



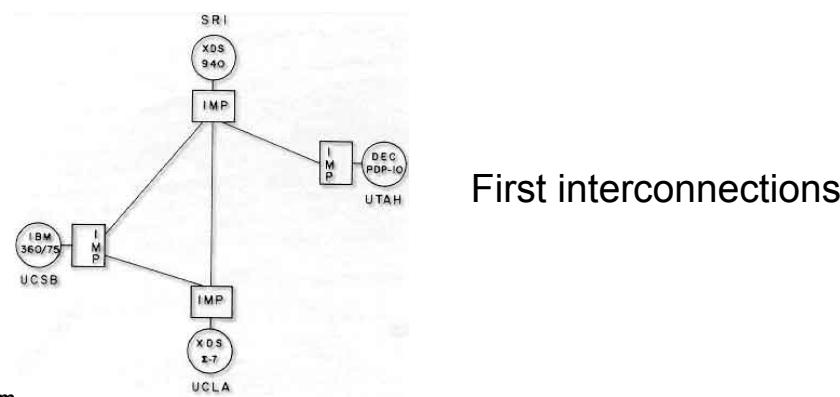
ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA – ICAI
Departamento de Sistemas Informáticos

Creating web pages
**Chapter 1. A brief introduction to the
Internet and web pages**

Cristina Puente, Rafael Palacios
2009-2010

History of the Internet. 1957-1970

- 1957 (Cold war) The USSR launched Sputnik, the first artificial communications satellite
- In response to this, the United States department of defense created ARPANET (Advanced Research Projects Agency Network)
- 1969 the net was increased by connecting several American universities
- Development of the first protocols





History of the Internet. 1970-1990



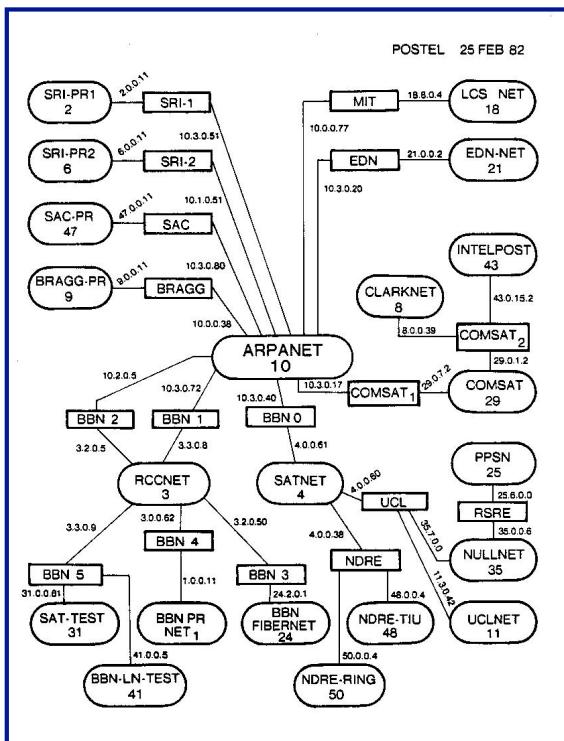
- American universities, responsible in part for the success and development of ARPANET
- Ray Tomlison, in 1971, created a program enabling messages to be sent via computers (e-mail).
- Vint Cerf y Bob Kahn created the first Transmission Control Program (TCP) and the term Internet is used for the first time
- 1984 TCP/IP is set up as a standard for Internet communications
- 1980-85 DNS system was created (Domain Name System)
- 1989 the World Wide Web as a system for the exchange of information was born



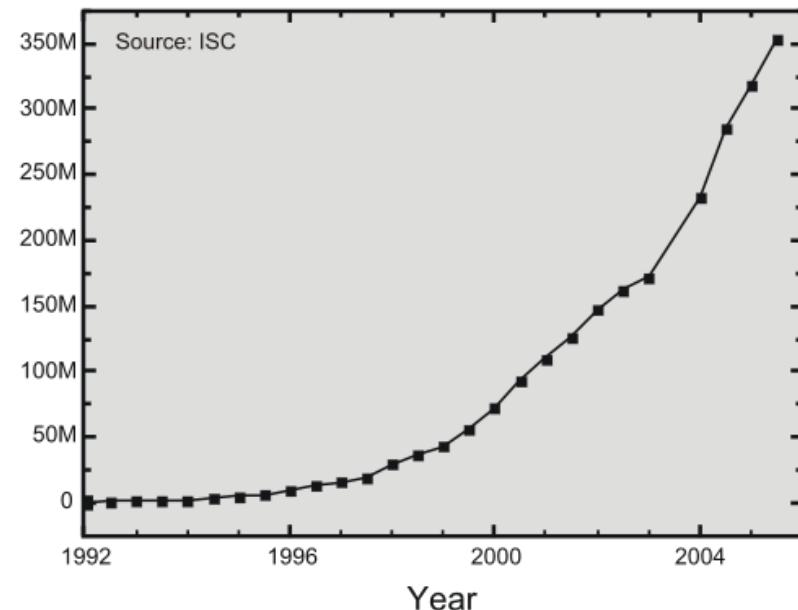
History of the Internet.



Internet: January '82



Number of Internet Hosts





History of the Internet. 1990-1995



- Expansion outside of the military and university environments.
- In 1990-91, Tim Berners-Lee, invented the World Wide Web.
- 1994 the commercial version of the browser Netscape Navigator is released.
- Shopping centers and businesses sell their products on the Internet: Pizza Hut, Ciberbanco, Amazon.
- Birth of the search engine Yahoo.
- First radio transmissions





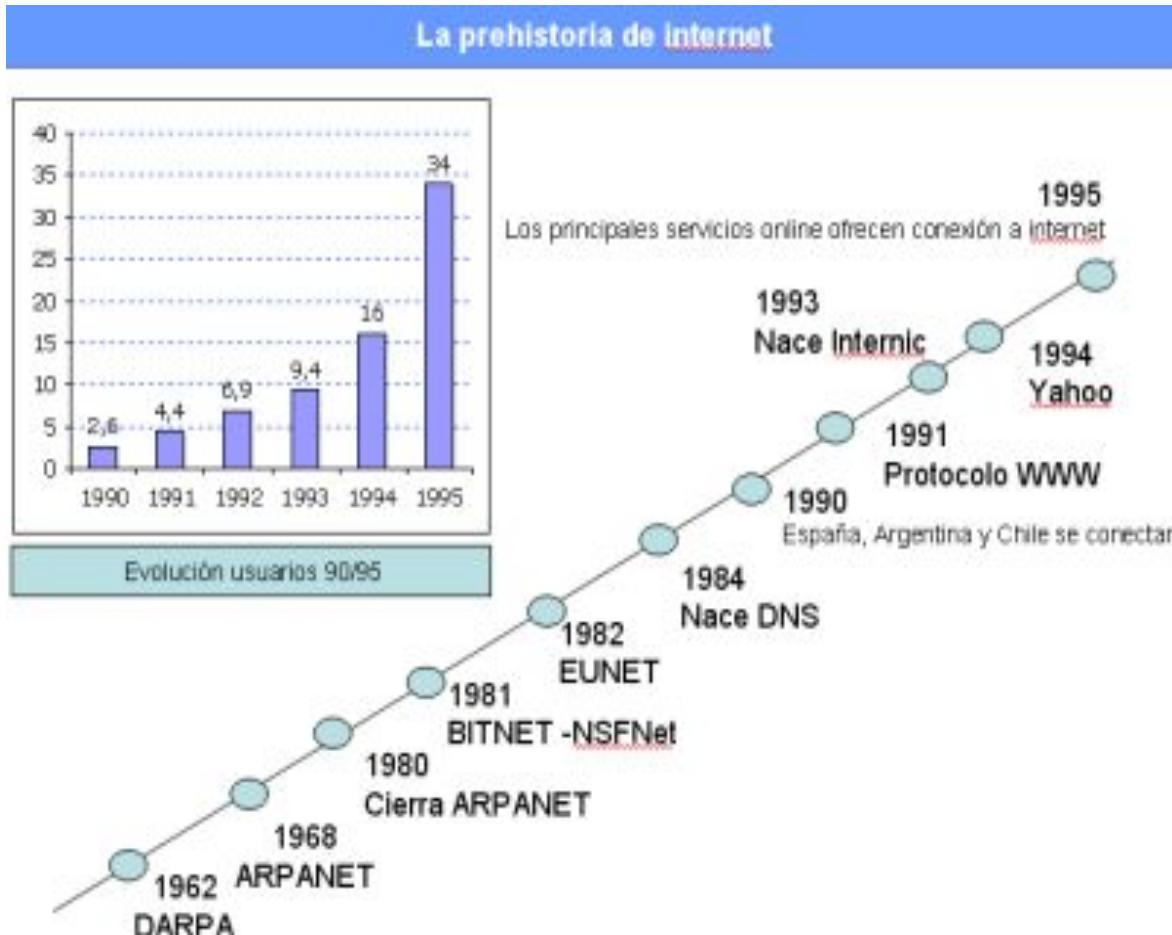
History of the Internet. 1996-2007



- Battle between Microsoft Explorer - Netscape Navigator
- Inclusion of multimedia content: streaming technique allows fluid video transmission
- May 96 El País and RTVE begin publishing web pages
- Increase in users in Spain:
 - May 96 0,2 million
 - May 98 2.0 million
 - May 2000 4.6 million
 - May 2001 6.0 million
- 1999: The sound format MP3 destabilized the multinational CD industry
- 2002: 500 million users worldwide



History of the Internet. Evolution



History of the Internet. Evolution



Fecha	Páginas Web indexadas (millones)	Peticiones por día (millones)	Buscador
Abril 1994	0.11	0.0015	WWW Worm
Noviembre 1997	2	-	WebCrawler
Noviembre 1997	100	20	AltaVista
Diciembre 2000	1327	70	Google
Mayo 2003	3083	200	Google





Internet concepts

- IP Address: Sequence of four numbers separated by periods that identify a unique address of origin or destination of information on the Internet.
- DNS (Domain Name System): Database of domain names and their corresponding IP addresses.
- Domain: "Extension" after the name which identifies the type of web site and allows us to determine the principal activity of the site. (.com for commercial sites or .gov for government sites)
- Host: Is used indistinctly as a synonym for a computer connected to the web or IP address. Every computer "host" has its own IP address.
- Server: Computer with which we can connect and share resources.



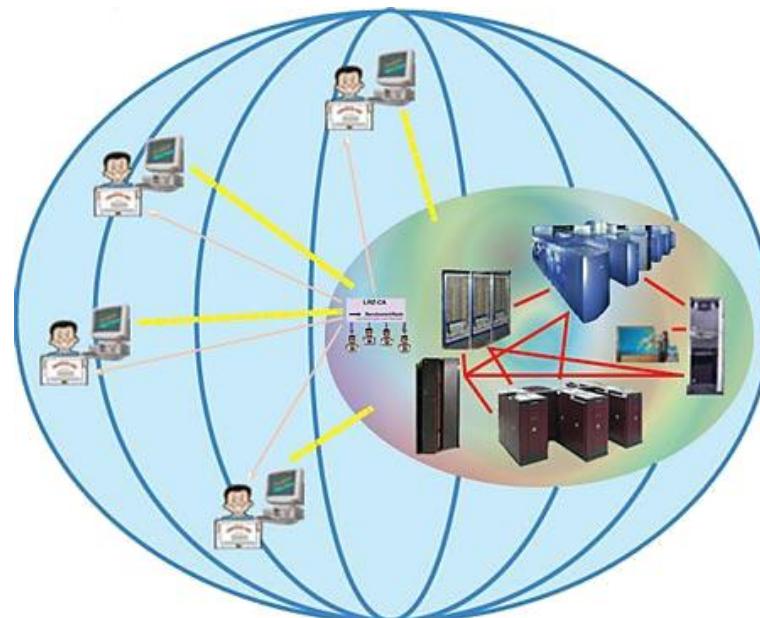
Internet concepts

IP Address(Google)

Dirección =
Dirección

Clients

Servers





Internet concepts



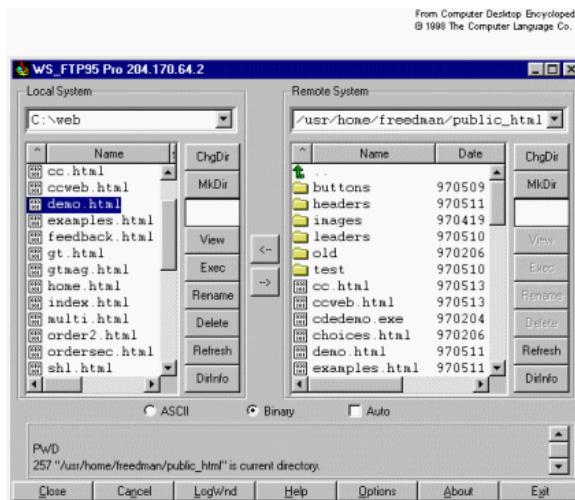
- News : News groups or debate forums in which people share their hobbies or common interests.
- Ftp : File transfer system which allows us to connect with file servers through the Internet
- Gopher : System which displays Internet documents and services as menu options.
- Telnet: Service which permits the user to access a remote system and work with it in terminal mode.
- Archie: Internet Service which explores a database of FTP sites in search of a file.



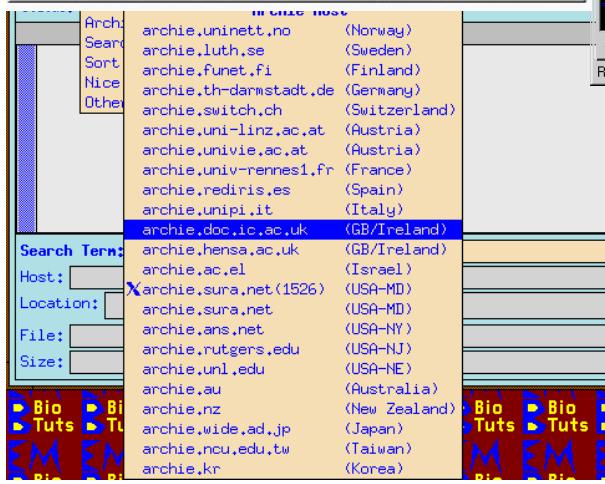
Internet concepts



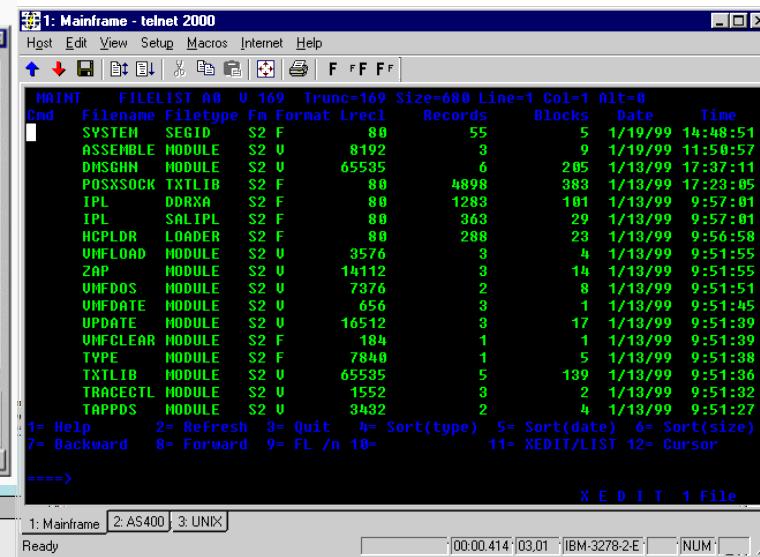
Ftp



Archie

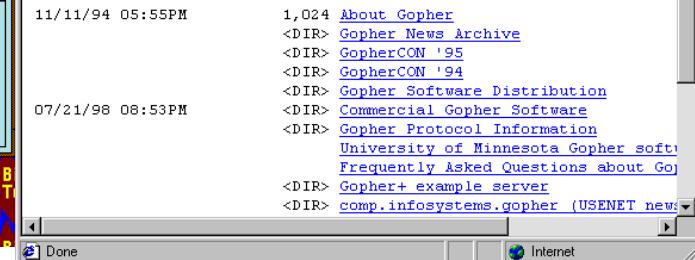


Telnet



Gopher directory at gopher.tc.umn.edu

Gopher





Internet content

- http (Hypertext Transfer Protocol): Protocol used in every Web transaction. Hypertext is the content of web pages, and transfer protocol is the system through which petitions for access and the replies with the content are sent.
- https : Secure version of http protocol which uses an ssl based code to transmit data through the Internet.
- ssl (Secure Sockets Layer): Encrypts information assuring the confidentiality of communication.
- Pop3 (Post Office Protocol): Permits the collection of e-mail to be read by a specific user.
- SMTP: Machine whichs acts as the entry point for e-mail sent by Internet.





Web Hierarchies

- Web Page
- Web Site
- e-commerce, e-learning..etc.
- Web application
- Portal
 - Vertical Portal
 - Horizontal Portal





Web page

- HTML, javascript
- For personal reasons
- Not extremely complex



Guido van Rossum - Personal Home Page

"Clawky and proud of it."

Antonio Larrosa's personal page

This page contains some notes about myself, my programs, my preferences, my midi songs, my friends, etc.

First of all, I will introduce myself. I'm Antonio Larrosa Jiménez, born in Málaga, in Spain.

I'm studying Mathematics in the [University of Málaga](#). I'm currently doing the 5th course. In this year, I could choose which subjects to go to, so I choosed the Analysis department subjects, which include names like Mathematical Models and Complements in Partial Derivative Equations. I also have to do some subjects of 4th course like Real Analysis or Complex Variable and Normed Spaces.

One of my main hobbies is ...

programming

My first (real) program was a data plotting DOS app called [Graficant](#). It was done in [basic](#) (with a 286 at 6 MHz) and it was very nice, but I lost its sources and even the executable. That was in 1989 or so, fortunately, my friend [Miguel Ángel Postigo Torres](#) ([Postigo for friends :-\)](#)) had a copy of the binary I left him when I finished it, but he didn't told me before 1995 because I didn't asked him until then!

After that, I learned Pascal and x86 assembly, and thought of a very interesting idea for a game, so I started coding, but when the game was funny to play I left it, because it app game called Clockworks or something like that from the creator of Tetris that shared the same new idea. So I left it. It was called [Shadows](#), it used the 320x200 mode with 256 colors and made a very good use of the VGA hardware, and I suppose its code is anywhere among my old disks, but I'm not sure...

Then, I did a DOS command-line Calculator, it was called [MegaMatrica](#). The main feature was a taking function that told you the result of the operation through a SoundBlaster soundcard and variables you could use to store values between sessions operations.

If also used a very sophisticated system by which the user could choose not to write any close bracket ')' and [MegaMatrica](#) automatically chooses where to write them.

The program was lost in a very unfortunate case of deletion of files with root privileges.

At least, my friend [Fco. José Jiménez Pascual](#), found a copy of the executable I gave him some years ago.

I was also working on a image morphing program, which had very promising results, it was called [MegaMorph](#) and was programmed in C. It allowed to morph from one image to another by specifying which part of an image should be mapped into which part of the target image. It also allowed to warp an image, that is, to distort it.

Dramatically, the sources were also lost in the same accident as [MegaMatrica](#), but I saw some time ago its sources among my disks so perhaps...

In the meantime (Summer of 1992), I started doing one of my greatest applications, [Cenbase](#). It is an object oriented data base to store the contents of a collection of disks. The data is stored in a hierarchical tree structure, and it can be queried using SQL-like language. See also my [resume](#) and my [publications list](#), a [brief bio](#), assorted [writings](#), [presentations](#) and [interviews](#).

Much of the information here is several years old, and although still correct, not necessarily very relevant. I'd like to thank Google for this page. I live in Mountain View, CA. I knew Google's services to be awesome, to work there is even better. But best is that I get to work for Dan Farmer's new company, [Elemental Security](#) in San Mateo, California. I have moved with my wife and son to San Francisco Bay Area.

"IT - Software (Individual)" of the [World Technology Network awards](#).

Award 2003 for extraordinary services to the community of users of Unix and Open Systems.

Page created by
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Last updated on
26 Jan 2001

Page created on
15 Sep 1998

KDE





Web sites

- HTML, Javascript, ASP, PHP.. depending on the complexity
- For business reasons
 - Institutional Presence of their Company on the Internet.
 - Sell their Products. Through their Catalog.
 - Provide Information about their Products.
 - Pre or Post Sale Service.
 - Receive bids from Possible Providers.
 - Seek Clients.





Web sites

The image shows two side-by-side screenshots of web pages.

ARLIT MADRID (Left): This page is for candle products. It features a sidebar with categories like COPA FLORENCIA, BOLA TOKYO, etc., and a main content area showing two product variants of "TULIPAS": "Tulipa Selecta Vacía" and "Tulipa Selecta Llena". Each product has a small image, a "Detalles >" link, and some descriptive text about dimensions, materials, and collection.

Garden Center Ejea (Right): This page is for garden supplies. It has a green header with navigation links: PORTADA, INTERÉS, TRABAJOS REALIZADOS, CONTACTAR, VER CESTA, and MAS NOTICIA. Below the header are links for Aquí Bulbos, Aquí Plantas, Aquí Herramientas, Aquí Madera, Aquí Mascotas, Aquí Mobiliario, and Aquí Riego. The main content area displays various products in a grid: AUTORIEGO L (35 cm diámetro), CEDRUS LIBAN (Cedro del Libano), BARBACOA DEN (Medidas: 120x47), AMPЕLOPSIS B (35 cm diámetro), FARO LAVA I (68 x 17 x 17 en cm), and LAMPARA MODE (Con bombilla Son T Plus 400W (Na)). Each product listing includes an image, a price (e.g., 65,00 €, 12,00 €, 320,00 €), and a "Detalles >" link.





Web applications

- Don't require installation on the client.
- Accessible from anywhere in the world.
Access control, security
- ASP, PHP, Java...more robust programming languages.

The screenshot shows a dual-pane web application. The left pane displays the Yahoo! Mail inbox, which is currently empty. It includes a sidebar with links for Bandeja entrada, Borrador, Enviados, Spam, and Papelera. The right pane shows a performance management dashboard titled "WebFOCUS Performance Management Framework". The dashboard has a "View of Today" section with a "Perspectives" table. The "Customer" perspective shows "Control Inventory" with current and previous values. The "Financial" perspective shows "Increase Sales" with current and previous values. The "Internal Process" perspective shows "Maintain Inv. Levels" with current and previous values. Below this is a "Perspective: Customer Objective: Control Inventory" table:

Measure	Current	Previous	Actual	Budget	Target	%	Balance
Quantity:	1,446	1,229	1,085	133.33	50		
Returns:	10	11	10	99.02	50		

Budget, Actual and Target Amounts are expressed in Thousands.





Portal

- Free services and content
- The ultimate end of these is to “learn about” the users that access their web sites and try to gain their loyalty.
- ASP, PHP, Java... more robust programming languages.



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Portal

- Two strategies
 - Regionalize
 - Specialize
 - Combination
- Vertical Portal:
 - Specialized Content for a sector of the market
- Horizontal Portal:
 - Content and services destined for the general public.



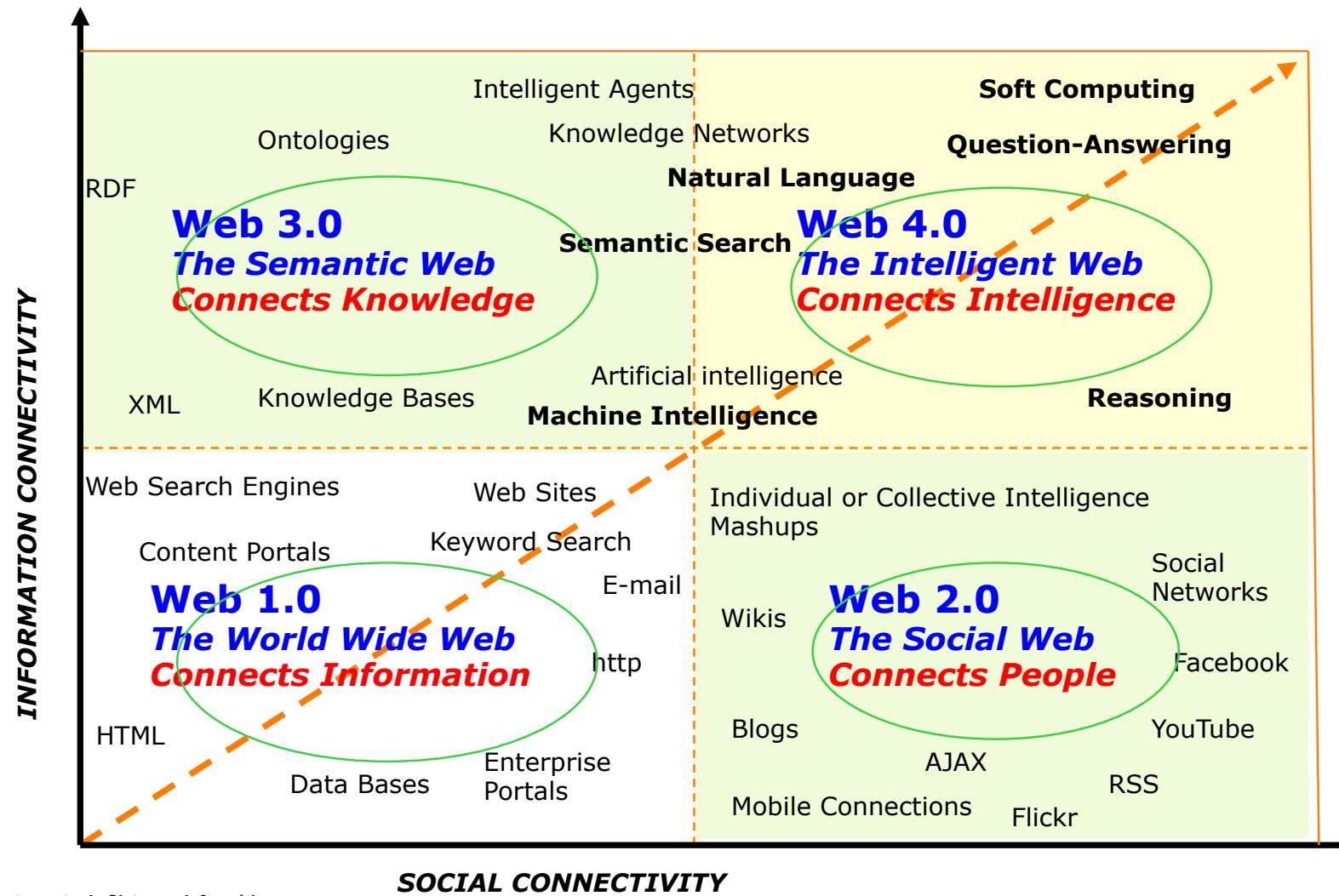
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Evolution of the Web





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