

E-journals- Characteristics, Publishing, Politics and Economics

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Agenda

- What is an Electronic Journal?
- Variations in E-journal Publishing
- Features and Characteristics of E-journals
- Pros and Cons of E-journals
- E- Journal Publishing, Politics and Economics
- Question - Answer



What is an Electronic Journal?

- Various names such as
 - Online journals
 - Electronic serials or e-serials
 - Electronic periodicals
 - Zines or e-zines or webzines
 - Digital serials or d-journals



Let us define

- It should meet the bibliographic definition of journal
 - according to AACR2 the definition of a journal is “ A publication in any medium issued in successive parts bearing numerical or chronological designations and indented to be continued indefinitely”
- Is accessible through Web
- Has the features of a journal, magazine or a newsletter
- Should preferably have an ISSN number (See www.issn.org)



Let us define- 2

- According to CONSER (The Cooperative ONline SERIALS cataloging program)

A remote access electronic serial is a continuing resource that is accessed “via computer networks”. It is issued in a succession of discrete parts usually bearing numbering, and has no predetermined conclusion. This is in contrast to direct access electronic resource which is issued on a physical carrier such as CD-ROM or floppy disks (CONSER, 2004)

<http://www.loc.gov/acq/conser/>



Variations in E-journals

- E-journals in aggregator databases

[Ebscohost](#)

[Proquest](#)

[Lexis-Nexis](#)

[FirstSearch](#)



Aggregators databases

Not designed initially as full text journals but as secondary information resources

With the passage of time started giving fulltext journals

Now more comprehensive coverage

Image presentation

Ability to provide linkage from

library's web page to table of contents of journals within the database

bibliographic citations in database to journal out side the database

Embargo from some publishers due to fear of loosing business



Virtual Journals

- Contains article published in various journals and publish them as a journal
 - Most important site [Virtual Journals in Science and Technology](#) publishes five virtual journals
 - [Virtual Journal in Application of Superconductivity](#)
 - [Virtual Journal in Biological Physics Research](#)
 - [Virtual Journal in Nanoscale Science and Technology](#)
 - [Virtual Journal in Quantum Information](#)
 - [Virtual Journal in Ultrafast Science](#)



Virtual Journals-Contd

- Other Publishers such Royal Society of Chemistry publishes [Chemical Biology Virtual Journal](#)
- [Fuel Cell](#) of Elseviers
- MedStudents
- [Virtual Journal of Cardiovascular surgery](#)

And the list is long and growing day by day



Secondary journals

- Indexing and Abstracting journals
 - Chemical abstracts
 - [Web of Science](#)
 - [Metadex](#)
 - [LISA](#)
 - Engineering Village
 - Inspec
 - Compendex



Features and Characteristics of E-journals

- We are still puzzled
 - Different search methods by different providers
 - It is difficult for the users to master these search techniques
 - Some provide for customization and e-mail alerting some donot
 - Result – New developments such as
 - CrossRef
 - Digital Object Identifier
 - SearchSolver
 - Jgate

Features and Characteristics of E-journals

- Access Issues
 - Restrictions on use
 - Access methods
 - should be simple for users to implement
 - Does not require maintenance by library or the content providers
 - Protects the IP of the content provider (CP)
 - Does not breach the security of CP.
 - Does not violate the privacy of the users



Features and Characteristics of E-journals

- WEB PRESENTATION
 - Various Formats
 - SGML, XML, HTML, PDF, MATHML, PS
 - HTML and PDF most common



Features and Characteristics of E-journals

– HTML Advantages

- More options for linking, searching and supplementing the text
- Loads quickly as file size is smaller than PDF
- Easy to index

– HTML Disadvantages

- More labor intensive to produce
- Troublesome to print fragmented documents
- Requires a separate production process from that of print journal
- Display may change with different browsers



Features and Characteristics of E-journals

– PDF Advantages

- Stable manageable and cost-effective for publishers
- Familiar look for users
- Easy conversion of legacy print

– PDF Disadvantages

- Requires additional plug-in i.e. Acrobat Reader
- Large Files – can cause annoyance with slow bandwidth



Features and Characteristics of E-journals

- Multimedia objects, Data files and other Supplementary materials
 - Engineers can share 3-D models
 - Medical researchers can use each others' images and clinical data
 - Programmers can share programming code
 - Physicists can share animations
 - Linguists can share audio files
 - All types of researchers all type of data



Features and Characteristics of E-journals

- Accelerated publication
 - From author –accelerated submission
 - For reviewer – accelerated review process
 - For author accelerated revision
 - For aggregator/service provider- accelerated mounting
 - Articles available much before available in print such as
 - Online first in case of Springer
 - Online Early in case of Blackwell Synergy
 - Articles in Press in Case of ScienceDirect



Features and Characteristics of E-journals

- SEARCHABILITY
 - Simple search
 - Advanced search
 - This Journal
 - All journals on the site
 - Journals in a subject cluster
 - Examples
 - [ScienceDirect](#), [SpringerLink](#)



Features and Characteristics of E-journals

- LIKABILITY TO, FROM, WITHIN, BETWEEN ARTICLES
 - Web of Science is the Master
 - Links from databases to external articles
 - Internal links
 - Links from Articles to articles
 - Forward links (citing articles)
 - Example [IOP](#)



Features and Characteristics of E-journals

- INTERACTIVITY AND CUSTOMIZATION
- Interactivity
- Alerting service
 - ACS ASAPAlerts
 - Wiley's MobileEdition
 - Highwire's eTOCs



Features and Characteristics of E-journals

- Stability and Accessibility
- Independent of Space and Time
 - Constraints
 - Low bandwidth
 - Availability of proper hardware and software
 - Occasional breakdown of Internet
 - IP blocking by the Content Provider
 - Shifting URLs
 - Shifting contents
 - Embargoes
 - IP Issues



Features and Characteristics of E-journals

- LONG TERM ACCESS: ARCHIVAL ISSUES
 - What happens if subscription is stopped
 - Change in hardware and software
 - Local hosting vs Remote hosting



Pros and Cons of E-journals

- **BENEFIT TO USERS**

- Independent of space and time
- Interact with other electronic resources
- Save user's time (Ranganthan's fourth Law)
- Provides value addition such as searchability, supplements, formats unavailable in print formats
- Accelerated publication
- Can be read by multiple users simultaneously
- Can not be mutilated, stolen, lost vandalized etc etc.



Pros and Cons of E-journals

- **BENEFIT TO LIBRARIES**

- Superior resource delivery
- Improved service
- Potentiality of accurate usage to help collection development decisions
- Cost savings
- Reduced shelving, binding, maintenance, claiming
- Public relation opportunities
- Provided and opportunity for concrete user education
- Satisfied users
- Simultaneous access



Pros and Cons of E-journals

- Drawbacks
 - Coverage may not be as complete as in print format
 - Authentication issues
 - Archival issues and long term preservation
 - Less control
 - Users technology does not always keep up with e-journal technology
 - Temporary unavailability due to technical reasons
 - Managing e-journals require much more skilled manpower



SCHOLARLY PUBLICATION AND ACCESS CHAIN

- THE PRINT PUBLISHING ENVIRONMENT-
Four major stake holders
 - The author
 - Journal publisher
 - The Library
 - The reader
- Indirect role
 - Funding agency
 - Institution
 - Reviewer
 - Guide



SCHOLARLY PUBLICATION AND ACCESS CHAIN

- ELECTRONIC-PUBLISHING ENVIRONMENT
 - E-journal publishers
 - Publishers as hosts
 - Aggregators
 - Publication hosting



ELECTRONIC-PUBLISHING ENVIRONMENT

– Link-Resolver services such as

- 1Cate: (www.openly.com/1cate/)
- Gold Rush Linker (<http://grweb.coalliamce.org>)
- LinkSource: EBSCO (www.linkresolver.com)
- SFX:ExLibris (www.exlibrisgroup.com/sfx.htm/)
- Sirsi Resolver: (www.sirsi.com/Sirsiproducts/openurl.html)

– E-journals management services

- TDNet, SerialsSolutions
- Gold Rush of CARL



E- Journal Publishing, Politics and Economics

- CHANGE AGENTS

- Explosion in research output
- Globalization of commerce and research
- Advocacy of Unrestricted access to information by International organisations
- Governments asking for free access to info from public funded projects
- Entrepreneurial and idealistic individuals are asking for free flow of info
- Advocacy in bridging S&T info gap
- Dynamic business climate such as mergers, buyouts etc.
- Tighter budget due to state policies



E- Journal Publishing, Politics and Economics

- SCHOLARLY PUBLICATION CRISIS
 - Academic library budget down even in developed countries (4% in 1980 to 3% in 2004)
 - Price increase
 - In US 227% during 1986-2002 while inflation was 64%
 - In UK 158% during 1991-2001 while inflation was 28%
 - In India multiple effect of price hike due to exchange rate



E- Journal Publishing, Politics and Economics

- SCHOLARLY PUBLICATION CRISIS
 - Volume increase due to increased number of researchers
 - Multidisciplinary research
 - Mergers and buyouts
 - Elsevier 30% with 2500+ titles
 - Springer + Kluwer 1350+ titles
 - Taylor and Francis 1200+ titles



E- Journal Publishing, Politics and Economics

- OPEN ACCESS MOVEMENT

- Benefits

- Possible cost saving for libraries
 - No authentication required
 - More opportunities to integrate and aggregate journal literature and deploy your own retrieval systems

- Author Self Archiving

- E-print Repositories

- Free E-journals



Conclusion

- FUTURE OF E-JOURNAL PUBLISHING

In a article published in Nature in 2004 Tim O'Reilly has warned

“ Publishers must serve the values of both authors and readers. If they try to enforce an artificial scarcity, charge prices that are too high or otherwise violate the norms of their target community, they will encourage that community to self organize, or new competitors will emerge who are better attuned to the values of the community.

www.nature.com/nature/debates/e-access/Articles/orelly.html



Any questions?



Thank you

