

Ebook Platform Usability Report

A Case Study of Cambridge, Elsevier and Wiley

Ebook Usability CKG Members

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The findings and insights presented in this document are based on data and information available up to December 2019. Any subsequent changes, updates, or developments in the relevant systems, interfaces, or policies after this date may not be reflected in this analysis.

Executive Summary

Goal

The Ebook Usability Common Knowledge Group (EUCKG) set out to develop criteria to evaluate ebook interfaces/platforms and to utilize those criteria to assess three system-wide ebook packages. We chose to look closely at Cambridge, Wiley, and Elsevier ebook package interfaces.

Methodology

First, we explored the three interfaces broadly. Each member of our team took the lead on studying one interface and reporting back to the group, highlighting the features and issues in the interface.

Next, we divided the features into categories and created a master matrix for platform evaluation. Using these categories, we formed category-specific teams that would evaluate all three interfaces. We believed this would help us to really understand that set of features and more easily be able to compare the pros and cons of each interface.

Findings and Recommendations

After carefully evaluating each of the interfaces using the criteria and categories from the matrix, we discovered significant variation across the interfaces. Thus, we were able to identify what we consider to be “best practices” for ebook interface design. We have included in this report our thorough evaluations and summary recommendations.

Introduction

For reasons of space, economy and convenience (for both library personnel and patrons), many academic libraries have made the decision to purchase significant portions of their books in electronic format. When possible and feasible, University of California libraries have chosen to purchase packages of ebooks directly from the publishers with access on the publisher’s own ebook interface. We have done this to avoid Digital Rights Management (DRM) and to allow us to cooperatively purchase this content with consortial discounts.

There are a number of papers published about ebook usability. Some focus on comparing print to electronic in terms of eye fatigue or learning outcomes, some follow specific users through the reading experience and look at specific hurdles they encounter, some attempt to survey users on which features are important to them in reading. However, there are few articles that conduct a feature-by-feature examination of ebook interfaces from the evaluative standpoint of a collective group of library

professionals in order to create a sustainable evaluation tool. ([Ebook showdown: Evaluating academic ebook platforms from a user perspective](#))

In many cases, our users access the books directly after finding them in their library's catalog, Google or another search interface, or by following direct links that have been suggested to them. In this case, features such as the arrangement of the book or chapter landing page, accessibility, and features related to the reading experience can be important. In cases when the user finds themselves at the landing page or title display of an ebook interface, search and presentation features become significant as well. There is a great deal of variability in the features and functionalities of the various publisher ebooks interfaces and there are not a lot of established "rules." This can create significant usability and accessibility issues for library users.

We believe that the University of California libraries and librarians should participate actively in improving the ebook discovery and reading experience for our users. Therefore, the University of California Ebook Usability Common Knowledge Group (EUCKG) created an evaluation matrix, which encompasses a substantial set of features related to searching, presentation, accessibility, and reading features. This matrix will allow us to be methodical in making recommendations to publishers and in making decisions about where to invest our book budget for the optimal user experience.

The EUCKG conducted a test of this matrix on three ebook packages that were purchased collectively by the UC Libraries: Wiley Online Library, Cambridge Core, and Elsevier ScienceDirect.

Methodology

After first determining our goals, we needed to develop the evaluation matrix. We began building the matrix as a list of features in broad categories, which were based on our own expectations prior to reading and evaluating the three platforms. As we moved through the evaluation, we expanded and further categorized the list, which became an iterative process as each member of the group reported back.

We chose to evaluate platforms that were: (1) publisher-based; (2) DRM free; (3) collectively purchased, and (4) substantively cross-disciplinary. We then selected books from each interface across several disciplines. For a list of the titles reviewed, please see the Appendix.

Individual EUCKG members were assigned to find, read, and report back on the features that either detracted from or enhanced the experience.

After we had compiled the matrix, we then assigned teams to each category (User Interface, Reader Compatibility, and Purchasing/Licensing) and had them evaluate each interface based on the features and issues listed for that category. This allowed us to become "specialists" in a set of features and apply the criteria evenly across all platforms.

Finally, we wrote up in-depth analyses of features and recommendations with a common set of questions. These sections have been edited and included in this report.

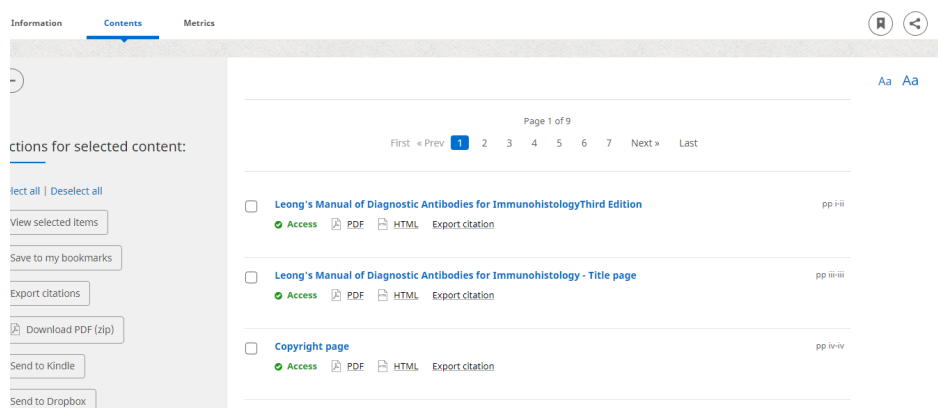
Findings and Recommendations

Navigation Features (Browsing, Searching, Downloading, Printing)

We evaluated three platforms of ebooks: Cambridge Core books, Wiley Online Library, and Elsevier ScienceDirect ebooks. This section of our evaluation reviews our findings in regards to **browsing**, **searching**, **downloading** and **printing** from these platforms.

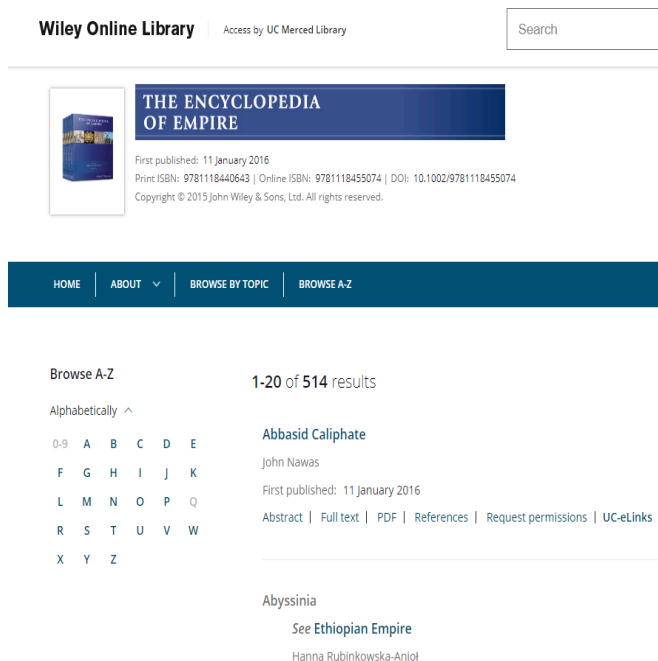
Browsing: We looked at browsing within a title and browsing the ebook platform as a whole. For all three platforms, browsing within a specific title was accomplished via scrolling through a listing of chapters or articles and their downloadable PDFs. Both Wiley and Elsevier ebooks list all chapters on one scrolling page, whereas Cambridge may be divided among multiple pages in longer publications.

Figure 1.



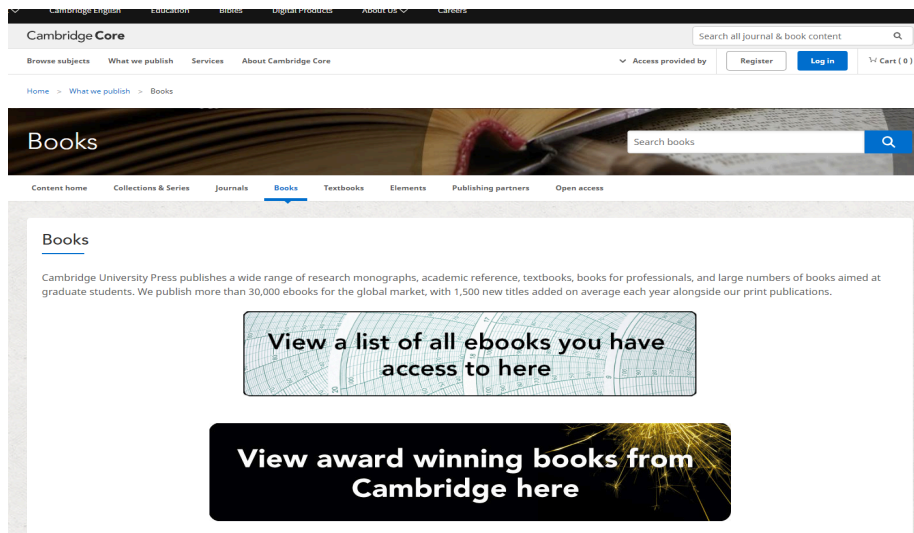
Wiley Online Reference ebooks were also browsable by topic or “A-Z” which was initially somewhat confusing. Upon further review, Topics seem to include broad scope subjects within an ebook, whereas A-Z was a more granular, index-like option for browsing.

Figure 2.



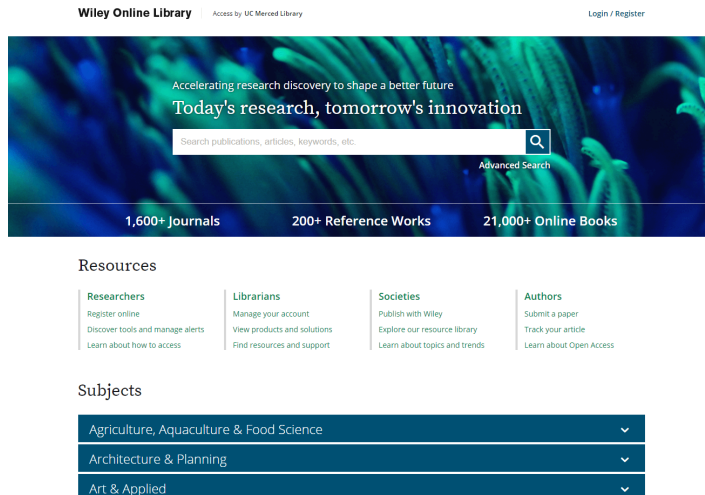
Browsing each ebook platform’s total content showed similar options but more variation in how options for browsing occurred. Cambridge’s “Books” page highlighted options to browse via a “list of all ebooks you have access to”, “award winning books”, “new books” along with a browsing option via Subjects. Journal content was on a separate page.

Figure 3.



Wiley Online had separate browsing options for its journals, reference works, online books, subjects and “New to Wiley.” Browsing could be accomplished either via the landing page’s publication options or via the subjects drop down menu.

Figure 4.



Elsevier’s content was browsable via broad subject categories in the sciences, broken down into specific subjects within each discipline, as well as “Popular articles” and “Recent Publications.” An A-Z publication listing and links to its open access journals and articles An option to go to “Journals & Books directly is linked as well.

Figure 5.

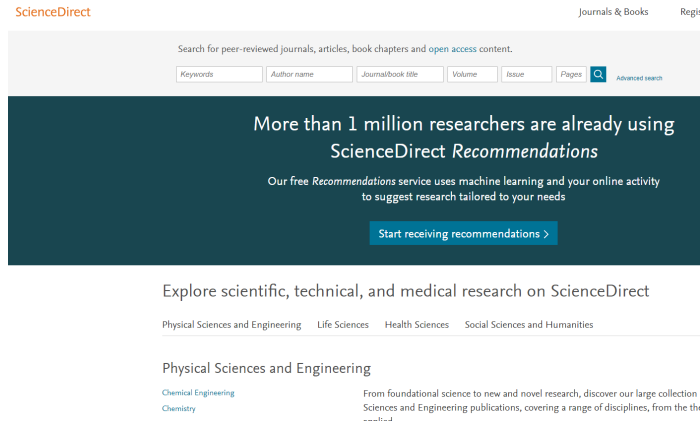
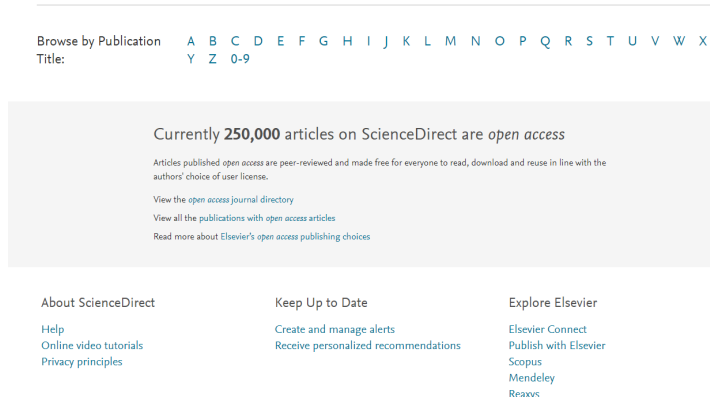


Figure 6.



Searching: Cambridge has a “Search in this book” box, however, we noted this only searches the HTML summaries and not the full content, nor does it highlight the chosen term(s).

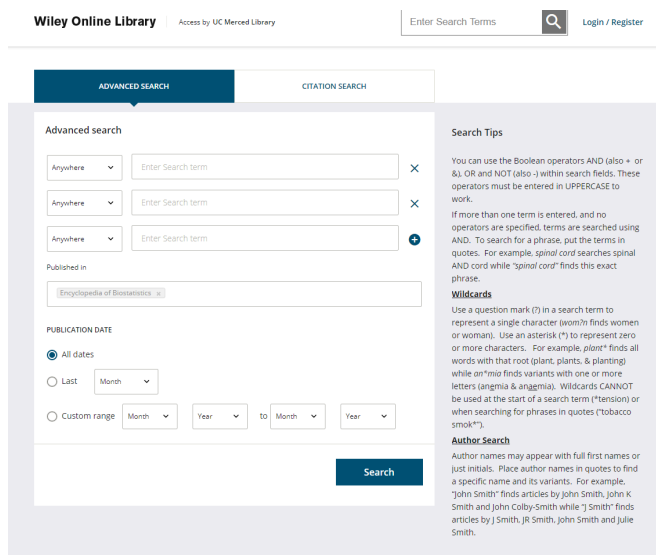
Figure 7.



Advanced searching was available; refinement of search, sorting, and saving a search were additional options. We also noted that Cambridge's search does not distinguish between keyword search vs. a phrased search/a phrase within quotes, whereas Wiley and Elsevier do.

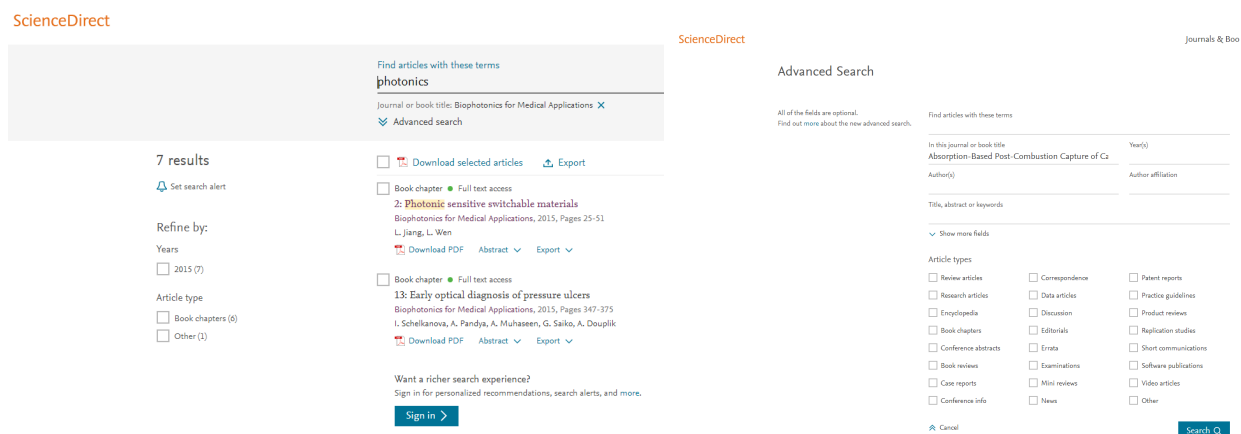
Wiley provides a single "Search" box with tabs for searching all content or just within the viewed item, which can be confusing initially (One might wonder, "am I searching all the Wiley ebooks or just this one?") On the plus side, it does search the full text content in PDF and both HTML and PDF in its reference works while highlighting the search term. If the user's cursor stays long enough in the search window, an Advanced Search or Citation Search option becomes available with "Search Tips" to assist with defining the search.

Figure 8.



Elsevier provides a separate “Search in this Book” box which searches the full content. Results are displayed by chapter, but give no context as to what was found. The search term is highlighted if it appears in the chapter or book title. Advanced Search is also an option, though more focused on other publications rather than searching within a book.

Figure 9.



Downloading and Printing: None of the platforms had page limits for downloading or printing, and PDF files were available by chapter/article or the complete title. However, both Cambridge and Elsevier accomplish whole book download and printing via clicking a Select All function limited to what articles or chapters are displayed on the current page only. This proved more of a problem for Cambridge content than Elsevier, since Cambridge ebook chapters can be listed on a number of pages, thus requiring multiple zip files to be downloaded. Elsevier mostly populates each ebook’s chapters on a single page, except for reference works.

Figure 10.

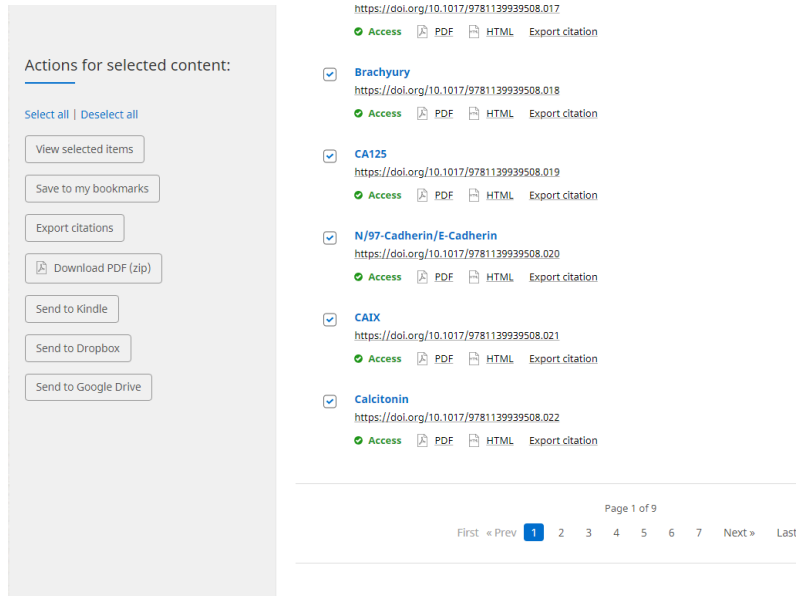
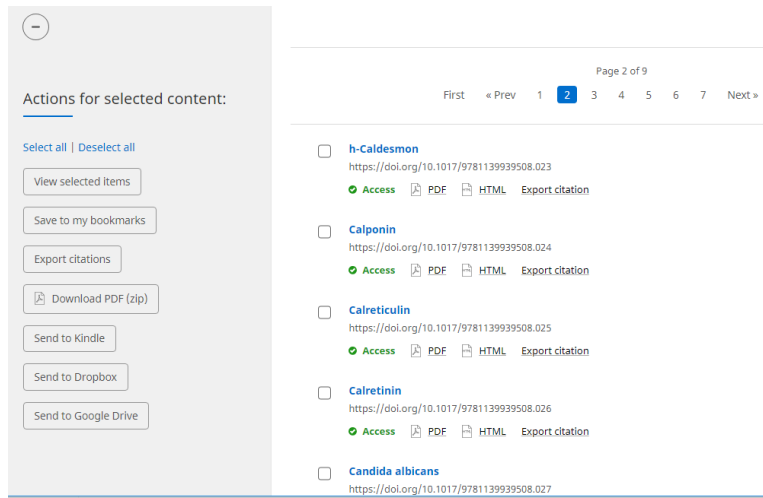


Figure 11.



Wiley ebooks do allow for a full book download then print via Download Full Book directly beneath the Table of Contents, while Reference works are limited to article PDFs, similar to Elsevier.

Recommendations

Upon evaluation of these three platforms, we have identified a variety of desirable functionalities for ebook content. In regards to Browsing, Searching, Downloading and Printing specifically, **highlighted**

search term(s), full book download in single file, keyword vs. phrase search functionality and the ability to search full text prove more beneficial to creating a robust user experience.

Presentation and Layout

Summary

Each ebook interface typically has general presentation and layout features; additionally, they have layouts specific to the interface landing page, display of book titles, book landing page, and chapter landing page. Each interface we looked at had advantages and disadvantages in each of these areas.

Some excellent features and characteristics of interface landing pages include prominent display of the access provision note, a highly visible search box with some advanced search options, and browsing options that are not so detailed as to create a cluttered or cumbersome home page. A feature we hoped to find, but did not, was the ability to limit to books up front (except in Taylor and Francis, which is all ebooks). Characteristics of a useful and pleasing title display are the ability to sort by a variety of fields and the availability of filters, such as by subject, date, or book type. Access indicators are common and expected. Book displays are fairly typical, but some problematic features we found were: overly large text, advertisements, and prominent book purchasing links. In the chapter display, it is most important to be able to easily click on the PDF link to download the chapter. Overall, being able to navigate to other levels (e.g. from chapter to book, from book to title list) is of top importance.

Which Features are Provided?

General

- Altmetrics: Cambridge and Elsevier have these. Cambridge is at the book level; Elsevier is at the chapter level.

Landing pages

- All of the landing pages have a relatively clean and professional layout, however Elsevier contains a large amount of text, which overwhelms the page, especially in its use of extensive subject lists at the bottom of the page. Cambridge may contain too little text, as their page seems to make all the content appear in a single window height. (e.g. access note).

Figure 12. Science Direct Landing Page - Cluttered, difficult to identify next step.

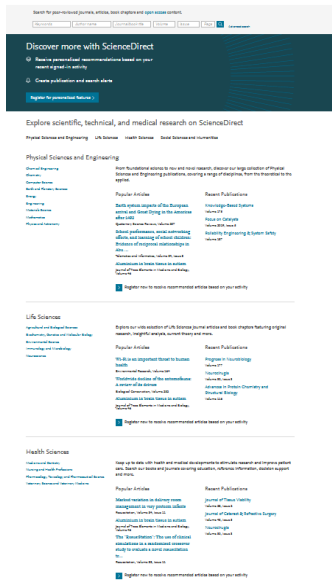
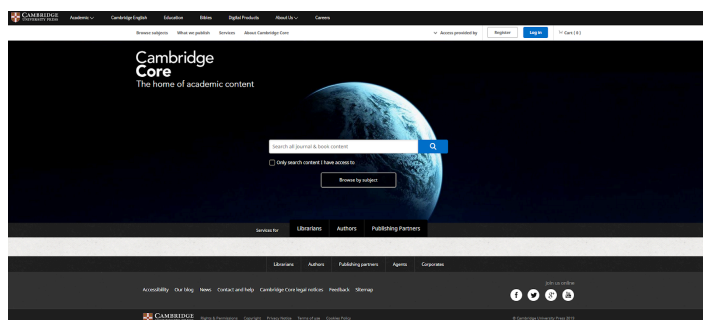


Figure 13. Wiley Landing page: Well organized.

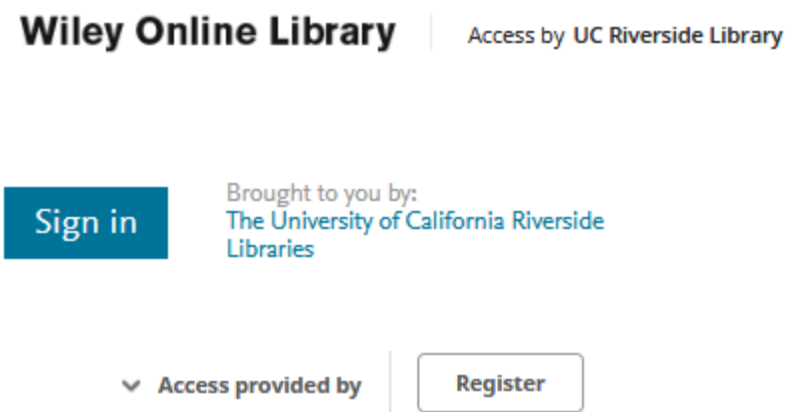


Figure 14. Cambridge Core - Compact at the expense of completeness



- Branding/Access notes: Cambridge's access note is somewhat hidden, whereas Wiley and Elsevier are more obvious.

Figure 15. Varying branding/access notes



- Search: Cambridge has a prominent site search box with no advanced search options; Wiley and Springer have more subject browsing via the landing page and additional advanced search options. Elsevier's search is clearly geared towards journals rather than books. None of the interfaces allow limiting to only e-books when searching, but can be filtered after. In Elsevier, the "Browse Journals and Books" link at the top is more useful, as the list can be limited to books and then searched.

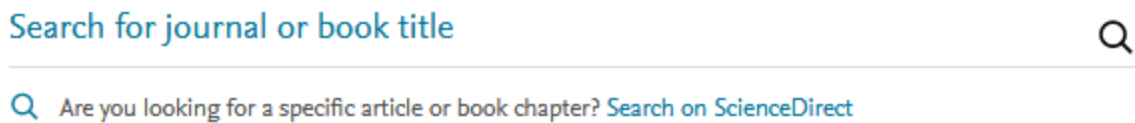
Title Display

- Cambridge allows users to sort their book list by title, publication date, and relevance. Wiley allows sorting by title or relevance. Elsevier sorts the books by title, and allows no other options.
- Wiley's title list page can be filtered by subject or date, sequentially. It is not possible to limit to only materials that are available (i.e. materials the library owns). Cambridge has a

full complement of refinements. Elsevier allows filtering by subject, material type, and accessibility, but not by date.

- Various publishers have varying ways of indicating, on a title list, whether the user has access to the book or not. The exception to this is Elsevier, which makes no indication on the title list whether or not the user has access to the book. The user must either put on the filter to see only accessible books or click into the book to see if access is available.
- Elsevier has two different book title displays depending on how they are accessed:
 - From a search, the title display does not allow one to filter by books, only by book chapters and encyclopedias. For encyclopedias, the display is slightly confusing and links go to “abstracts only?”
 - The “Journals and Books” link, located at the top of every page, provides a clearer list, and may be limited by publication type books (but not chapters or encyclopedias). The default sort is alphabetical, but the title display cannot be sorted otherwise. There is an option here to search for a journal or book title, and there is a note to search on ScienceDirect if looking for a chapter or article.

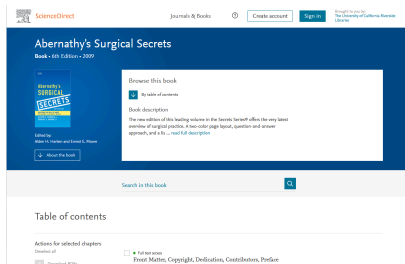
Figure 16.



Book Display

- For all three platforms, the same bibliographic information is provided, but layouts differ:
 - Elsevier: the book info display takes up a large portion of the page, leaving little space for description, table of contents, and other pertinent information.

Figure 17. Elsevier Science Direct Book Landing Page

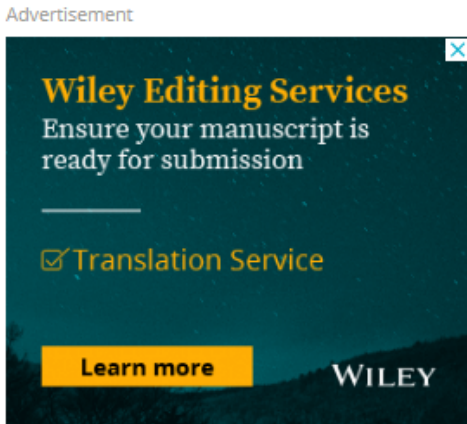


- Wiley: each book, even if owned, has a “get online access” link that is more prominent than the content below the fold. The link goes to a paywall. Further, Wiley contains numerous ads, some of which are animated, which is distracting.

Figure 18. Wiley banner ad

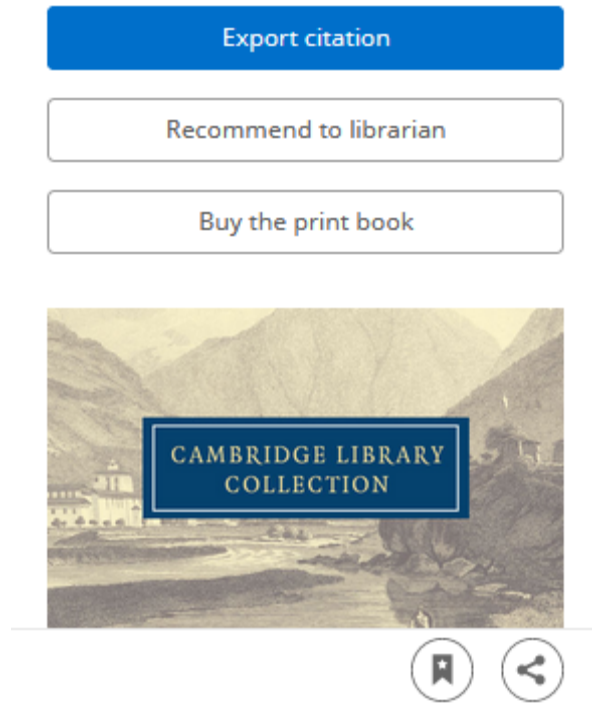


Figure 19. Wiley sidebar ad



- Cambridge has an option to buy the print version that appears prominently, and no SFX/UC-eLinks button.

Figure 20. Cambridge, link to buy the print book



Chapter Display

- Elsevier has the most user-friendly chapter-level experience. It includes figures, tables, hyperlinked text, and linked references (but not to UC-eLinks). There are no breadcrumbs, but navigating back to the book display page is done by clicking on the book title or the small image of the book cover. There are also links to the previous and next chapters. One concern to note is that having the complete HTML on the chapter landing page might lead to a doubling of usage statistics.
- Wiley's references link out via UC-eLinks, which is a plus, however, the ads on the chapter display are distracting. Unlike the typical practice of putting references cited at the bottom of the chapter display, Wiley has "Citing Literature" (articles that cited the chapter). This is interesting additional data, but slightly confusing in terms of placement. The link to full-text is typical (PDF and Adobe Acrobat symbol), but a little under-emphasized. There are no breadcrumbs, but there is a link to the Book Display Page on the Chapter Display Page.
- Cambridge is the least user-friendly, as the chapter display is often just a page with links and only basic information. Returning to the book display is possible by clicking on bread crumbs or on the prominently displayed book title.

Figure 21. Cambridge chapter display - very little substance

Home > Books > Mathematical Modelling of the Human Cardiovascular System > Control and optimization

Mathematical Modelling of the Human Cardiovascular System

Data, Numerical Approximation, Clinical Applications

Chapter

Access





Print publication year: 2019 Online publication date: April 2019

8 - Control and optimization

from Part Three - Optimization, Control, Uncertainty And Complexity Reduction

Alfio Quarteroni, Politecnico di Milano, Luca Dede', Politecnico di Milano, Andrea Manzoni, Politecnico di Milano, Christian Vergara, Politecnico di Milano

Publisher: Cambridge University Press
<https://doi.org/10.1017/9781108616096.009>
pp 159-177

Export citation

Which Features are Not Provided?

- None of the interfaces allow users to search only books up-front, it is only available by filtering results.
- In-book searching: Cambridge and Elsevier allow in-book searching, whereas Wiley does not. However, in both cases search results are only a list of chapters that have the search term(s), with no context. Wiley allows the user to download an entire book in PDF, which allows for keyword searching across the entire book, but it is an extra step.
- In all of the interfaces, ebooks seem like a tacked-on addition to the “real” content, which is clearly journals.

Figure 22.

Search for peer-reviewed journals, articles, book chapters and open access content.

What are the Desirable Features?

- Clear indication if an item is owned, and the ability to filter by what users can access

Figure 23. Access search option

Only search content I have access to

- Navigational breadcrumbs

Figure 24. Navigational breadcrumbs

[< Back to search results](#) [Home](#) > [Books](#) > [A Guide to Modern Cookery](#) > [FISH](#)

- No ads
- Link-outs to UC-eLinks at the book, chapter, and references level
- Ability to limit searches to e-books only
- Ability to sort title lists in a variety of ways
- Anchor links within a chapter between text and endnotes (see Cambridge example)

Are there any Barriers to Access?

None noted.

Recommendations

- Wiley: Remove ads or have the ability to turn them off; add navigational breadcrumbs; add UC-eLinks at the book and reference level
- Cambridge: Add straightforward navigation through chapters (breadcrumbs), remove or make smaller the “Buy the Print Book” link; add UC-eLinks at book, chapter, and reference levels; make pagination at chapter heading level more clear

- Elsevier: Reduce the title header size on the book's landing page; use fewer arrows; de-clutter home page; fix search results to be more book-friendly/more like the Books & Journals link at the top

Features for Further Discussion

- Having HTML on the chapter display page is useful, but is it necessary? It apparently double counts for statistics.

Feature Differences Among Disciplines

- Differences occur between type of book, i.e. monograph vs. reference work or monographic series, which can be confusing.

Publisher Differences

- Cambridge's main landing page seems to hide potentially useful content in order to make the page more compact.

Reader Compatibility

Currently, all publishers offer a variety of options for reading ebooks. Users can download books in PDF format for use on a device (ereader, tablet, phone) or Adobe Acrobat. Users can also read books on the Web using the publisher's proprietary platform. While these options are a good start, there are many improvements that can be made to the ebook reading experience. For example: making books available in the ePub format; having bookmarks, annotations and citations available in all formats (PDF, ePub, HTML, etc); using open standards for bookmarks and annotations to ensure cross-platform compatibility. The publishing industry has made a good start in offering ebooks to users in the formats they need; the next step is to encourage them to offer more formats and services.

Which Features are Provided?

- All three publishers provide books in PDF.
- None provide ePub, a format more suitable for mobile devices. This format broadens the user's reading options since many readers use this format, however it is worth noting that there are open source programs to convert PDF to ePub.
- All publishers allow downloading of both the complete book and individual chapters.
- HTML is available from some publishers but it must be used on the publisher's platform behind their paywall.
- Wiley
 - Books are available as HTML
 - Only offers static PDF
- Cambridge
 - HTML format is only available for some books. Some have HTML for the entire book and some just have HTML for the summary

- Only offers static PDF
- Elsevier
 - HTML format available for all books
 - Offers PDF with links activated

What are the Desirable Features?

- When the patron asks to access an eBook, the platform automatically detects the requesting device and downloads the most suitable format. (PDF to desktop computers and ePub to mobile devices.)
- PDF annotation should be available.
- Publisher has created HTML links in the book. Only Elsevier has this feature.
- PDF annotations and links can be downloaded and used outside the publisher's platform.

Are there any Barriers to Access?

- None that we can see.

Recommendations

Our long term goal should be to work with publishers and libraries:

- To improve PDFs so that they are more interactive (for example, hyperlinks, citation, annotations).
- To make ePub one of the format choices, which would make the text more readable and provide more interactive features.
- To encourage the development and use of portals that can display the content options for all publishers' materials so that patrons no longer have to go from publisher portal to publisher portal to access eBooks.
- To encourage the development and adoption of non-proprietary universal ereaders and ereader plugins to provide patrons with a wide variety of services. SciVerse is a proprietary example of this type of software, which offers many plugins for users such as annotation, citation, grant opportunities, etc. (See [this](#).)

Features for Further Discussion

- None

Feature Differences Among Disciplines

- Cambridge: HTML format is limited to the summary section only for the Physics ebook and Business and Economic ebook that we investigated. Full-text HTML is available for the Medicine and History ebooks. To get a better understanding of this, we may want to look at more books or simply talk to Cambridge to better understand their policy on this.

Publisher Differences

- Elsevier is the only publisher that offers hyperlinks in PDF.
- Cambridge does not offer full text HTML for all books.

Highlighting, Bookmarking, and Export

A list of features related to highlighting and bookmarking are evaluated, including interoperability with Dropbox/Google Drive, highlighting, bookmarking, adding to favorite, annotation, annotation export, citation export, citation format and others. Among all the features, citation export is supported by all of the four publishers and provided in a variety of formats. Content export option and integration with Google Drive/Dropbox is even supported by one of the publisher platform.

However, highlighting, annotation and bookmarking features are rather limited. With a few publishers, users have to create personal accounts before they can bookmark. Built-in annotation and highlighting features are not provided on publisher at all. They are only enabled in certain higher editions of Adobe Acrobat reader. The lack of capabilities to bookmark and annotate can limit users reading and learning experiences.

Which Features are Provided?

- Users have to first download PDF files before they are able to make highlighting and annotations in certain higher editions of Adobe Acrobat reader, such as Pro, DC or XI, if using Microsoft Edge in Windows 10 environment.
- With Wiley and Cambridge, users can bookmark after creating and logging into their personal account
- All three publishers provide citation export features and support a variety of formats, such as plain text, RIS (EndNote, Reference Manager, ProCite), BibTex, Refworks. Medlar is only provided by Wiley.
- Users can export the content into Google Drive and Dropbox from Cambridge platform
- Medical related content requires special citation export format, such as Medlars.

Which Features are Not Provided?

- Built-in highlighting and annotations are not provided on publisher platforms even after user login.

What are the Desirable Features?

- Easy highlighting, bookmarking, and annotation
- Annotations can be consolidated and can be accessed in later time
- A central place for annotations

Are there Any Barriers to Access?

- Inability to make personal notes and get access to them in the future
- Currently, users have to have a higher edition of PDF reader, such as Pro, DC or XI in order to be able to annotate; and they are not free.

- Annotations cannot be shared
- Users have to create separate personal accounts with each publisher in order to bookmark

Recommendations

- Instead of multiple personal accounts with different publishers, a built-in BMS (Bibliographic Management System, e.g. Zotero, Mendeley, etc.) is desired so that users can directly export and import with one step. Highlighting, bookmarking, and annotation will be supported in user-preferred BMS tool.
- Users can also bookmark and annotate in Google Drive/Dropbox and share their annotations with peers

Publisher Differences

- Some special citation export formats are only supported by certain publishers. For example, Medlars is only supported by Wiley.
- Certain publishers can export content into Google Drive and Dropbox
- Bookmarking options are not provided at the same level. Some publishers allow users to bookmark at article level, and some only allow users to bookmark at title/chapter level

ADA Assessment Criteria

A comprehensive evaluation of the accessibility features available on the three ebook platforms was conducted. Based on our evaluation, we suggested the following website features and content features for eBook platforms that the UC system licenses. Website features are common informational and interactive features on a content platform that provides users ways to contact the provider if there is an accessibility need. Content features include how accessible the content formats are to users as well as how accessible the reading environment, page, and tools are surrounding that online content.

Desirable website features include:

- Transparency of accessibility practices and level of compliance and plans for fixing any outstanding accessibility issues. Transparency is usually provided at minimum via a Voluntary Product Accessibility Template (VPAT).
- Add the date of the latest update for policies and practices, so if there is a reference to timeline and planning of accessibility testing and fixes that users have a better frame of reference.
- Make accessibility policy, practice, and contact links easily available in global navigation.
- Have a response and remediation process in place to facilitate user's need for accessible content.

Desirable content features include:

- All licensed content should follow best practices for [WCAG 2.1 Accessibility Guidelines for Level AA compliance](#) (The WCAG 2.0 standard was recently updated to version 2.1 in June, 2018).
- Machine readable text surrogates should be available for all non-text or visually based content.

- When text is available, ensure that the text is structured and has appropriate descriptive tagging to ensure machine readability.
- Major navigation labels and content heading areas should have descriptive language. For example, instead of “Read More” text should read “Read More About our Policies.”
- Content should also be usable across multiple devices and browser types.
- For backlog content that may not have been produced in an accessible way, have an easy to find contact mechanism that will allow users to request an on-demand accessible version of content.
- For navigation of content, we generally want to ensure that all content can be easily navigated and accessed via tab use as well as screen reader use. The appropriate shortcuts and tagging should be available within the content as well as the website or platform features housing the content that allows easy navigation and use of content for all user types.
- Any tools available to the reader in the reading environment of the website should all be accessible, easily navigated via tabbing, screen readers, as well as screen focus.

Publisher Differences:

In general, the Cambridge publisher site and content platform has the most comprehensive and easily accessible information on their ADA practices for both their website and their licensed content formats. The ADA information is easily available in the global footer, which is the same on the publisher website and content platform. Cambridge also provides accessibility-specific contact information for their users.

Wiley has some concise information accessibility best practices available on their content platform website, which is easily available via the global navigation. They have brief statements on how users can expand text size viewing on licensed content as well as their browser support. However, they do not have extensive overview information on how they support and conduct accessibility best practices for their content formats or their website. They do state on their site that they strive for WCAG 2.1 Level AA compliance. They also state that their Voluntary Product Accessibility Template is available upon request. They have general contact information available on their site but no specific accessibility contact information available.

Elsevier has different accessibility information on their general publisher site versus their content platform site on Science Direct. On both sites, the accessibility information page is not immediately available to users at the top global level of navigation and is only discoverable after detailed browsing of their Policy Page or searching by a third party search engine. On their publisher site, they state that they strive for compliance with the WCAG 2.1 Level A. However, on the Science Direct content platform, they state in their Voluntary Product Accessibility Template (VPAT) that they are compliant with both WCAG 2.1 Level A and AA. Thus, there is disparity on accessibility compliance across their different content platforms. Their ScienceDirect platform provides a downloadable version of their VPAT, detailed information on their accessibility practices, a chart on how various parts of their website and content stack up against accessibility standards, as well as a specific accessibility contact email for users who have a specific accessibility issue or request. ScienceDirect also provides a way for students with disabilities to request special electronic files if needed.

None of the publishers provide ways for users to test their content or websites for accessibility. However, if they conduct the testing as part of their content production and website development process, this would be unnecessary for users. Cambridge and Wiley seem to have no difference in the way their website page is laid out for content across different discipline types. However, with Elsevier content platforms there appears to be some variance across their various products from different disciplines.

Moving forward, we recommend that our ebook vendors provide as much information as they can on how they comply with WCAG 2.1 standards and their intentions for addressing any issues they face in regards to their website or their content. Providing a way for users to be able to easily contact the publisher on any issues they have regarding the website or content is a reasonable way to accommodate any demands on content backlog or areas of the site that do not yet meet University of California recommended compliance level AA.

Final Recommendations

Navigation Features (Browsing, Searching, Downloading, Printing)

Upon evaluation of these three platforms, the EUCKG has identified a variety of desirable functionalities in regards to browsing, searching, downloading and printing. Specifically, highlighted search term(s), full book download in single file, keyword vs. phrase search functionality, and the ability to search full text prove more beneficial to creating a robust user experience.

Presentation and Layout

We were most impressed by clean landing pages with obvious options for searching and browsing ebook specific content, title list pages with many sort and filter options and symbols indicating content access, book display pages with well-organized book information and table of contents listings, and chapter display pages with clear PDF links. We were most troubled by ads and platforms that offered to sell access to content we had already subscribed to.

Reader Compatibility

To improve on the reading experience of ebooks, we recommend publishers consider enhancing PDF formats with interactive features such as hyperlinks, citations, annotations, adding ePub as one of the format choices which is more compatible with mobile devices, and adoption of a universal ereader to provide users with a unified reading experience.

Highlighting, Bookmarking, and Export

The citation export feature seems to be quite standard and well developed across publishers. The content export and integration with cloud storage services like Google and Dropbox is a new but popular development. However, the annotation and bookmarking functions are still lacking and have created usability barriers for users. Requiring users to register accounts first before they can bookmark the content is a disadvantage to users. The integration with a third party annotation tool might be worthwhile to explore.

Accessibility

In this ebook platform assessment, we suggested certain website features and content features for resources that the UC system licenses. Desirable website features included transparency in regards to the platform's level of compliance with accessibility standards and a clear way for libraries and patrons to contact the vendor in regards to any accessibility issues they may be facing in utilizing the platform. Content features that were generally desired included well structured and machine readable text surrogates for all ebook content, including multimedia content, as well as content that is easily navigable and usable via tabbing and screen reading software.