# Conclusion

## Summation of the Major Options

The intent of this report has not been to rate, rank, or recommend the various audiobook vendors. Each library and library consortium will need to analyze its needs, the needs and preferences of its target user population, its budget, and other factors before evaluating the options and eventually selecting one or more vendors. Nevertheless, it may be worthwhile to summarize the options currently available to libraries and library consortia.

### Audible

The master collection of Audible is the largest of the five vendors reviewed, but this company's interest in leasing or selling content to libraries, library consortia, and other institutional customers seems to wax and wane, which should be a caution flag. It offers no support systems, such as an administrative module, circulation system, and usage statistics.

### NetLibrary and OverDrive

In many ways, NetLibrary and OverDrive compete directly for institutional customers for digital audiobooks. Both companies have sizable and growing master collections. Both are using the protected WMA file format. Both now allow institutional customers either to purchase individual copies or to lease more or less unlimited simultaneous access to all or parts of their master collections. Both are moving into non-audiobook digital media, such as music, movies, and television.

Of the five vendors, OverDrive has been the most aggressive in trying to extend and fine-tune the audiobook listening experience. It also has been the most aggressive in adding other types of media objects, such as music and video, to its offerings, which may bode well as portable media players overtake portable audio players as the hot device to carry.

### OverDrive and Playaway

OverDrive and Playaway have taken the most steps to make their digital audiobook systems more accessible to everyone, especially those who are blind or have low vision.

### Playaway

Playaway's self-contained, preloaded digital audiobooks can be obtained from Playaway, Recorded Books, and Follett—and perhaps from other companies. Playaway seems to be finding it easier to license its playback technology than to negotiate with content holders for the right to distribute content directly.

Although Playaway is trying to sell both to individual consumers and to such institutions as libraries and library consortia, its business and technology model may be better suited in the long run for institutional sales and use. Because audiobook content is "cemented" into the portable playback device, the device cannot be wiped clean and a new audiobook loaded after an audiobook has been read. Individual consumers often bite on this model for printed books, building a sizable home collection of printed books that have been read. Audiobooks are more cognitively disposable, however, so the Playaway model may not be very attractive to end users. Does an audiophile really want to have a shelf full of previously listened-to Playaway devices? For a library, however, where serial circulation of content across the population served is well established and comfortable, the Playaway model, with the audiobook content preloaded on an eminently portable, easily used playback device, may be popular.

The March 2006 Mid-Illinois Talking Book Center's report on the Playaway field test notes, "For those users who are interested in trying a digital audio book but who balk at the idea of installing software, downloading content from the Internet, then transferring content to a portable playback device, the simplicity of the Playaway system should be very appealing."[1]

### TumbleTalkingBooks

By eschewing the downloading and transferring of audiobooks and e-books, TumbleTalkingBooks has cut through those headaches and hassles for publishers, aggregators, libraries, and users. The big downside of TumbleTalkingBooks is the lack of a critical mass of content. For a digital audiobook service targeted to libraries and library consortia to succeed, it needs, in my opinion, to offer at least ten thousand titles within a reasonable time after launch. TumbleTalkingBooks has yet to offer one thousand titles. Playaway is in a similar situation.

### No-Direct-Cost Web-Based Sources

Web-based sources of digital audiobooks that have no direct costs ("free") for institutional and individual users are becoming attractive alternatives to fee-based vended services. Libraries and library consortia considering this option need to remember that the investment of a library's resources into building and maintaining a service go far beyond the price paid to vendors for purchase or lease. What value libraries can add to the welter of no-direct-cost Web-based digital audiobook sources also remains an open question. Careful selection and virtual co-location (through finding aids, for example) would add value to the current situation. Libraries also could help make audiobook readers aware of the many volunteer efforts to produce freely available audiobooks and encourage interested readers to volunteer in these efforts.

## Potential New Vendors in 2007 and Beyond

In addition to the current vendors, libraries contemplating a digital audiobook service will want to be aware of new players that enter the market in the future.

### Ingram Library Services

Late in 2006, rumors were circulating that Ingram Library Services was planning to launch a downloadable digital audiobook service in 2007.

### Audio-Read

Audio-Read, an Australian-based audiobook company, has designed and marketed an interesting portable playback device. It is larger than most MP3 players, but still easily held in the hand. It contains a built-in speaker as well as an audio output jack, so if the user does not like or have ready access to earbuds or headphones, he or she can still listen to the audiobook. The device also has been designed to be more usable by patrons who are blind or have low vision or manual dexterity problems.

Audio-Read recently opened a London office that will serve the United Kingdom and European markets. According to Anthony Blackwood of Audio-Read, it may enter the North American audiobook market in 2007 or later (e-mail to the author, September 25, 2006).

## Issues and Concerns

### Reasons to Wait

There are two aspects to the current situation with audiobooks that may discourage some libraries from jumping in, investigating and selecting an audiobook vendor (or vendors), and launching a service. The first aspect is the iPod impasse, which is another instance of the kind of corporate grudge match that seems to plague the early years of all major information technology innovations, from Betamax versus VHS to the present. The iPod currently has approximately 87.3 percent of the market for portable audio playback devices.[2] Only one vendor in the top five examined in this report officially and seamlessly offers digital audiobooks that can play on the family of iPod portable devices. That vendor, Audible, seems to be either uncertain or of two minds when confronting the business decision about selling to libraries.

The other major showstopper for many libraries is the fact that most current vended audiobook services for libraries work much better if the patron is outside the library. It rankles some librarians even to consider, not to mention consciously plan, a service designed for users who are not physically in the library.

In 2006, OverDrive began to provide software that would allow libraries to offer a downloadable digital audiobook service that would work at public workstations in the library. This service would enable walk-in patrons to check out digital audiobooks provided by the library, then download them onto the patrons' own portable audio playback devices.

OverDrive reports that the early impact of this software has been more in consciousness raising among library staff than in providing in-library competition to at-home downloading and transferring. When a downloading workstation is provided in a library, staff members become more aware of a service that their library may have been offering for months, but which has been largely invisible because all activity heretofore has occurred outside the library.

Realistically, in-library downloading and transferring of digital audiobooks probably will never compete in volume with out-of-library downloading and transferring.

When confronted with a choice between downloading content on my own computer at home versus on some communal computer in my local library, I'm going to opt for my own computer. Chances of catching some virus or experiencing some damaging problem seem lower via the home route, plus I don't have to worry about another patron accessing my account on a shared workstation.

### Competition and Convergence

The business and technology models of OverDrive and NetLibrary are converging in some essential ways. OverDrive started with the "one copy, one concurrent user" model of selling digital audiobooks to libraries. It since has launched its Maximum Access Plan, which allows unlimited concurrent access to titles from Blackstone audiobooks. NetLibrary, on the other hand, began with a model that allowed more or less unlimited concurrent use, but it since has developed and deployed another model that requires the purchase of single copies, at least from some of its content suppliers. NetLibrary also began by offering subscription access to its entire master collection, but it since has offered subscription access to subsets of the master collection. OverDrive began with aggressive efforts to obtain digital audiobook content from a wide variety of content suppliers, while NetLibrary's service launched and gained speed by supplying content from just one supplier, Recorded Books. NetLibrary has since added content from other suppliers to its master collection.

### Same Audiobook Production in Multiple Master Collections

The current situation in the digital audiobook market could be described as a relatively large demand and a relatively small number of available titles. As a result, once the audio rights holder for a particular book grants rights and an audiobook production is made, often that identical production may appear in most of the major master collections. In other words, the overlap between the master collections of Audible, NetLibrary, and Playaway appears to be quite high. This situation may subside in the future, as more content—and more diverse content—pours into the marketplace.

### Multiple Audiobook Productions for the Same Basic Text

Most commonly, multiple audiobook productions for the same text are made for titles in the public domain. Various business-to-business aggregators of digital audiobook content will create narrated versions of the same classic book, such as a Dickens novel. If a library or library consortium is selecting titles on an individual basis, either for purchase or for a leased collection, this situation can create a selection conundrum. Which audio production of that classic novel should be selected? The narration talent almost always varies, and, if the content is to be purchased, the price often varies. The selector could listen to snippets of each audiobook production or could rely on his or her sense of the overall quality and popularity of each audiobook production company.

### Potentially Disruptive Technologies

#### Streaming Audio

If most library users are connected to the Internet most of the time, why bother with the time and hassle of downloading content? Just stream it.

At present, limiting the experience to a live Internet connection may be a constraint to many users. TumbleTalkingBooks has no plans to offer downloadable, offline digital audiobooks. However, the day may soon arrive when the majority of the reading public is online more waking hours than offline. And wireless hotspots may overtake the world faster than global warming. Many people will be able to listen to these audiobooks on their Internet-connected PP ICE (personal, portable information, communication, entertainment) appliances.

#### Text-to-Speech Software

The quality of text-to-speech software is improving, and the costs are declining. This development could marginalize human-narrated digital audiobooks.

## The Affordances of Digital Audiobooks

As we attempt to peer into the future, it is tempting to try to pick the winning company. Will OverDrive outweigh and outlast NetLibrary? Will Ingram enter the market with a far superior product? Will the TumbleTalkingBooks model of streaming audio coupled with text and animation survive? Will Playaway turn out to be a "Pony Express" phenomenon—a transitional technology that is very useful and relatively popular, but only for a short time as the majority of users quickly become acclimated to and enamored of the new technology? Will some start-up company like YouTube—perhaps with the brand name YouListen—come along and become an overnight success?

Rather than try to pick the winning company, which is fraught with risk and can lead to embarrassing backpedaling down the road, let's look at what the various vendors are doing measured against an ideal digital audiobook service. This ideal can serve as a point of reference.

Ideals can be difficult to imagine, let alone articulate. At this point, I could develop an elaborate allegory of a cave and express in vague, mystical language my sense of the platonic ideal of digital audiobooks. However, it may be more useful, if less colorful, to use the concept of "affordances" and think about what digital audiobooks afford.

In *The Myth of the Paperless Office,* Sellen and Harper developed the concept of affordances for printed documents. As the authors thought about the role of paper and printed documents in work environments, they realized, "We need to understand what it is about the physical properties of paper that make it play into different aspects of the work that people do, and how work practices have evolved along with paper in such a way that paper is woven into the very fabric of work."[3] To better understand this complex situation, Sellen and Harper developed the notion of affordances. They do not claim to have invented or discovered the notion of affordances. They trace its history back to *The Ecological Approach to Visual Perception,* published in 1979 by ecological psychologist James J. Gibson.

As articulated by Sellen and Harper, "An affordance refers to the fact that the physical properties of an object make possible different functions for the person perceiving or using that object. In other words, the properties of objects determine the possibilities for action."[4] For example, it is easier to spread out dozens of printed documents on a table and quickly compare them than it is to visually compare dozens of electronic documents. The affordance to spread out and compare documents is much stronger in print than in electronic format. The concept of affordances can be usefully applied to many technology sectors. For example, the ability to afford unplanned stops and whimsical side trips while traveling is much stronger with the automobile than with trains and planes. If I find myself passing through (or over) Mount Horeb, Wisconsin, and decide on the spur of the moment to tour the Mustard Museum (www.mustardweb.com), it's possible when traveling by car.

Although Sellen and Harper concentrated on printed documents in work environments, the notion of affordances can be easily and profitably extended to audible documents in both work-related and recreational situations. In short, we can apply the concept of affordances to digital audiobooks. In doing so, we first need to notice that, when applied to digital technologies, the concept of affordances involves both hardware and software.

It seems to me that over time the users of a technological system will eventually internalize the "natural" affordances of that system and give them free rein. Over time, the affordances, like the truth, will be revealed. Think, for example, of how over the course of the twentieth century the affordances of the automobile profoundly affected how and where we live, work, eat, vacation, and so forth.

In this notion of affordances, we can perceive some sort of technological determinism. Only by "letting go" or resigning oneself to the affordances of a technological system can one fully understand and exploit that technological system. Over time, no amount of legal, social, or cultural resistance to the affordances of a technological system can prevent those affordances from holding sway.

These are some of the key affordances of digital audiobooks:

- **Virtually unlimited use, both concurrently and over time.** TumbleTalkingBooks is the only vendor of the top five that fully exploits this affordance. NetLibrary allows multiple concurrent use, but only up to the maximum usage events allowed during the contract period. If a library or library consortium reaches the maximum number of uses allowed during the contract period, it must either purchase additional usage or shut the service down until the contract renewal date. OverDrive currently is using the "one copy, one user at a time" model for most of its audiobooks, but it does offer the option of unlimited usage of blocks of titles selected from the audiobooks provided by Blackstone. According to Steve Potash of OverDrive, the company has no plans at the present time to expand the option for unlimited usage to content provided from other publishers and suppliers (telephone conversation with the author, fall 2006). Audible and Playaway offer only the "one copy, one user at a time" model.

  There are many reasons why this naturally occurring affordance of digital content is not fully exploited at this time. The reasons are psychological, contractual, legal, and even technological.
- **Variable speed playback without change in voice pitch.** This affordance is one example of point-of-use functionality enabled by digital audiobooks that is impossible or less elegant in other types of audiobooks or media. With an analog audiobook recording stored on a cassette tape, when you speed up the playback, you get the "Alvin and the Chipmunks" effect. Although this affordance may have some applications in the realm of digital music, where the user could speed up or slow down the tempo of a musical recording, it has more self-evident applications in the realm of audiobooks and other spoken recordings. Poetry, religious texts, language-learning materials, and any dense text may cause the reader to slow down the playback. In addition, poor readers and readers who are learning a second language may want to slow down the playback speed. Other users may be speed-listeners and want to speed up the playback of the audio content. For example, many blind readers can comprehend spoken-word content played back at a high rate of speed.

  The implications of variable speed playback are wide-ranging. This affordance can work with pausing and skipping to enable customized movement through an audio text. For example, a user may want to speed up playback of a long novel during a chapter that consists primarily of descriptions and scene setting, then slow it down a bit during a chapter that

consists of much dialogue, key plot information, the climactic scenes, and so forth. Variable speed playback may also soften demand for abridged versions of audiobooks. Why settle for an abridged version (where the abridgement has been made by an editor using unknown selection criteria that may not reflect the needs and interests of a particular user) when playback of the unabridged version can be sped up to take in the full text in about the same amount of time as the abridged version played at normal speed?

Playaway has brought variable speed playback down to the portable playback device level. OverDrive has incorporated variable speed playback into its OverDrive Media Console software, which is freely available to download and enables enhanced playback and navigation options when using an audiobook on a computer with a Microsoft operating system. NetLibrary's audiobook can be played at varying speeds when using, for example, version 10 of Windows Media Player.

- **Delivery of the content over the Internet and other computer networks.** As Chris Anderson pointed out in his 2006 book, *The Long Tail,* digital distribution is much cheaper and faster than any other distribution method involving physical items moved across distances using internal combustion engines, sneakers, etc.[5] When digital audio content is distributed over computer networks, it can be either downloaded or streamed. Streaming or downloading audio content is a very efficient and inexpensive form of distribution.

  NetLibrary and OverDrive both rely on distribution by downloading via the Internet. TumbleTalkingBooks relies exclusively on streaming its content. Audible's "AudibleAir" service allows digital audio content to be downloaded directly to cell phones and other portable net devices.[6] Playaway does not use this affordance of digital content at all, preferring to preload digital content onto portable playback devices, then shipping the entire package to libraries, library consortia, retail outlets, and individual consumers.
- **Moving content onto and off of various computing devices and storage media.** This has been a major affordance wrought by the explosion of digital content in the last twenty years. We now have a host of dynamic content carriers through which we can transfer content with abandon.

  OverDrive scores the highest in this affordance category. Most of its content can be downloaded quickly and easily to a wide variety of computing and portable playback devices. Most of its content also can be burned to a set of CDs. NetLibrary content also can be transferred to any number of portable playback devices capable of playing back protected Windows Media Audio files, but NetLibrary digital audiobooks cannot be burned to CDs. Audible's content also can be transferred to an increasing number of "Audible-ready" devices. Because TumbleTalkingBooks relies on streaming audio delivery, evidently no content is stored on any computer or playback device. Listening to a TumbleBook is akin to a pure experience, with little or no "digital residue" left behind. If you want to listen to part or all of a TumbleBook again, you simply re-stream it. The downside to the Tumble model is that libraries, library consortia, and individual library users cannot transfer Tumble audiobooks to playback devices that are not currently connected to the Internet. This limits the types of time-shifting that can be achieved with Tumble audiobooks. Playaway does not offer this type of content shifting at all.
- **Text-to-speech.** Another affordance of any type of digital text, such as a word-processing document or an e-book, is that the visually presented text can be turned into a synthetically generated audio rendition through the use of text-to-speech (TTS) software. TTS software has the potential to turn any digital alphanumeric content into audio content. It also allows different voices to be used, which can be achieved with human-narrated text only if multiple voice actors are used, or if a single narrator varies his or her voice.

## Future Directions for Audiobooks in Libraries

TumbleTalkingBooks is the vendor doing the most innovative work in this sector of the information economy. It is experimenting with new ways of experiencing a book. In the spirit of Library 2.0, it is letting the user decide how to experience the book. For libraries, the TumbleTalkingBooks service can lead to economies of conflation. Rather than purchase one or more copies of the print, large-print, and audio versions of a book, libraries need only subscribe to Tumble Read-Alongs.

As of late 2006, OverDrive and NetLibrary were the leading suppliers of digital audiobooks and related services to libraries and library-related organizations. Although both of these companies developed e-book systems prior to developing digital audiobook services, they have been less aggressive than TumbleTalkingBooks in developing and delivering an integrated audiovisual book reading/listening experience.

Audiobooks may be coming soon in a big way to virtual three-dimensional worlds, such as Second Life. Throughout the latter half of 2006, a number of large publishers and media companies began developing a presence in Second Life and testing some programming, marketing, and sales options. It may soon become common for your avatar to listen to an audiobook or music while

in Second Life. The possibilities for integrated visual and auditory book experiences, which TumbleTalkingBooks has explored in the real world, may blossom in interesting ways in virtual worlds.

## Notes

1. "Final Report of the Field Test of the Playaway Self-Contained Portable Digital Audio Book Player," East Peoria, Illinois: Mid-Illinois Talking Book Center, 2006, www.mitbc.org/Playaway/Playawayfinal.htm (accessed November 25, 2006).
2. "Windows Market Share Rises," WinInsider Web site, www.wininsider.com/news/?2248 (accessed November 7, 2006); "iPod Market Share Falls—to 87%," ExtremeDAP Web site, www.extremedap.com/article2/0,1895,1711754,00.asp (accessed November 7, 2006).
3. Abigail J. Sellen and Richard H.R. Harper, *The Myth of the Paperless Office* (Cambridge: MIT Press, 2002), 16–17.
4. Ibid., 17.
5. Chris Anderson, *The Long Tail: Why the Future of Business Is Selling Less of More* (New York: Hyperion, 2006), 55.
6. "A–Z Catalog," Audible Web site, www.audible.com/adbl/store/audibleAir.jsp?BV_UseBVCookie=Yes (accessed October 30, 2006).