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E-Resources Publishing Today:

Electronic Journals

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Journal Sales Manager

Friday, 30 June 2006

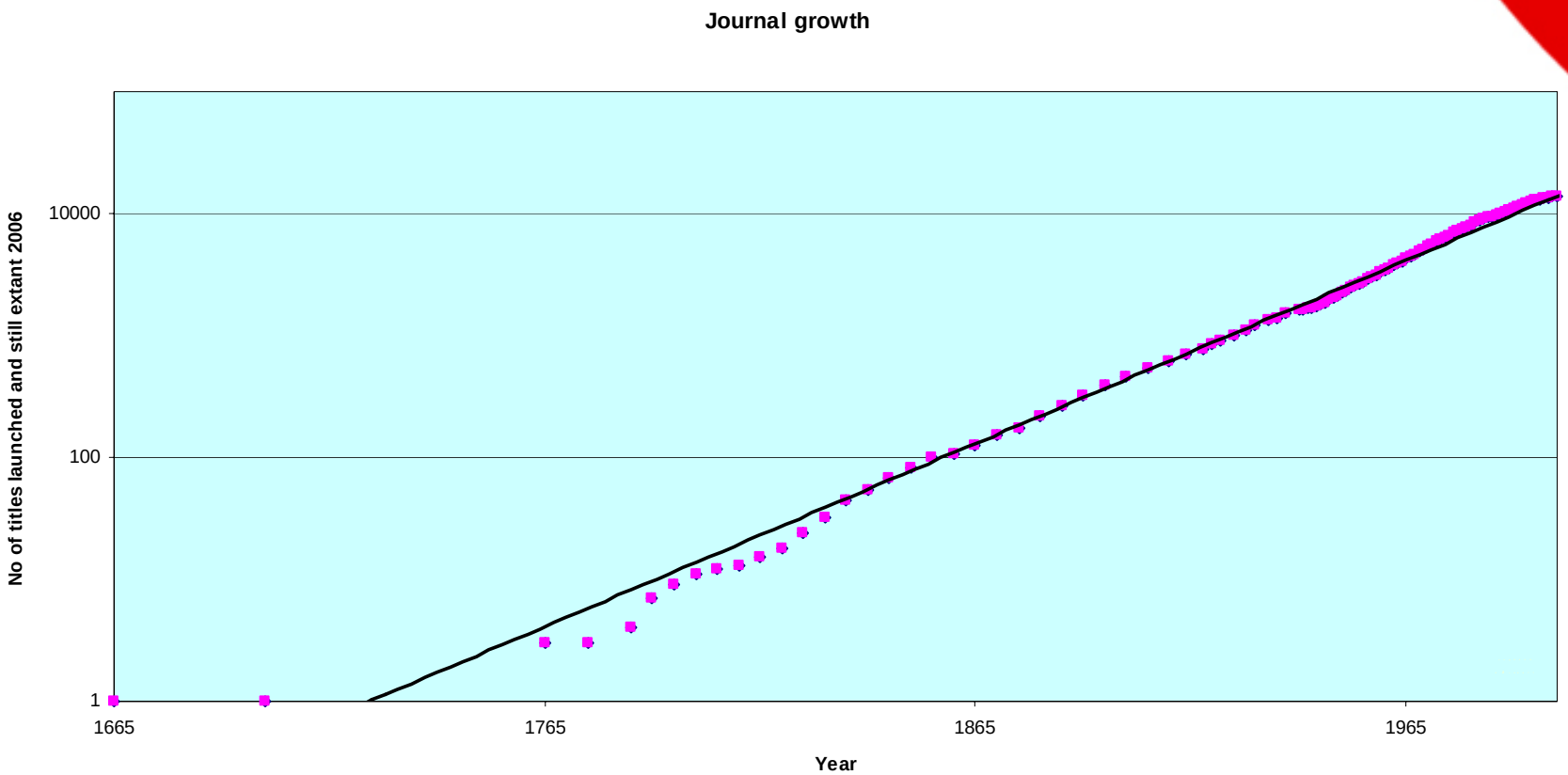
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Overview

- Introduction
  - Why journals?
- The Publication Process
  - The Author Experience
  - Production
  - Distribution
- Archives & Backfiles
- Purchasing Electronic Journals
- The Cost of Publishing
- Alternative Business Models
- Summary

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Journal Growth 1665-2001



Total number of active refereed learned journals in 2006 >20,000

More researchers ⇒ more articles ⇒ more journals

Why do journals survive?

- Useful vehicles for disseminating research results
- Provide recognition to the person who carried out the research
- Keep other researchers and practitioners up to date
- Advance the knowledge base of the discipline
- Conclude a study
- Provide a stamp of quality and authority to work
- Researchers can further their own careers
- Archive knowledge

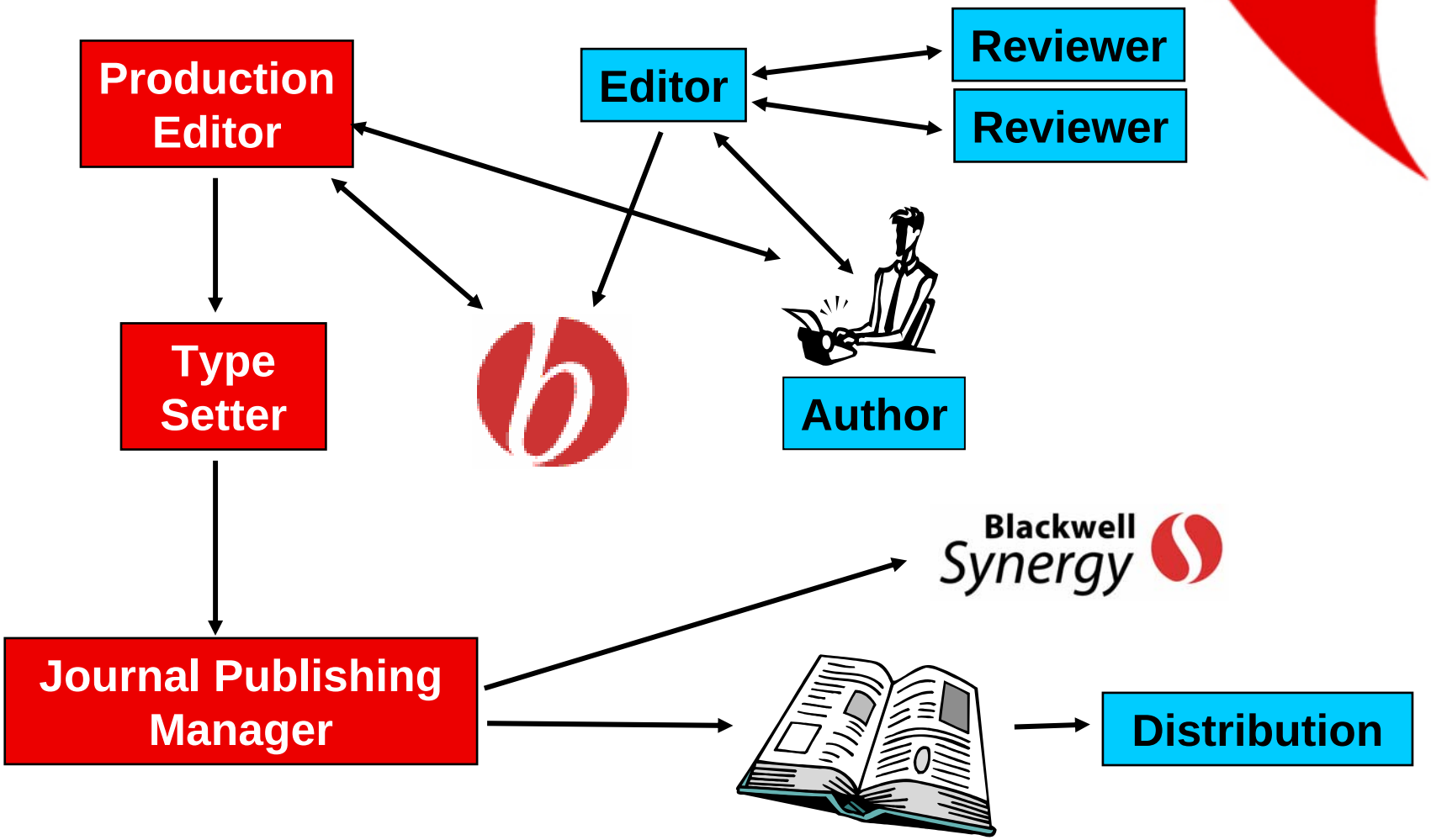
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Value of Electronic Journals

- In 2002, 70% of surveyed research faculty were using electronic journals for their research (1)
- In 2003, 78% of surveyed faculty characterized electronic scholarly journals as "*invaluable research tools*" (2)
- In 2003-04, libraries surveyed by the Association of Research Libraries (US) spent more than $300 Million to license electronic materials (3)
- The same report revealed that on average 31% of total library material expenditures were devoted to electronic resources (3)

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The Publication Process



Why authors choose journal “x”?

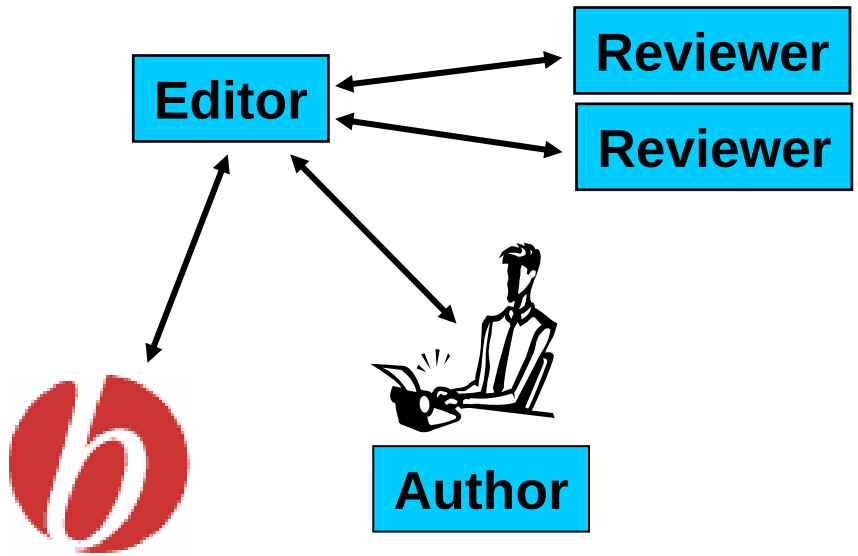
- Reputation of Journal
- Impact Factor – Measure(s) of quality
- Serves the authors research community
- Global reach and readership
- Fast editorial decision
- Rapid publication
- Reputation of the editor or editorial board
- Journal has both print and electronic versions
- Constructive review comments
- Increased likelihood of acceptance



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The Author Experience

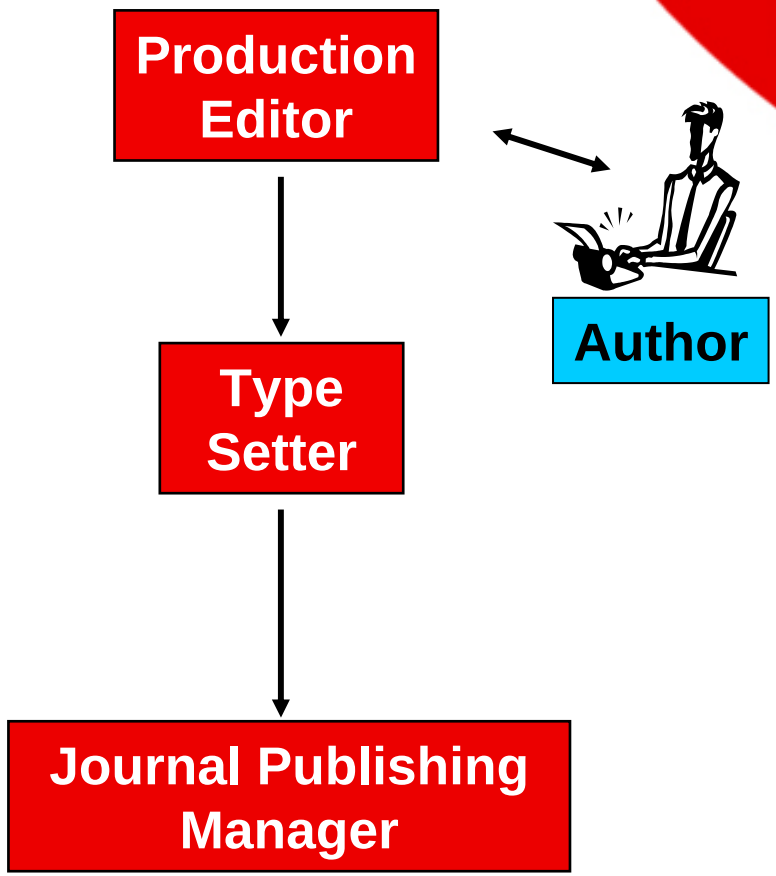
- Write an article
- Select a journal
- Submit manuscript
- Track through peer review
- Track through production
- Proof manuscript
- Obtain offprints
- View article online
- Provide feedback



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The Production Process

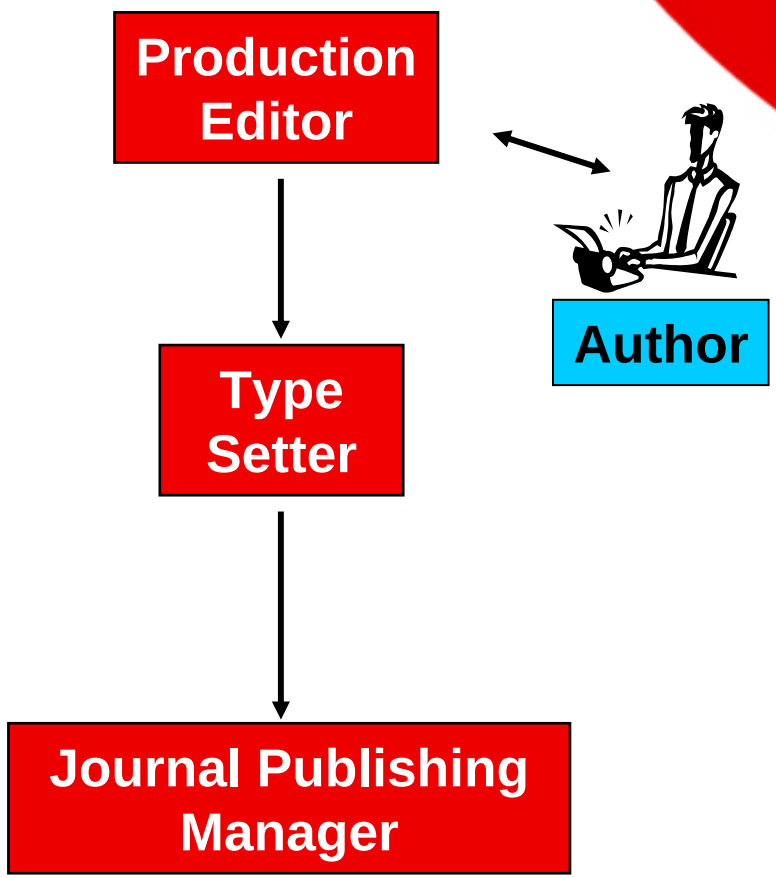
- Accepted article received
- Production Editor checks the article and enters selected details into a tracking system which handles…
  - Schedule management
  - Despatch and fulfilment processes
  - Print and online publication process
  - Possible online tracking for authors and editors too!
- Article is assigned a unique digital object identifier (DOI)



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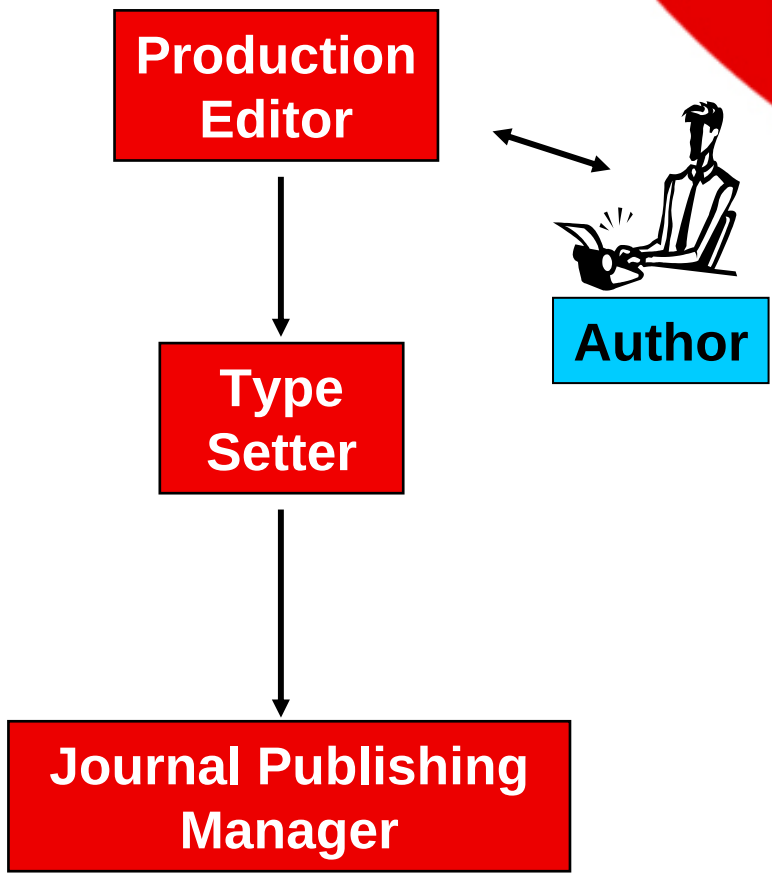
The Production Process

- Production Editor/Freelance Editor copy edits the article, checking…
  - Text conforms to journal style
  - Consistency of text, tables, figures and references
  - Data integrity of the files
  - Formatting of special symbols and characters
  - Some typographical coding is added e.g. non-breaking hyphens, fixed spaces
  - Illustrations are sized and improved where necessary
- Major queries are referred back to the editor and/or author



The Production Process

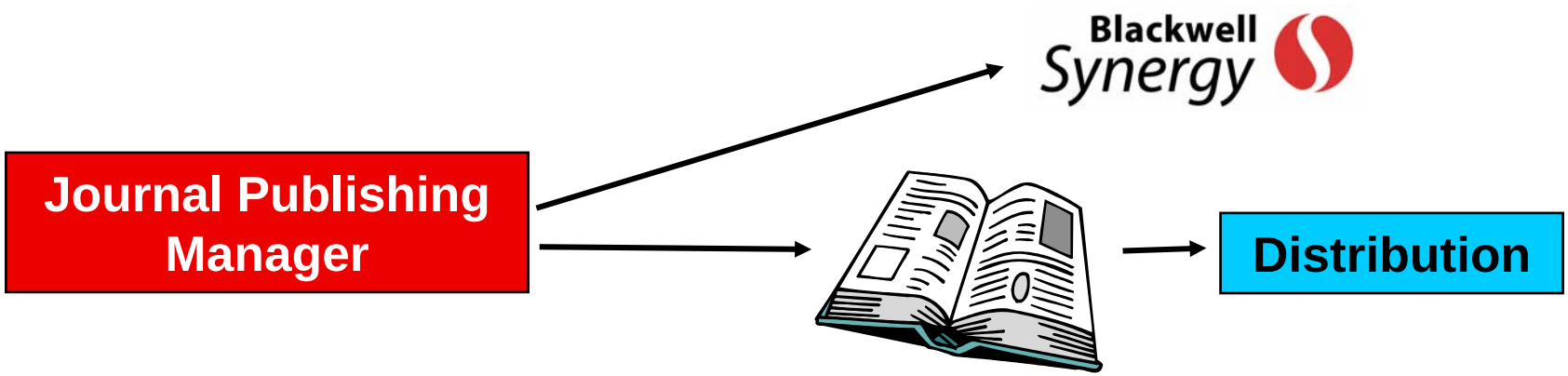
- Electronic file is also coded in extensible mark-up language (XML) for composition and linking
- Composition must conform to the design of the individual journal, the publisher's specification and the traditional rules of the printing industry
- Proofs sent electronically to authors
- The typesetter, publisher and author check proofs to ensure that the printed page is correct
- Articles are made up into issues, sometimes with an editorial and other text.



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The Distribution Process

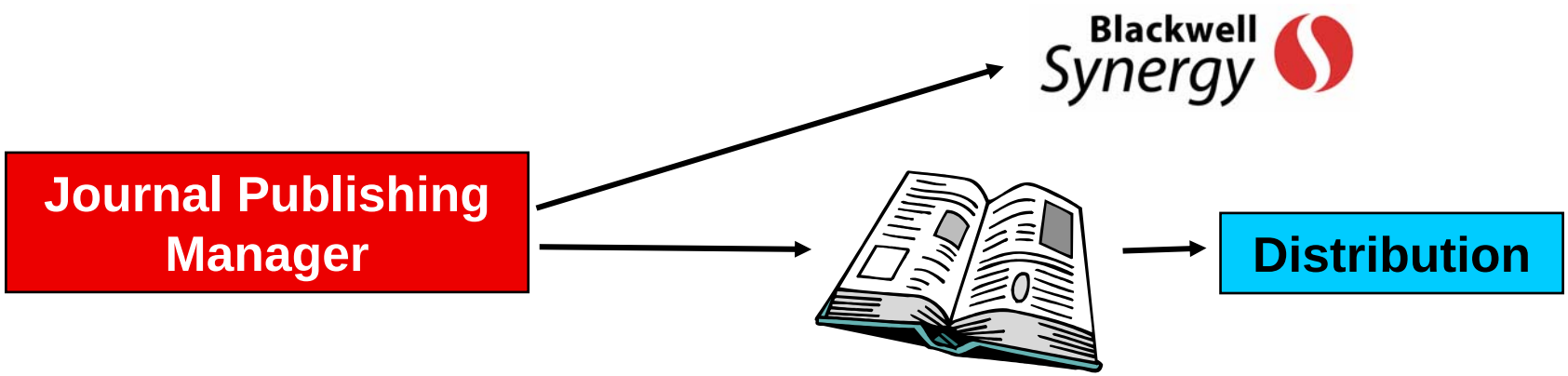
- The complete XML, together with web-ready PDFs and high-resolution graphic files, is processed for online publication.
  - An automated process checks file structure against the publisher DTD
  - Visual quality assurance checks that the online display is correct



The Distribution Process

- Publication and distribution

- Rapid electronic publication…
  - Articles published after acceptance but before proofing
  - Articles published after the proofing but ahead of issue publication
  - Usually publishers can ensure access to electronic articles within 4–6 weeks of initial acceptance

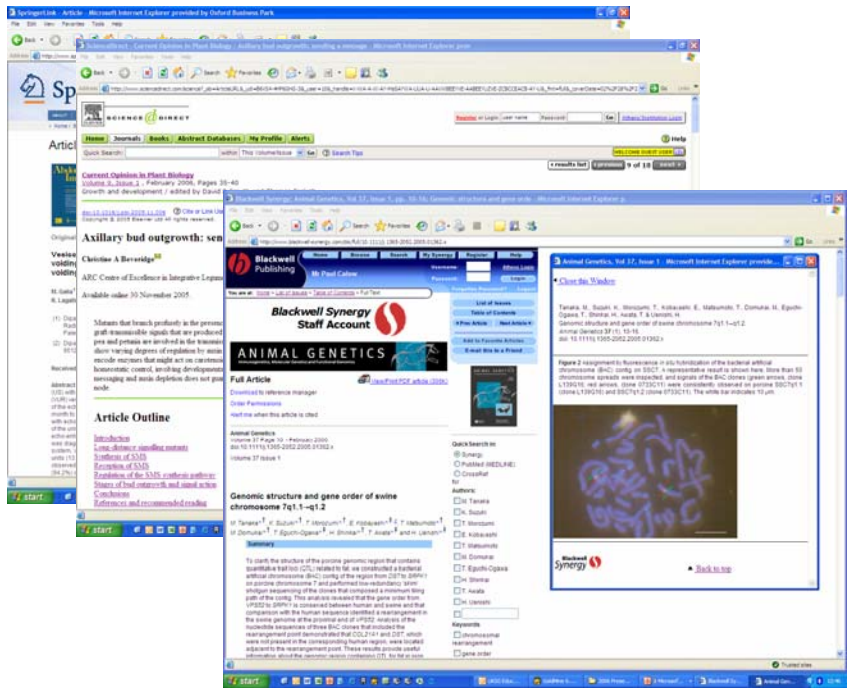


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The Distribution Process

Electronic Journal Delivery Platforms

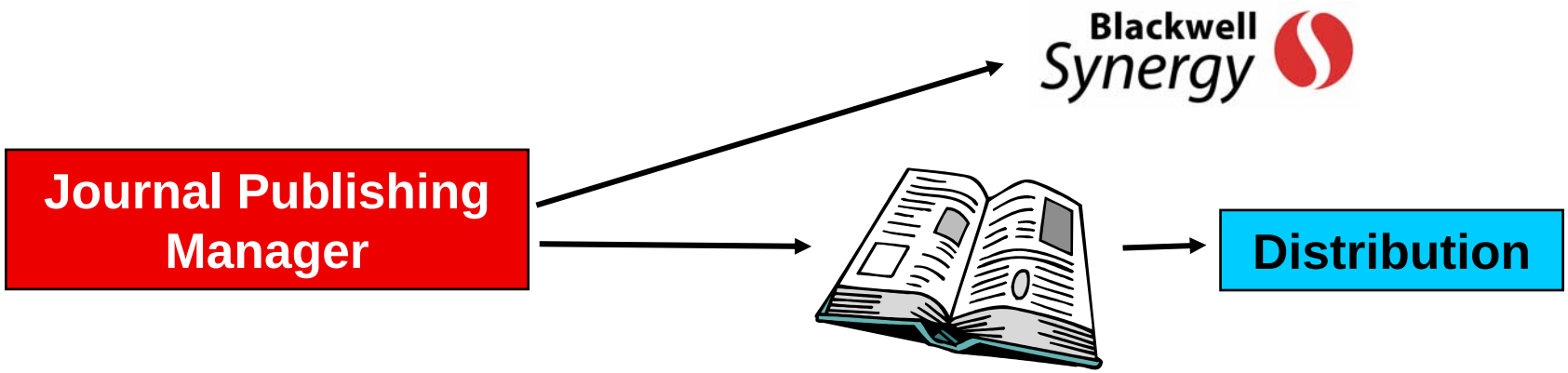
- Full-Text Journal Articles
- Rapid publication online
- Searching/browsing
- Reference Linking
- 24/7 Access
- Back files
- Personalised Homepages
- Library Administrator pages
- E-Commerce



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The Distribution Process

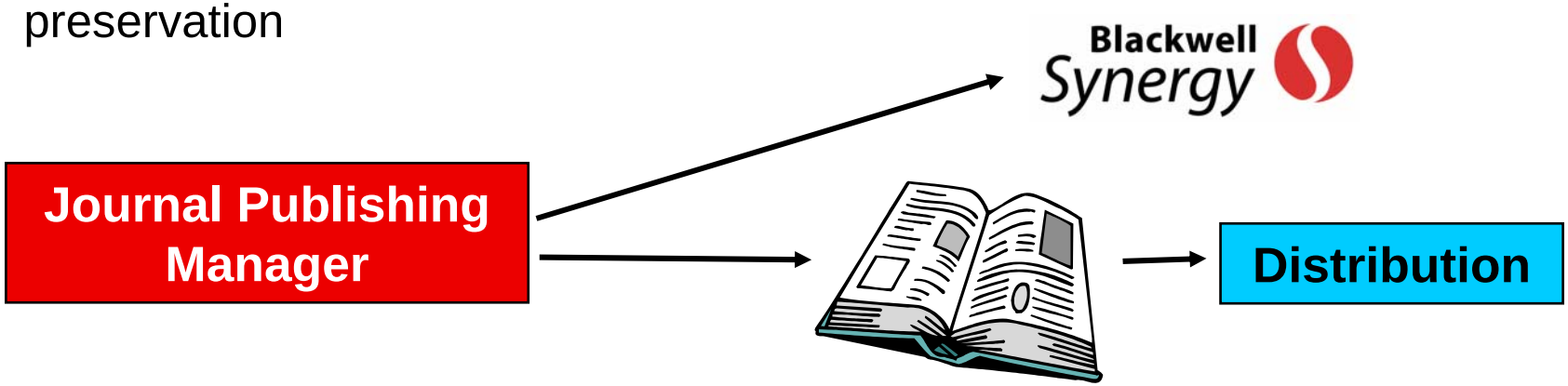
- Author given a PDF file or conventional printed offprint of the finished article for their own use
- Print-quality PDF files sent to printer along with cover files and advertisements
- Printed issues distributed to subscribers via a specialist despatch house



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The Distribution Process

- Article metadata is distributed to external databases, A&I services and search engines, allowing them to link back
- Press releases are issued for news-worthy articles to generate interest and usage
- Copies of the full article are sent to legal deposit libraries and archiving organizations to ensure long-term preservation



Ensuring Long Term Preservation

- LOCKSS
  http://www.lockss.org/
  Open source software that converts any personal computer into a digital preservation appliance, creating low-cost, persistent, accessible copies of e-journal content as it is published

- CLOCKSS
  http://www.lockss.org/clockss/
  Using LOCKSS concept across a controlled network of institutions and libraries

- Koninklijke Bibliotheek (KB)
  http://www.kb.nl/bst/beleid/bp/2002/opslag-en.html
  Worked with IBM to develop an electronic deposit system focused on providing a “dark” archival solution

- Portico
  http://www.portico.org/
  Concept based on the migration of content from one file format to another as technology changes and as file formats become obsolete

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Post-Publication

- Once published an electronic article should be available to subscribers forever

- The content of an article can only be changed or (in the worst cases) withdrawn in cases where there is either a health or legal risk associated with the article

  e.g. Science's retraction of South Korean scientist Woo-suk Hwang's published papers on cloning and stem cell research due to falsified data

  http://news.bbc.co.uk/1/hi/world/asia-pacific/4608352.stm

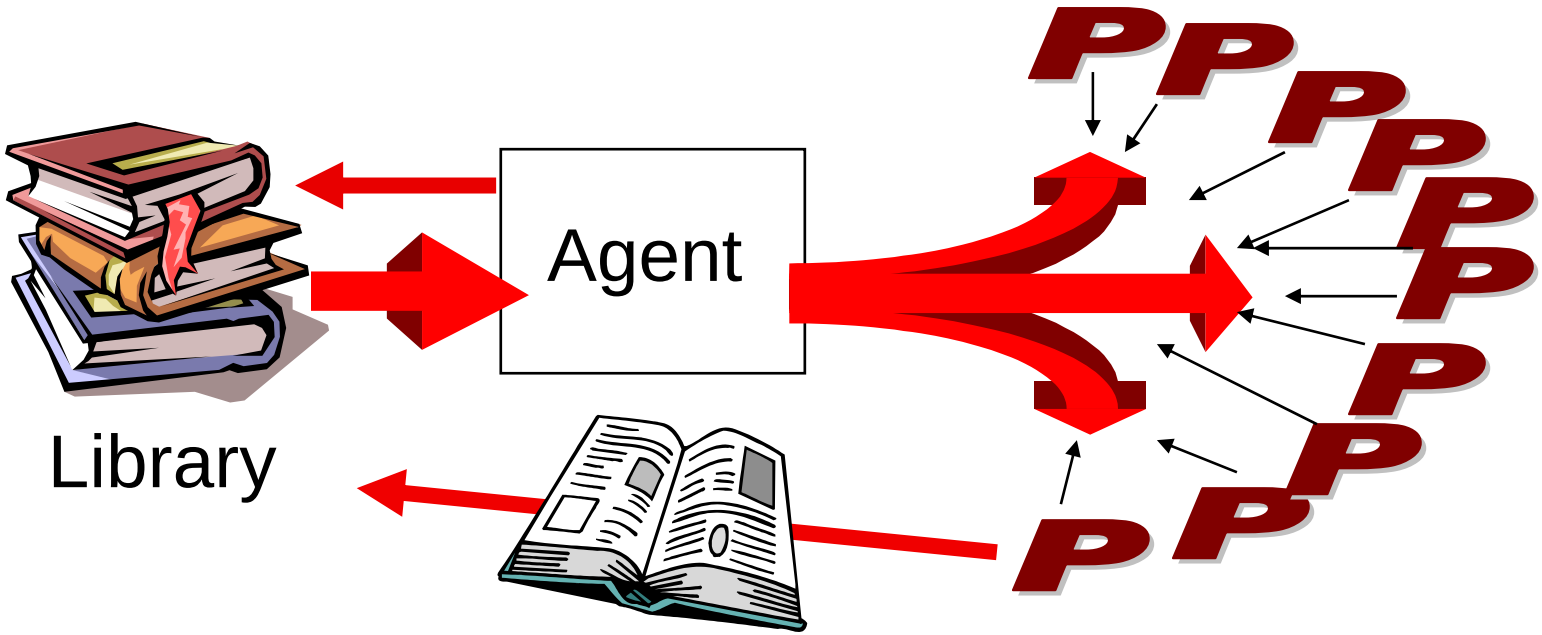
- Publishers' Rights Departments are active in the protection of authors' copyright, and take action against cases of plagiarism, dual publication or other infringements

Digitization of Backfiles

- Digitization of back issues that were published before the advent of electronic publishing
- For a well-established journal, backfiles can stretch back over 100 years
- A full digital archive enhances the value of current content by enabling researchers to trace the history of developments within a particular field online
- Publishers sell backfiles in many ways…
  - Title by title
  - Focused subject collections
  - Broad multi-subject collections
  - Purchased via a one-off fee (with or without additional maintenance/technology fees)
  - Purchased via an annual subscription

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The Purchasing Process: Print



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The Purchasing Process: Electronic

- Libraries are now working together…
  - To save money
  - To buy in bulk
  - To negotiate better terms and conditions

- Consortia Purchasing
  - Groups of Libraries (Local, Regional, National)
  - “The big deal” or sub-sets by discipline
  - Pay-per-view
  - Usage based pricing
  - Print plus electronic or e-only
  - More content, more information

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The Cost of e-Publishing

With the advent of new technology shouldn't content be cheaper or free?

- Costs of e-journal production are made up of two main components:
  - cost to create the first copy (85-90%)
  - cost to duplicate and distribute (10-15%)
  - Print production costs are distributed more evenly between the two
- Estimates for the creation of the first copy vary
  - approx. £2,000 - £6,000 per article depending on the publisher and the discipline
- Several cost components
  - Peer review: costs for ALL submissions
  - Technology: development, functionality, stability
  - Marketing & Promotion: directing users to information

The Cost of e-Publishing

- Copying and distribution costs are low
  - The internet acts as a distribution medium
- Authentication, licensing and management becomes more complex
- Publishers are now responsible for longer term availability and archiving
- Any alternative to the traditional publishing model must raise enough money to cover the per article costs to be self-sustaining

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Remember That Publishers Add Value…

- Online publication
- Electronic workflows
- Copy editing
- Proofing and typesetting
- XML tagging and mark up
- Management of metadata
- Archival deposit
- Print publication
- Print distribution
- Creating best practice guidelines
- Marketing and distributing research findings
- Financial support to the scholarly community
- Legal infringement monitoring

Alternative Publishing Models

Author Pays (Open Access)

- Who pays the publishing costs?:
  - **Readers pay**
  - **Readers' agents (library) pay**
  - Authors pay
  - Authors' institutions pay
  - Authors' granting bodies pay
  - National authorities pay (e.g. JISC)

- Open Access (new e-only publishers)
  - E.g. BioMedCentral

- Open Access hybrid (traditional publishers)
  - E.g. OUP, Springer, Blackwells

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Alternative Publishing Models

Institutional Repositories (Open Access)

- Author self-archiving (4)
  - Electronic posting of author supplied articles
  - Often no publisher mediation
  - Posting of pre-prints and/or post-prints
  - Often on personal web sites or within institutionally developed repositories
  - Publisher policies concerning author self-archiving vary

- Discipline specific e-print servers
  - Facilitate the sharing and storage of research pre-prints

    e.g. arXiv (Physics) , CogPrints (Cognitive Science)
  - Digital extensions of existing peer-to-peer research communication
  - e-print servers usually experience high rates of participation within their respective fields

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Institutional Repositories (Open Access)

Example Author Rights Post-Acceptance

- Authors may share print or electronic copies of their version with colleagues (i.e. not the final published version)
- Authors may use all or part of the article in other publications
- Authors may use the Article for educational or research purposes
- Authors must acknowledge the publisher and/or society
- Authors may post to their website, their employer's website or repository and to free public servers in their subject area
  - Some publishers/societies/journals have chosen to implement an embargo period before which posting on the web is restricted
- When posting on the web, authors must give full bibliographic details plus a link to the definitive version on the respective publishers e-journal delivery platform

Summary

- E-Resources publishing requires **innovation**
  - Publishers are embracing technology to improve…
    - Content creation
    - Content management
    - Content delivery
    - Ongoing support

- E-Resources publishing is still **evolving**
  - Search and retrieve culture
  - Users want information on demand
  - Alternative publishing models
    - Author pays (Open Access)
    - Institutional repositories (Open Access)
  - Increasing momentum for move from print to e-only

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And finally…

"Treasure the scholarly communication system, it has worked for 400 years…

…[but at the same time] support experiments and be curious"

Ann Okerson: Associate University Librarian, Yale University.
UKSG Seminar: 23rd November 2004, London

Thank You!

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http://www.blackwell-synergy.com/

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(1) Amy Friedlander, *Dimension and Use of the Scholarly Information Environment* (Washington: Digital Library Federation and Council on Library and Information Resources, 2002), Table 68

(2) "Electronic Research Resources" survey of 7,403 faculty conducted in 2003 by Odyssey, a market research firm, on behalf of Ithaka (unpublished)

(3) Mark Young and Martha Kyrillidou, *ARL Statistics 2003-04* (Washington: Association of Research Libraries, 2005)

(4) Raym Crow, “The Case for Institutional Repositories: A SPARC Position Paper” (Washington: The Scholarly Publishing & Academic Resources Coalition, (2002)

What is XML?

- e**X**tensible **M**ark-up **L**anguage
- Style of tagging used to mark the individual elements of an article's text
- Text is tagged in accordance with the publisher's technical specification document type definition (DTD)
- The denser the tagging structure, the greater versatility of the resulting file and the number of automated links that can be generated to external databases.
- Standardised XML and graphics files have a much greater archival potential than those produced by word-processors or desktop-publishing software.
  - Proprietary file formats will always require a suitable reader to be available for their continued accessibility
  - Structured files (e.g. XML files) contain only information that complies with international standards, and
  - Can therefore be interpreted or converted by any system
- For more information go to: **http://www.w3.org/XML/**

What is a DOI?

- **D**igital **O**bject **I**dentifier
- Used to identify content objects within the digital environment
- Information about a digital object may change over time, including where to find it, but its DOI will not change
- The DOI system provides a framework that enables…
  - Persistent identification
  - Management intellectual content
  - Management of metadata
  - Linking customers with content suppliers
  - Facilitating electronic commerce
  - Enabling automated management of media.
- DOIs can be used for any form of management of any data, whether commercial or non-commercial.
- For more information go to: **http://www.doi.org/**

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What is a DTD?

- **D**ocument **T**ype **D**efinition
- A DTD tells us what tags and attributes are used to describe content in an SGML, XML or HTML document
- A DTD tells us where each tag is allowed and which tags can appear within other tags
- A DTD ensures that all documentation is formatted the same way
- For more information go to: **http://www.w3schools.com/dtd/default.asp**

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