E-Business
Publishing and Collaboration

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The World Wide Web
An Authoring-Publishing system

- The original model for the web was a collaborative authoring environment
- The goal was to support sharing of research at CERN
- Mosaic developed an open model that only supported dissemination

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Overview

- Commercial Publishing
  - Publishing models
  - Examples
  - Issues
- Corporate Publishing
- Collaboration
  - Document based collaboration
  - Collaboration beyond documents

Bit Businesses

- Bit businesses are businesses that are essentially in the business of selling bits
  - Publishing companies
    - Books and magazines
    - Music
    - News
  - Educational institutions
  - Banks and brokerages
  - Consulting firms

Electronic publishing as a Bit Business

- Publishing is a classic bit business
- From a traditional publishing point of view
  - Manual reprographics $M*C*cpm$
  - Mass production reprographics $M*cpm+C*cpc$
  - Electronic reprographics $\sim 0*cpm+C*cpc$
  - Ad hoc reprographics $\sim 0*cpm + \sim 0*cpc$
- In electronic publishing, exchanges can be completely disintermediated

Web Publishing Models

- There are at least four basic publishing models on the web
  - Commercial publishing
  - In-house publishing
  - Peer reviewed publishing
  - Peer to peer publishing

Commercial Applications

- News services
- Reference materials
- E-books
- Intelligence Applications
  - Best of practice
  - Competition
- Aggregators and Distributors

Experiments on the Web

- Major news sources – NY Times, Wall Street Journal, CNN, MSNBC
- Archives – Ziff Davis, Dow Jones, Lexis/Nexis, EDGAR
- Pointcast (www.entrypoint.com)
- Ebooks – www.1stBooks.com

Free Access to
daily news

•Free alert service – for now

The New York Times

NYC
Weather
64° F

MONDAY, JUNE 5, 2000 | Site Updated 3:10 PM   E-Mail Updates

Supreme Court Rules Against
Grandparents on Visitation

By DAVID STOUT
NYT UPDATE, 12:50 P.M.
The Supreme Court curbed states'
power to help grandparents visit
their grandchildren against parents'
wishes. Go to Article
• Court Disputes Tax Charge Against Hubbell

How Race
Is Lived in America
The second article of a
series.

Clinton Tells Russian Deputies
U.S. Alliance Is Not Ensured

By MICHAEL R. GORDON WITH ELAINE
SCIOLINO
NYT UPDATE, 1:20 P.M.
President Clinton told Russian

Best of Friends,
Worlds Apart Joel
Ruiz is black. Achmed
Valdés is white. In
America they
discovered it matters.
Go to Article

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Selected information pushed by email

E-Mail Updates FROM NYTIMES.COM

The New York Times

Thank you for signing up to receive e-mail newsletters from The New
York Times on the Web. For daily services, delivery will begin in the
next day or two, depending on the time of day you signed up. Other
services will begin with the next scheduled mailing.

DAILY HEADLINES
Today's Headlines

E-MAIL FORMAT
Text format

YOUR E-MAIL ADDRESS
E-mail will be sent to the address shown.

spring@imap.pitt.edu

If you need to modify your selections, please return to the e-mail sign-up
page to make your changes.

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Archive/Research service for a fee

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Current News **Information Tech. Resources**

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IT Resources on E-Commerce

Not so free business intelligence

Push/pull pointcasting technologies

Keywords filter specific news
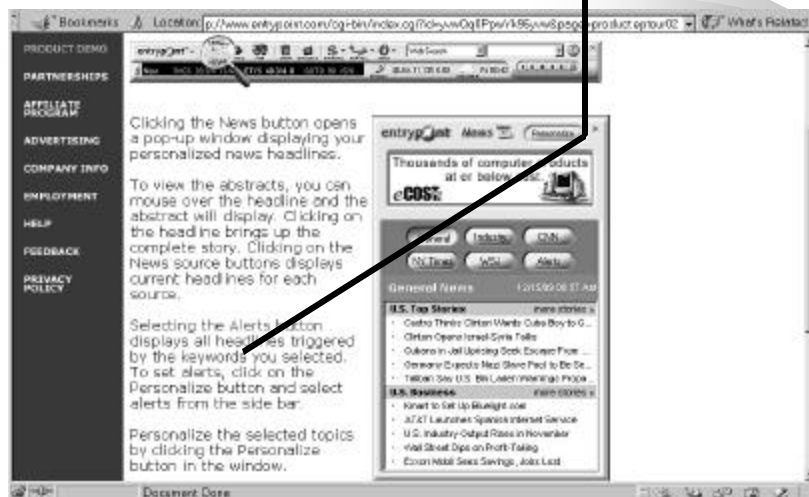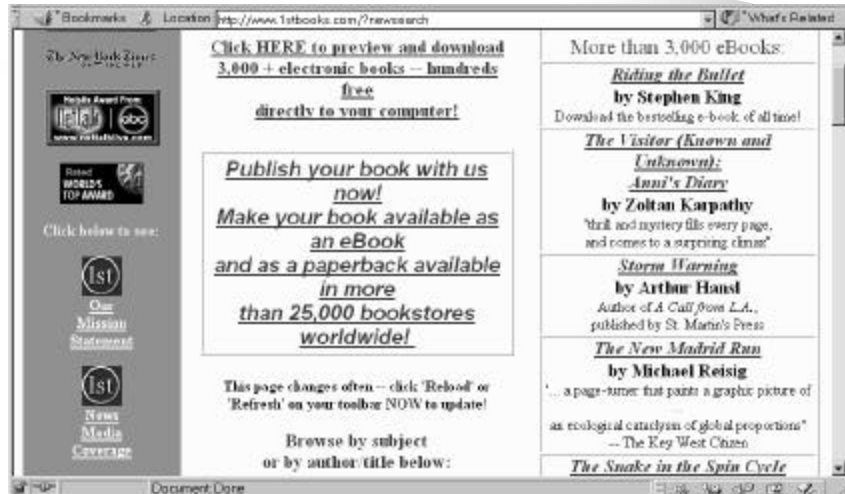
8

E-Book fee
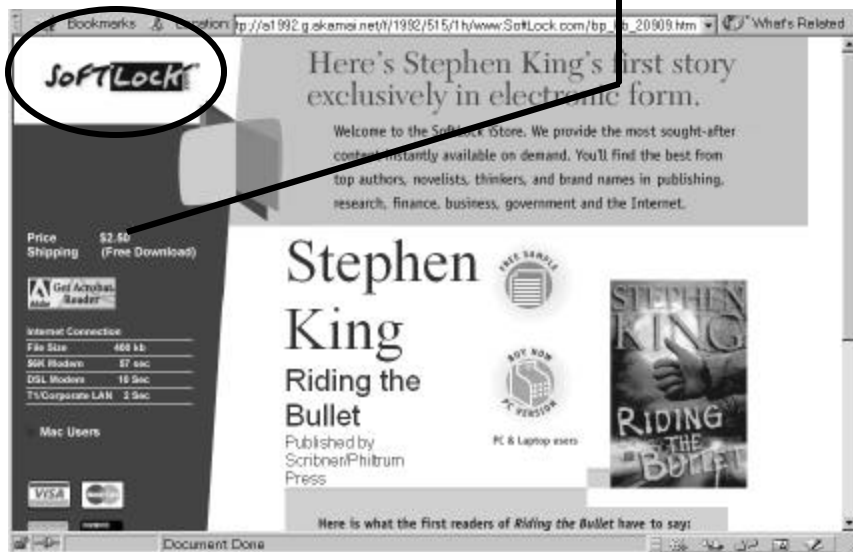
Reasons for
Web Publishing

- Pressure from competition
- Increased speed in time to market
- Widespread adoption by end users
- Existence of a paid for infrastructure
- Lack of mediation on the web

Issues and Opportunities in
Web Publishing

- Issues
  - Copyright – ease of copying, lack of protection
  - User attitudes – everything should be free
  - Micropayments and pay for use transactions
  - Brand loyalty, and niche marketing
  - Advertising fees
- Key opportunities
  - Time critical alerts, personalized preferences
  - Archival and reference collections

Advertising issues

- Advertising on the web is targeted and immediate and therefore more valuable
- Advertising is untested and therefore under subscribed
- Network externalities – amount and quality of information continue to increase
- Metrics and tools for measuring web access are continuing to improve

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Web Advertising Metrics

- Hits: server or page accesses
- Qualified hits: hits that deliver information
- Visits: hits by a given user over a small period of time
- Unique users: number of user over time
- Standard Impressions: number of times a banner is seen
- AdClicks: clicks on a banner

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Corporate Publishing
Every Businesses 2nd Business

- Design and specification documents
- Reports
- Competitive intelligence
- Catalogs and marketing materials
- Procedure and policy manuals
- Training materials

Corporate Publishing
Issues and Opportunities

- Regulatory requirements for access
  - Paper centric view
- Synchronization of information, e.g.
  - Hire date policies and order date pricing
- Training in maintaining
  - Putting it out is easy, keeping it current is hard
- Need for multiple forms
  - Some data must exist in multiple forms

Peer Reviewed Journals

- E-journals provide a faster time to market
- They provide the status of the organization to the articles published
- They maintain roughly the same load on editors and reviewers
- Almost 9000 journal and newsletters now exist in electronic form (gort.uscd.edu/newjour)
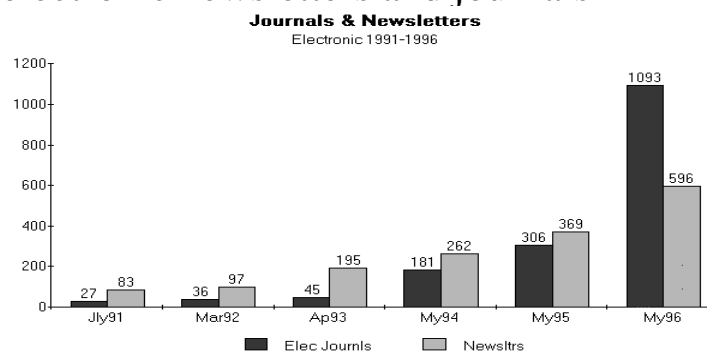
Growth of E-Journals

- There are currently more than 9,000 electronic newsletters and journals

Journals & Newsletters
Electronic 1991-1996

The Idea

You are looking at one of the first peer-reviewed journals on the Internet, about the Internet. First Monday expands the frontiers of academic publishing by combining the traditional values of peer review with publication on the World Wide Web.

Aim & Scope

First Monday publishes original articles about the Internet and the Global Information Infrastructure. First Monday has:

- followed the political and regulatory regimes affecting the Internet,
- examined the use of the Internet, by analyzing economic, technical, and social factors,
- reviewed research and development of Internet software and hardware,
- studied the use of Internet in specific communities,
- reported on standards, and
- discussed the content of the Internet.

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Collaboration through the Colorado Digitization Project
by Nancy Allen

Digital Workflow Management: The Lester S. Levy Digitized Collection of Sheet Music
by G. Sayeed Choudhury, Cynthia Requardt, Ichiro Fujinaga, Tim DiLauro, Elizabeth W. Brown, James W. Warner, and Brian Harrington

The Plant Information Center
by Evelyn Daniel, Peter White, Jane Greenberg, and James Massey

The Birth and Development of Find-It!: Washington State's Government Information Locator Service
by Nancy Zussy

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Educational and Training Applications

- Production of content materials
- Production of instruction
- Production of assessment instruments
- Development of new approaches to interaction
  - Instructor
  - Peers
  - Administrative systems

Collaboration on The Web

- Collaboration around documents
  - Metadata and namespace management
  - Authentication, locking, and versioning
- Collaboration beyond documents
  - Peripheral information
  - Social capital
  - Socialization

Collaboration around documents

- Documents have to be protected
  - Access, editing, annotating, voting
- Users have to be given rights
  - As individuals (authors) and as groups
- Document activity needs to be tracked
  - Accesses, actions, times
- Users need to be connected
  - Formal and informal communications, awareness

Collaboration beyond documents

- Who is around
  - Are they available
  - Do they have knowledge
- What needs to be done
  - When does it need to be done
  - Can I help with it