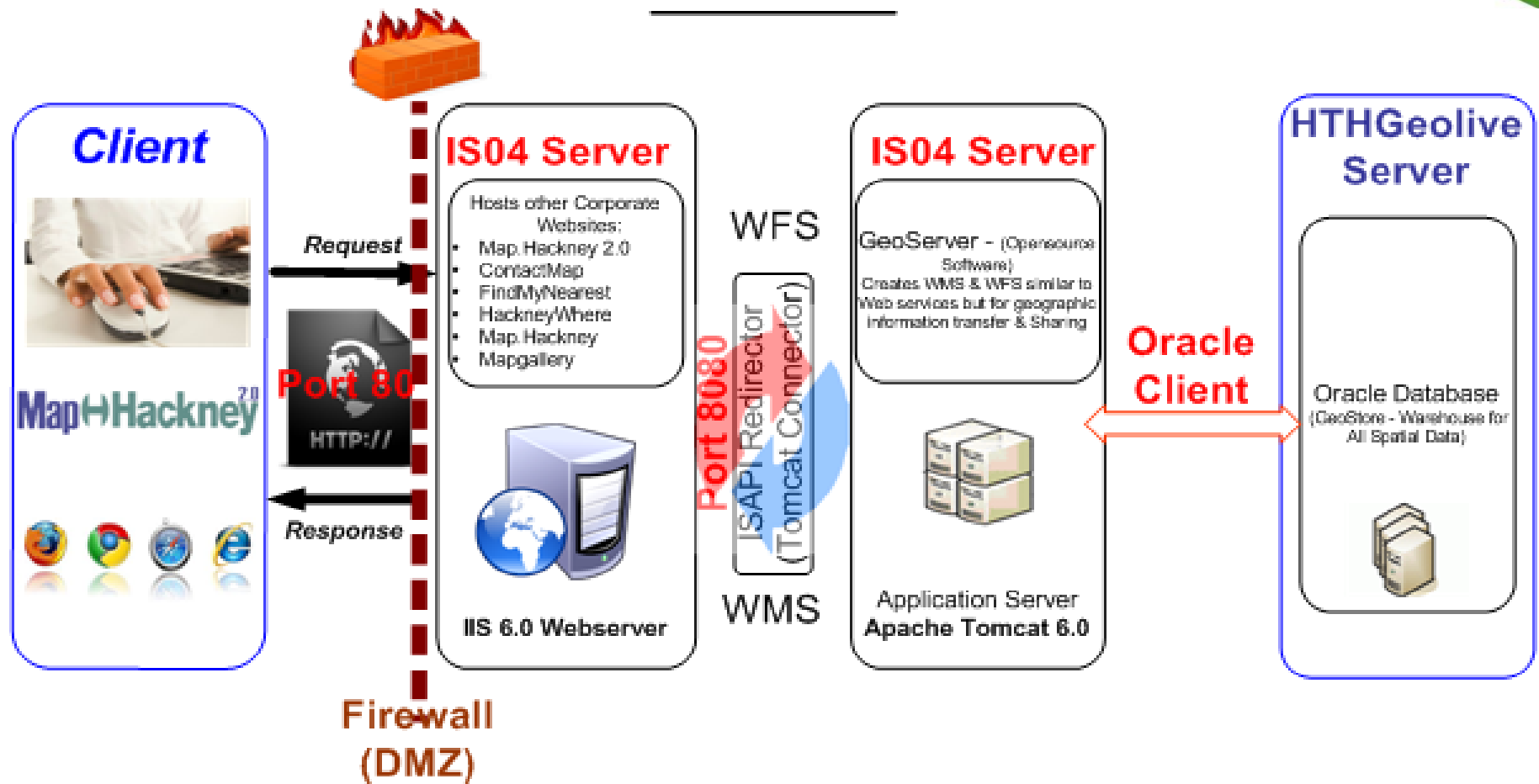




# Case Study: Open Source Software Stack Architecture



# Case Study: Map.Hackney2.0 Backend Server Integration Architecture



# The Value and Effectiveness of Adopting OSS and OS at LBH

## ❖ Technological Factors

❖ Security

❖ Quality

❖ Costs

❖ Try before you buy

❖ Interoperability

❖ Customisability

## ❖ Organisational Factors

❖ Freedom

❖ OSS variation and functionality





# The value and Effectiveness of Adopting OSS and OS at LBH

## ❖ Environmental Factors

- ❖ Active and vibrant community of supporters

- ❖ Preferred by public institutions and governmental agencies in Europe

# Key Elements for Success in the Adoption of OSS and OS

- ❖ OSS and OS Champion
- ❖ Presence of skilled developers
- ❖ Organisational policies, strategies and business models that favour OSS and OS adoption
- ❖ Comparative advantage of OSS and their technological strength



# Barriers and Risks with OSS & OS Adoption



- ❖ Increased cost of implementation
- ❖ Inadequacy of an in-depth design documentation
- ❖ Top management understanding of OSS and OS concepts
- ❖ Migration from proprietary software to OSS

# The Concept of Open Source Software (OSS)

“OSS is a term for software published under licenses that do not give any private intellectual property rights to the developers” (Osterloh & Rota, 2007).

Contributions to the development process are made by enthusiastic volunteers, non-paid members of the OSS community investing their free time and private resources for a common good in software development.

# The struggle of Open Source Software

- ❖ Microsoft once remarked about the effects of open source software on its business that “long term credible” and “a direct short-term revenue and platform threat to Microsoft”
- ❖ Ballmer: “Linux is a cancer” Contaminates all other software with Hippie GPL rubbish

USER FRIENDLY by Illiad



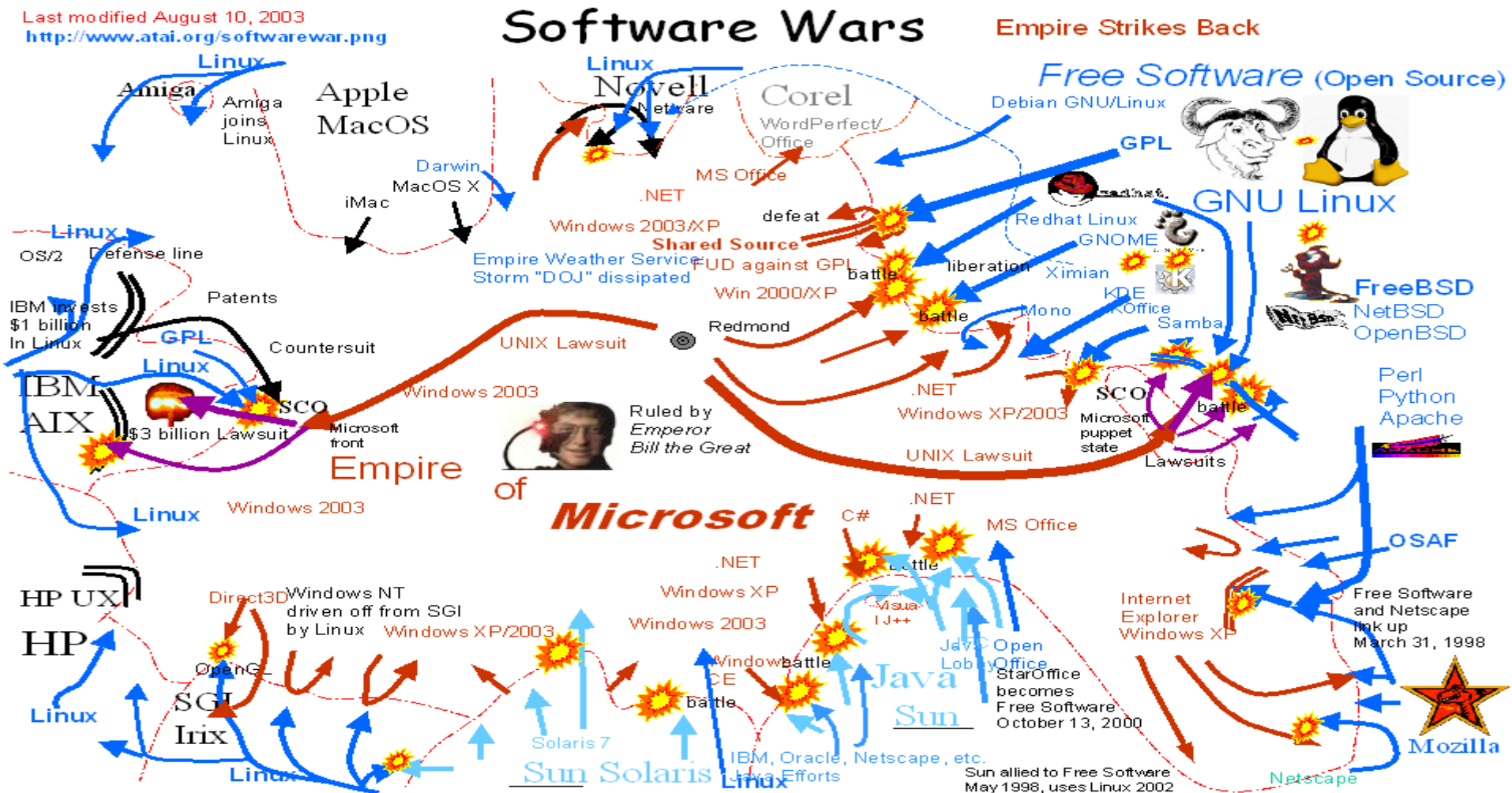


# The struggle of Open Source Software

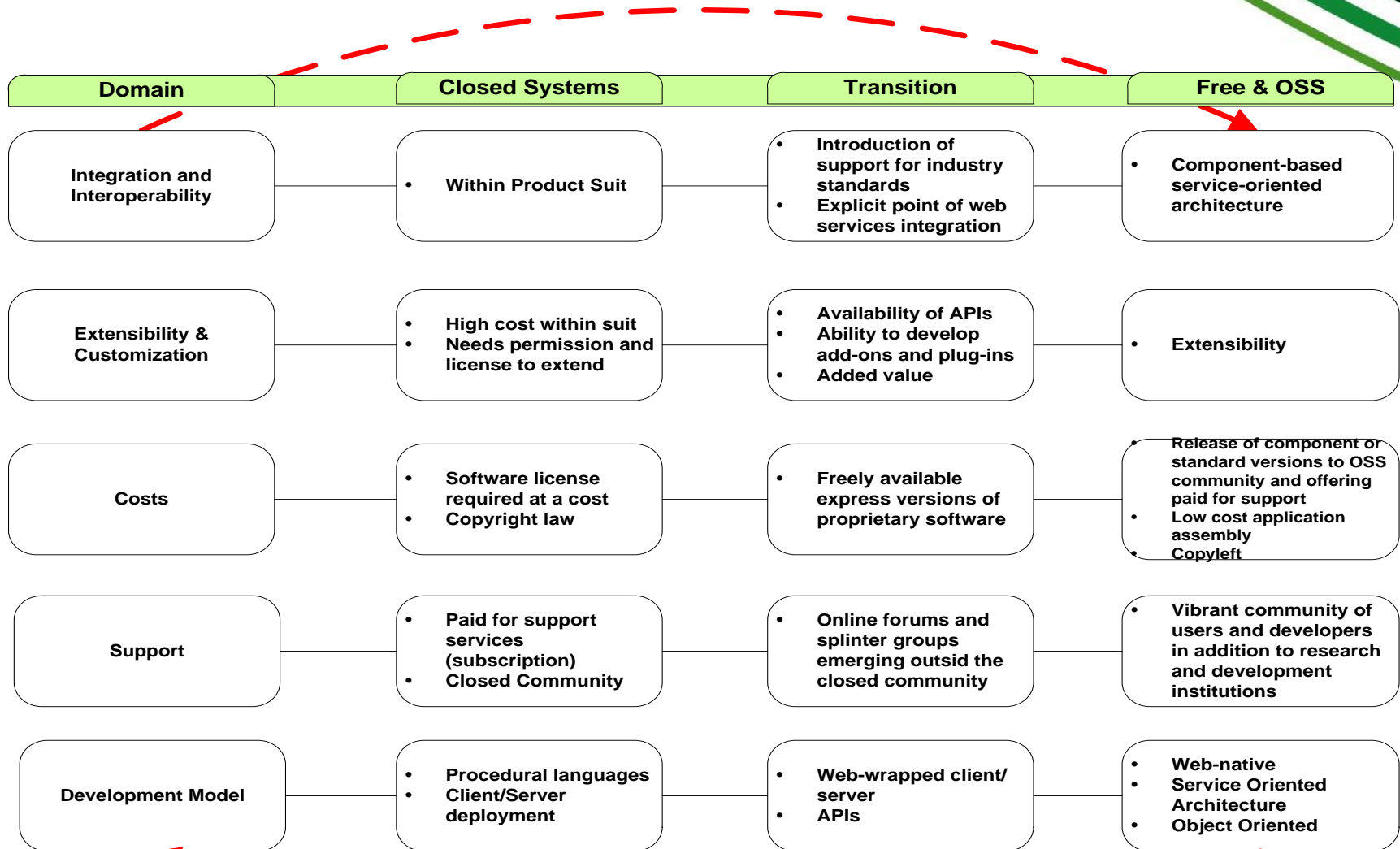
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Last modified August 10, 2003

<http://www.atai.org/softwarewar.png>



# OSS Transition Model



# The Concept of Open Standards (OS)

According to Pountain (2003) means "a standard that is independent of any single institution or manufacturer, and to which users may propose amendments."

There are three key characteristics of open standards, identified by Coyle (2002);

- ❖ anyone can use the standards to develop software
- ❖ anyone can acquire the standards for free or without a significant cost and
- ❖ the standard has been developed in a way in which anyone can participate.

# The Concept of Open Standards - Benefits

When OSS and OS are combined offers some significant benefits;

- ❖ Access to different types of information both within and between partners
- ❖ Greater Accessibility
- ❖ Wider Knowledge about a technology and more competition
- ❖ Achievement of Interoperability
- ❖ Easy Migration of data and other information assets

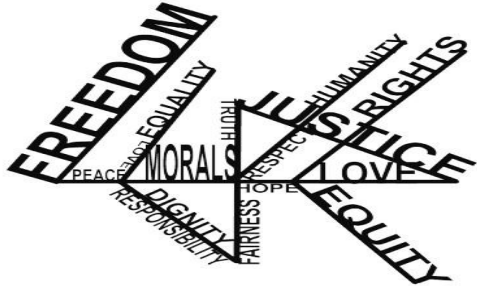


# Future Direction

- ❖ OSS and OS will drive the business in the Corporate GIS team
- ❖ Implementation of PostGIS, QGIS, GeoNetwork and ESRI Geoportal concurrently with existing set up and wean ourselves from proprietary software
- ❖ Ensure complete documentation in addition to the architecture of the processes







# In Summary

*Research estimates that “by 2013 open source technology will be included in 85 percent of all commercial software packages, and by 2016 will be included in mission-critical software packages within 99 percent of global enterprises”. This sends a clear message that OSS and OS have come to stay and it is about opportunity, risks, complexity and management challenges.*

- ❖ *An open world is a better world.*
- ❖ *Embracing open source is an attitude, not a binary choice*
- ❖ *Standards for your data are as important as to current ease of use*
- ❖ *There is no stasis. Things will always change.*