

Factores multiplicativos: ejemplos de sectores académico y industrial

Michael Gould

Universitat Jaume I, Castellón

Vender SL

- “Más barato que software privativo”
 - Trampa!
 - “dumping” es práctica común
 - Software comercial no tiene precio (tiende a cero) cuando el vendedor quiere un cliente de referencia, entrar por la puerta
 - Total Cost of Ownership (TCO): importante calcular objetivamente los costes

Vender SL

“Contribuir a proyectos SL ayuda al desarrollo económico regional...”

– Santo Guillermo

- 25 de cada 100 céntimos invertidos en MSFT se dedica a la erradicación de la SIDA, hambre,...



www.geoinfo.uji.es



Vender SL

- “Mejor servicio”
- “Mayor flexibilidad”
- et cetera
- Sin muchos datos objetivos
 - A veces sí, a veces no
- Difícil de demostrar
- opensource.mit.edu

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In the spirit of free and open source software (F/OSS), we are attempting to establish a community in which information will be freely exchanged, so that we may further the understanding of open source and its implications outside the realm of software development. We invite researchers to post their papers on open source and free software here, and to add themselves to the research directory, so that our community can become steadily larger and more comprehensive.

contributing

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staying

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Factor multiplicativo

- Algo interesante en si mismo, pero con potencial para amplificar su efecto de forma piramidal (exponencial)
 - Autores, clerics, algunos profesores...
- SL favorece la creación (amplificación) sobre ello (no sólo la difusión)
 - Ventaja radica en el tipo de licencia (libre)
 - Sexta ponencia hoy

Factores multiplicativos en los negocios

- Antiguamente: jefe de ventas
 - Influencia (tutoría) sobre grupo de vendedores
 - Potencial de grandes ganancias (comisión)
- Venta piramidal (ej. Amway)
- Hoy: web, e-comercio
 - Alcance casi sin límites

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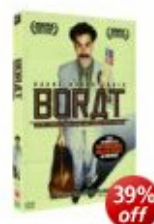
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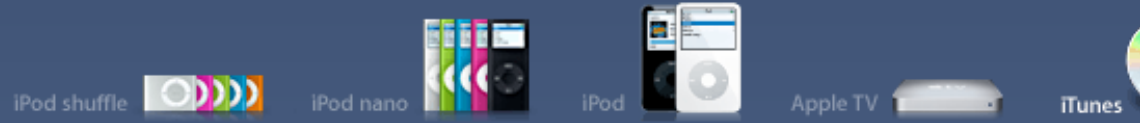
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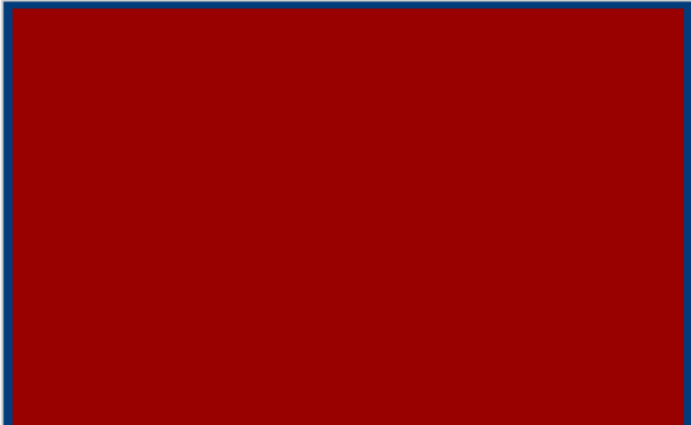
Las ventas de iPod, música celestial para Apple

EFE

NUEVA YORK.- El fabricante de ordenadores estadounidense Apple logró en los últimos tres meses de 2005 **beneficios e ingresos récord**, debido al éxito de venta de su reproductor digital iPod, del que vendió más de 14 millones de unidades.

Entre octubre y diciembre del 2005 -primer trimestre del ejercicio fiscal del 2006- la empresa californiana prácticamente duplicó su beneficio, a

publicidad



El famoso iPod de Apple. (Foto: Reuters)

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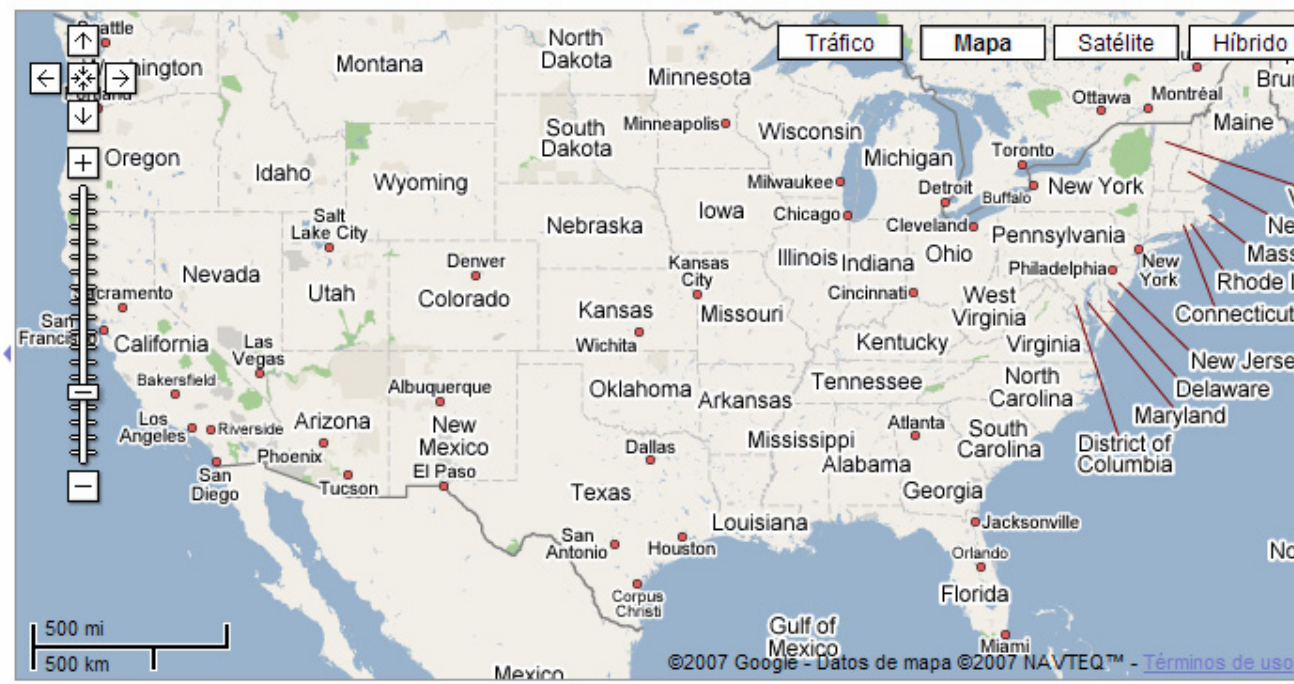
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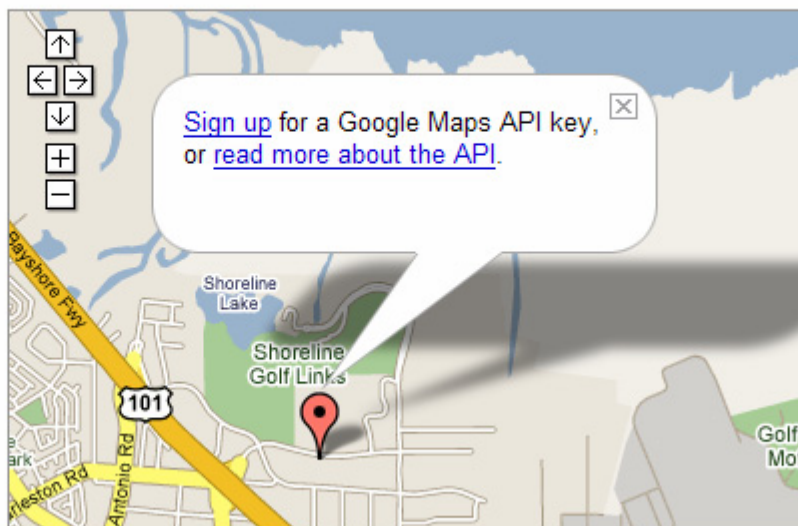
[Google Maps for Enterprise](#)

Includes enterprise licensing and support

Put Google Maps on Your Own Web Site

[Sign up for a Google Maps API key](#)

The Google Maps API lets you embed Google Maps in your own web pages with JavaScript. You can add overlays to the map (including markers and polylines) and display shadowed "info windows" just like [Google Maps](#).



Google Maps Mania

An unofficial Google Maps blog tracking the websites, mashups and tools being influenced by Google Maps.

[Ads by Google](#) [Google Maps](#) [Map Editor](#) [Satellite Maps](#) [XML Mapping](#)

FRIDAY, MARCH 02, 2007

➔ Google Maps Mania links for 2007-03-02

[The Police World Concert Tour Map](#)

[The Lost Tomb of Jesus on Google Maps](#)


[Karta Map](#) - [GeoNames](#) + Google Maps mashup; mapping placenames, landmarks and geo-locations.



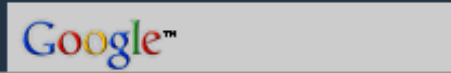
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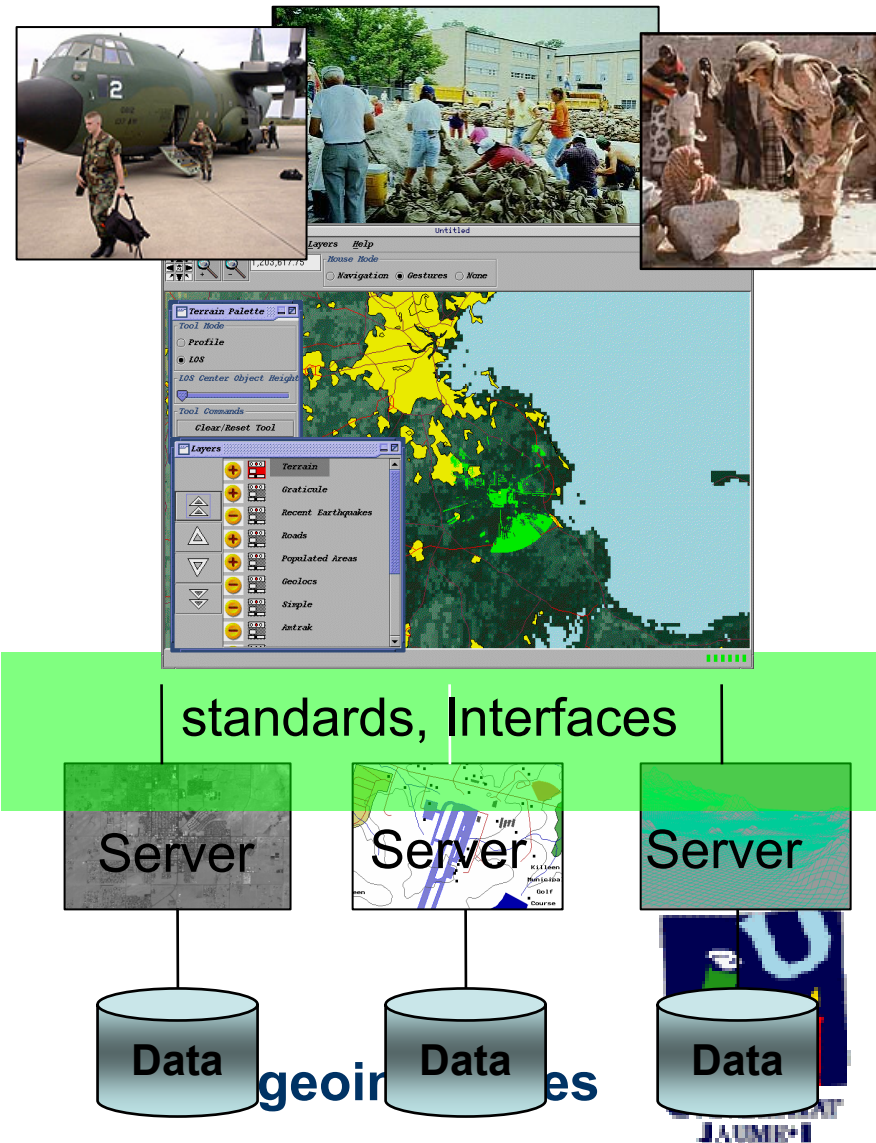


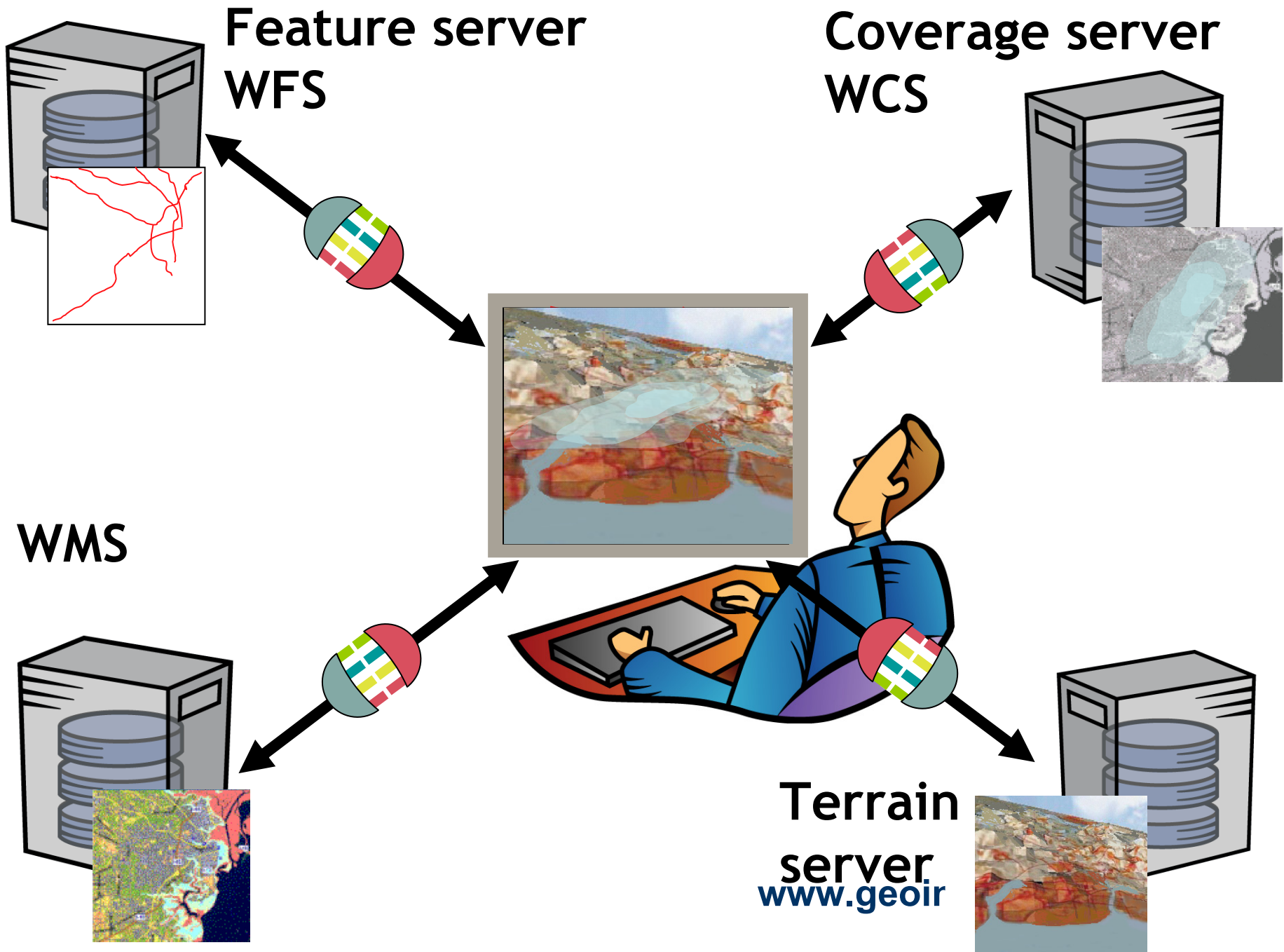
Total Residents:	4,283,122
Logged In Last 60 Days:	1,549,396
Online Now:	34,658
US\$ Spent Last 24h:	\$1,626,114
LindeX Activity Last 24h:	\$224,722

WebMapping Testbed (WMT)



- Proof-of-concept project, October 1999, connecting heterogeneous servers and clients (multi-vendor)
- A test of collaboration among various companies and agencies
- Retrieve data in data servers in various nations, from various clients





Efecto multiplicativo

- Termino muy común entre los programas de I+D+i de la UE (por ejemplo Information Society Technologies, IST)
- Quieren subvencionar proyectos que prometen la posibilidad de un efecto “pirámide”
- Sinónimo con impacto

KAI - Strategy



- Visionary RTD with high potential payoffs
 - medium to high-risk/long-term research
- Early Exploitation & Broad Adoption
 - Trials, best practice, demonstrators
 - **Seek high multiplier effect**
 - Consensus building & interoperability
 - Entrepreneurship (e.g. Venture Capital Forum)
- Socio-economic analysis (e.g. indicators, skills)
- RTD & Policy supporting each other

Which Proposals Do We Want to Encourage?

- Visionary scope

- 5 - 10 years from now, addressing real Information Society needs

- Multiplier effect

- Benefits beyond project participants
- Technological, industrial, economic & societal impact
- Supporting standards & European policies

- Key players

- Consortia of appropriate size and composition involving key European players

Efecto multiplicativo en ciencia

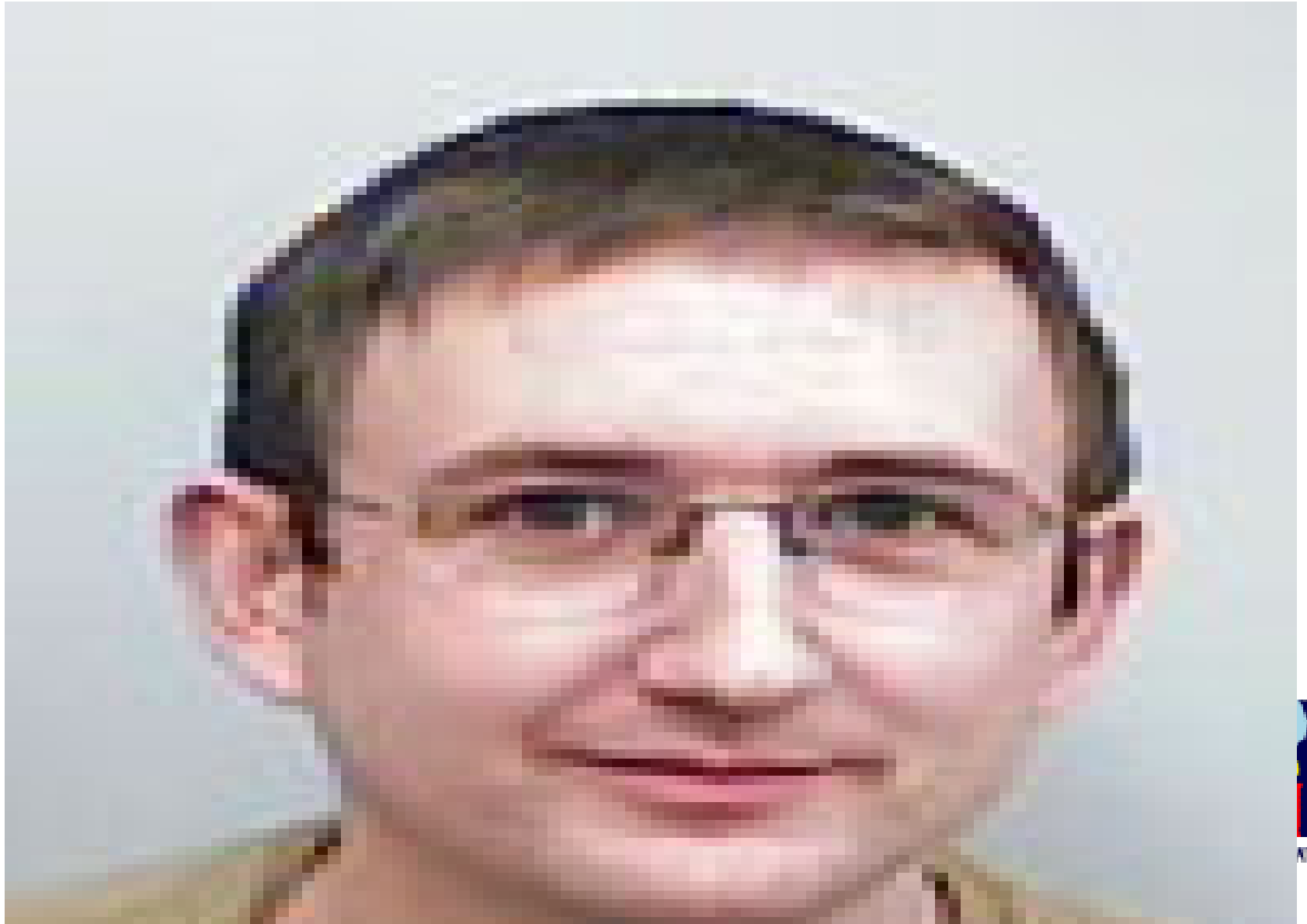
- “Si he logrado ver más lejos, ha sido porque he subido a hombros de gigantes”
– Isaac Newton 1676



¿Gigante?



¿Gigante?



A hombros de gigantes

- Academia (ciencia normal) es un proceso de acreción
 - pequeños avances, granos de arena
- Aplico mi nueva idea sobre lo que ya ha sido demostrado
 - Sobre la base aceptada (demostrada)
 - “Sin reinventar la rueda”
- No guardo mis novedades
 - se las publico



“The right to search for truth implies also a duty; one must not conceal any part of what one has recognized to be true.”

Visual Map Algebra: a direct-manipulation user interface for GIS

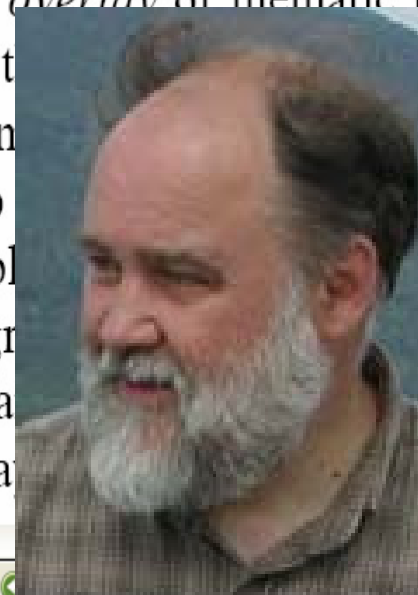
*M. J. Egenhofer and H. T. Bruns
National Center for Geographic Information and Analysis
and
Department of Spatial Information Science and Engineering
5711 Boardman Hall, University of Maine, Orono, ME 04469-5711,
U.S.A., {max, tomb}@mecn1.maine.edu*

Abstract

Geographic Information Systems (GISs) store, analyze, and present spatial data and information about geographic space and geographic phenomena. Virtually all aspects of a GIS have inherent spatial, graphical, and visual characteristics. While the database and analytical aspects of GIS have enjoyed considerable advancement in recent years, a user's access to and interaction with

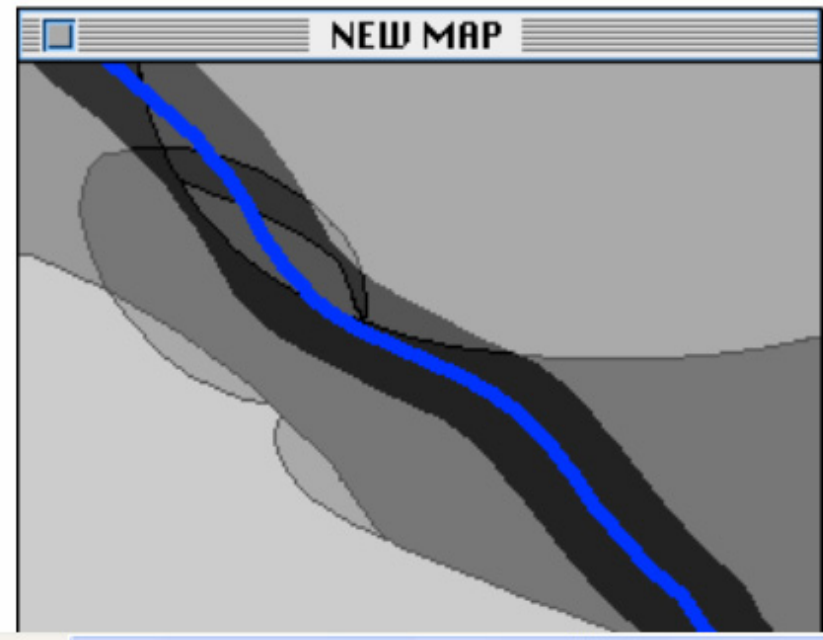
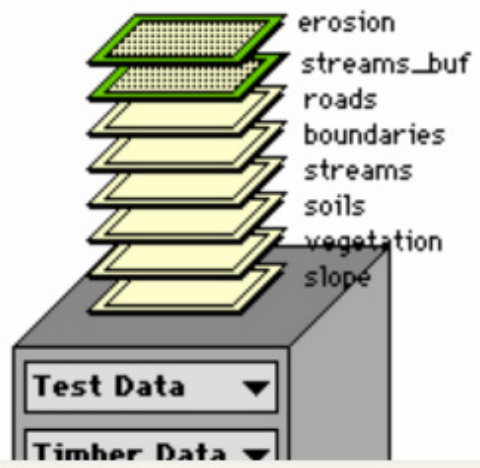
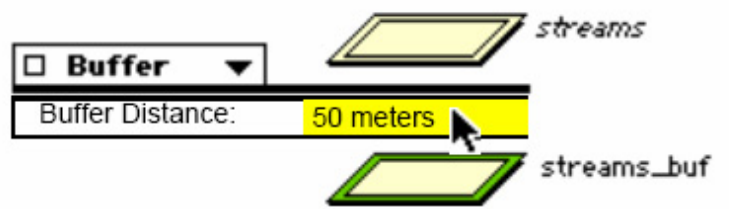
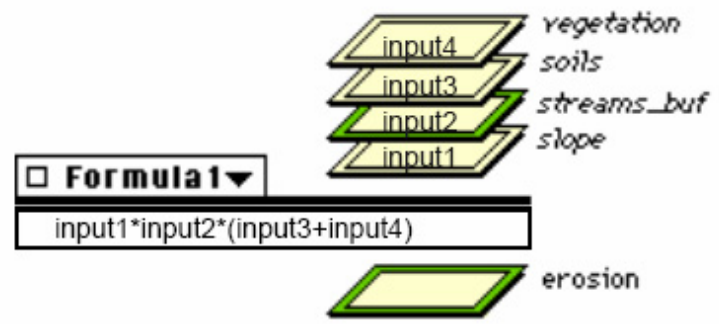
(Mark and Frank 1987). Cities represent space by the continuous measurement of several different properties, or themes, over the same area (Goodchild 1992). The choice of themes and how they are combined is highly dependent on the purpose of the analysis and modeling. By treating each theme as a variable in an algebra, Tomlin (1983, 1990) has formalized the combination of themes in a Map Algebra. These combinations reveal information that was unavailable in any component theme. Spatial scientists use Map Algebra to explore relationships in the data, and gain an understanding of processes that exist in the physical world.

The techniques of Map Algebra are rooted in the history of GIS—for an overview see Chan and White (1987). The single most important concept is the *overlay* of thematic map layers. Computerized map overlay evolved from manual methods of t (Figure 1). Historically, map overlay was a strictly visual process, with lin abilities. Map Algebra is a completely generalized form of analytical map ple by GIS technology. Layers of thematic data over the same geograph d by some analytical operation, yielding a new thematic layer with integr e analytical operations can be as simple as superimposing one layer over a ex mapping expressed as a function or truth table over the values in the la Egenhofer,



Charles Dana Tomlin

File Edit Layer Platform Table



FOR THEORY-BASED EVALUATION OF USER INTERFACES. *International Journal of Man-Machine Studies* **36**, 741–73.

Sandhu, J., Amundson, S., and Marble, D. (1987) *The Map Analysis Package*. The Ohio State University, Columbus, OH.

Stone, M., Fishkin, K., and Bier, E. (1994) The Movable Filter as a User Interface Tool. in *Proceedings of ACM CHI'94 Conference on Human Factors in Computing Systems*, Boston, MA, pp. 306–12.

Tomlin, C.D. (1983) A Map Algebra. in *Proceedings of the 1983 Harvard Computer Graphics Conference*, Cambridge, MA.

Tomlin, C.D. (1990) *Geographic Information Systems and Cartographic Modeling*, Prentice-Hall, Englewood Cliffs, NJ.

Tomlin, C.D. and Berry, J. (1979) A Mathematical Structure for Cartographic Modeling in Environmental Analysis. in *Proceedings of the ACSM*, pp. 269–83.

Turk, A. (1993) The Relevance of Human Factors to Geographic Information Systems. in *Human Factors in Geographic Information Systems*. (eds. D. Medyckyj-Scott and H. Hearnshaw), pp. 1–31, Belhaven Press, Boca Raton, FL.

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Results 1 - 10 of about 271 for GIS. Sort by: Date / Relevance

[PDF] [GIS EXERCISE 1](#)

GIS EXERCISE 1 Objectives: To understand the following: • GIS sources • Projections • Dataframe Properties • Templates STEP 1: DOWNLOADING FROM MASSGIS

ocw.mit.edu/NR/rdonlyres/Urban-Studies-and-Planning/11-304JSpring-2006/C18153E6-88B4-44DF-9D7F-80B1DB6F3CCC/0/gis_1.pdf - 2006-10-30

[PDF] [GIS EXERCISE 4](#)

J GIS EXERCISE 4 NAD_1983_StatePlane_Massachusetts_Mainland_FIPS_2001. For a reminder of how to do this, consult GIS Exercise 1, Step 2.

ocw.mit.edu/NR/rdonlyres/Urban-Studies-and-Planning/11-304JSpring-2006/045E9B85-74C7-4F48-922C-AECF7F819382/0/gis_4.pdf - 2006-10-30

[[More results from ocw.mit.edu/NR/rdonlyres/Urban-Studies-and-Planning](#)]

[PDF] [GIS Projects for 1](#)

Page 1. GIS Projects for 1.963 Fall 2004 Objective: To expand and apply your knowledge of GIS on a hands on project. The parameters

ocw.mit.edu/NR/rdonlyres/Civil-and-Environmental-Engineering/1-963Fall-2004/B4D4E517-CAA4-48B2-B9FD-1F8AA46A920C/0/gisproject.pdf - 2006-01-06

[PDF] [Vector processing in a GIS](#)

Page 1. Vector processing in a GIS Site Selection exercise using vector Selection



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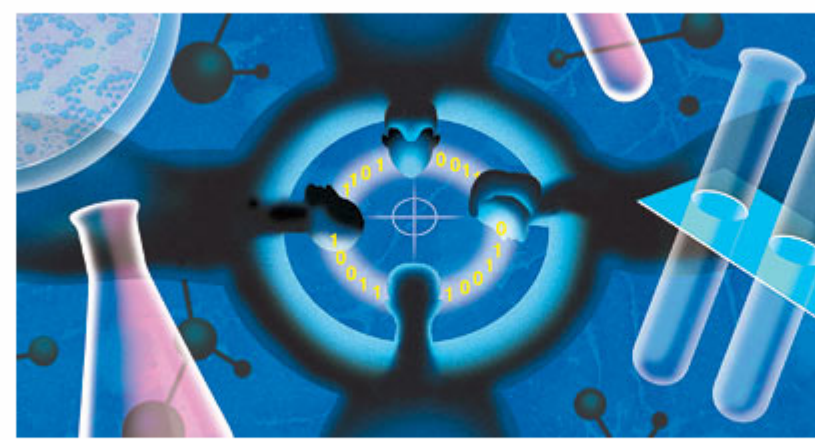
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An open-source shot in the arm?

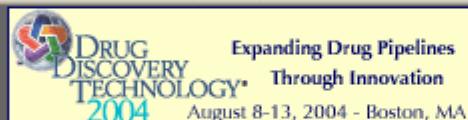
Jun 10th 2004 From The Economist print edition

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Medicine: The open-source model is a good way to produce software, as the example of Linux shows. Could the same collaborative approach now revitalise medical research too?

CAN goodwill, aggregated over the internet, produce good medicine? The current approach to drug discovery works up to a point, but it is far from perfect. It is costly to develop medicines and get


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"When faced with decisions about sharing, scientists should consider seriously the broader impact of their decisions on the fundamental characteristics of the scientific enterprise and, when at all possible, err on the side of openness."

The Selfish Gene: Data Sharing and Withholding in Academic Genetics

BY DAVID BLUMENTHAL
 AND ERIC CAMPBELL
 MASSACHUSETTS GENERAL HOSPITAL
 UNITED STATES
 31 MAY 2002

The free and open sharing of scientific information, data, and materials is a fundamental ideal underlying the social structure of science. The importance of data sharing is clearly illustrated by the inscription on the statue of Albert Einstein in front of the National Academy of Sciences: "The right to search for truth implies also a duty: one must not conceal any part of what one has recognized to be true." The case presented by Next Wave illustrates the powerful incentives that work to undermine the practice of sharing in science. In this case, protecting one's scientific priority (and that of a student) led to data withholding. However, in withholding data, researchers may unknowingly jeopardize several fundamental characteristics of the scientific enterprise.

This essay is divided into three sections. Initially, we discuss the importance of sharing to three key aspects of science. Then, we present the results of our research into the nature, extent, and consequences of data sharing and withholding in the genetic and the life sciences. Finally, we briefly explore the implications of our research for science policy and practice.



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O'Reilly: Human genome is open source, too

By Matt Berger

July 25, 2002 4:48 pm PT

SAN DIEGO -- At a gathering of open source software developers, two leading researchers involved with the sequencing of the human genome delivered presentations citing the benefits of open source both in the development of computer systems and in science.

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Ewan Birney, team leader for genomic annotation at the European Bioinformatics Institute (EBI), and Jim Kent, a research scientist at the University of California, Santa Cruz, spoke Thursday at the O'Reilly Open Source Conference here.

"I don't think you can have science without open source," said Kent, who is credited with helping to produce the first assembly of the human genome and creating the human genome browser, an application that allows

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ESRI Shapefile Technical Description

An ESRI White Paper—July 1998

Muy extendido, pero de forma lineal

No han construido sobre él.

Factor multiplicativo: bajo.

ESRI Shapefile Technical Description

Freeware versus SI

An ESRI White Paper—July 1998

Conclusiones

- Factor multiplicativo: importante distinción entre SL y S. privativo
- Ejemplos industriales y académicos
 - GDAL/GeoTools→gvSIG→SIG Costas....
- Factor multiplicativo sinónimo con
 - Impacto
 - Extensión/Innovación
 - Reutilización
 - Libertad
- Todo consecuencia de su licencia

Gracias por vuestra atención

Contacto: gould@uji.es