Personalization of Digital Information Services

Yaşar Tonta

Hacettepe University

Department of Information Management

Ankara, Turkey

tonta@hacettepe.edu.tr

yunus.hacettepe.edu.tr/~tonta/tonta.html

Y.T.

Outline

- Industrial Society vs. Information Society
- Collection management
- Disintermediation
- Personalization of digital information services
- Issues
- Conclusion

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Production Factors

- ❖ Labor

- ❖ Capital

- ❖ Knowledge

- ❖ Labor + material = **economic success**

- ❖ Material and service management is most important in the Industrial Society

Industrial Society

❖ **Mass production**
– Standardized goods and services
– "Any customer can have a car painted any color that he wants, as long as it's black" (Henry Ford)

❖ **Mass distribution**
– Newspapers, radio-TV, etc.

❖ **Competition**
– In US: 260 different brands of cars, 87 colas, 3000 beers, 340 cereals, 50 bottled water, etc.

❖ **"Make, store, sell"** (Mitchell M. Tsang)

❖ **"The Age of the Terrific Deal":** "as you want them", "from anywhere", "at the best price and highest quality" (Robert R. Reich)

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Organization in Industrial Society

- Based on mass production and mass distribution
- "Mechanistical organization"
- "Continuous development"
- Traditional education and training
- Rigid / hierarchical adminsitration
- Economic models based on centralization

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Knowledge . . .

- ❖ "None of the sources that are used to create wealth is as important as knowledge."

- ❖ Knowledge → "lifeblood of development"

- ❖ Knowledge → the *sine qua non* of competition

Information Society

- ". . . pre-automation technology yields standardization, while advanced technology permits diversity."

- "Unstandardized" goods and services (Toffler, 1970s)

- Cheaper to produce personalized goods and services using advanced IT: ". . . as technology becomes more sophisticated, the costs of introducing variations declines" (Toffler 1970, p. 236)

- "Sell, make, deliver" (Mitchell M. Tsang)

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Organization in Information Society

- Based on mass customization and personalization
- Mass customization is an indication of a rich and complex society.
- "Dynamic organization"
- Customer focused education / continuous education
- Loose / horizontal administration
- Economic models based on customization

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Customization / Personalization

❖ Customization

– Changing or customizing goods and services according to customers' needs

❖ Personalization

– ". . .selecting and filtering information objects or products for an individual by using information about the individual." (Koch, Möslein, Schubert, 2002):

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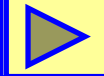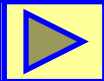
Information Services & Internet

- ❖ Removal of temporal and spatial barriers

- ❖ Provision of information services to remote users (24X7)

- ❖ "Instant gratification"

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Collection Management

- ❖ Increasing costs of information sources

- ❖ One source – one user → One source – multiple users

- ❖ "Ownership vs. access"

- ❖ Ownership dictates use of centralized information management models

- ❖ Budgets devoted to electronic information resources increasing (%15-%20)

- ❖ Cooperative/consortial collection management practices

Increasing Costs

Graph 2
**Monograph and Serial Costs
in ARL Libraries, 1986-2000**

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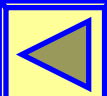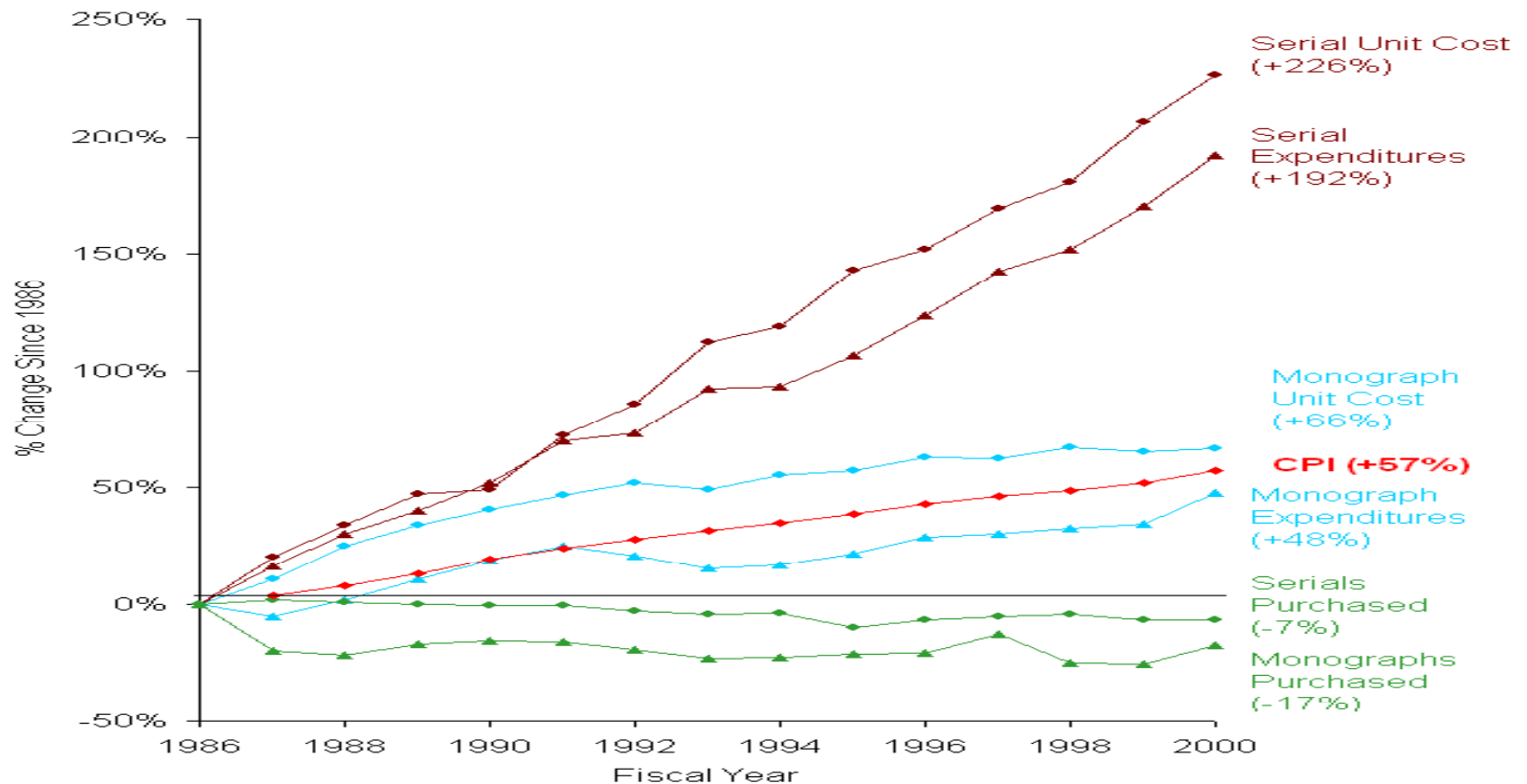
Collection Manager's Responsibilities

- Separate policies of licensing, processing, maintenance, storage and usage

- "Interdependence" on other information centers, library consortia, information producers/providers and aggregators
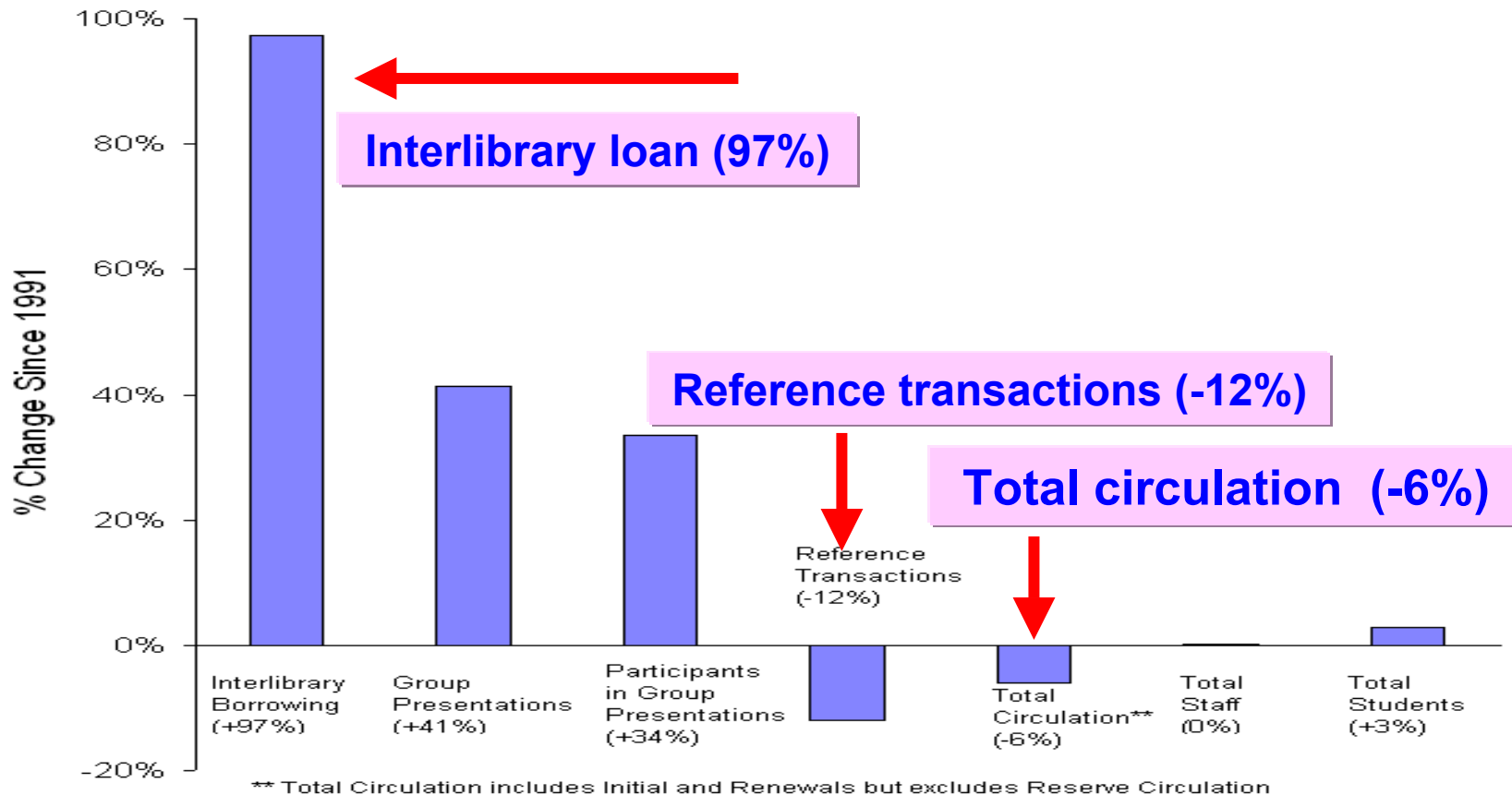
Disintermediation

- Intermediation
  - requires centralization
  - is expensive
  - usually means long lines
  - doesn't serve remote users
- IT makes information management less centralized, more distributed
- Disintermediation
- Increase in interlibrary borrowing transactions
- Decrease in reference and circulation transactions
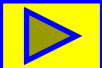
Impact of Remote Access
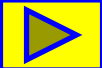
Graph 1
Service Trends in ARL Libraries, 1991-2000

Interlibrary loan (97%)

Reference transactions (-12%)

Total circulation (-6%)

% Change Since 1991

Interlibrary Borrowing (+97%)
Group Presentations (+41%)
Participants in Group Presentations (+34%)
Reference Transactions (-12%)
Total Circulation** (-6%)
Total Staff (0%)
Total Students (+3%)

** Total Circulation includes Initial and Renewals but excludes Reserve Circulation

Personalization of Information Services

❖ Explicit / implicit personalization

❖ Active / passive personalization

❖ Personalization of display environment

❖ Personalization of collections / content

❖ Personalization of services

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MyLibrary

MY LIBRARY
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Welcome back, Debby!   (about MyLibrary | customize profile | logout)

Enjoy two days of readings and book signings during University Authors Days, January 30 and 31, 2001, in the D. H. Hill Library.

The NCSU Libraries is celebrating the career of N.C. Commissioner of Agriculture Jim Graham with an exhibit in the D. H. Hill Library and a virtual exhibit.

Research Library of the Future Panel Discussion: Join a panel of faculty, students, and administrators at a brown bag lunch to discuss this topic, Feb. 8, 11:15 A.M. to 12:45 P.M., Faculty Senate Chambers, D. H. Hill Library.

Message from my Librarian (about)

ALA Midwinter Meeting 2001

It's time to make plans for the ALA Midwinter Meeting 2001 if you haven't done so already! This year's meeting runs from January 12-17, 2001, in Washington, D.C.

11/20/00

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1. Australian Institute of Management
2. herc
3. Info Today, Inc.
4. Internet Public Library
5. Library of Congress
6. NTU Library
7. Oak Ridge National Laboratory
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11/20/00

7.   Oak Ridge National Laboratory
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My Librarian(s) (about)

For information needs contact: Susan Baker
(515-2936, SusanE_Baker@ncsu.edu).

To request a purchase contact: Peter Fritzler
(513-2990, peter_fritzler@ncsu.edu).

Library Links (about | customize)

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4.   Electronic Resources by Subject
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8.   NCSU Libraries Virtual Reference Desk
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2. Bottom Line, The
3. Collection Building
4. Electronic Resources Review
5. Interlending & Document Supply: The Journal Of The British Library Lending Division
6. Internet Research
7. Issues in Science and Technology Librarianship
8. Journal Of Knowledge Management
9. Librarian Career Development
10. Library Management
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Issues in Science & Technology Librarianship

Number 28
Fall 2000

Articles
Theme: Instruction in Science and Technology Libraries

Board accepted **Collaborative Instruction by Writing and Library Faculty: A Two-Tiered Approach to the Teaching of Scientific Writing**
by Deborah Huerta and Victoria E. McMillan, Colgate University

Board accepted **Library Instruction in an Interdisciplinary Environmental Studies Program: Challenges, Opportunities, and Reflections**
by Laurie A. Kutner, University of Vermont

Board accepted **Promoting Information Literacy for Science Education Programs: Correlating the National Science Education Content Standards with the Association of College and Research Libraries Information Competency Standards for Higher Education**
by Jennifer Laherty, California State University, Hayward

Board accepted **Designing and Delivering a Public Health Informatics Course**
by William Olmstadt and Gale G. Hannigan, Texas A&M University

Address   https://portal.vt.edu/render.userLayoutRootNode.uP   Go

VirginiaTech

Search: Enter search keywords   Go

MYVT

Home

Log on for personalized content

PID: tonta

Password: **********

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Refresh the Channel

» Get a PID

» Change your PID password

» To use this site you must have a current browser like Internet Explorer 5+ or Netscape 6+.

Featured Sites & Initiatives

- Submit Sporn Teaching Award Nominations
- Home for the Holidays
- View the latest university video -- "Putting Knowledge to Work"

Weather

3-Day Forecast for blacksburg, va

Current Conditions: Fair, 25° F

TODAY   Partly Sunny   39° F

VT News & Events

Opps... This channel is temporarily unavailable

Start   17:34

Personalized Information Services

- Portals
- Personal banking services
- On-demand publishing, on-demand video
- Automatic current awareness, ToC services
- Electronic document delivery
- "desktop librarian" (www.liveperson.com)
- Recommender systems (e.g., amazon.com)
- Information agents

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Personalization & Alerting to be Added to ISI Web of Knowledge

◀
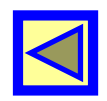
Philadelphia, PA USA November 25, 2002 —Today, Thomson ISI announced that personalization and alerting will be added to the _ISI Web of Knowledge_ SM platform in 2003. With the personalization feature, users will be able to save search strategies on their desktop or on the _ISI Web of Knowledge_ server. Search strategies saved on the _ISI Web of Knowledge_ server can be retrieved by users who have access to _ISI Web of Knowledge_ from within an institution, or from any remote location where they can get access to the library's services. An alert management page will allow users to quickly change search and alert options, and a personal journal list feature will offer seamless integration between _ISI Web of Knowledge_ and the most recent journal table of contents information in _ISI Current Contents Connect_®.

Initially, the alerting enhancement will be made available through _ISI Current Contents Connect_ and _ISI Web of Science_®—two pre-eminent resources within the _ISI Web of Knowledge_ platform. Additional resources will be equipped with this powerful new alerting feature during 2003. The new alerting feature will allow users to receive results of a search via email. The alerts are delivered in a format preferred by the user, including HTML and ISI ResearchSoft tagged files. Each alert will include a link to the related bibliographic record and the full-text of the journal literature.

"Introduced this year, _ISI Web of Knowledge_ is the single Web-based environment from which users can access, analyze and manage essential research information," explained Jim Pringle, ISI Vice President of Development for

Amazon.com

Amazon.com recommends . . .

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BOOK INFO

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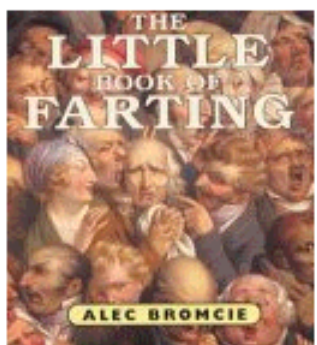
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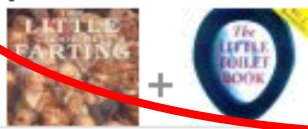Become a New Seller at Amazon.co.uk Marketplace by January 31, 2003 and get a £3 gift certificate. Terms and conditions apply.

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Personalization Issues I

❖ Standard content is offered to all users

❖ Recognize users when they log on and personalize the content based on their rights and privileges

❖ Providing information services using "pull" and "push" technologies

❖ Personalized electronic books

❖ Need to move from "resource-centric" approach to "relationship-centric" approach

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Personalization Issues II

❖ Difficult to implement in a distributed environment

❖ Network infrastructure

❖ Security & privacy concerns

❖ Interoperability

- with library automation systems, student information systems, financial systems, etc.

- With e-banking, e-commerce, e-health, e-government, e-(l)earning systems

❖ More sophisticated budgeting, pricing, use and training models

Conclusion

- ❖ Transform information services and make them available through distributed networks
- ❖ Abandon "one-size-fits-all" approach and emphasize "relationship-centric" approach
- ❖ Instant gratification is only possible with instant access to personalized information sources and services
- ❖ If not satisfied with remote and personalized information services, users may ignore information centers altogether and "take their business elsewhere"

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Department of Information Management

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