A data-driven digital transition: Reader expectations of the *WHO Classification of Tumours* Series

Teresa Lee[1] and Arthur Perret[2]

[1]*International Agency for Research on Cancer, Lyon, France*

[2]*École Nationale Supérieure des Sciences de l'Information et des Bibliothèques, Lyon, France*

Corresponding author: Teresa Lee, leet@iarc.fr

Abstract

Introduction

Librarians and publishers are interested in understanding user preferences and habits vis-à-vis reading and accessing scholarly books. Recent library and publishing literature reveals conditions and preferences that typically drive users to print and electronic formats. For the International Agency for Research on Cancer publishing unit, whose goal is to offer in digital formats the bestselling, internationally recognized series *WHO Classification of Tumours* (also known as the *Blue Books*), it was imperative to supplement these findings by asking the readers directly.

Objectives

The survey's authors set out to gather evidence on which to base decisions about formats, functionalities, business models, and marketing specific to this series. The authors designed the survey to reveal the needs of a specialized audience; they also sought to contextualize and test findings in the literature about print versus digital reading preferences.

Methods

Responses were gathered from an online survey that ran for 7 weeks, from late September to mid-November 2015. The survey consisted of a total of 24 questions, with branching that directed only those respondents with a sufficient level of familiarity with the *Blue Books* to an additional set of queries. Questions were generally closed-ended, but open-ended comments were invited on selected topics of functionality and format preferences.

Results

The survey generated 579 completed responses (a completion rate of 68%), and 69% of respondents identified their occupation as pathologist. Most typically the *Blue Books* are used to locate specific pieces of information (88%), with 92% of respondents using them for clinical or diagnostic purposes. Print was indicated by 60% of respondents as their preferred format for reading scholarly or professional books. For preferred electronic file format, 64% reported PDF, a format whose fixed layout conforms to print. In terms of reading practices, 66% reported using laptops and 76% using desktops as devices to access scholarly literature. While many respondents rely on modes of sharing such as libraries, colleagues, or association memberships, 54% of respondents named individual purchase as their most common way of obtaining professional books.

Discussion

The stated format preference is print, further underscored by a preference for PDF. However, *Blue Books* readers are flexible in their practices, using a range of electronic devices for professional reading. Further, both the direct comments and the finding that *Blue Books* are used predominantly to locate specific information, rather than being read cover-to-cover, indicate that electronic formats will be welcome and useful. Respondents expressed interest in higher-quality images, regularly updated content, and enhanced search capability. Timeliness of content appears to be the most compelling factor when deciding whether to buy an e-book. The survey indicates that there is room for libraries to better position themselves when it comes to connecting readers with new scholarly books.

Keywords: Publishing; Reference Books, Medical; Surveys and Questionnaires

Introduction

Both librarians and publishers have vested interests in understanding user preferences and habits vis-à-vis reading and accessing scholarly books. Recent studies on the preferences and behaviours of scientific, technical, and medical (STM) audiences discuss factors that typically drive users to print and electronic formats (1–4). In a literature review of e-book studies conducted from 2006 to 2011, Staiger concludes that "academic users typically search e-books for discrete bits of information, a behavior summed up by the formula 'use rather than read'" (5). However, the relationship between reading behaviour and format preference also appears to be nuanced, with format overriding the book's genre and shaping the type of reading: "No matter if a book is published as a textbook, reference source, or other book type, most readers report using e-books like reference books." (2).

Such issues of format preference, reading and access behaviour, and attitudes to e-book technologies are critical to the International Agency for Research on Cancer (IARC) publishing unit, whose goal is to offer in digital formats the bestselling, internationally recognized series *WHO Classification of Tumours* (also known as the *Blue Books*). The *Blue Books*, authoritative and concise reference books for the histological and molecular classification of tumours, have to date been available only in print. In planning the launch of e-book sales, the IARC publishing unit saw it as a necessity to supplement findings in the literature by asking its audience directly.

Objectives

The survey's authors set out to gather evidence on which to base decisions about formats, functionalities, business models, and marketing specific to this series. The authors designed the survey to reveal the needs of a specialized pathologist audience; they also sought to test and contextualize findings in the literature about print versus digital reading preferences.

Method

Responses were gathered from an online survey that ran for 7 weeks, from late September to mid-November 2015. The survey consisted of a total of 24 questions, with branching that directed only those respondents with a sufficient level of familiarity with the *Blue Books* to an additional set of queries. Questions were generally closed-ended, but open-ended comments were invited on selected topics of functionality and format preferences.

Results

The survey generated 579 completed responses, representing a completion rate of 68%, and 69% of respondents identified their occupation as pathologist. The bulk of respondents fell into the age brackets 35–49 years (39%), i.e. mid-career, and 50–64 years, i.e. late career (43%). Despite an international audience for the *Blue Books*, responses skewed towards North America (38%) and Europe (37%).

Most typically the *Blue Books* are used to locate specific pieces of information (88%) (Figure 1), with 92% of respondents using them for clinical or diagnostic purposes (Figure 2). Print was indicated by 60% of respondents as their preferred format for reading scholarly or professional books, while 27% reported no definite format preference (Figure 3). For preferred electronic file format, 64% chose PDF, a format whose fixed layout conforms to print, over EPUB, HTML or other formats. Although results also indicate that print, or print plus online, is a more common mode than electronic-only for reading other well-known pathology books (Table 1), the survey also confirms that users already consume scholarly and professional books on a range of devices, with 76% reporting the use of desktops and 66% laptops (Figure 4).

Respondents who stated a definite preference for one format over the other were also asked to rate aspects of the preferred format that attracted them to it. Those who stated they had no definite format preference were asked to consider and rate the appeal of aspects of each format (Table 2). Among those who indicated hardcopy as their preferred format, the top-ranked criteria contributing

to their preference were that print books are better for cover-to-cover reading (36% strongly agreed) and provide better browsability (36% strongly agreed). Among those preferring e-books, portability (58% strongly agreed) and being able to dispense with physical storage (53% strongly agreed) were rated highest. Unsurprisingly, respondents who stated that they had no format preference tended towards greater neutrality in their opinion on factors that may be perceived as specific advantages of one or the other format. However, among the same set of respondents, there was a greater inclination to find aspects of electronic format appealing over print.

When it comes to access, while many respondents rely on modes of sharing such as libraries, colleagues, or association memberships, 54% of respondents named individual purchase as their most common way of obtaining professional books. Libraries were reported as the second most common option for obtaining books for scholarly or professional reading (Figure 5). However, when it comes to discovery of new titles, colleagues (57%) and professional associations (55%) ranked highest, with only 26% reporting the library as a source (Figure 6).

When asked about expectations of the pricing of e-books, the vast majority of respondents expected an e-book to cost less than a print book (Figure 7). However, when asked to report on factors that determine the decision about whether to buy a particular e-book, cost (68% agreed or strongly agreed) was secondary to access to regularly updated content (79% agreed or strongly agreed) (Figure 8).

Conclusions

Our survey results confirmed, and the respondents urged us in their qualitative comments, that when it comes to the *Blue Books*, it is not a print versus electronic proposition but a matter of both formats existing alongside each other. Zhang and Beckman came to the same conclusion in 2011, stating, “These numbers [53% preferred e-books and 47% print] indicated that e-books and print will coexist for a long time in the foreseeable future.” (4).

While at this point the majority of our respondents prefer print, our survey confirms the flexibility around format choice noted in other studies (1,2,6). The respondents who expressed no definite preference for either print or electronic format were cognizant of and thoughtful about the perceived advantages of both; however, they tended to be more positive about the advantages of e-books over those of print. Further, the nature of the use of the *Blue Books* also supports this complementarity, given that the *Blue Books*, which are used predominantly to locate specific information, will likely be very welcome in an electronic format. In addition, the *Blue Books* readership is already accustomed to reading scholarly and professional books across multiple electronic devices. While the move towards offering digital formats is an inevitability for IARC, the literature and the current environment suggest that the transition to consumption of STM e-books is likely to be more varied and less complete than that of journals, for which "the vast majority of use ... takes place electronically" (7,8).

STM publishers are interested in enriched digital platforms that go beyond the e-book as a relatively static, electronic counterpart to the print; IARC is no exception. However, survey results suggest that while an enriched, database-driven platform would be useful, it is not widely perceived as a necessity for the content of the *Blue Books*. The two main factors that would argue for taking publishing in this direction are images – being able to provide better quality and quantity without limitations of devices and file formats – and timeliness (Figure 8,9). For the IARC publishing unit, the priorities that emerge from the survey are the above-mentioned areas of image quantity and quality and regularly updated content, and that of enhanced search capability.

While the survey was intended to inform IARC's publishing priorities, its findings may also be useful to health librarians. In particular, the survey indicates that there is room for libraries to better position themselves in order to be perceived as a discovery channel for new scholarly books. While the library is a notable source of the actual content and ranks second only to individual purchase as the most common way for the audience to obtain books, in contrast, it ranks much lower as a source of discovery (Figure 5,6).

Tables and figures

Figure 1: Manner of use

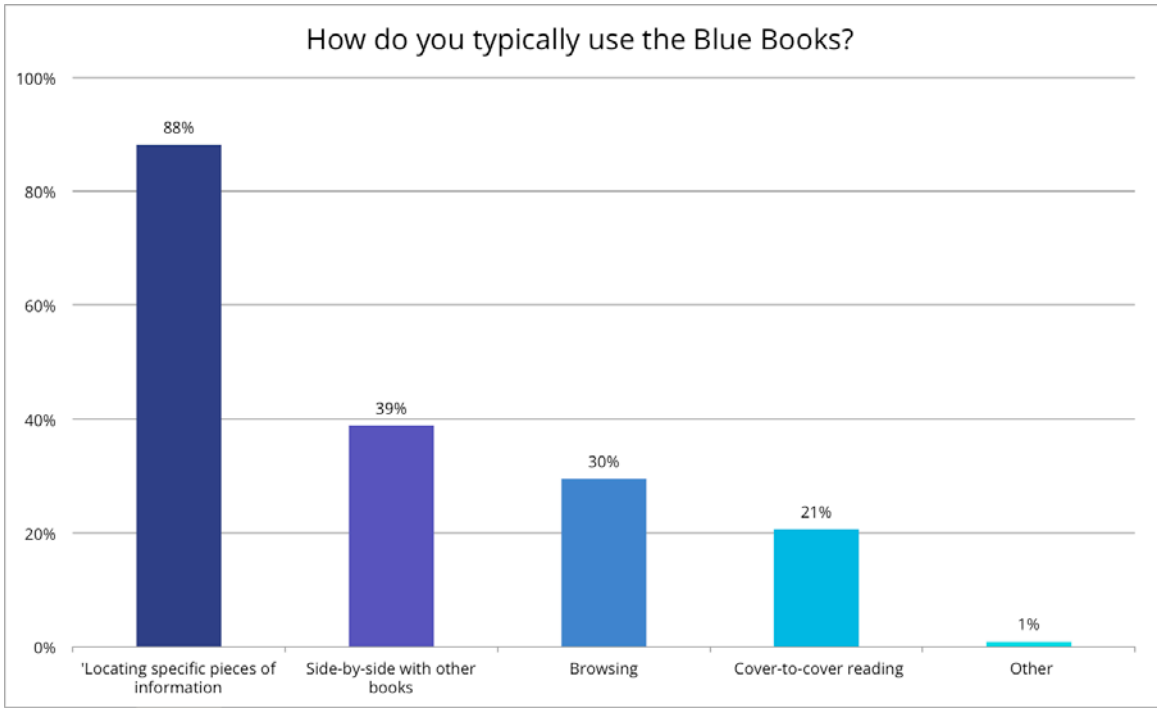

Figure 2: Purpose of use

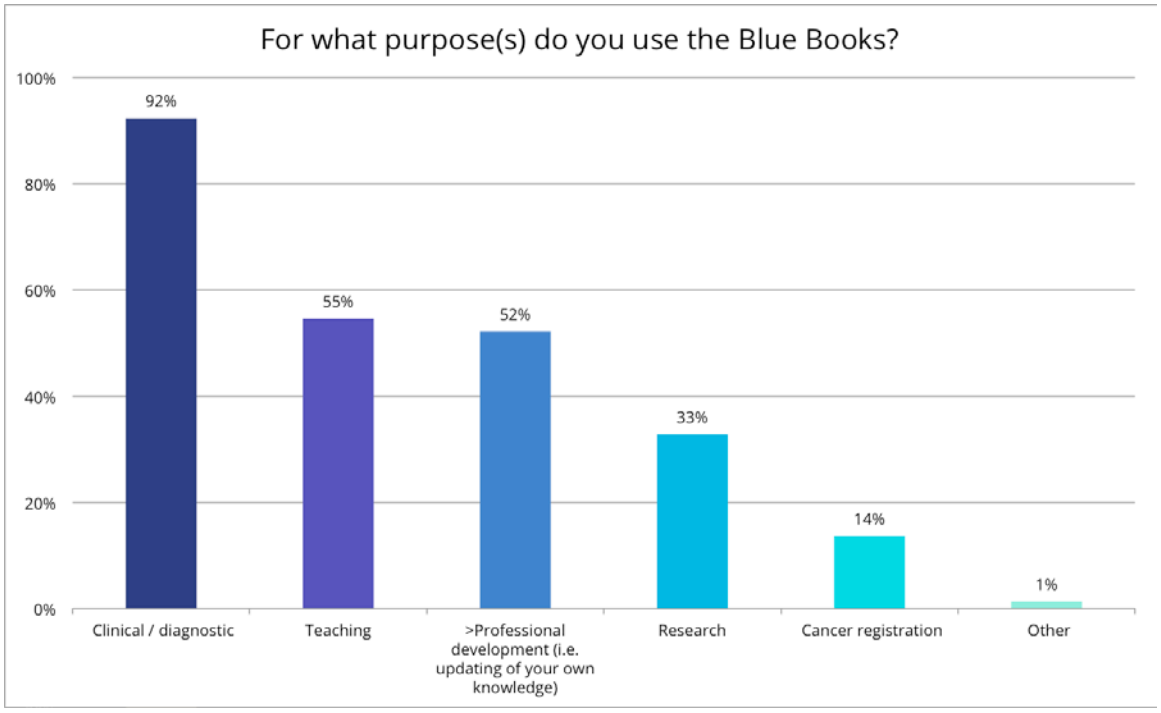

Figure 3: Format preference

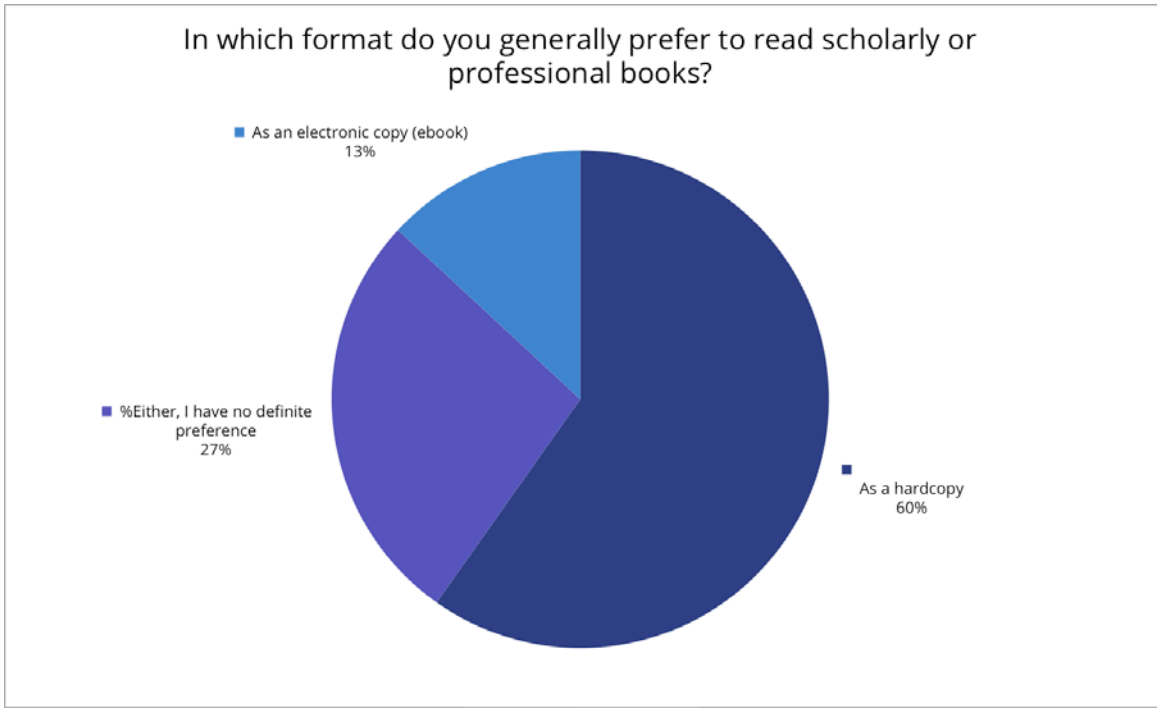

Figure 4: Devices

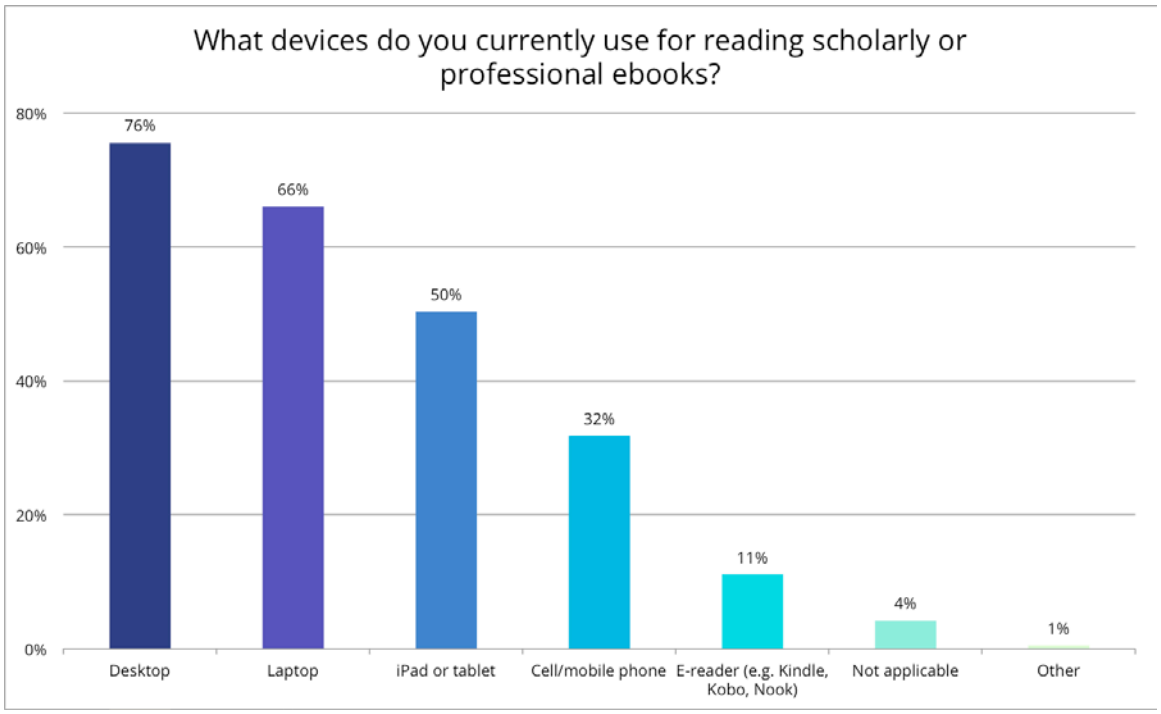

Figure 5: Accessing resources

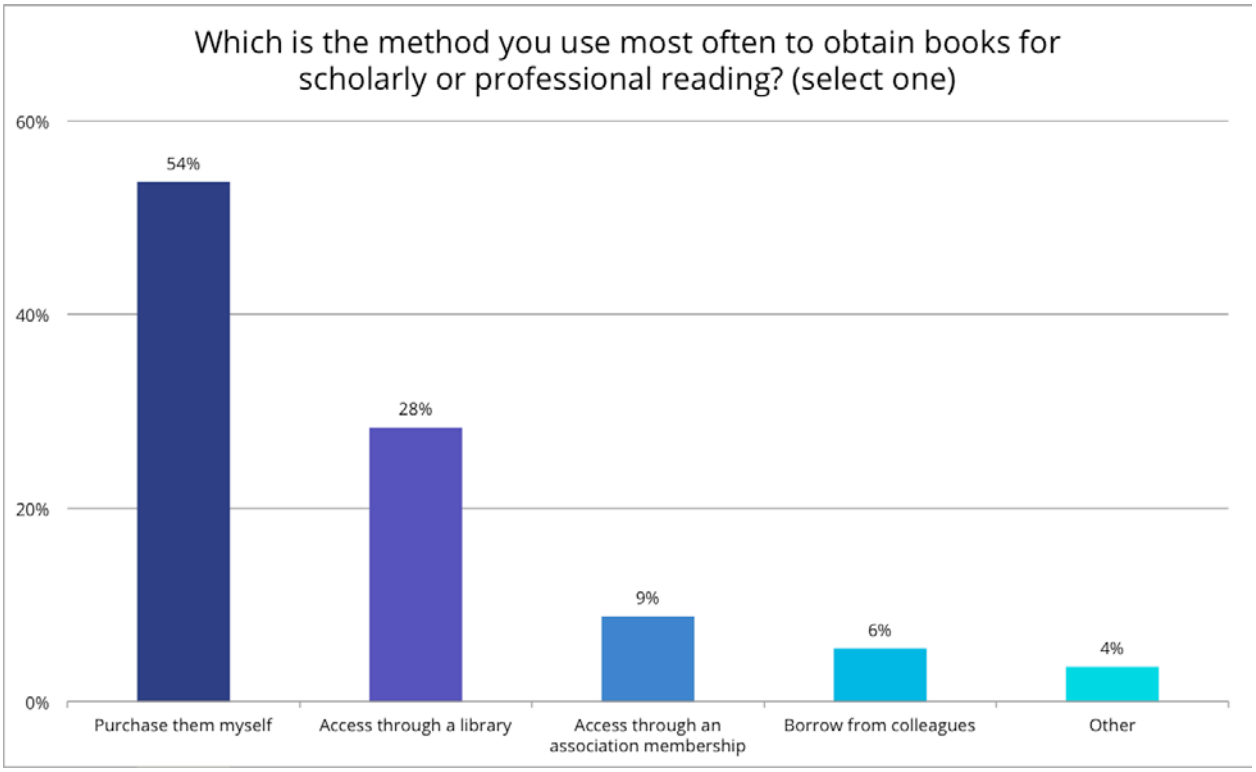

Figure 6: Discovering resources

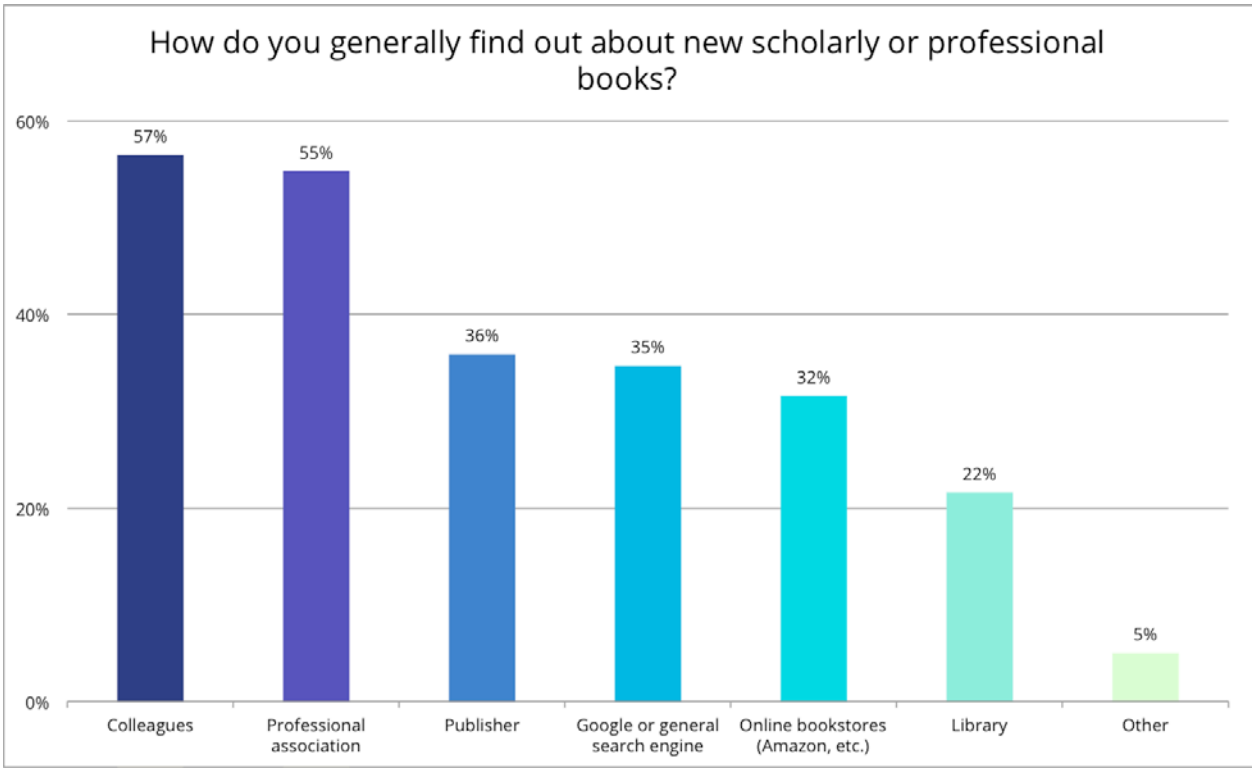

Figure 7: Expected cost of ebooks

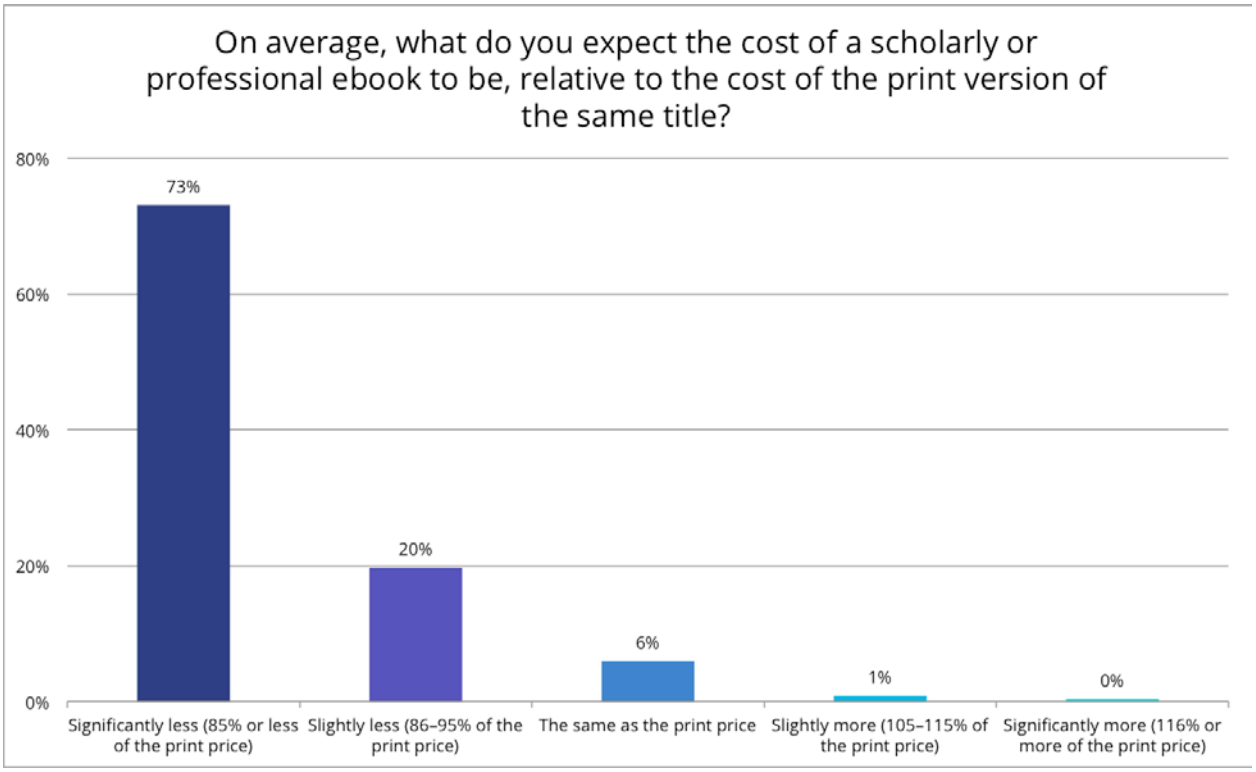

Figure 8: Rating the factors influencing the purchase of ebooks

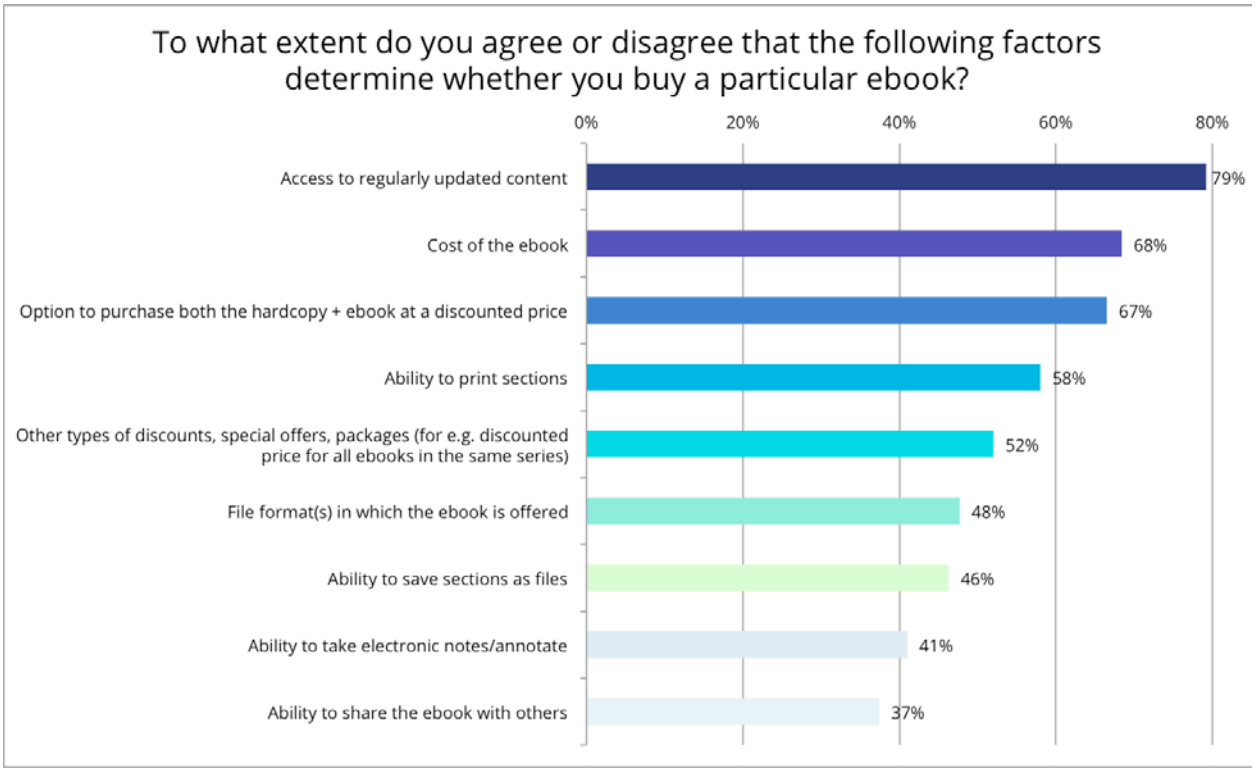

Figure 9: Rating the usefulness of possible features of electronic Blue Books

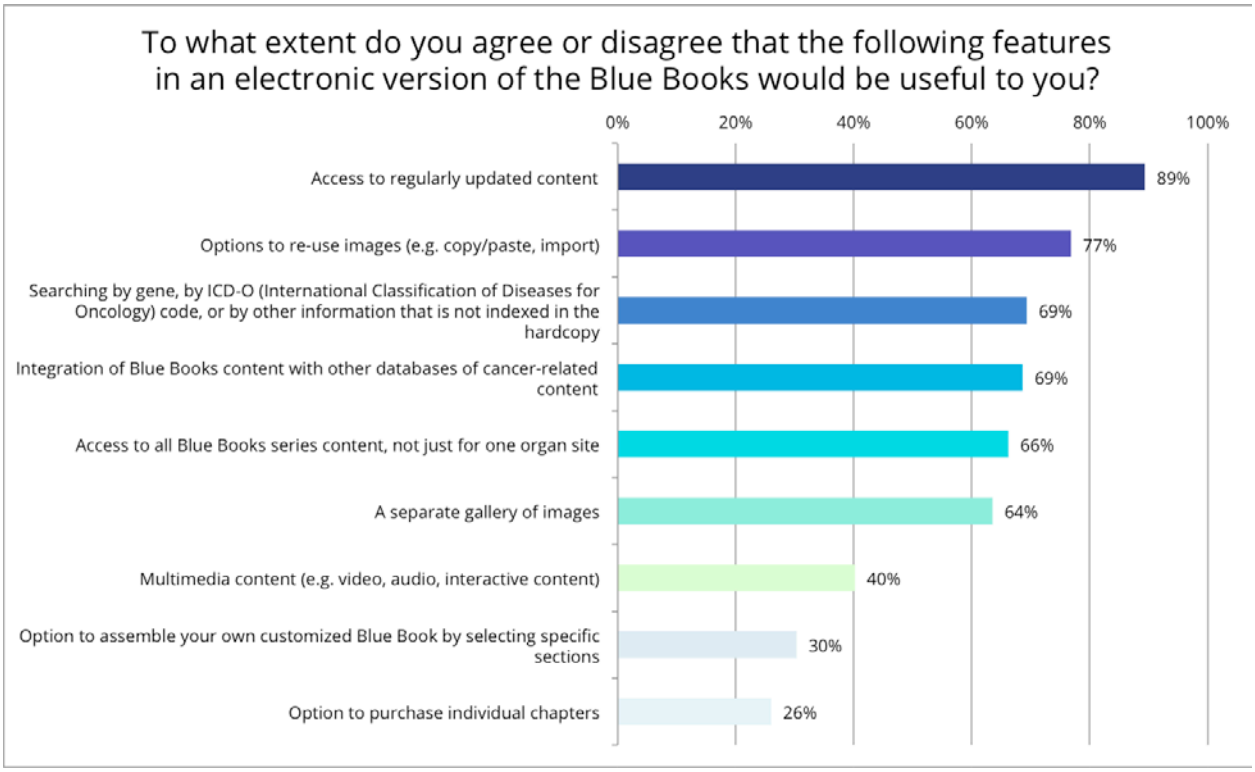

Table 1: Use and format for other titles and resources

	No, I do not use	Yes, in hardcopy	Yes, in electronic	Yes, both hardcopy + electronic
Carter: Sternberg's Diagnostic Surgical Pathology	67,20%	23,60%	2,80%	6,50%
Fletcher: Diagnostic Histopathology of Tumors	60,70%	26,80%	5,20%	7,40%
Gattuso: Differential Diagnosis in Surgical Pathology	91,10%	3,90%	2,60%	2,40%
Rosai: Rosai and Ackerman's Surgical Pathology	45,00%	41,00%	1,70%	12,40%
AFIP Atlas of Tumor Pathology series	45,60%	48,00%	3,00%	3,50%
Journal articles	4,60%	7,70%	43,50%	44,10%
Clinical guidelines or protocols	14,40%	5,50%	50,00%	30,10%

Table 2: Respondents' opinion on features depending on format preference

(P): print-preferring respondents
(E): electronic-preferring respondents
(NP): no preference for either format

	Neither agree nor disagree		Agree		Strongly Agree	
Print (P) vs. No preference (NP)	**P**	**NP**	**P**	**NP**	**P**	**NP**
Better for cover-to-cover reading	15,00%	29,90%	42,50%	45,20%	36,40%	19,10%
Better for browsing	16,20%	31,20%	41,60%	38,20%	36,10%	12,10%
Easier to have other hardcopy books open at the same time	16,20%	29,30%	47,70%	40,10%	30,90%	15,90%
No need to interact with technology or devices	24,00%	34,40%	35,00%	23,60%	22,00%	13,40%
Convenient for lending and/or borrowing	25,40%	31,80%	43,90%	37,60%	19,90%	12,70%

	Neither agree nor disagree		Agree		Strongly Agree	
Electronic (E) vs. No preference (NP)	**E**	**NP**	**E**	**NP**	**E**	**NP**
Better for searching for and locating specific information	10,50%	15,90%	42,10%	46,50%	46,10%	36,30%
Enhanced content/multimedia content	17,10%	13,40%	39,50%	52,90%	39,50%	31,20%
Lighter/more portable	6,60%	11,50%	32,90%	40,10%	57,90%	45,20%
No need for physical storage	9,20%	10,20%	35,50%	42,70%	52,60%	43,30%
Ability to copy and paste	13,20%	12,10%	46,10%	42,70%	39,50%	43,90%
Ability to take electronic notes/annotate	26,30%	24,80%	38,20%	39,50%	30,30%	26,10%
Ability to print specific sections of content	18,40%	21,00%	42,10%	42,00%	34,20%	31,20%
Environmentally friendly	17,10%	21,70%	42,10%	35,00%	38,20%	38,20%

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