Research libraries, with their in-depth collections that support research activities, have long collected print books and journals, and, in recent years, e-books and e-journals. E-books and e-journals enable researchers to locate and obtain information quickly and remotely at any time of the day or night; they have become especially popular over the past decade. On the other hand, audiobooks have not played a very important role in research libraries.

In July 2007, the Research Library at the National Institute of Standards and Technology (NIST) instituted an Audiobooks-on-iPods program using leadership and management audiobooks. NIST researchers enthusiastically embraced the program from its very first day. In its initial nine months, researchers checked out audiobooks six times more frequently than new print books.

**Audiobooks**

Audiobooks—digital sound recordings of books read aloud—have become widely used over the past few years. Their typical play time is between eight and fifteen hours. While listeners can enjoy audiobooks on a personal computer, they generally listen to them on portable media players while they do other things. As with their precursors, Books on Tape, audiobooks are particularly suited to content intended to be read from beginning to end. Since this does not include textbooks or technical books, many research libraries have yet to include audiobooks in their collections.

**Program impetus**

We had wanted to offer downloadable audiobooks to permit staff members to build their management skills on the go since 2004. Members of our Research Library Advisory Board (which represents work units across NIST, such as physics, chemistry, materials science, electronics, and electrical engineering) had told library managers that having access to portable sound recordings of leadership and management books would expand their available time for developing these competencies. While they were motivated to extend their knowledge in these areas, and at times had job requirements to do so, they were greatly pressed for time with research and other responsibilities.

**Initial investigations**

At first our task seemed simple. We would locate a vendor with a broad selection of downloadable leadership and management audiobooks and would purchase or subscribe to them. Our integrated library system (ILS) administrator and catalogers would identify the best ways to make the audiobooks available for customers to download and distribute to their personal media devices. Our customers would then multitask or listen to the leadership and management books while riding the train, watching a soccer practice, or doing something else. Keeping road, laboratory, and other types of safety in mind, of course.

As we explored vendors of downloadable audiobooks, however, we found only...
There were basically only three major suppliers of audiobooks on management topics. More importantly, those suppliers offered their audiobooks in different file formats: two offered them in a Windows-based copyright-protected file format, and a third in a protected file format compatible with Apple iPods. Hardware and software incompatibilities abounded. In November 2008, one major supplier announced it had added support of iPod and other Mac devices to its already existing Windows-formatted collection. However, a search of its business category (as this article goes to print) retrieved only three audiobooks with two of the three focused on personal finance rather than on leadership and management.

We knew that the iPod brand seemed to have an intangible coolness factor. Also, iPods had the greatest market share of all personal audio players. But further investigation showed that apart from those of the supplier that to date provided only three business audiobooks, iPod-downloadable audiobooks were not specically made to be integrated with library software or checked out for specific time periods. They were generally purchased and downloaded by individuals for personal use, although libraries were certainly free to purchase them and develop their own tracking and circulation workarounds. Additionally, other library-friendly audiobooks that did have such desirable library features as expiration at conclusion of checkout period were not playable on iPods. We decided to wait to see if technologies might evolve so we could offer downloadable audiobooks for iPods that our ILS could manage.

Copyright protection or digital rights management

The audiobook digital copyright protection methods we found during our explorations three years ago, and which are still in use today, are: digital rights management (DRM), used with Windows Media Audio (.wma) audiobooks; and FairPlay, used with Apple Advanced Audio Coding (.aac) audiobooks. These protection methods are at the root of a struggle over download formats in both the massive music industry and the smaller, but increasing, audiobook sector.

The issue of audiobook copyright protection is complex. Copyright protection methods seem to benefit some developers at least as much as copyright holders. Drastic changes have taken place over the past year among major labels in the music and entertainment industry (Sony BMG, Warner Music Group, Universal Music Group, EMI Music). Each of the companies has now abandoned altogether the use of DRM for music downloads, apparently to allow consumers to have the option to play downloads on the portable media players of their choice. It is hoped that one day a similar flexibility of format may extend to the audiobook arena.

Of note, in January 2008 Amazon announced a decision to purchase Audible.com, the huge audiobook company that sells audiobooks in an iPod format. It is possible that changes may lie ahead in this format war.

At any rate, due to the ongoing digital rights format battle at this time, 30 million or so iPod owners are unable to download audiobooks from library Web sites, where vendors supply the files in protected .wma format. So while users love iPods and the iTunes Music Store, with its simple means of downloading and transferring audio content to their players, if they wish to listen to audiobooks they must purchase their own.

One library’s answer

Unfortunately, the digital rights management scenario did not progress much over the two years following our investigation. By July 2007, our library decided to make its own way around the format asc: we launched a small pilot program in which we circulated iPod hardware, beginning with two fifth generation, 30 gigabyte video iPods we had purchased a year earlier for library staff exploration of podcasting as a marketing tool. Each iPod had a 2.5 inch display screen at the top, with a selection and volume wheel below. We had initially chosen iPods because, at the time of purchase, 79 percent of all purchased portable
media players were iPods. In addition, we wanted to explore the video and audio capabilities of media players.

We sought the guidance of a NIST leadership program coordinator in selecting leadership and management audiobooks for our program. Together we identified 12 audiobook titles in the area of leadership and management and purchased them. We loaded six audiobooks on each iPod, entered their metadata in our online catalog, and ordered wall chargers so customers would not need to sync the iPods to computers to charge them (the default way to charge an iPod is by means of a USB cable hooked to a computer; however, digital files may easily be transferred at the same time, often automatically). By lending the iPods with wall chargers, we discouraged customers from transferring materials between their computers and the iPods when charging them. At the same time, we ordered 40 sets of inexpensive earphones that customers could keep.

In addition to loading the iPods with audiobooks, we also loaded them with audio podcasts of lectures from the NIST Physics Lab and free science-related video podcasts from the Discovery Channel and National Geographic. We used free iTunes software to download these podcasts and to transfer them to the iPods. We wanted to give customers an opportunity to experience these new technologies.

We advertised the two new circulating iPods, and they were checked out immediately. Within two months each had a six-month waiting list and circulation staff were consistently contacting customers to let them know when their requested iPods were ready.

We have twice expanded the popular program and have purchased more iPods and audiobooks.

There are now eight circulating iPods, each of which holds between four and six audiobooks. Incredibly, during the first nine months of the program, customers checked out more than 250 audiobooks.

We used customer input to refine our procedures. At one point we shortened the checkout period from four weeks to two to make the iPods available to customers on the holds lists sooner. We later rolled checkout back to four weeks when customers told us that two weeks did not give them enough time to listen to all the books on each iPod. We were surprised; we had expected that each customer would listen to perhaps one or two of the audiobooks per checkout. A short while into the program, also based on customer feedback, we created instruction sheets with listings of audiobook titles to distribute with each iPod, and ordered cases to protect them from rain.

Recently, we also added one-hour videos of scientific in-house seminars to all of the iPods, and keep one iPod in our reference collection strictly for those monthly seminars. This means the seminars will always be available for immediate viewing in the library.

The future

So what’s next for our audiobooks program? The future will depend upon developments in this evolving industry.

According to a 2007 Audio Publishers Association survey, audiobook sales were up by 6 percent in 2006 over 2005. The majority of these purchases were in the form of compact disks (77 percent, up from 74 percent in 2005). But downloadable audiobook sales had increased by a greater proportion, from 9 percent to 16 percent.

As more of our customers seek to multitask, we’ll expect an increase in requests for downloadable audiobooks, specifically in subject areas that lend themselves to a cover-to-cover listening format, such as leadership and management. We may consider offering additional content, such as science histories or biographies.

The recent decision by Amazon—maker of the Kindle e-book reader—to purchase Audible, the large audiobook company that makes use of the iPod digital rights management method, FairPlay, may bring about significant changes. Analyst Michael Gartenberg of Jupiter Research recently speculated in the New York Times, ‘Can Amazon convince book publish-
ers to do what music labels have done and get rid of digital rights management on these files to make them play across the board? Or might there be some interesting sort of marriage of the downloadable digital written and spoken word? Regardless, developments here will surely be interesting to watch.

Our research library continues to monitor the state of affairs in DRM and audiobooks. For the time being, we will continue to lend iPods, as this is the simplest option we have found to date for our customers to keep up with their management readings in a format that permits multitasking in their busy lives. Changes may be coming, but, for the foreseeable future, our relatively low-budget program fills the bill, and our customers are happy.

Notes
1. The identification of any commercial product or trade name does not imply endorsement or recommendation by the National Institute of Standards and Technology.
12. Oder.