## Popular Culture, Technology, and the Future of the Library

(or)

The "Hurrieder" We Go, The "Behinder" We Get

Presentation to the

GOLD/GALILEO Annual Users Group Conference

Athens, Georgia

August 4, 2006

J. Richard Madaus, Ph.D. College Center for Library Automation

# "We are not who we are by the talents and abilities we possess.

We are who we are by the choices we make."

-- Albus Dumbledore

## Before we start – let's mention the world of books

- They are still here
- There will never be enough budget to buy all the ones we need
- Books sales continue to grow

## **Book sales data from the Book Industry Study Group (BISG)**

NET revenue – U. S. Book Publishers

- ✓ 2004 \$32.5 Billion
- ✓ 2005 \$34.6 Billion
- ✓ Projected to top \$40 Billion by 2010

## Important Questions for 2006 – 2010

- So you've migrated to a "next generation" library management system – now what?
- How do you find the "right" place for your library in the ubiquitous and ever-changing world of the internet?
- How do we continue to invest well in library cooperation and avoid being "cooperated on"?
- What's really involved in TAKING IT TO THE NEXT LEVEL?
- Let the adventure begin.....

**Automating Reference Evaluation of Internet Sources** Death of MARC PDAs/Portability of Data JPEG 2000 **Metadata Harvesting** Preservation of New Media Formats Infrared Personal Search Software **OPACs** and User Behavior Blogging Copyright Storage/Organization of Data Self-Publishing Spam Filters Web Usability **Data Transmission** RSS **RFID** Home Scholar **XML** Handhelds Hiring good Systems personnel Interoperability **E-Resource Management Trust Management** Open Source Open URL Open Access What's important *RIGHT NOW?* Web Services Personal Information Management(PIM) Scanning vs. Reading **Biometrics Privacy and Electronic Confidentiality** Wireless/ Wireless Security **Broadband Integrated Online Library Systems Submerging Technologies Human Factors** Authentication and Rights Management User Centered Design Institutional Repositories Search Engines and Research **User Interface Design** Policies and Technology Metasearching/Federated Searching Security, Digital Rights Management **USA Patriot Act** Game Technology Customization and Personalization

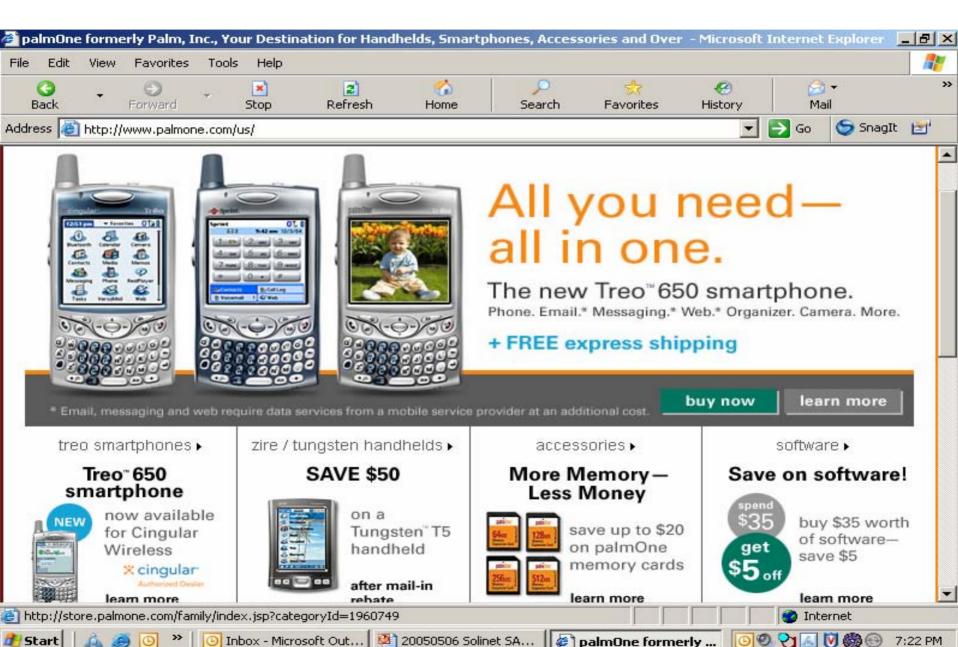
## **Cultural Trends versus Library Realities...**

- Let's take a few moments to explore the speed of trends in consumer focused technologies and cultural behavior
- How many of us are planning services for these users?

### Slide from a 2001 presentation:



### Slide from 2004 Presentation



And in September 2005 ...



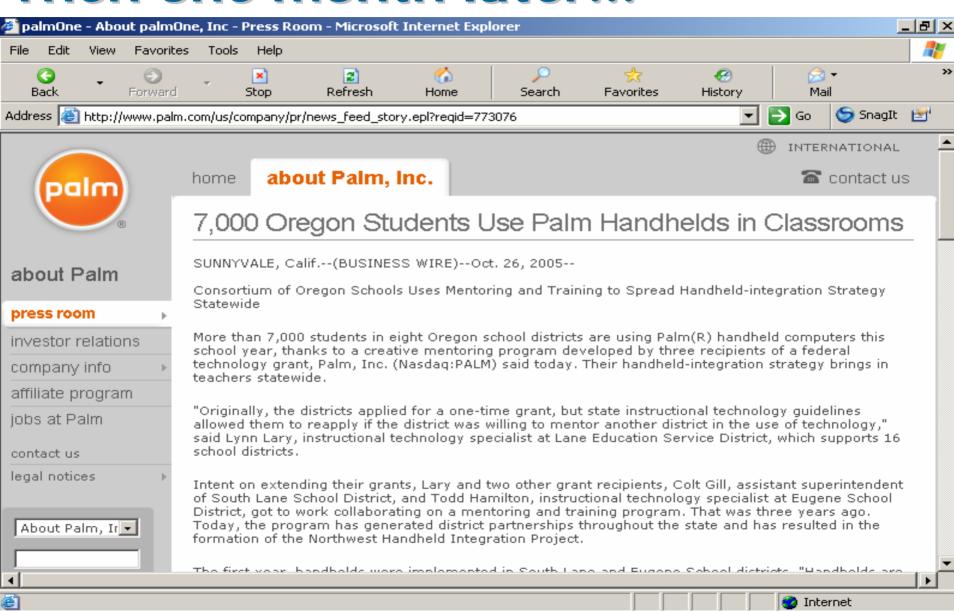
Inbox - Microsoft ... 20051104 TBLC.ppt About Palm, Inc...

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# Start

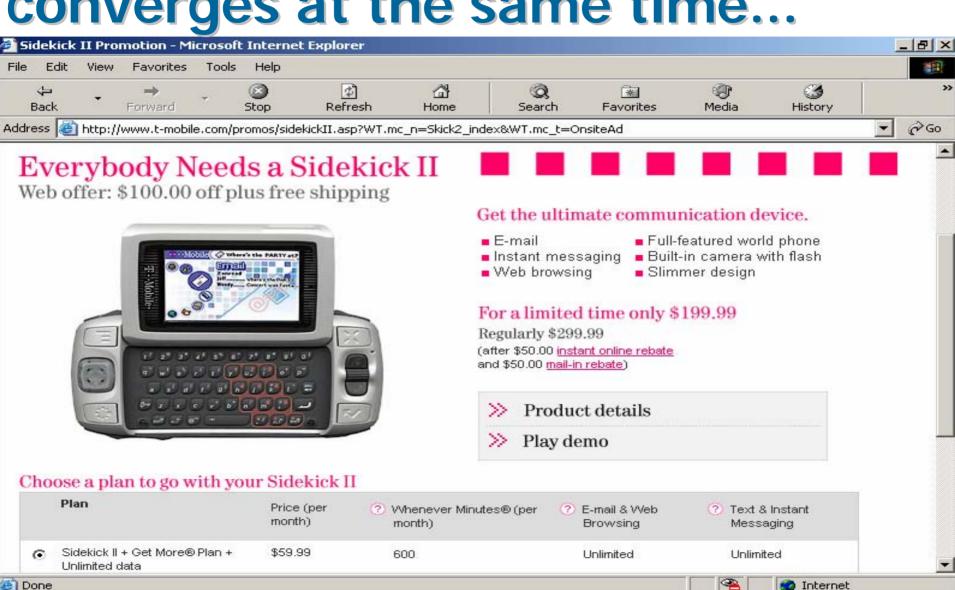
### Then one month later...

🎒 Start



Inbox - Mic...
20051104 ...
FalmOne ...
PalmOne - ...
PalmOne - ...

## The marketplace expands and converges at the same time...



Inbox - ... ALA An... Sidekick... Microsoft...

Start

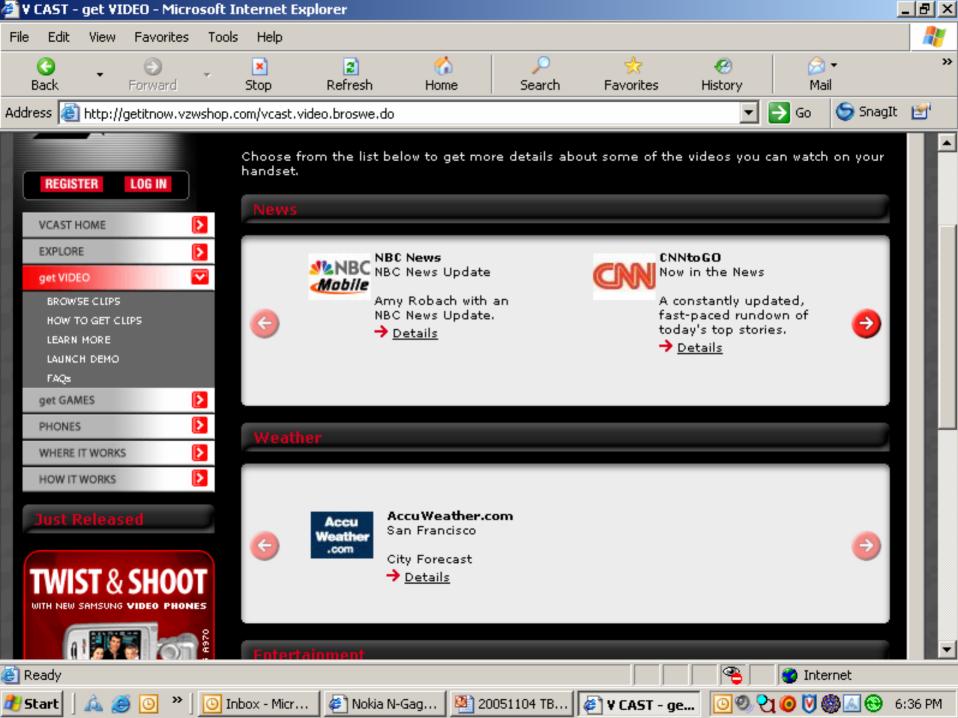
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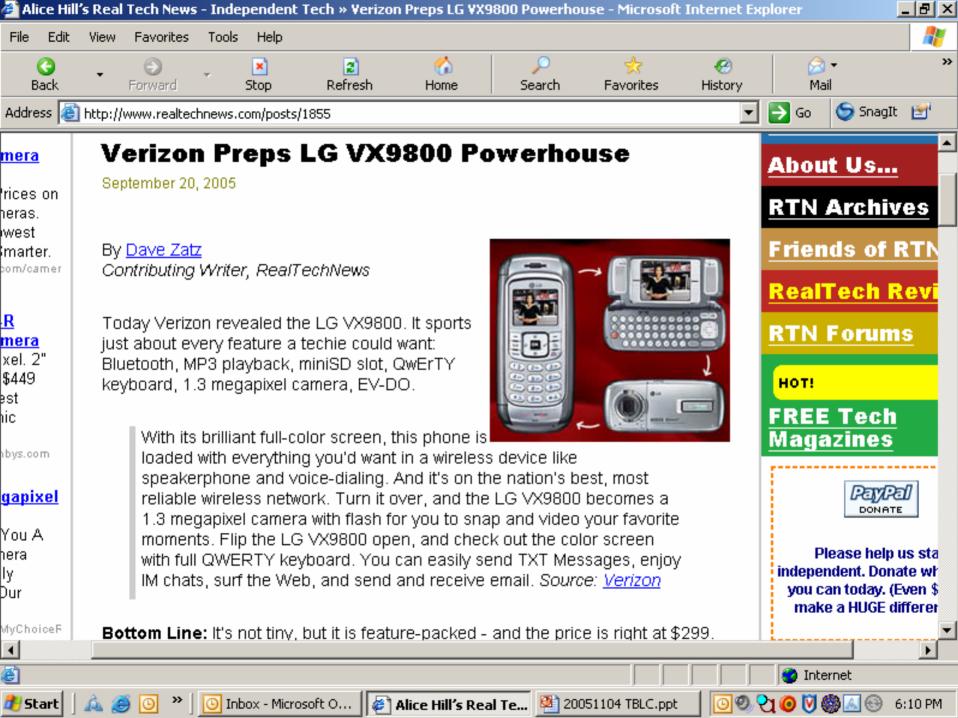
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### Understanding the Speed of Technology Trends

As the "gizmos" keep changing, entirely new markets and ways of doing things become commonplace almost overnight!





### An Interesting Experiment...



books will the cards hold? I hope that publishers won't be miserly. Otherwise people might as well just download the books.







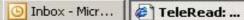
















Microsoft Po...



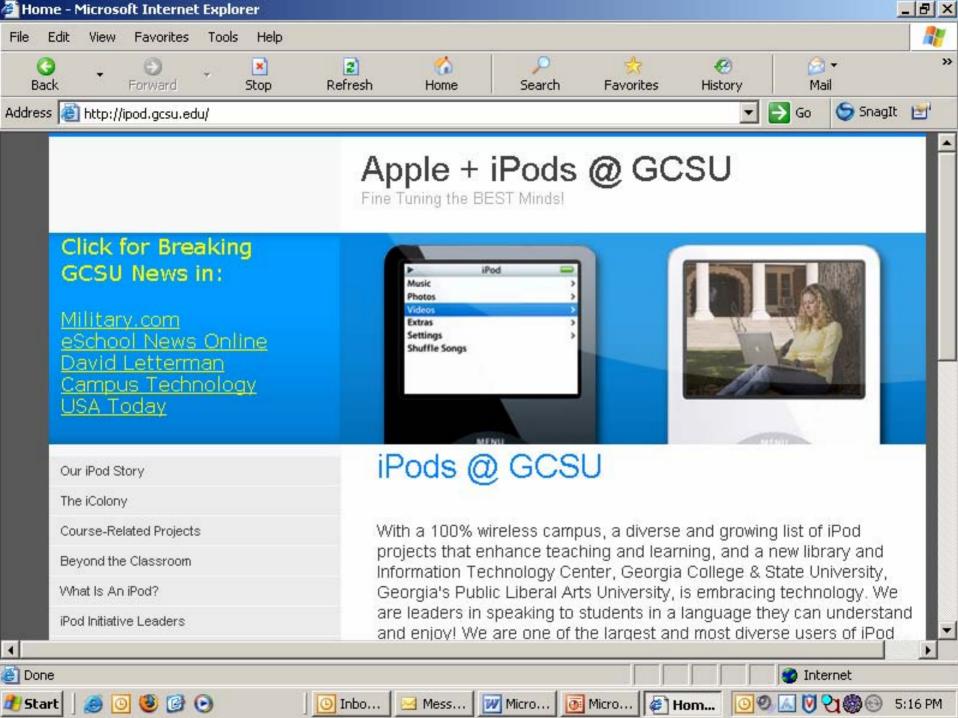
Exalead - Mic...









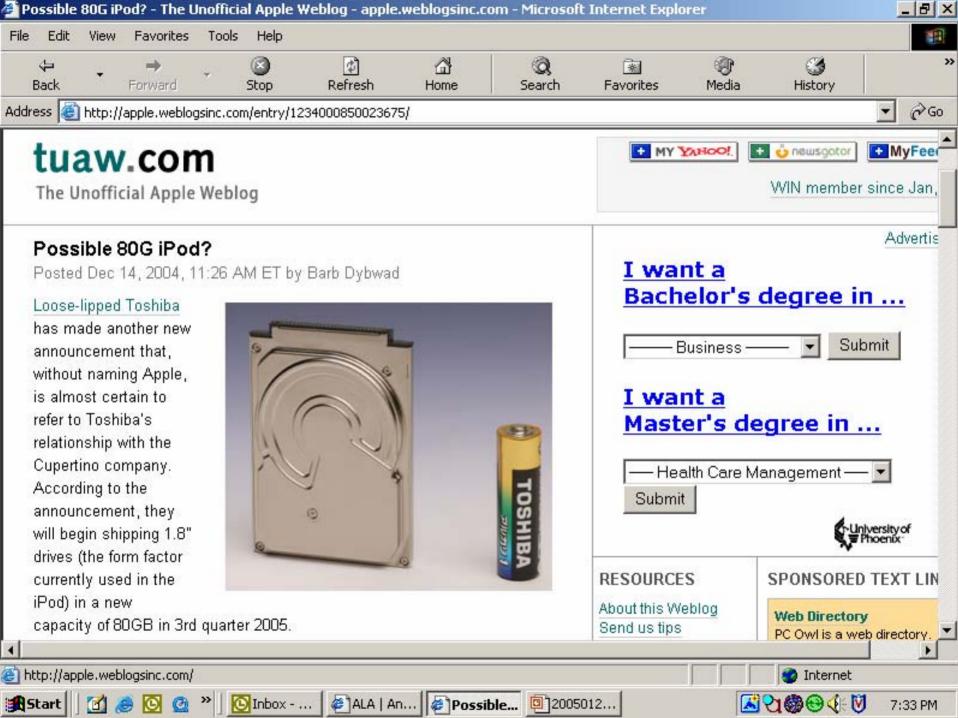


### Stop and think about this...

The 57,000,000 MARC records of OCLC WorldCat will fit in 24 Gigabytes of a 40 Gig Ipod with a lot of room left over

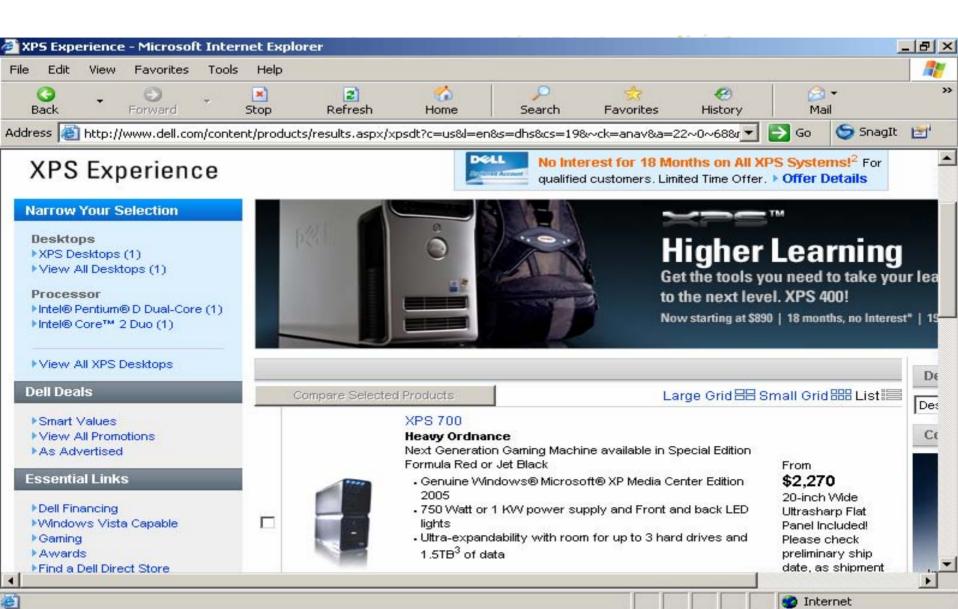
(It's actually been done according to Gary Houk of OCLC)

So what's next?

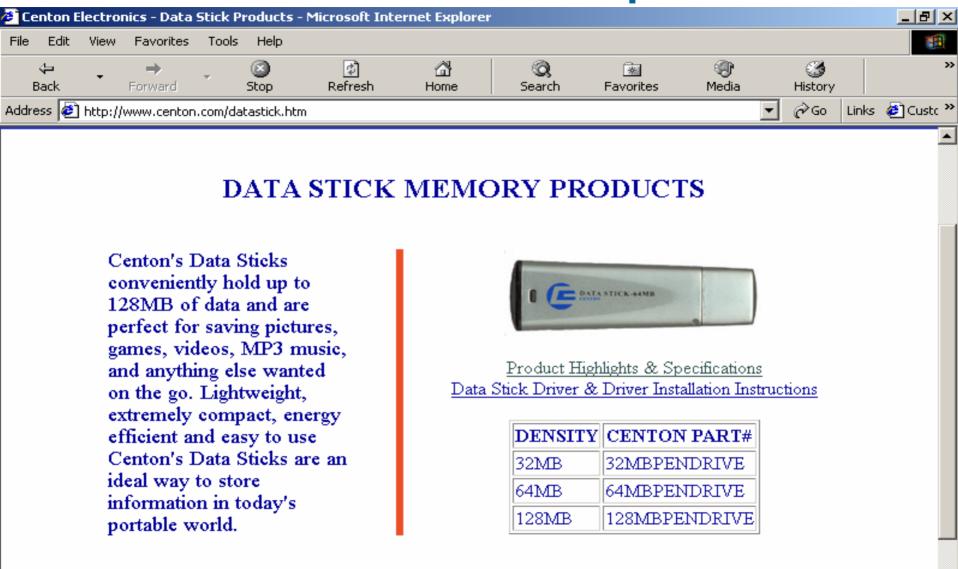




### PC Capacity isn't Standing Still Either



### Another slide from a 2001 presentation:



































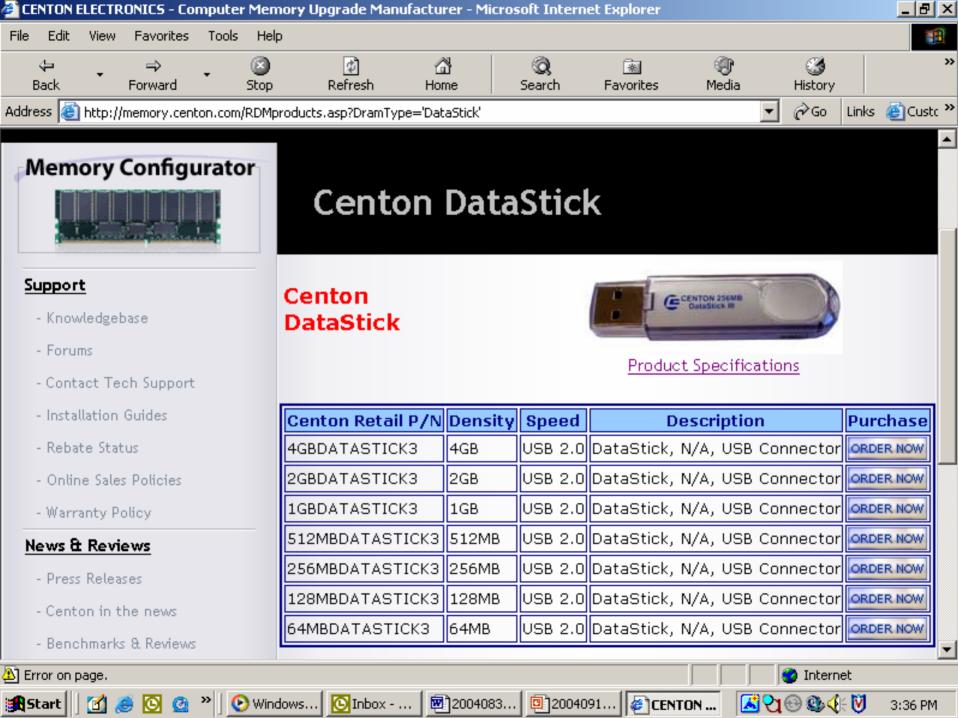


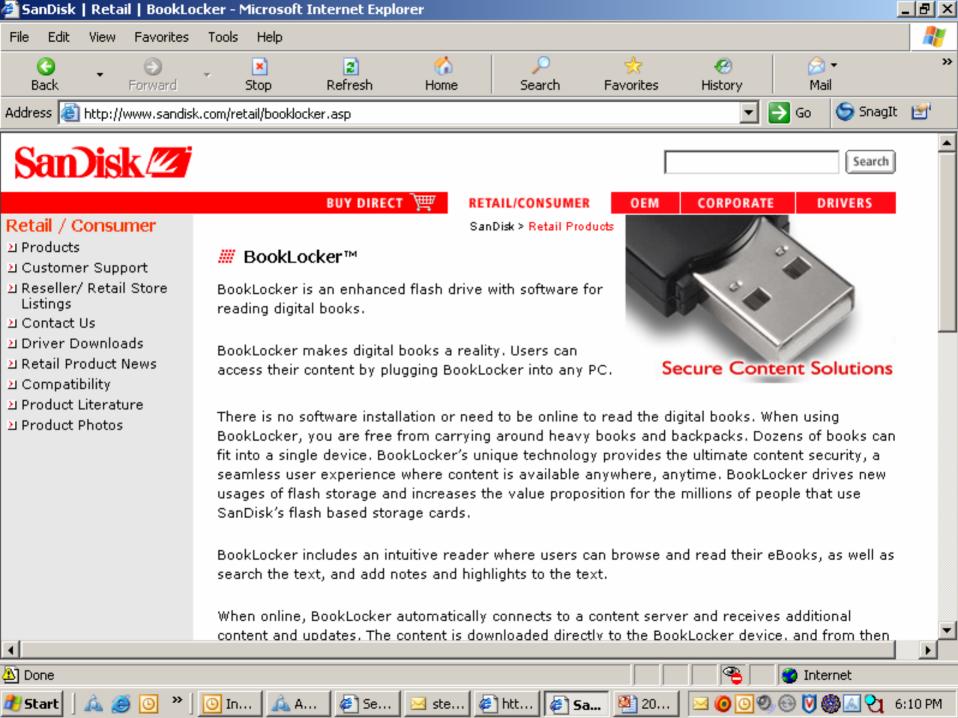


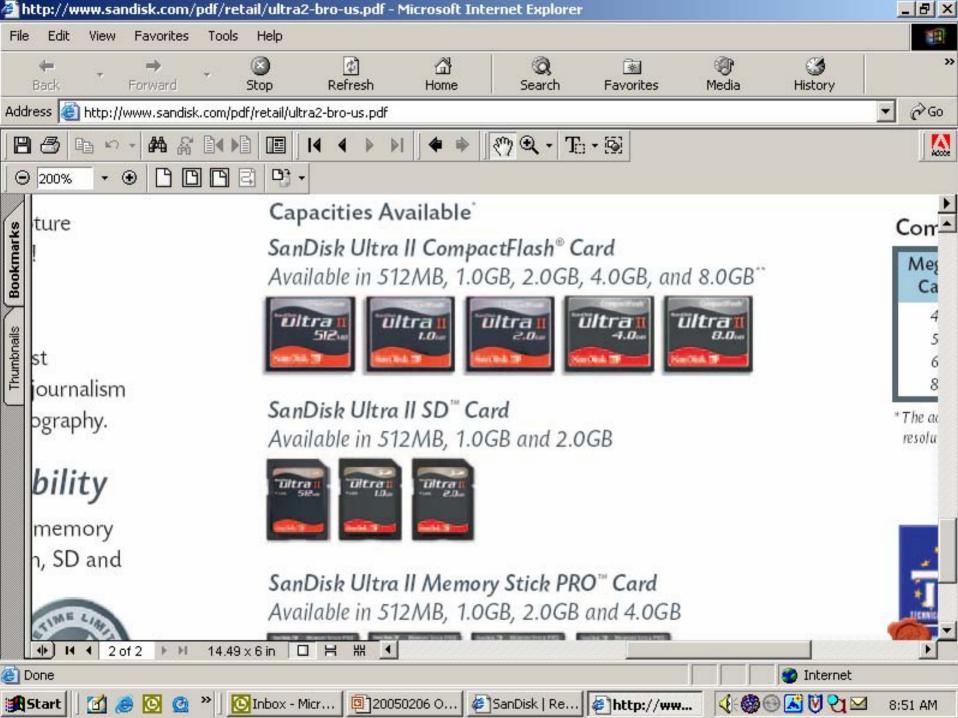
Internet

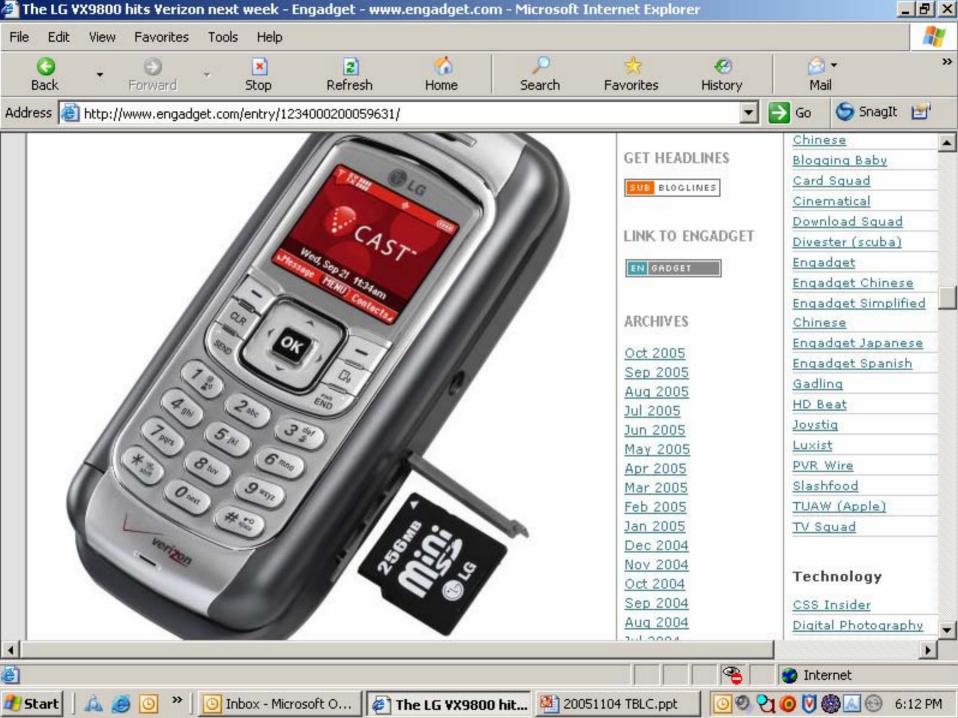












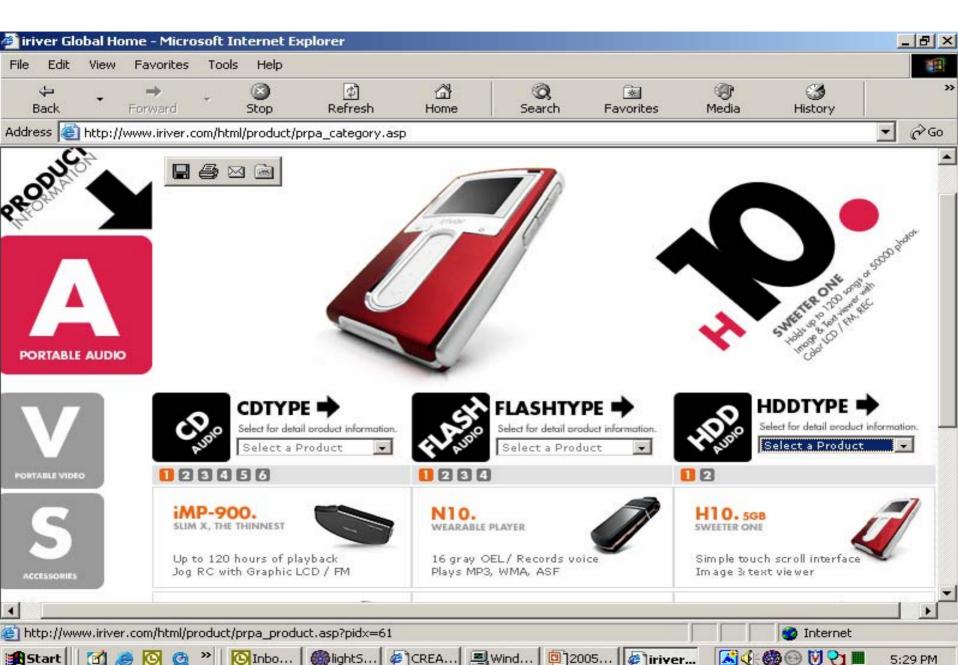
## Moving beyond the simple I-Pod world...

- Mobile devices are converging on and within the overall information marketplace
- It isn't just Apple computer that is in this business and there are already billions being made...

### A slide from a 2003 presentation



#### Same Web site -2006



#### Same Web site - 2006



Micros...

5:19 PM

**Another I-Pod Competitor...** 





















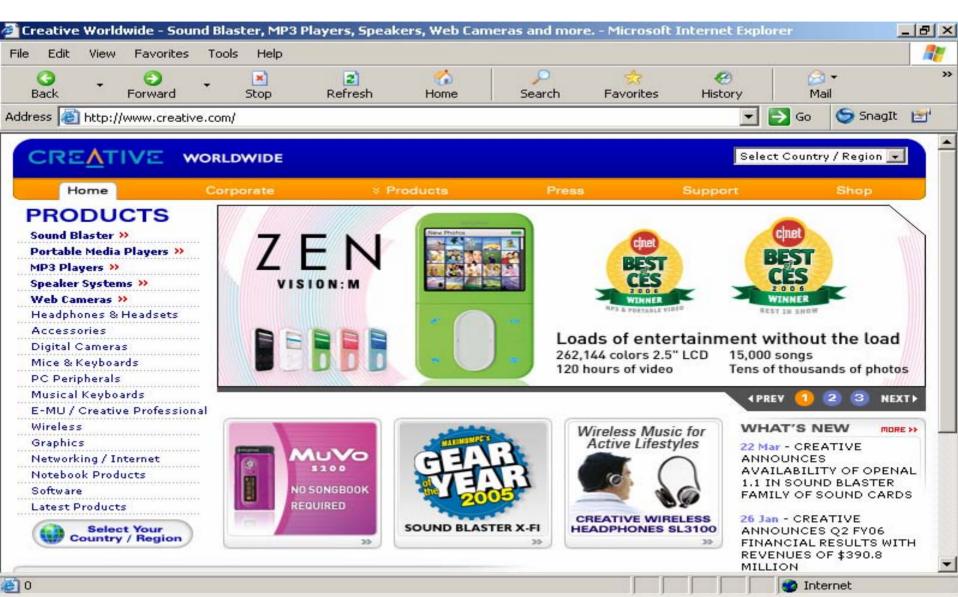








### **Award winning I-Pod Competitor...**



Apple -... | F Creati...

Micros...

5:11 PM

20060...

Inbox ...

Start

### The real move to portable media...



5:23 PM

Start

Inbo...

#### **THIS WEEK 2006 Web Site**



## TIVO jumps in...

Online Scheduling



#### DISH-TV won't be left out...

Nokia N-Gag...

Inbox - Micr...

# Start



20051104 TB... | # Home - Mic...

6:40 PM

## More and more mobility...

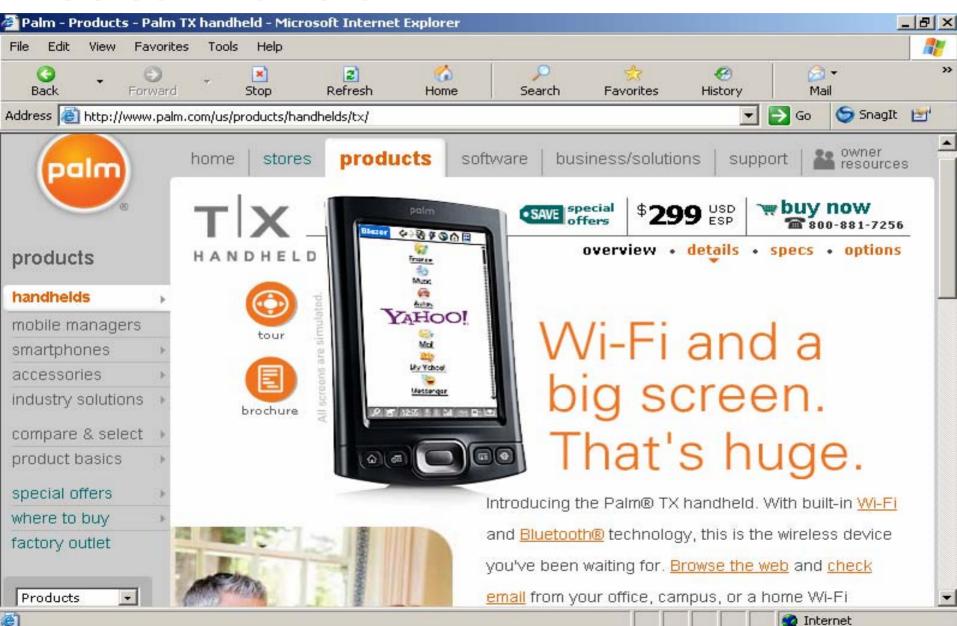
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Inbox ... | Fwd: ... | Palm ... | 20060...

April 2...

#### Not to mention...





## Mobile computing from Sony...



service

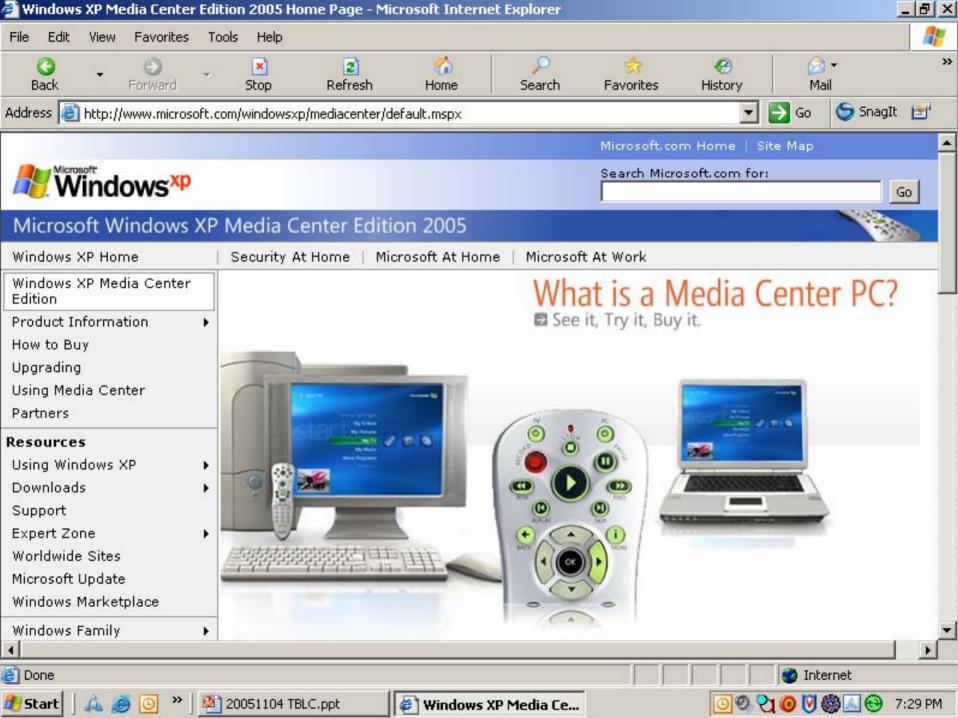
CloseOut-Sales

Warranty

generation, super-portable PC. Indeed, Sony designed the Vaio U50 with constant mobility in mind. It is the latest in the tremendously successful line of always-carry notebooks from Sony, designated the U-series. Sony makes only limited quantities of the U-series. The three

### Windows based portable media...





#### Stop and think about this

- If WorldCat will fit in your pocket and everything is connected to everything else --- what are the implications for libraries?
- Is this a reality for the far future? Or only a few moments from yesterday!

#### Now, a moment to ponder...

- I believe that we are not that far from a TERABYTE (1000 Gig) in the pocket! (probably within five years)
- How soon can we start planning library service for PetaByte (1000 TeraBytes) resources in the pocket? (probably within ten years)
- However, we probably don't need to think about ExaBytes for a couple of years yet.

#### Or, maybe ExaBytes will be here pretty quickly



Inbox ... 20060... 6 Googl... 6 HVD A... 0 Micros...

Internet

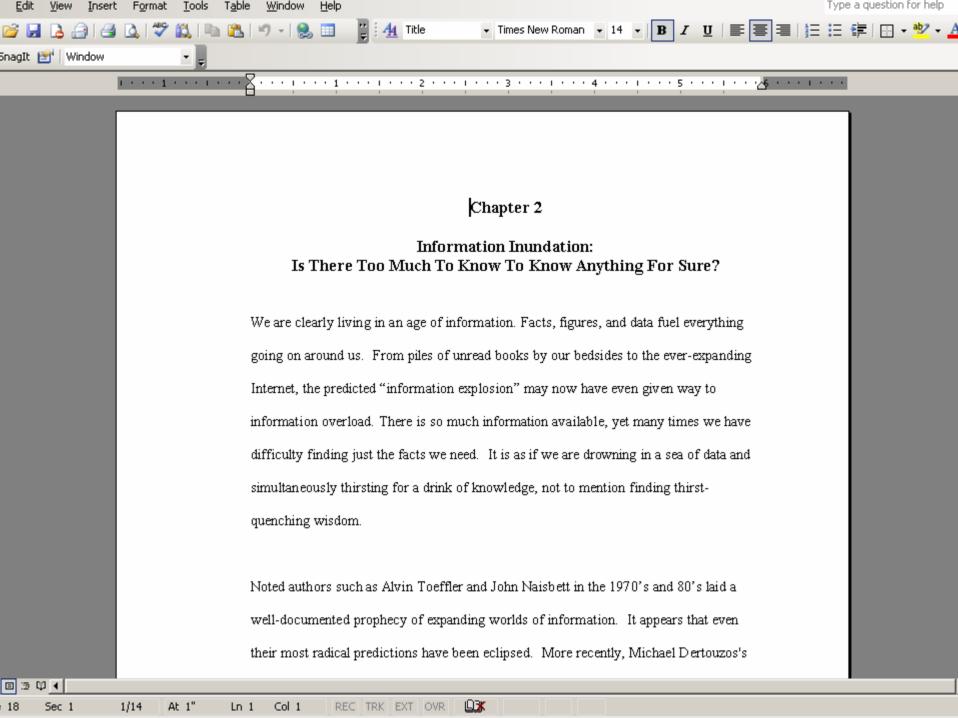
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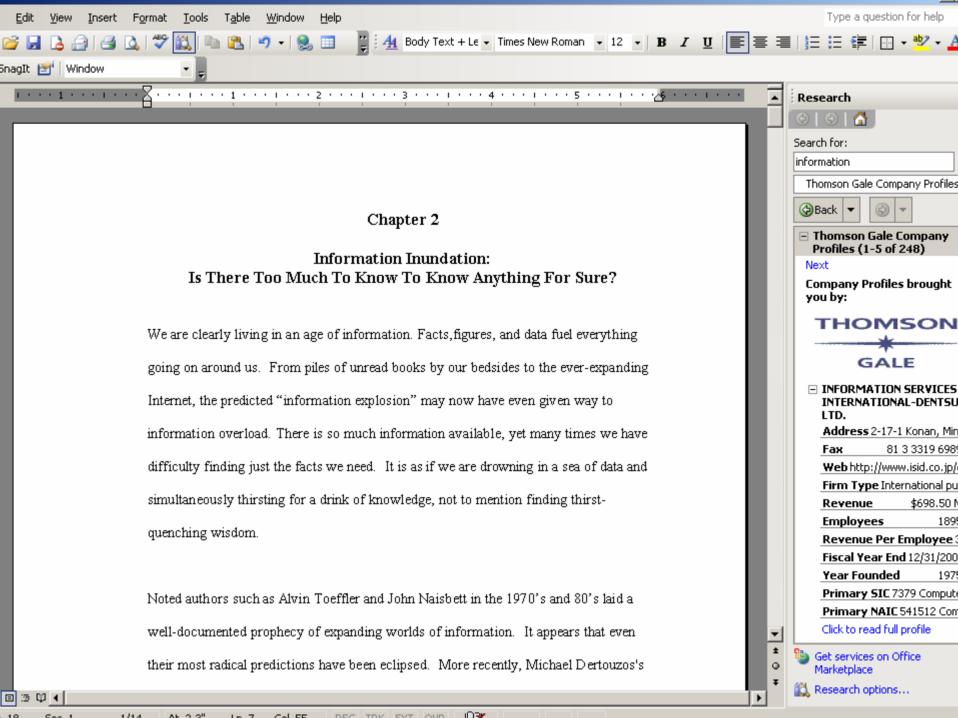
Done

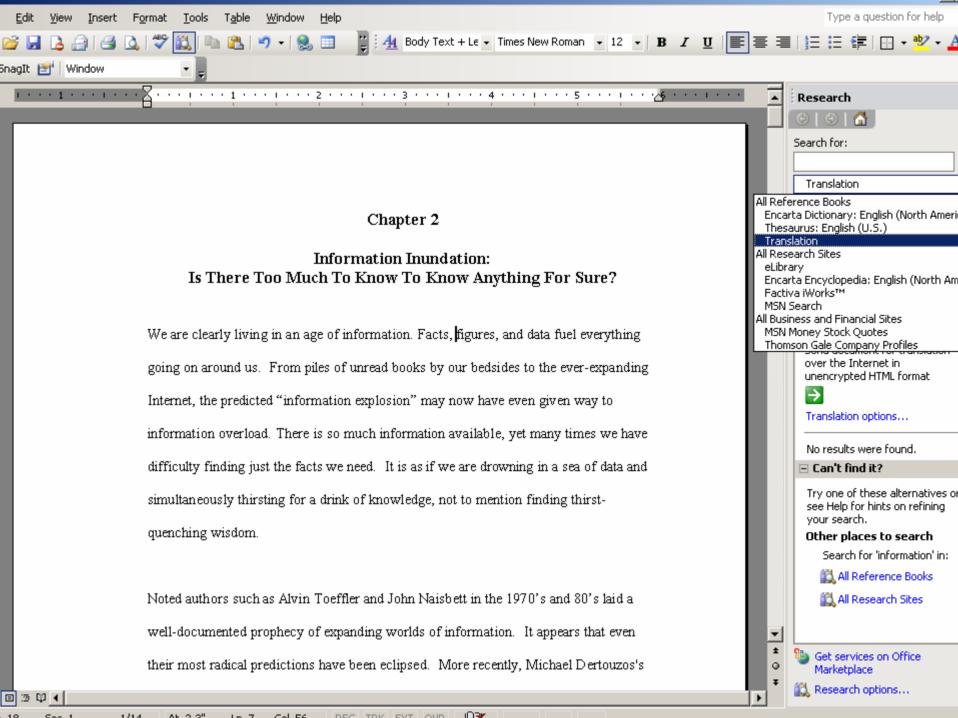
**Start** 

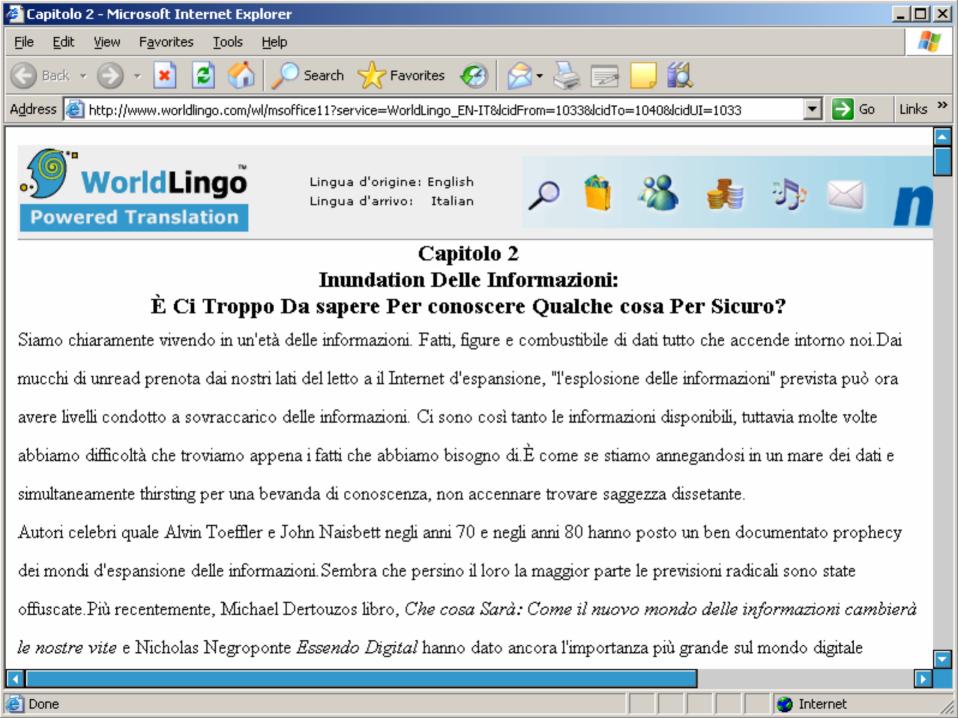
## But wait ---Let's talk a little more about research...

- Have you looked closely at your versions of Windows Office products?
- Have you found the < RESEARCH> button in Word 2003?
- Let's take a quick peek...









# And if we are going to talk about research...

We must mention the impact of



# Ten things GOOGLE has found to be true

- Focus on the user and all else will follow.
- 2. It's best to do one thing really, really well.
- 3. Fast is better than slow.
- 4. Democracy on the web works.
- 5. You don't need to be at your desk to need an answer.

# Ten things GOOGLE has found to be true

- 6. You can make money without doing evil.
- 7. There's always more information out there.
- 8. The need for information crosses all borders.
- 9. You can be serious without a suit.
- 10. Great just isn't good enough.

#### The Library place in all of this...

- Can we in the library world create a powerful ten items list like Google?
- If we create such a list, what would we do with it?

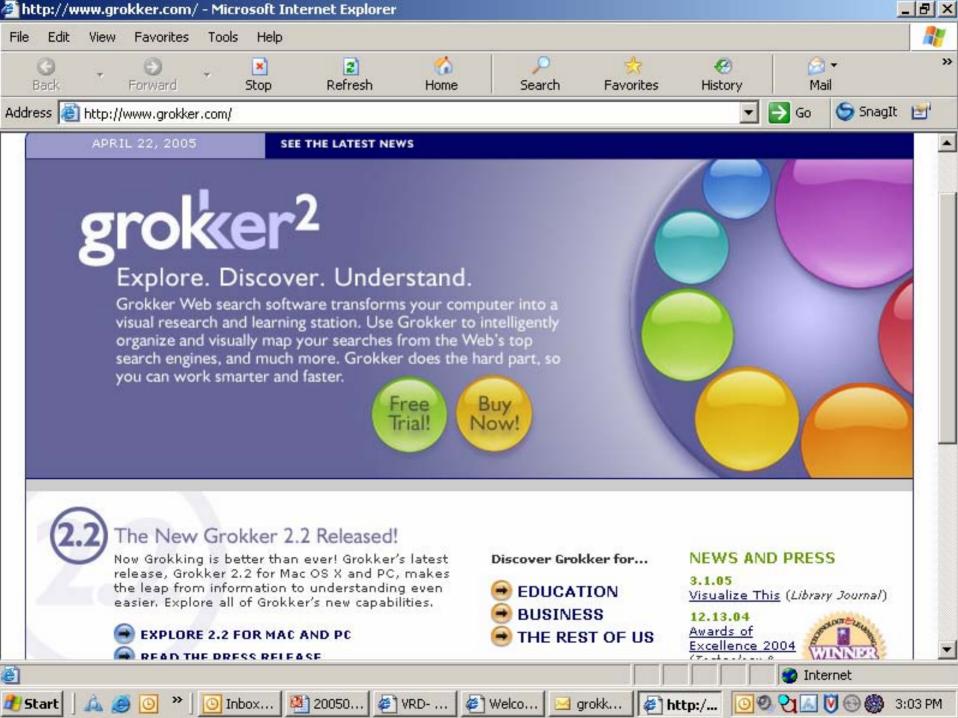
### **An Interesting Comparison:**

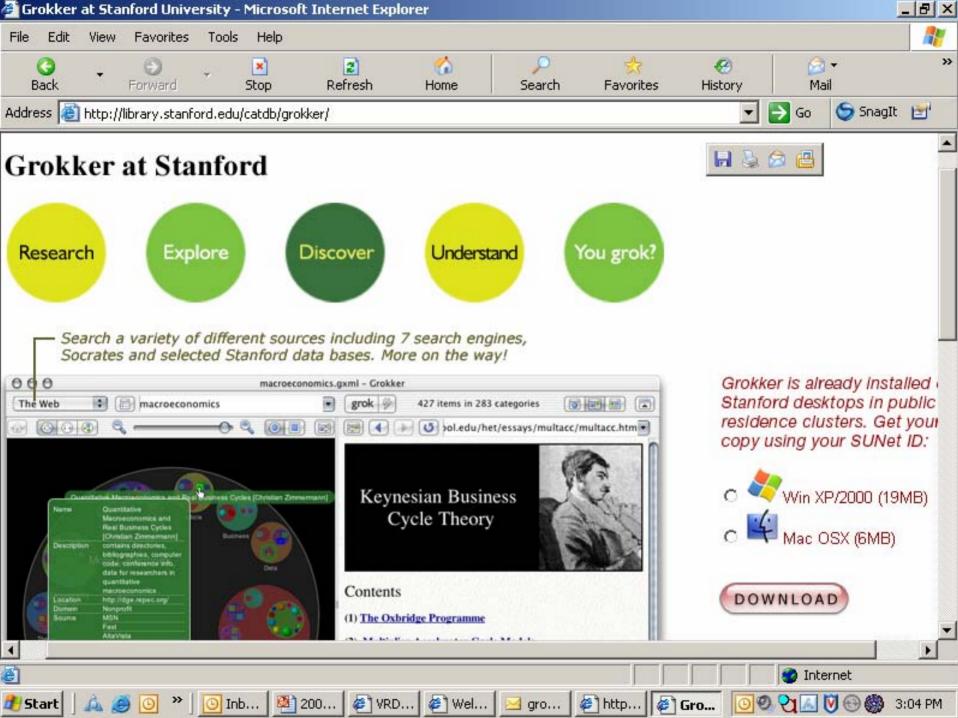
OCLC exists to further access to the world's information and reduce library costs by offering services for libraries and their users.

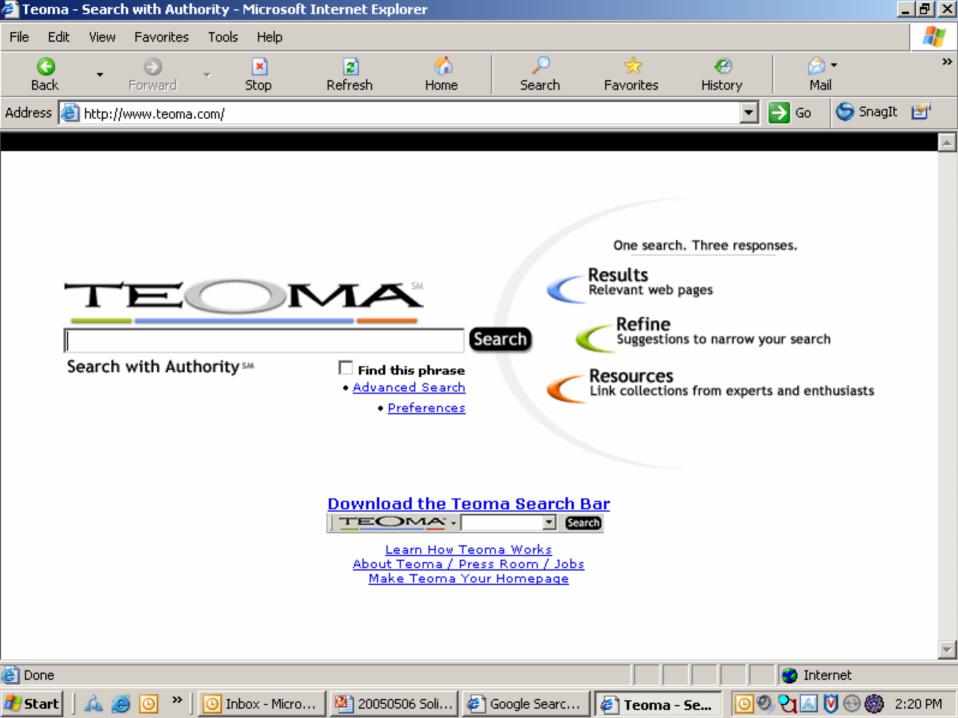
Google's mission is to <u>organize the</u> world's information and make it <u>universally accessible and useful</u>.

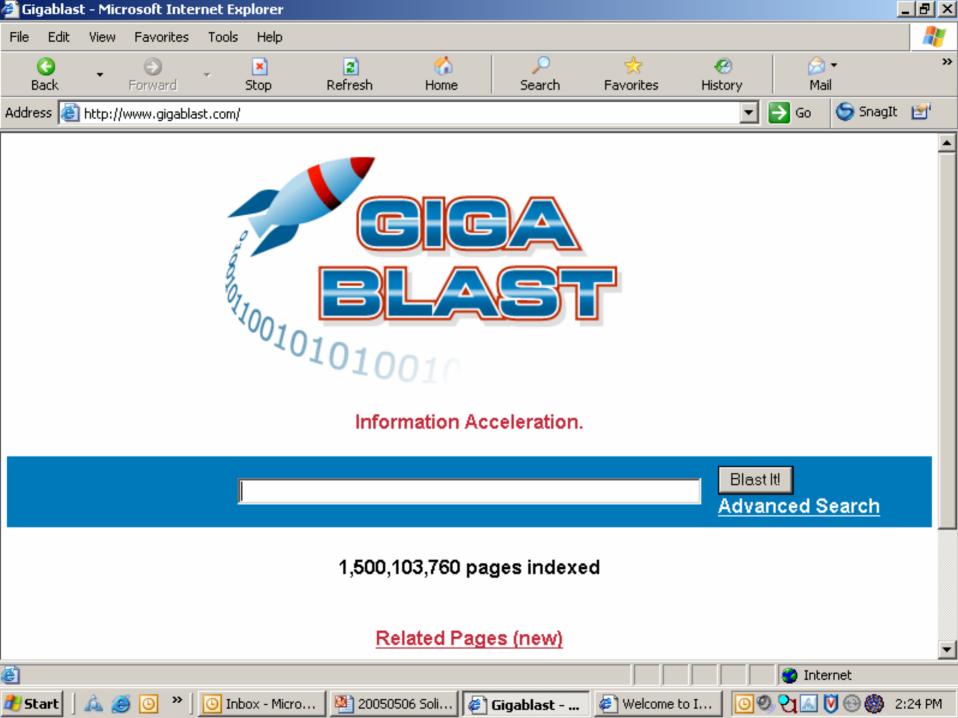
#### So... What's Next?????

- The Successor(s) to Google?
- Faceted Searching Approaches?
- Clustered Searching Approaches?
- Collaborative User based site building?
- **????**



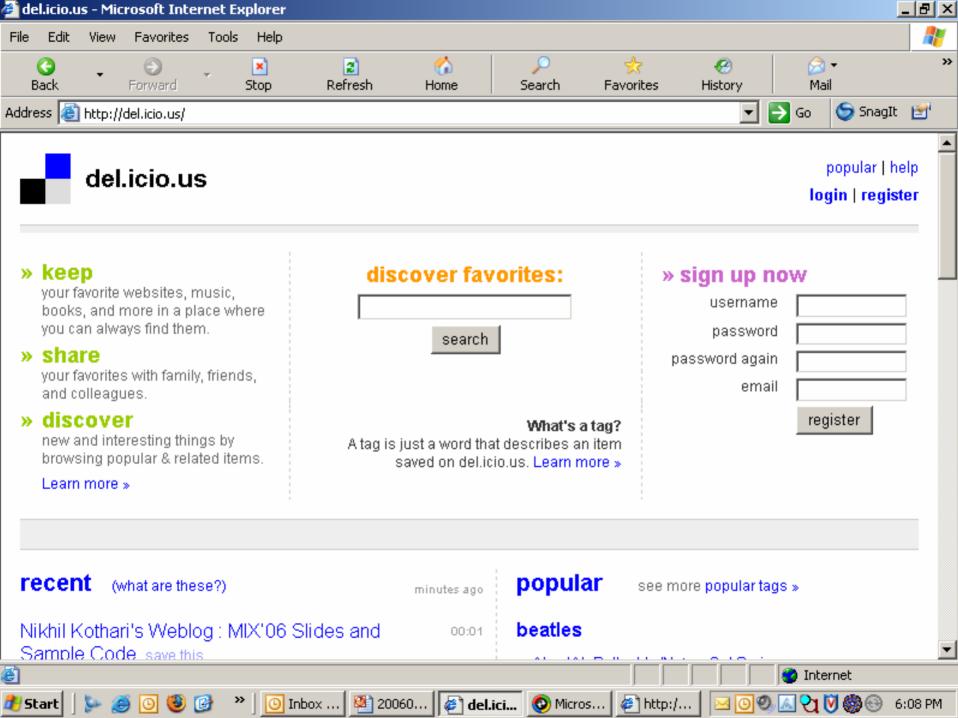


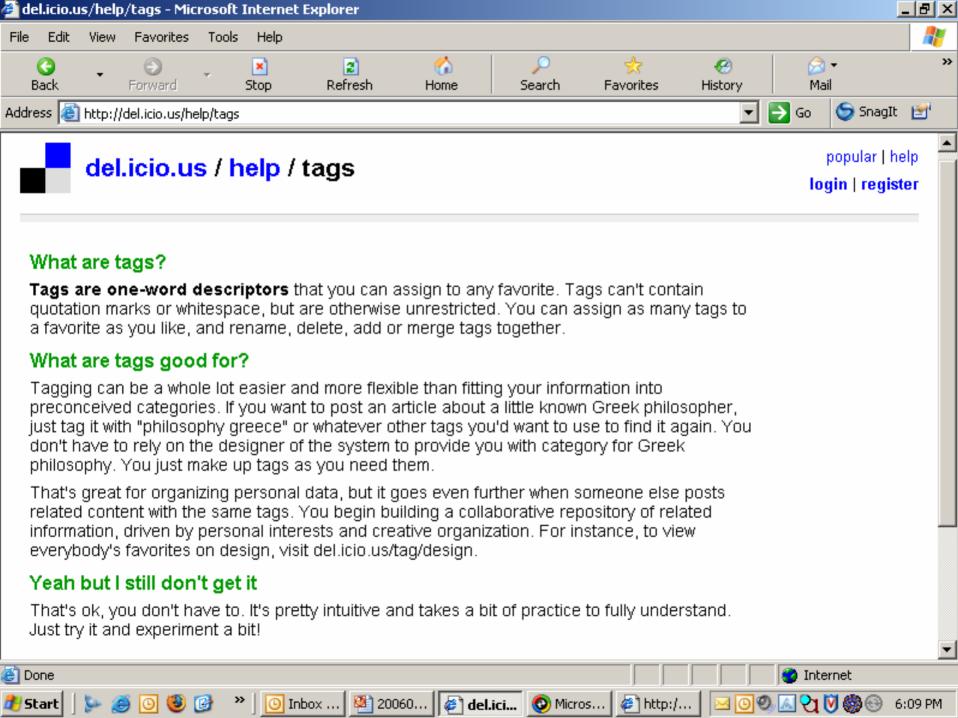


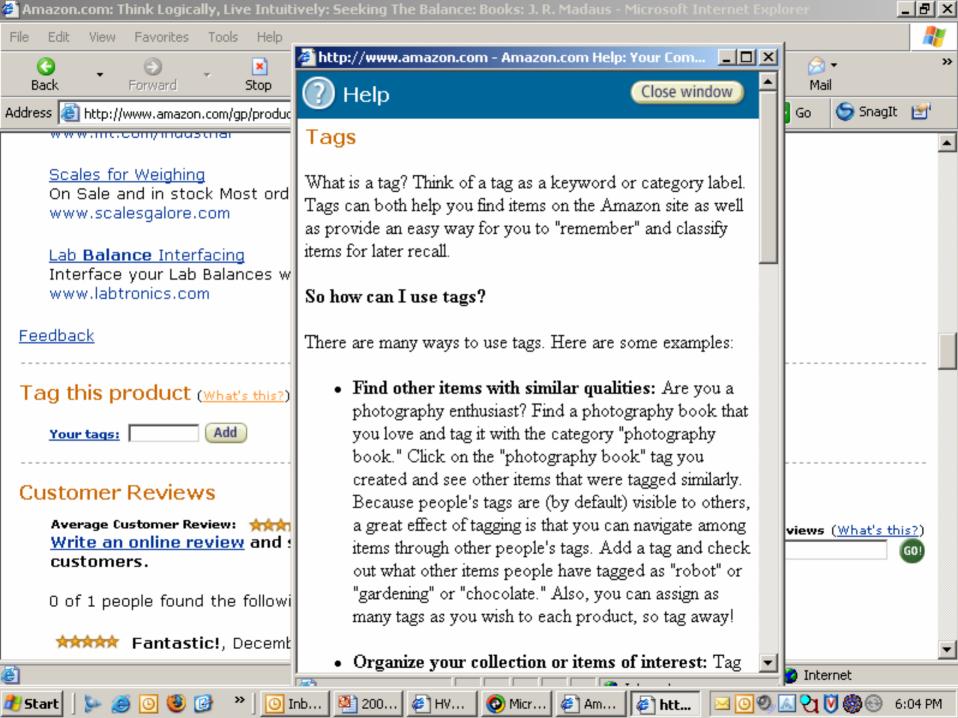


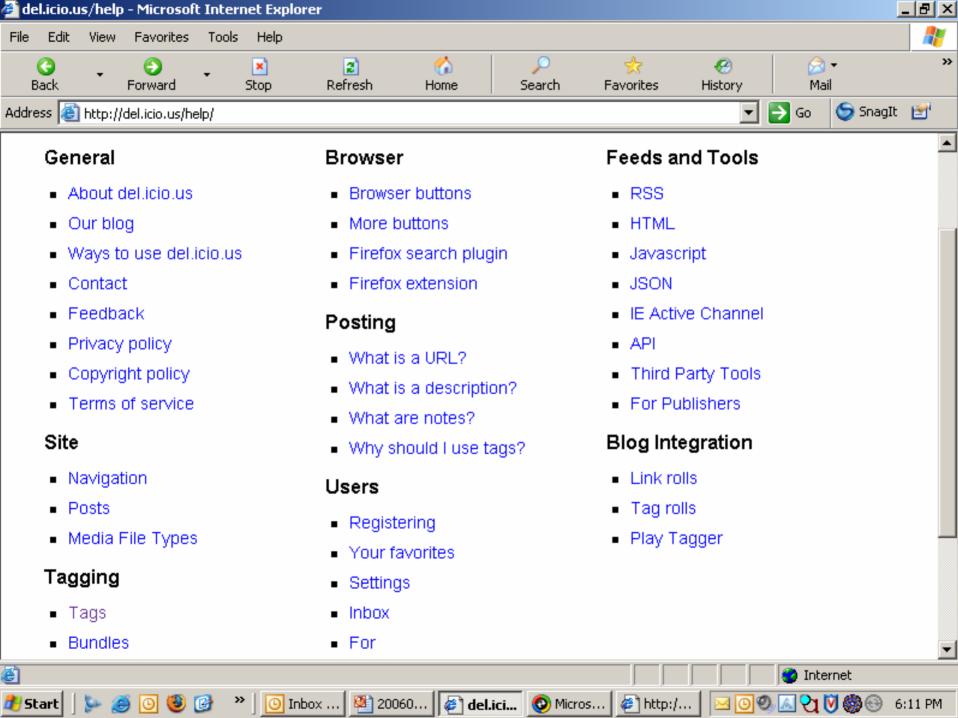
#### Big trends on the way...

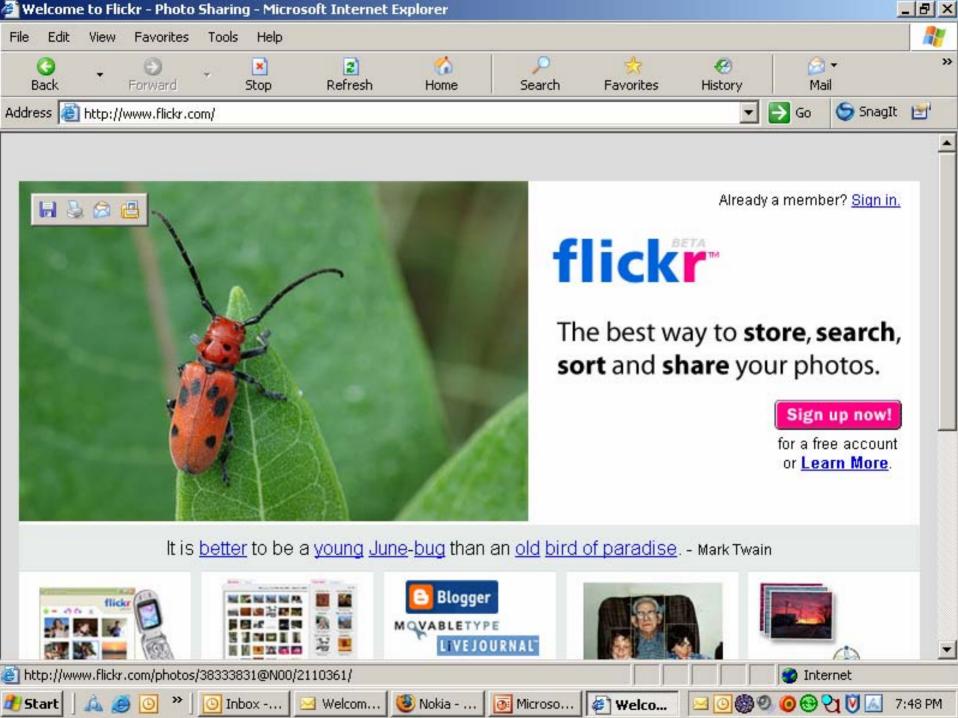
- User based meta-tagging
- Personalization moves to "steriod" levels
- Social software
- Pod casting Pod casting Pod casting
- **???**

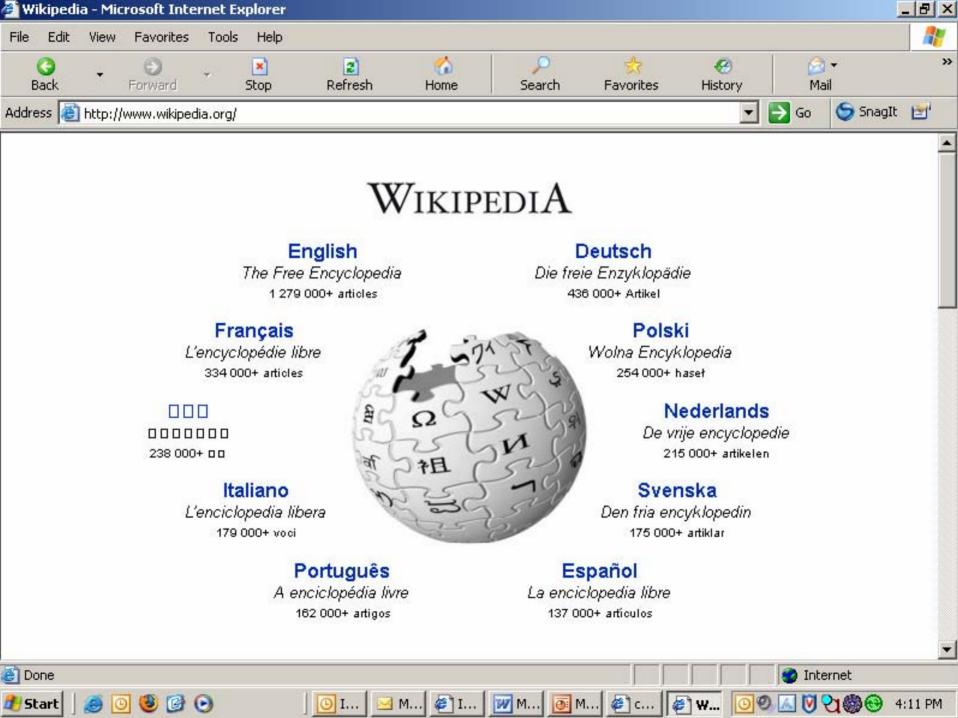










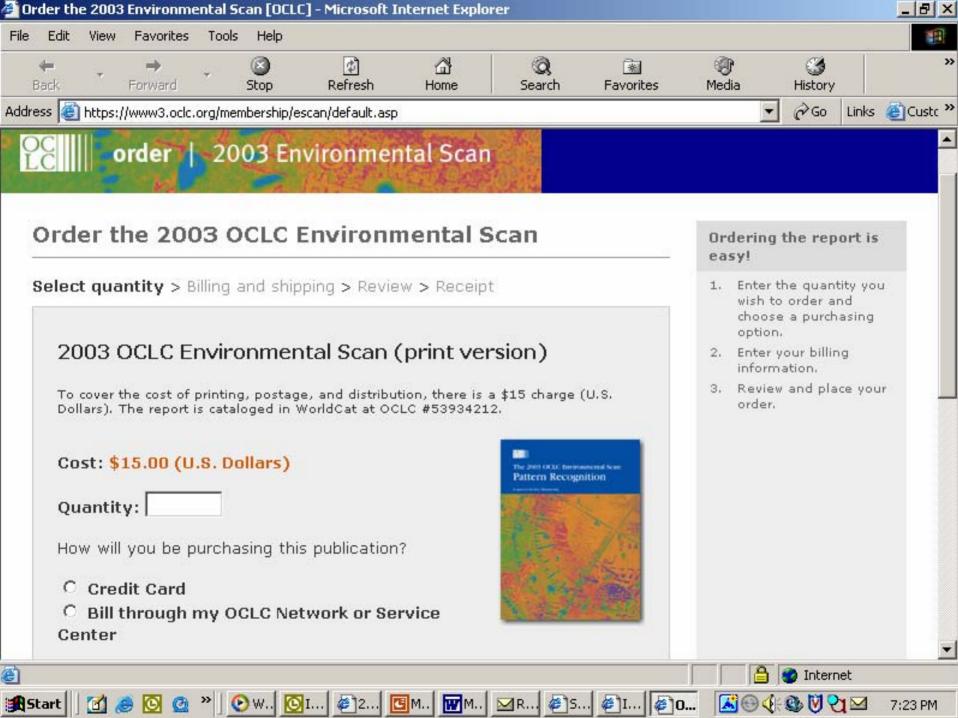






## Important Trends for 2006 - Some Core Things That Really Do Matter

- Realizing that the very latest "gizmos" will continue to change every few months
- Realizing that it's not about the technology, it's about the people! And the way they live
- Beginning to take REAL action on the critical need to move past the illusion of site bound librarianship



## OCLC *Marketplace Trends 2003* tell us that...

Information may now be viewed as being "good enough" by the user whether it is "THE" answer or not –

the user may no longer care about the level of authenticity, if the answer provided is "good enough" from their perspective.

### **Marketplace Trends 2006**

- The 2003 OCLC Environmental Scan is now a historical document
- Oh, by the way, that means it's old and in the past!
- So what should we expect in the 2008 Environmental Scan?

#### But Wait --- there's more!!!...

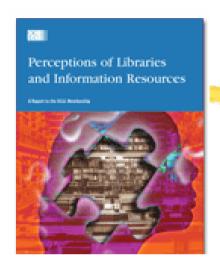
Library use

Awareness and use of library electronic resources



 Part 4: Respondents' Advice to Libraries (PDF; 284kb)

Part 5: Libraries--A "Universal"



# Perceptions of Libraries and Information Resources (2005)

The findings indicate that information consumers view libraries as places to borrow print books, but they are unaware of the rich electronic content they can access through libraries. Even though information consumers make limited use of these resources, they continue to trust libraries as reliable sources of information.

# How much do WE *Allow* the new technologies to change our services?

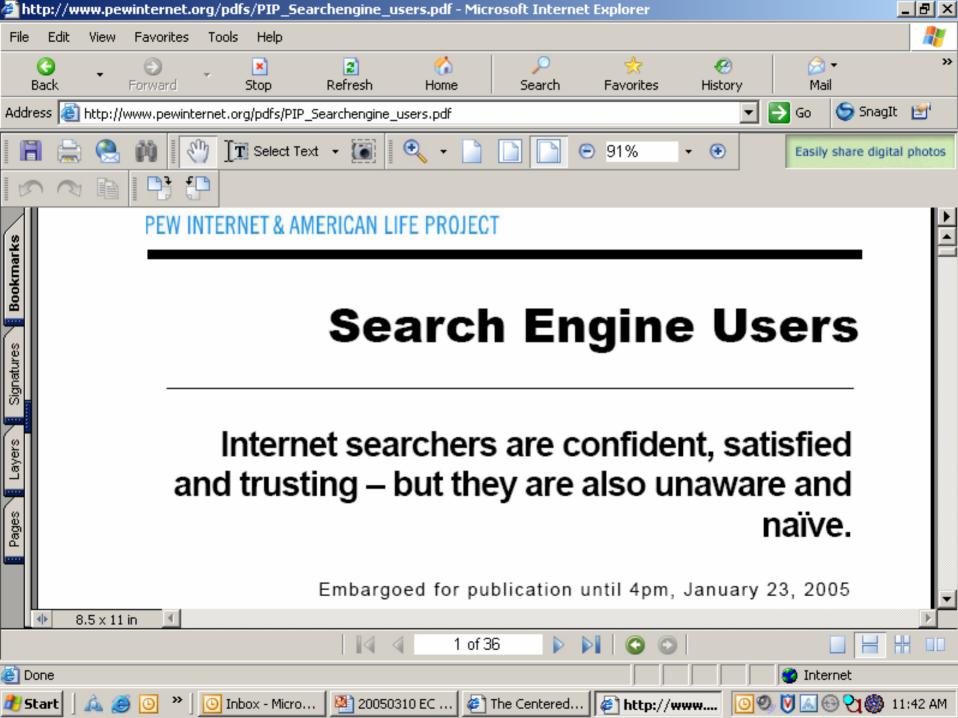
- How much do we *really* know about the information seeking/using habits of the popular culture in the world around us?
- How much of popular cultural behavior has real implications for library services?
- And what actions do we take based on what we think we now know?



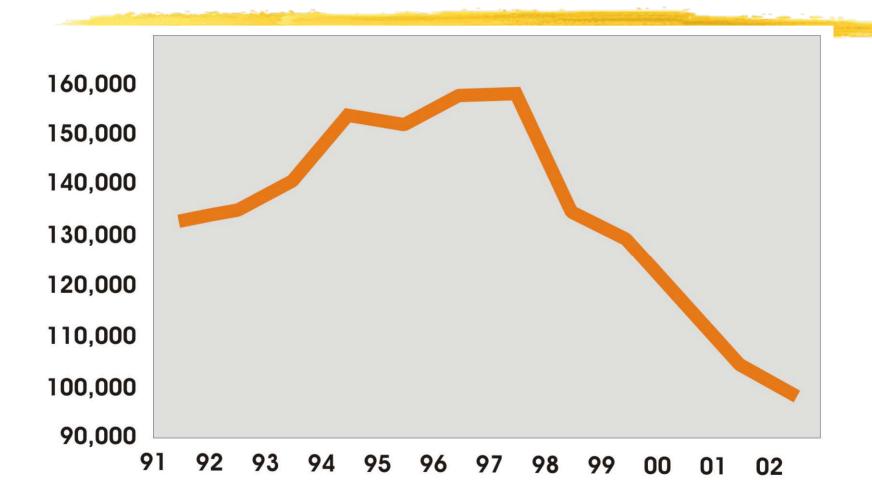
Table 5: Comparing online information searching to library use	
Use internet more than library	73%
Use Internet and library about the same	16%
Use Internet less than library	9%
Don't know	2%

Source: Pew Internet & American Life Project College Students Survey, n=1032. Margin of error is  $\pm 3.5\%$ .

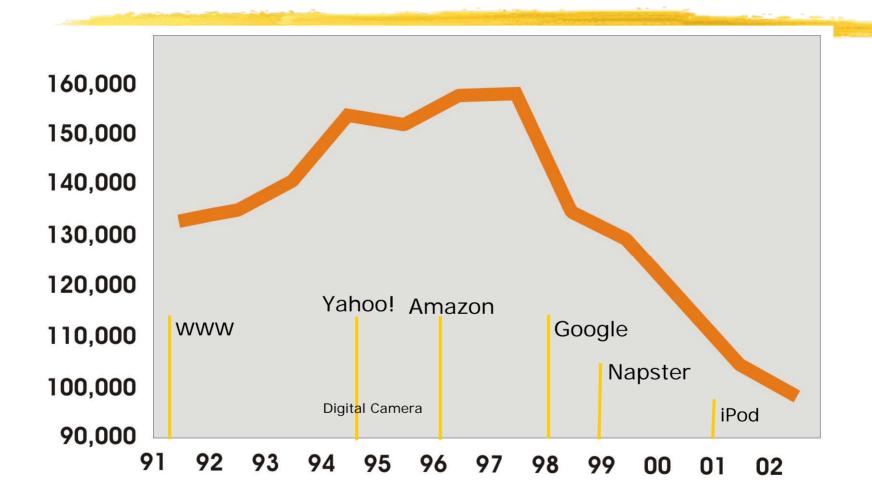
Jones, Steve. The Internet Goes to College: How students are living in the future with today's technology. Pew Internet & American Life Project, Washington, D.C., 2002.



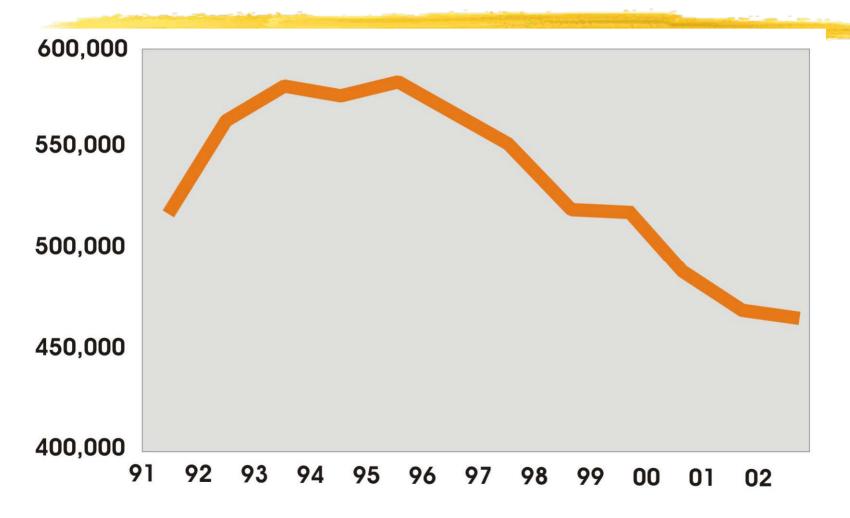
#### **Total reference transactions**



#### Total reference transactions



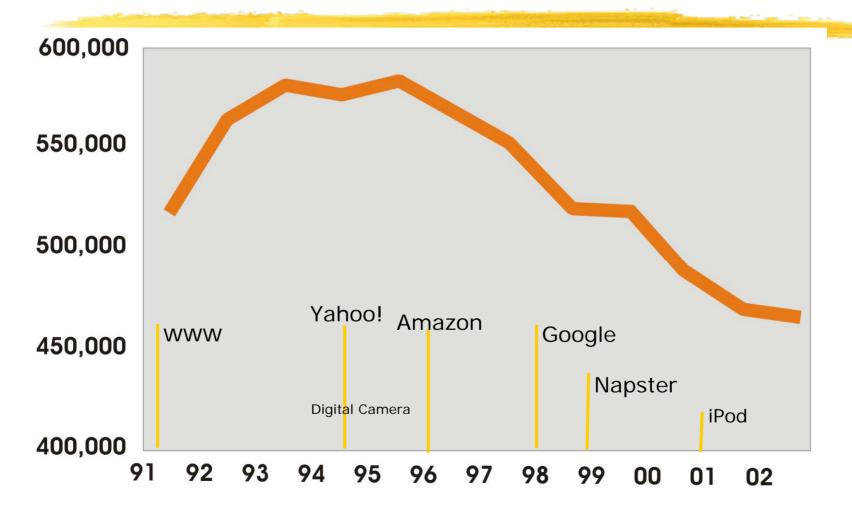
#### **Total circulation transactions**



Association of Research Libraries www.arl.org

Note: M. Kyrillidou and M. Young. (2002). ARL Statistics 2000-01. Washington, DC: ARL, p.7.

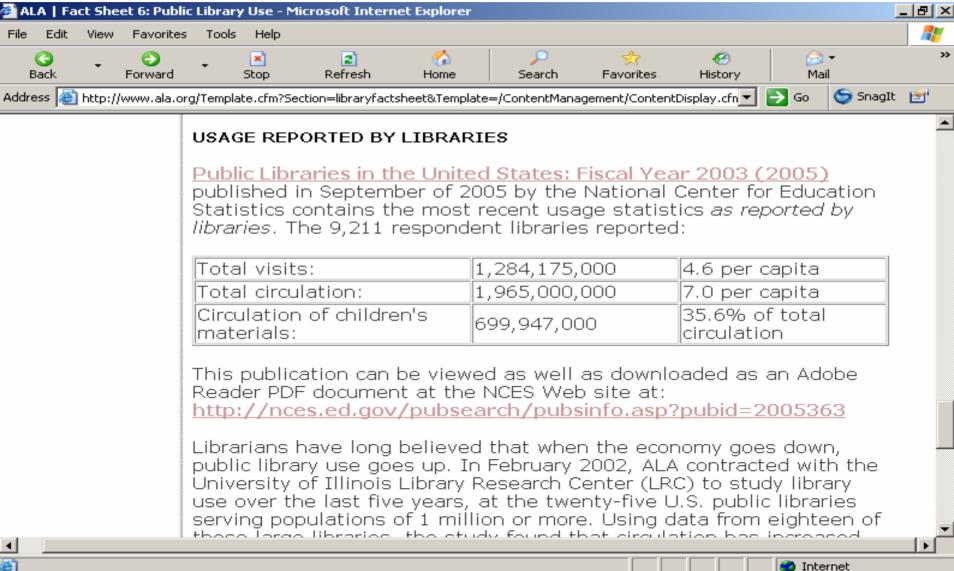
#### **Total circulation transactions**



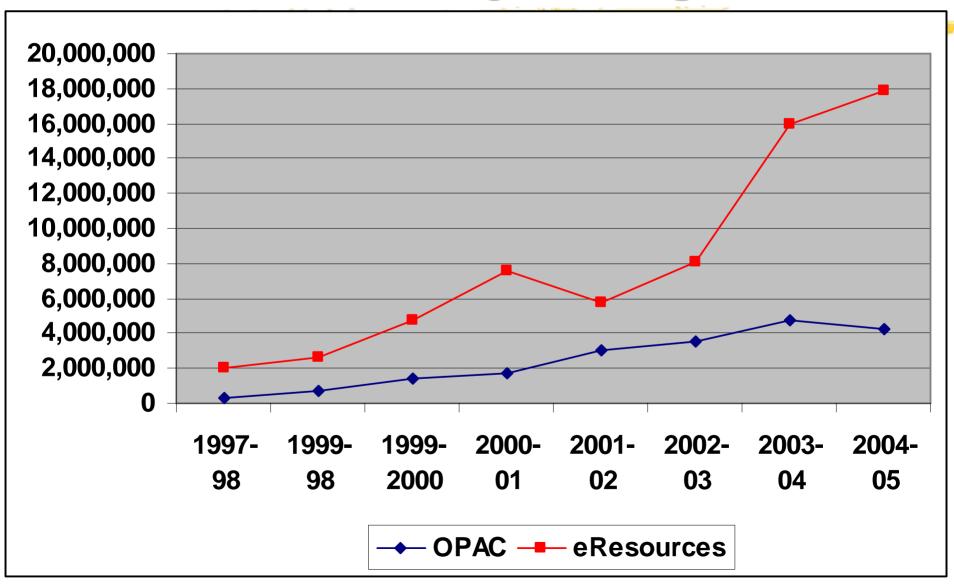
Association of Research Libraries www.arl.org

Note: M. Kyrillidou and M. Young. (2002). ARL Statistics 2000-01. Washington, DC: ARL, p.7.

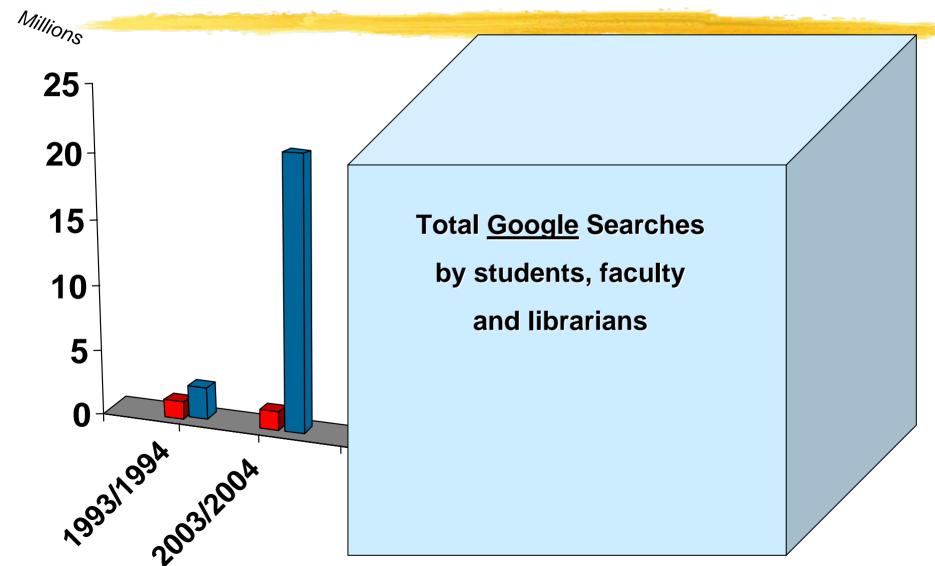
# Yet, at the same time public library use is going through the roof



# E-Resource use vs. OPAC use -- Florida Community Colleges



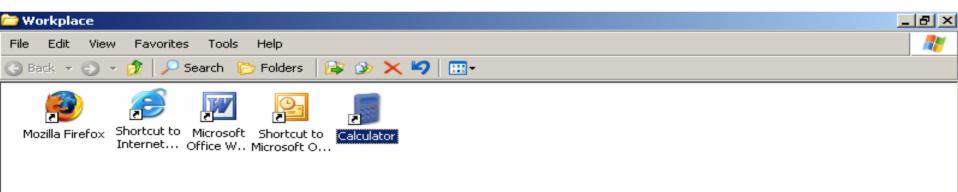
#### Ten Years of Activity: Print vs. Electronic



# Taking a closer look at the users in the overall Infomarket

- How can we best serve users that seek information through Google as a starting point?
- How many of us start with Google?
- How many of us are Wikipedia users?
- Where do we fit?
- Where CAN we fit?

When digital immigrants (that's us folks) use a PC, the main focus is e-mail, word processing, and a bit of Web searching



- When digital natives (the Millennials") use internet capable devices (PC's, Cell phones, PDA's etc) they are "connected to the world"
- it is a lifestyle
- -- formats don't matter just more files to be manipulated

- Now, One more time for clarity For "Millennials":
  - > It's not a book
  - It's not a picture
  - > It's not a video
  - > It's not an CD audio
  - > It's not a document

#### It's JUST ANOTHER FILE!

- How do libraries become relevant for "Millennials"?
- We must realize that:
  - > It's not an e-book
  - > It's not a journal
  - > It's not an online database
  - > It's not a newspaper

It's JUST ANOTHER SCREEN!

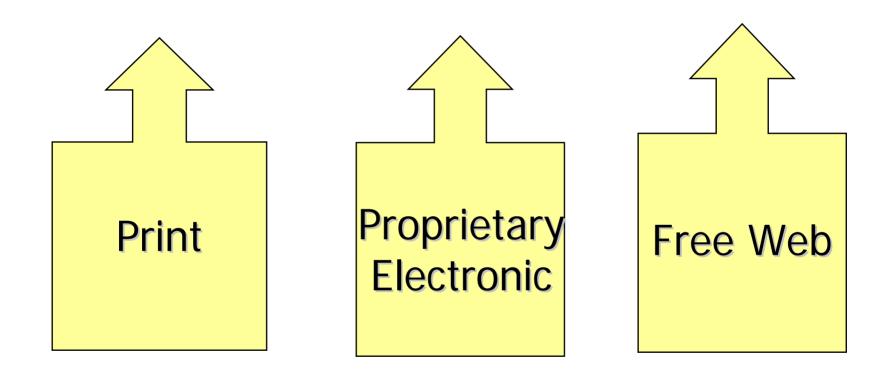
### The Library place in all of this...

- We have a lot to offer, but we must be noticed first!
- Can we move fast enough?
- And how do we do any of this with no additional resources?

## Traditional library roles in the Infomarket still remain

- Access (proprietary and free)
- Assistance (off-site and in-person)
- Instruction
- Collection Building (print and electronic)

# Multiple Foundations of Information Resources Supporting Library Services



# New implications *demanding* our attention

- Information is no longer site bound
- Information support services (like libraries) have been traditionally site bound
- The more that becomes available electronically, the more that is expected to be available already
- The library role in the overall information marketplace is increasingly less secure

# New implications *demanding* our attention

- A Website is not enough we must begin establishing a lifestyle presence for libraries in "Webspace"
- The PC democratized data processing, The Internet is "de-institutionalizing" information

# New implications *demanding* our attention

- Why do we think that our users want information in the containers we provide?
- We need to understand that information "foraging" is a valid lifestyle practiced by most of our culture?
- When people think of the Internet as a lifestyle, do they still think of the library as a place?

# Points for libraries to consider in the changing Infomarket

- Providing service to users you may never see
- Thinking in terms of "market share"
- Collaboration being the long term key for library survival

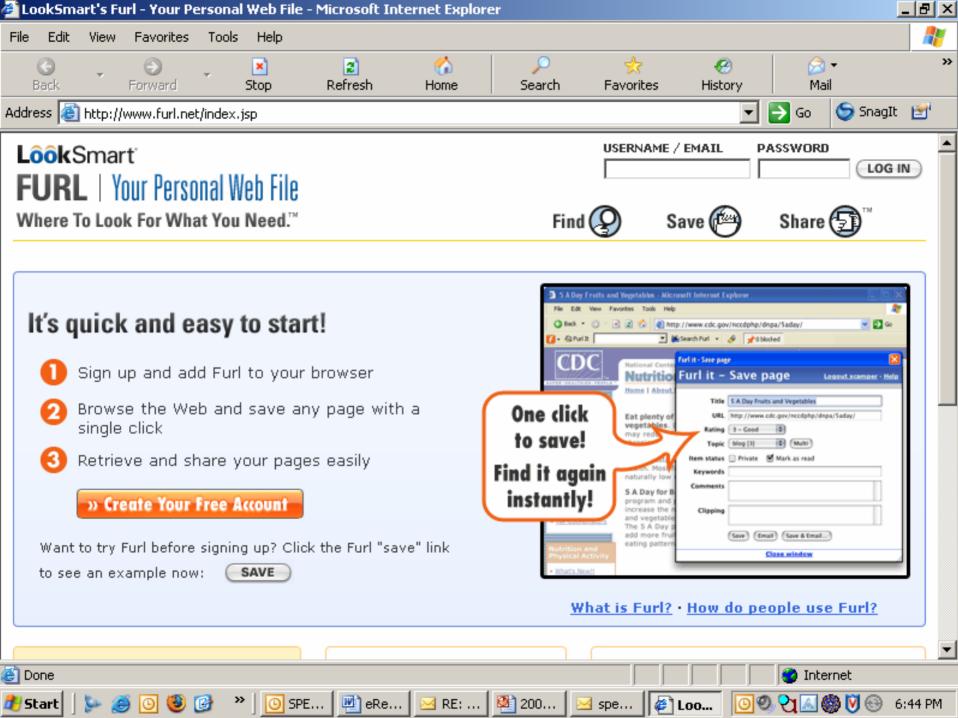
# Points for libraries to consider in the changing infomarket

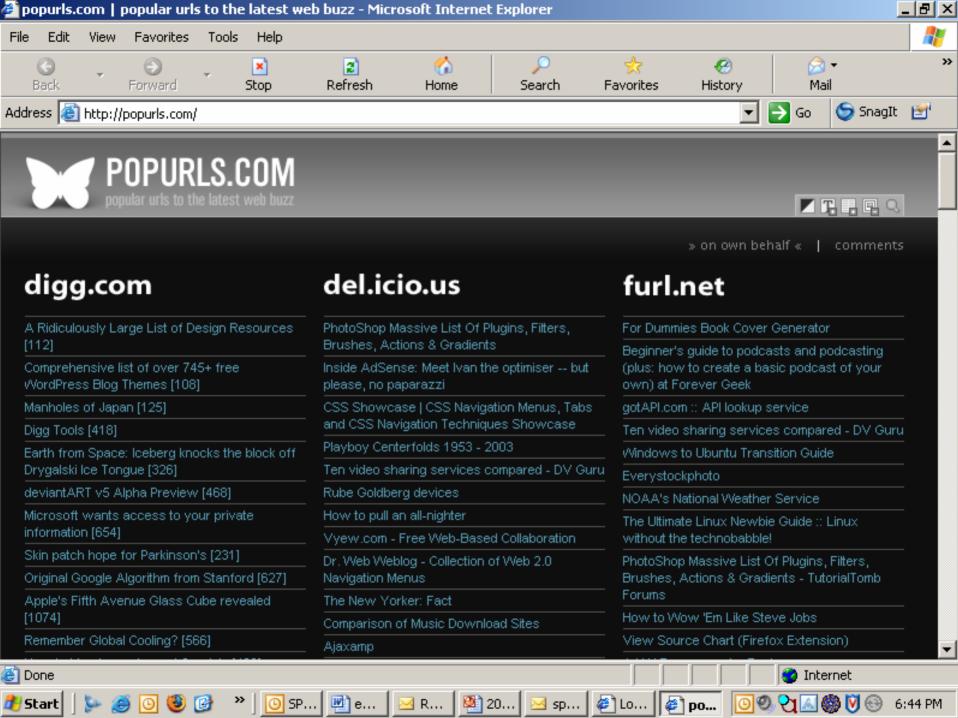
- Collaborating for digitization projects
- Collaborating for online reference services
- Collaborating to create large scale online collections of e-content
- Collaborating for harvesting and meta-tagging projects
- Collaborating to train for the future
- Collaborating for all the reasons that libraries have always been the models of cooperation

# Points for libraries to consider in the changing infomarket

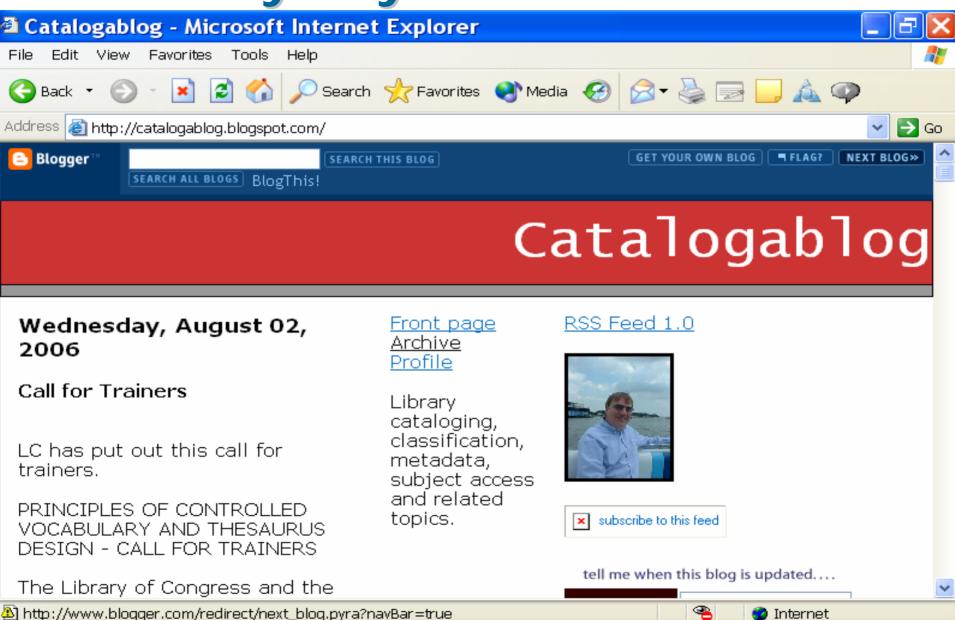
- How many of the following do you regularly use?
- And similarly how many of your users live in this space?







## How many of your staff use this?



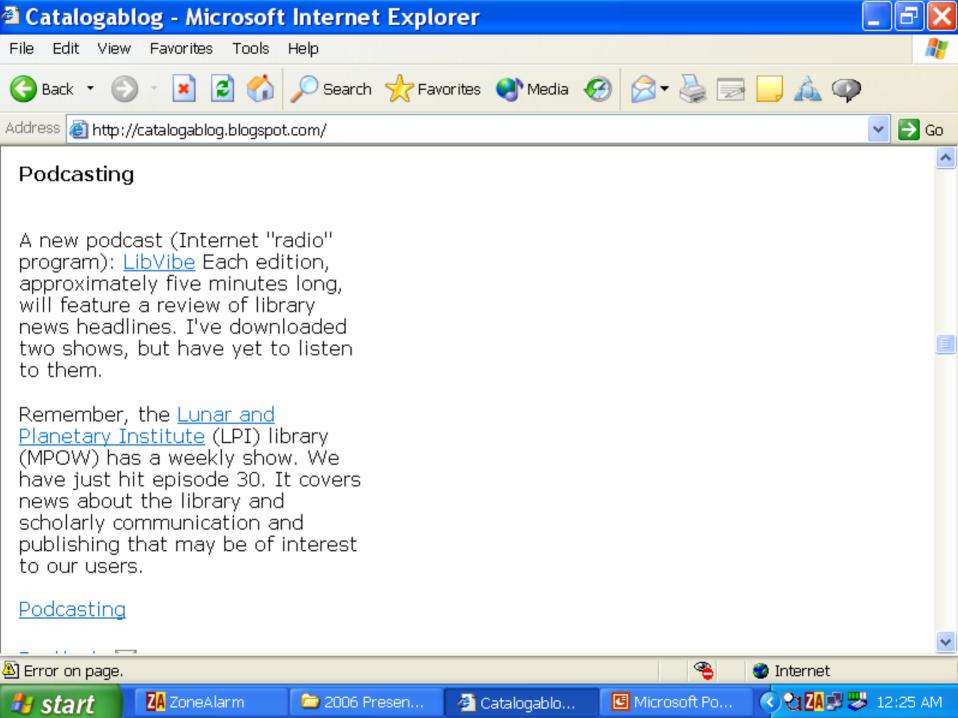
Catalogablo...

ZA ZoneAlarm

🎒 start

2006 Presen...

Microsoft Po...



### A challenge from youth?

Current teen-age slang term:

"TMI"

Meaning "Too Much Information" – you are telling me more than I want to know. Please stop.

"It is not the strongest of the species that survives, nor is it the most intelligent, but those who are most responsive to change."

-- Charles Darwin

"Change is just plain exhausting!"

> -- Cathy De Rosa January 26, 2005

## Now it's up to you to do the really hard work – thinking and planning for our future...

thank you

for your interest

and attention.