

WHAT TALKING BOOKS HAVE TO SAY: ISSUES AND OPTIONS FOR PUBLIC LIBRARIES

Susan Hoy Home Library Service Officer Burwood Library Sydney NSW

A main element of public library service has always been user expectation and reliance on the provision of new collection resources and formats in addition to traditional services. Today this translates to an emphasis on internet services and online provision of information and collections. The focus of this paper is on spoken word material and audio download services, giving an overview of available audio formats and device features. It covers general issues to consider when making decisions on audio collections and the strengths and weaknesses of the formats under consideration. Examined are the evolution of audiobooks, emerging technology, and playback devices; service and collection issues; format strengths and weaknesses. Edited version of a paper presented at the Next Chapters conference, State Library of NSW 1-2 May 2009.

For millennia oral storytelling was part of most societies for passing on stories, information and heritage. But when Thomas Edison created the technology to record voice, and play it back, the world of storytelling was revolutionised. Throughout the last century, and this, the development of listening and playing devices and products has experienced a rapid and popular evolution. Development of gramophone recordings, vinyl records, portable cassette recorders, compact disc (cd) players, mp3 players, and computer technology has given the world numerous alternatives for listening to stories, music and information.

The current era for audiobooks began with the advent of internet technology which permitted new compressed audio file formats eg Wav and mp3, to be easily transmitted. Once the file formats were available small portable players with much larger memory capacity became common. The popularity of audiobooks has soared, audio download subscription services have mushroomed and libraries are now faced with a multitude of ways to provide audio services to their users. These massive changes and variety of methods for delivering audiobooks has, as Cec Churm puts it, confused the position, 'and has meant that many libraries have made decisions quickly without any experience or knowledge of its implications for library and library users'.¹

As the new and ever widening array of choice in formats and technologies multiply so too does the challenge to manage and deliver quality content in ways that are appropriate and can be sustained today and tomorrow. Cassettes are becoming obsolete, and cds are under threat from newer formats. This makes it challenging for users of audio material, but in particular for library services, to provide the most suitable

and cost effective audio material and services for users.

It is very clear there is a growing increase in demand for audio and libraries must determine what services and collections can address the needs of traditional and emerging target groups wanting spoken word access. Traditional target groups, such as the print disabled, blind, frail aged, or other persons with a disability, are still heavily reliant on audio material. However the market for spoken word material is much broader, also including computer savvy seniors, baby boomers, and younger people who are embracing spoken audio formats. Why is this so? Possible answers include the rapid availability, ease of access and portability of downloadable audio content. A wide variety of content is available for a relatively low cost and the ease of creating and sharing content online. For example podcasting is attractive to more highly computer literate groups.

In moving from audiocassettes and books on cd to subscription libraries of downloadable audio files, the marketplace of the audiobook has expanded at an alarming rate. At base, the product of talking books essentially remains the same. It is the delivery mechanisms that are driving change. Along with the advent of downloadable audio comes new pricing models and changing patterns of how people are reading. Navigating through the maze of multiple possibilities provides a major challenge to library services with regard to cost, access, availability and content.

From a library perspective two important service questions need to be considered

- is the library following, or driving change?
- is the library meeting existing demand, or creating new ones?

Any decision on audio formats at this point of the cycle will need to consider the available budget, management of existing collections (to maintain, reduce or expand), creating new collections and services, and the users the library serves or wants to attract. This paper looks at several current formats and audio services, mindful that tomorrow will no doubt bring additional formats and means of delivery.

A book by any other name?

Recorded spoken word material has had many different names over time. The term audiobook was originally used to refer to a book on tape or spoken word cassette, as opposed to music. The earliest talking books were developed for blinded soldiers returning from World War 1 and consisted of long playing records for gramophones. Technology continued to evolve.

Originally, audiobooks were principally available in school or public libraries, as well as special needs libraries, such as that run by Vision Australia. The terms books on tape, talking books, or spoken word cassettes were frequently and erroneously used as a synonym for audiobooks when the majority of product was only available on cassette. However, with cassettes no longer the dominant medium for audiobooks, nomenclature has become a nonissue. In this paper the term audiobook or talking book is used to refer to all spoken word products and formats.

Thiele² traces the changes that audiobooks have undergone. Put briefly, the long playing record was superseded by reel to reel magnetic tapes, followed by the amazing development of the tape cassette. This made spoken word books more affordable and led to public libraries building audiobook collections.

By using slower playback speeds and four track recording it became possible to record up to six hours of material on one cassette. However, this caused two problems. First, it required the reader to read from beginning to end and finding specific passages or pages is virtually impossible. Secondly, the fragile and vulnerable nature of the tape cassette impacted on its playing lifespan. With advances in other audio formats and deliveries, it is now the turn of cassette tapes to be placed on the endangered species list.

Compact disc technology was quickly embraced by audio content manufacturers who

took up this format for storing and delivering audio material. However, one of the biggest problems with compact discs is that files are not condensed, so one book title quite often requires the same number of discs, if not more, than the number of cassettes required when using the cassette format. Although the compact disc format has advantages, including a better life expectancy, the format has never really challenged audiobook production on cassette tapes. For over a decade these two formats have coexisted offering audio material to the same interest groups, to choose their preferred product based on the playback device they used.

When digital audiobooks became available as part of the rapidly evolving internet technology they had a dramatic effect on the audio market place. As electronic files digital audio does not have a physical manifestation. Digital audio has the similar content as conventional audiobooks but titles can be downloaded to a personal computer or portable listening device such as mp3 players.

The main advantages of downloadable audio and mp3 format are portability and navigation. Cassettes and cds offer no simple way to move backward or forward in the text, as you might do with a hard copy printed book. Digital playback is infinitely more flexible, determined of course by how it is formatted, and generally allows the user to jump around the text by chapter, page, or special bookmark, making it more like reading the printed page.

Audiobooks are now usually distributed through multiple formats. Some are still produced on cassette, but the majority is now distributed in cd, mp3, and downloadable formats, including preloaded digital devices. Audiobooks and the new generation of listening devices and formats have given readers with limited or no vision an increasingly popular reading option and have brought the world of audio content to the attention of sighted audiences as well. Today, audio content is embraced by many of the library's mainstream users.

Following is an overview of some of these formats, devices and online services.

Daisy (Digital Accessible Information System) format³

Daisy format standard is one of the most outstanding technologies developed to date. It

allows advanced navigation and ease of access, and is rapidly becoming the worldwide standard for audio content. A 21st century replacement for analogue audiobooks, Daisy was always intended to not only meet the needs of the blind or persons with other vision disabilities, but to also meet the needs of a wider readership.

As a digital reading format Daisy can combine audio, text and graphic information in one product.

Some of its unique features include

- Daisy playback devices handles music cds, mp3 cds and Wav files in addition to Daisy formatted audio discs
- advanced navigation: data can be recorded with up to 6 heading levels, allowing a book to be navigated using a string keyword search by elements such as chapter, page, paragraph and sentence, making it more equal with standard hard copy. This ability to move around the book is not available on audiobooks on cassette or cd
- automatic pitch compensation allows you to speed up or slow down the speech without altering the tone or pitch of the voice
- bookmarks can be inserted at any point and the resume function has playback continued from the point the reader left off, rather than at the beginning, as with conventional cds
- as a multimedia product Daisy can incorporate text, graphic and audio into one publication, which allows the reader to view text via the pc screen at the same time as listening to it
- it is read/played using a digital playback device or computers with Daisy software installed
- it has better sound quality than that available on cassette. Digital recording eliminates the traditional hiss and background noise encountered on cassettes, especially those that have been played many times. This is an important advantage to readers who have hearing impairment
- large amounts of content can be compressed into one Daisy cd with no noticeable deterioration in sound quality. An entire Daisy book can be contained in one cd, whereas books on tape span multiple cassettes as do books on cd. One cd eliminates the frustration of sorting multiple tapes for low vision readers and prevents the

hassle of missing or damaged parts of the book. Fifty hours of audio may be contained on one Daisy cd.

Other general features of Daisy formatted playback devices include

- key describer function (voice announcements give prompts and describes the function of each button when pressed)
- playback resumption feature (the device remembers where the reading stopped and resumes in the same place, even if the device has been turned off)
- built in speaker and headphone socket
- powered both by mains supply and rechargeable battery
- sleep timer (device will automatically turn off after a customised period of inactivity)
- calendar, calculator and clock function included.

Daisy format has already evolved since its inception, providing new access and delivery opportunities such as internet streaming. However, books produced in Daisy format must be read on purpose built devices handling the Daisy format to permit complete functionality. Options include regular computers hosting Daisy reading software, properly formatted cd players and mp3 players.

Following is a list of the better known playback devices and their unique features.

Daisy desktop players

*Plectalk PTN1 Daisy player*⁴ An easy to use Daisy player, with a slot loading cd drive, large, raised, high contrast buttons and built in speech guidance.

*Plectalk PTR2 Daisy player and recorder*⁵ Player and recorder in addition to playing cds allows stereo recording of meetings or conference sessions direct onto cd or compact flash card. Built in microphone and automatic gain control ensures that different inputs produce similar recording levels. It can create and edit Daisy books and burn cds.

*Victor Reader Classic Daisy player*⁶ A fully featured digital talking book player.

*Victor Reader Classic X Daisy player*⁷ This possesses extra features to help with more structured textbook and reference material. The

numeric keypad allows you to jump to specific pages or numbered bookmarks or more easily move to chapter, section, page or paragraph positions.

*Victor Wave Daisy player*⁸ This is a compact, battery operated portable clamshell design ideal for listening to audiobooks on the move and is similar to a cd player.

Handheld portable playback devices

*Victor Stream Daisy player*⁹ A compact and portable player, it plays a variety of digital formats, including digital talking books, text files that have been loaded onto it, as well as music. The Victor Stream is about the size of a deck of cards and features both text to speech capabilities and digital audio support. Functions include

- advanced navigational controls. Arrow keys provide navigation to specific pages, headings, or bookmarks, allows browse of the bookmarks list, and navigation across multiple books or mp3 folders
- downloads and transfers audio files directly from the pc without file filtering software
- it uses a removable sd (secure digital) card for storage
- built in text to speech synthesizer converts text files into speech. This means you can read electronic files (with synthetic speech) or digital recorded books (with human speech)
- variable playback speeds
- includes a voice recorder using built in microphone
- has a key describer mode enabling user familiarisation with the Victor Stream's functions
- has a sleep timer button to conserve battery life
- provides an audio message for battery capacity
- 15 hours battery life
- announcement of mp3 folders and file name
- audio tone control
- has small built in speakers, or you can use headphones or small portable speaker that plug into the headphone jack.

*Audio-Read navigator*¹⁰ Initially designed for use by the elderly and people with vision impairment the Audio-Read is a purpose built digital audio player that provides users with a

simple to use player with advanced navigation functions. Functions include

- easy to use
- large tactile buttons
- bookmarks remembering the reader's place
- auto sleep mode
- long life battery, up to 100 hours
- lightweight
- durable and impact resistant
- 3 level navigation controls
- customisable voice prompts
- high quality internal speaker
- made in Australia.

*BookCourier*¹¹ Designed for the visually impaired and those with reading disabilities BookCourier is a portable, convenient and economical tool for listening to electronic text, spoken word audio files and music. It is equipped with an 18 key keypad and is operated completely by touch and listening. The Courier can play mp3 files of audiobooks or music, and can 'read' aloud other computer files such as web pages or Microsoft Word documents with its own built in synthesizer. It also handles files from Audible.com and users can set bookmarks in any files. It does not have a built in speaker, so speakers or headphones are required additions. Some computer knowledge is needed to download files from pcs or the internet using the supplied transfer software. Functions include

- mp3 player
- voice recorder
- fast forward and reverse controls
- bookmarks
- built in alarm
- sleep timer
- clock and calendar
- easy to use controls for adjusting volume and reading speed
- powered by 2 AA batteries
- stores up to 4GB
- plug and play USB connection for transferring files
- built in talking user guide.

*BookCourier Braille*¹² Designed for the visually impaired, BookCourier Braille plays music and audiobooks. It can also translate text into spoken words so just about any book or document can be read. A simple 90 degree

clockwise rotation of the device changes functionality to a Braille input device for taking notes. Functions include

- set bookmarks
- smart navigation. Jump by chapter, paragraph, article keyword search
- note taker that understands Braille input
- voice recorder
- supports secure digital (sd) memory for up to 32 GB of storage
- powered by a rechargeable lithium battery
- variable speed for audio and text files
- built in talking user guide

*Milestone 311 Daisy player*¹³ Another handheld player designed specifically for people who are blind or visually impaired. The size of a credit card, this portable player can be used for mp3 files of music or audiobooks. Functions include

- quality digital voice recorder
- small internal speakers produces crisp clear audio in noisy environments
- the RFID tag reader allows users to tag and identify daily living objects such as medications, cds and food labels
- download directly from pc
- stores several titles on a sd card
- navigates by page, chapter or section
- resumes playback from the last saved position in book
- provides the option to create tags and storage to a folder for playback
- functions that are not used, not purchased or not desired can be disabled/enabled
- 1 GB internal memory plus an sd card interface up to 32 GBs storage. Both work in parallel and are fully accessible via USB connection. No software needs to be installed
- cannot be used it to listen to documents or web pages.

*Vi player*¹⁴ Is a purpose designed mp3 and audiobook player for the visually impaired. As well as traditional user options, audio files including books can be easily loaded and played from either the internet or from existing libraries using sd card technology. Some computer knowledge is needed. Voice guidance software shepherds users through the easy to use menu system, and the unique intelligent pause resume function bookmarks the exact starting place.

Functions include

- 4 GB built in flash memory (20 unabridged audiobooks)
- unique bookmaking intelligent pause system
- 2.4" full colour screen
- audible menus for ease of use
- fully compatible with the Ulverscroft range of mp3 cds (need to download)
- compatible with Windows Media Player and Audible ready
- voice guidance for ease of use
- mp3/4 Player
- FM radio
- voice recorder
- text to voice conversion
- graphic equalizer
- jpeg viewer
- multiple bookmarking capabilities.

As well as the playback devices specifically designed with the low vision community in mind there are also many new devices that can handle Daisy format or offer other more flexible audio reading for a wider audience.

*Playaway*¹⁵ The name of an audio player that has digital content already preloaded with a battery to make it play. Consequently Playaway audiobooks avoid the issue of damaged tapes/cds/mp3 carriers. Functions include

- no cassettes, no cds, no downloads – it just plays
- lightweight, about the size of a deck of cards with standard 1.5 volt AAA battery making it highly portable
- each Playaway holds an entire audiobook or music compilation, regardless of length
- using only a few buttons, the listener can easily navigate back and forth through chapters, adjust volume and alter speed of the narrator's voice
- reverse/forward scan within chapter
- automatic bookmark feature that remembers where listening stopped and resumes at that point
- capable of storing 80 hours audio
- the digital content is loaded at the factory (library) and cannot be changed or copied by the end user
- outputs to earphones or external amplifier
- provides approximately 20 hours of playtime before battery completion

- ideal starters for older readers who have never used a digital audiobook
- packaged to resemble a book, with artwork and jacket information reproduced on the front and back covers
- affordably priced.

*Amazon Kindle 1/Kindle 2*¹⁶ Amazon Kindle is a software and hardware platform for reading electronic books produced by Amazon.com. Download is required in Amazon Kindle format or plain text content. Amazon offers an email based service that will convert other documents and files. There are a number of internet providers that provide compatible formats. There are currently two versions of the Kindle ereader.

- Kindle 1 carries 2 GB internal memory (approximately 200 nonillustrated titles), more with sd cards
- Kindle 2 has capacity for 1500 books (does not have sd slot)
- Kindle 2 has text to speech option to read aloud
- both support audio input from mp3 and audible audiobooks (need to be transferred to the Kindle via USB or sd card)
- wireless connectivity enables readers to download from the Kindle store directly from the device
- lighter and thinner than a typical paperback
- bookmark capabilities
- pages can be dog eared for quick reference
- notes can be added
- long battery life. Fully recharged in 2 hours
- Kindle books can be read on iPhone or iPod touch.

*Sony reader PRS-505*¹⁷ The Sony reader digital book is more compact than many paperbacks. Lightweight and holds around 160 electronic books with built in memory or hundreds more with optional memory cards. Elink technology makes it easy to read even in bright sunshine. The text can be magnified for sight impaired readers and its long battery life lasts up to 7,500 continuous page turns.

By purchasing a Sony mobile collection libraries can make the Sony reader available to users on or off site. A pc protocol simply downloads a collection of titles from the NetLibrary site and transfers them to the Sony reader. The standard mobile collection provides

one copy of each available title, exclusively for use with the Sony reader. The Mobile Collection Plus provides two copies of each title, one set for standard online use, in addition to the set for the Sony Reader PRS-505. Includes download licensing.

Online services

Audiobooks provided via online digital download are becoming more popular and more accessible. Many library services worldwide are providing online audio catalogues as part of their own collections via various commercial providers and in some cases are providing their users with the devices needed for playback.

Loans from the online library are generally for the period designated by the library, just like hardcopy books, except instead of having to return the title to the library it simply vanishes from the user's computer hard drive when the loan period ends. There is a multitude of online providers but three main contenders now service the Australian market: OverDrive, NetLibrary and Audible.com. Each of these providers has particular benefits and drawbacks. Following is an overview of each.

OverDrive¹⁸

OverDrive houses its audio collection in a Windows Media Player environment and titles are downloaded in this audio format. Audio content can be used on a computer and mp3 players that are compatible. Libraries can either choose a subscription base or purchase per title to build an online collection.

OverDrive allows internet connected pcs to become self service download stations for audiobooks and music. The Windows based software permits users in the library to download copy protected audiobooks and music directly to supported mp3 VMA players.

Other features of the OverDrive program include the facility to go forward or back a few sentences, or skip entire chapters. It allows readers to speed up or slow down the narrator's pace, and will keep the reader's place even if the computer is turned off. In addition, OverDrive offers Media Kiosk software which, when installed at a library's public internet station enables users to search the library catalogue, locate a title and then connect a player to the terminal using a USB port and the library's internet connection. Bear in mind, however, that broadband access is necessary

since some titles are very large and easily consume large amounts of megabytes and online time.

NetLibrary¹⁹

With an annual subscription this product offers easy to use functionality with access to multiple formats and best selling titles from major publishing houses. However, the collections made available are based on the library size and anticipated circulation requirements. Most titles are narrated by professional actors, but are also limited by availability. Like OverDrive it uses Windows Media Player and can be used on pcs and laptops and compatible mp3 players.

Audible.Com²⁰

Like the online providers already mentioned, Audible.com provides titles and ebooks by direct download, but offers its program in Apple format.

Planning audio services and collections

As with any collection development process a number of factors need to be taken into account as criteria when considering an audiobook collection. Following are some issues that need to be addressed when planning any audio service. There is no proven and complete answer for all of these points – posed in many instances as open questions for consideration.

What is your target group?

Libraries need to consider the type of user base it is providing the service for. Seniors generally, or just housebound? Will the service be provided to young persons and children, business people or university students? Culturally and linguistically diverse (Cald) communities may offer particular problems as far as selection and budgeting? A decision not to discriminate and serve all users has serious budget implications.

Specific target groups have different collection needs and possess different access opportunities to appropriate devices. Libraries need to assess what those needs are before selecting titles or subscriptions for the collection, as well as the means used to deliver audio service to its users.

Traditional groups using audio material include frail aged, persons with a disability, particularly low vision or the legally blind. But the general public, especially the computer literate youth and post baby boomer users who have experience and facility with pc and internet

developments, are becoming a major competing subgroup.

How is the collection to be presented?

Resource management differs depending on the decisions made regarding appropriate formats and providers. With regard to physical audio resources, some libraries interfile their collection on the shelf regardless of format. Others have segregated areas for particular subcollections. Most libraries save staff time by having open access to resources, but will this include access to loanable devices?

All libraries would have an organisational model in place but if audiobooks become a virtual collection, accessible via digital delivery, space requirements and access may need to be rethought. Will they be catalogued and by what means eg individual titles, providing subject access, 856 tag connectivity? Exactly how do users get access to the audio file? Who will maintain the online collection, the provider or will it be the responsibility of library staff? Is the virtual library hosted on the library server or externally hosted by the provider? Beware, choice may be compromised by licensing arrangements or subscription service models.

What service model works best? Subscription issues

There are now myriad ways of acquiring audiobooks and many individual producers and vendors. The standard permanent collection of cassette tapes, cds, or mp3 cds is increasingly threatened by options involving subscription access (some of which involve hard copy purchase elements), or other digital delivery from a host website. Subscription options require serious examination of exactly what the service provides and the titles being offered.

- is the contract and licensing annually based?
- is access to particular titles, authors, and genres guaranteed in any way? Providers can lose access to titles due to their own copyright and licensing arrangements.
- are there limits placed on the number of loans per title, or simultaneous loans?
- does the library wish to maintain both a permanent core collection, and a floating digitally delivered collection?
- will online collections be regularly updated, such as a best selling fiction standing order plan, and if so, do older titles get removed from the collection?

Selection of the collection

Whose responsibility is selection of audio content and the devices required? Will library staff select under the collection policy for both physical and virtual audio collections?

It should be noted that some online providers prefer to sell packages that are regularly updated, supplying new titles and removing old, not popular, titles without consultation with the library. Will selection of virtual collections be based on popularity, cost, file size? Libraries need to look closely at details in any arrangement formed with online providers of audiobook content.

Downloading issues

Offering library users the use of library's internet connection to download audio material will impact on the library's operational computing reserve on its server and possibly affect service standards. Some files are not only very large, but take a long time to complete downloads. The allocated internet usage time per user may not be sufficient for them to complete their downloading. This may inadvertently tie up the audio service and impact on statistics. Consider the following carefully

- offering download via library inhouse services may also impact on the connection contract and licensing agreements with the vendor
- remote users accessing large and time consuming audio files will potentially use up all their private online time and download size allocations
- will the library allow remote users to temporarily join the hosting library to access the desired audio material without first physically joining at a branch? If yes, how will this be managed?
- there are general security issues to be considered related to downloading material from the internet
- will library staff provide downloading training?

Managing loans and statistics

Loans for physical resources are straightforward but a workflow solution that handles subscription loans and downloads needs to be developed. How will electronic titles be loaned and recorded and can audio files be automatically returned off the user's card? Is access via the library's opac or a link to a

virtual library page? With physical collections, where devices are needed to play the formats, will devices be loaned if needed. Can the current library management system handle new collections and automatically collect statistics?

Promoting an audio collection and getting finding

Validation of a new or expanded audio collection will be greatly assisted by running promotional activities that make the public aware of the advantage the library is now offering by these services. Similar promotional activities to those employed for other areas of the collection, such as bright signage, may be supplemented by a local newspaper article covering the new and different look or feel of the service. But also consider adding a direct appeal to special target groups and community organisations in your local area that use audio material.

Partnerships with Vision Australia, blind citizens associations, Cald community groups, the Macular Degeneration Foundation, local aged care facilities and community homes will benefit all involved, expanding the library's reach and impact for these sometimes isolated groups. Funding support arising from such partnership may not be direct but their support for the service should assist getting council support as part of community service initiatives.

Collections, services and devices: criteria to consider

Content

Library services need to decide what genre areas are needed to service their user base, and make sure these are covered, especially if entering subscription arrangements. Some audio producers offer only a specialised type of output eg BBC Worldwide, ABC Audio. Unless the library is selecting independently, it is not uncommon to encounter limitations in some genre areas if sourcing from a single or restricted range of audiobook providers. The type of audio material to best serve the community, or the mix between physical or electronic audio content, has to be carefully thought about.

It may be obvious, but the origin of the published audio content should be considered, as it may influence content's attraction and acceptance. For example, a large proportion of audiocassette and spoken word cd titles come from the UK. Consequently both fiction and

nonfiction material in these formats tend to have British voices and subject content. mp3 formatted discs, however, are largely published in the US, with American voices and content.

The choice between unabridged and abridged material continues to be an issue. However, where the older formats tended to have more unabridged titles, on the whole audio downloads have a higher proportion of abridgements and is heavily influenced by copyright and licensing agreements. Downloadable audio also sees more dramatisations and multivoiced material. This needs to be taken into account as some users of audio material find this type of content unsuitable.

Usability

What is needed to access and play the audiobook? Is a specialised device required? User access to cassette players and cd players might not be an issue but how many, and what type of people, have an mp3 formatted player, personal computer or specialist device to read the audio content?

These points have been referred to previously but are worth repeating in this context. The target groups need to be able to easily access the library's audio content and if a specialised device is needed, or delivery is suddenly placed in the hands of a remote provider under subscription, the library may have to consider providing devices or connectivity to the audio source. Service under the latter arrangements will be more cumbersome and depart from the traditional physical book/loan model.

Availability

Is audio content in the desired format readily available or are there shortcomings in the range provided? As already said, some individual suppliers specialise rather than providing the full range of genres and formats. Libraries needs to identify what major suppliers exist for their chosen format, or mix of formats, and ensure a sufficient range of titles can be obtained without difficulty. How quickly can titles be obtained? Can the collection be easily added too? How recent is the material?

For digital providers remember there may be contractual abnormalities. Can there be simultaneous loans? Can hard copy versions and downloadable versions be loaned at the same time? If not, how is this to be monitored?

Are titles removed and new titles added regularly and who supervises this?

Cost benefit

Obviously cost is a major factor influencing decisions as to library audio services and collections. With the multiple choices in audiobook supply and the manner it is accessed libraries need to calculate that the favoured service model is cost efficient as well as appropriate to its target group. Cost factors can include

- replacement of broken items or devices
- subscription costs against the cost of buying material outright
- download overhead costs that may be additional to the online subscription
- or, download costs to the user
- shelf ready processing cost in the case of physical formats
- device/player costs associated with either hard copy or online formats
- subscription costs
- database maintenance costs
- virtual website costs
- physical collection costs
- staff time
- space in collection
- other housekeeping, service and collection maintenance costs.

Cost is usually the biggest determinant of what type of audio collection and services are offered. High turnover rates, or increasing title access while reducing unit costs, will make it easier to sell those services to your funding source.

Functionality of devices

Each playback device has differing features and elements which may make it more suitable for a library purpose. To decide which device option is better libraries will be required to hypothesise the effectiveness of each device/player against its compatibility with preferred formats and content, and usage by target groups.

Some questions to consider are

- is the device easy for all to use, is it appropriately sized, or will it appeal to only a proportion of library users?
- how easily can the device be damaged, are there replacement parts, and at what cost?

- is the device/player targeted towards a particular user group?
- can the device handle all audio files, or is it specific to one format?
- features of the device, in particular its navigational facility.

Shelf life and maintenance costs

Additional costs can be encountered to make audio material shelf ready, like special casing, or to replace broken or damaged parts. Audio material has a history of being prone to damage. Even given new formats or delivery systems this trend may continue to occur, with damage to physical units or to virtual audio playback devices or connectivity. A choice on format and content needs to assess the likelihood that the existing collection investment will be superseded by new audio developments.

Loans

Loan parameters will need to be worked out, as will the following elements

- loan periods and entitlements per user
- is there a contractual limit on downloadable audio per library per year, per user, and does total loan figures influence the subscription costs and titles?
- can the same physical and downloadable title be simultaneously loaned?
- how are loans recorded? Is there a library management system interface for online audio, and if not what is the work around?
- how are users' items returned?
- can users borrow remotely? How is this implemented and can new users join online to download?

Statistics

A demonstrable return on investment in terms of the percentage of users using the audiobook service, and total loans and turnover rates, will assist proposals to expand or otherwise change with funding bodies. Statistical capture is essential but how easy is it to obtain loan or usage statistics?

- is it an automatic built in function or is manual intervention necessary?
- is it easy to produce reports to export to other programs?
- can the library management system cope with new material categories and formats to allow statistical collection and reporting?

Languages other than English (Lote)

Are Cald communities to be included as a target group?

- is audio material in other languages available?
- what is the range and quality?
- does the preferred vendor offer Lote?
- in what format?

Copyright/contractual obligations

Investigate copyright aspects carefully, particularly those associated with subscription arrangements. Determine whether hard copy and electronic copy can be loaned simultaneously. Can popular titles be on loan to more than one user at a time? Can libraries make hard copies of electronic files or visa versa? Does the library need to guard against possible piracy?

Format strengths and weaknesses

Below is an overview of some of the strengths and weaknesses of the main format groups: cassettes, compact discs, mp3 audio discs and online audio. This is not a comprehensive list but rather observations gained during research into the topic.

Audiocassette tapes

Content

Strengths

- most traditional fiction genres are still available, and new best selling fiction
- both unabridged and abridged content are available
- a number of suppliers/publishers offer this format.

Weaknesses

- much discussion has taken place about the time audio content on cassette tape will remain available. In the UK this format is still the most popular, whereas in the US some companies no longer produce in it
- Australian content and nonfiction material is limited
- in general, availability of this format appears to be declining.

Usability and functionality of the device

Strengths

- cassette tapes are easy to use
- most people are familiar with the operation of a cassette player
- most people own a cassette player

- pushing stop means the reader can start off where they left off
- buttons are relatively easy to find for persons with low or no vision
- simple to use – stop, play, rewind, fast forward, pause and eject
- replacement tapes are usually still available from the original supplier.

Weaknesses

- limited navigation. Will stop and start but not jump between pages, chapters or sections. Hard to recover the place if the reader falls asleep
- needs a cassette player to use
- purchasing new cassette players in today's market place is more difficult. They are no longer plentiful and are usually only sold as part of a larger costlier system
- as device numbers dwindle eg cars are no longer sold with cassette players, the audience using cassettes declines.

Availability

Strengths

- libraries can still source audiobook on cassette from Australian suppliers, predominately titles from the UK and some Australian content
- some titles are simultaneously published with the printed version.

Weaknesses

- the longevity of production. The prediction is that cassette tapes will become obsolete within the next few years
- smaller production runs mean that not as many titles are readily available
- very few books on cassette are available from retail markets.

Target group

Strengths

- traditional target groups still benefit greatly from cassettes, including persons with low vision, the frail and elderly, print disabled and disabled persons, most of whom are still using this audio format and are comfortable with it.

Weaknesses

- changes in the technology and reading habits of the general public mean that most no longer prefer to use cassette tapes
- cassettes are not offering the type of audio material that target groups such as young

persons, car drivers, university students and computer users wish to obtain

- alternative methods of audio delivery are pushing cassettes out of the marketplace.

Cost

Strengths

- some publishers provide replacement tapes free of charge
- with the purchase of a book on tape it remains permanently in the collection.

Weaknesses

- expensive in comparison to a printed copy
- smaller target audience.

Shelf life

Strengths

- part of libraries' permanent core collections
- format usability and visibility – easy to tell that the packaging contains tapes
- replacement tapes are available free or at low cost.

Weaknesses

- can become stretched from use
- damaged from machines
- low usage statistics – taking up shelf space
- large space required for storage/display.

Statistics

Strengths

- automatic collection since they form part of most library management systems' reporting module.

Weaknesses

- most libraries are experiencing lower loans statistics for this collection.

Languages other than English

There is very limited availability of books on cassette in languages other than English.

Audiobooks on compact disc (cds)

Content

Strengths

- larger quantity of titles available than books on cassette
- larger range of multivoiced recordings such as dramatisations, television programs and interviews
- most traditional genre areas of fiction are still available, as well new best selling fiction and nonfiction
- both unabridged and abridged content are available.

Weaknesses

- has the same genre limitations as cassettes with regard to traditional material such as family sagas, westerns, Australian content
- some nonfiction areas are limited.

Usability and functionality of the device

Strengths

- most people have cd players
- most cars have cd players
- most people are familiar with the operation of cd players
- for these reasons there is a wider user audience
- for sighted people it is easy to use and offers some navigational breaks

Weaknesses

- limited advanced navigation. Not able to jump between pages or chapters
- no bookmarking options
- some target groups do not have cd players
- some target groups (often those heavily reliant on audio material) do not know how to operate a cd player. Some traditional users find cd players more difficult to operate, as well as handling the physical discs. Persons with print disabilities, low vision and other physical and learning disabilities may have more difficulties with operation of the device
- often difficult to return discs to packaging.

Availability

Strengths

- libraries can source material from Australian suppliers. Products are predominately from the UK, US and Australia
- large proportion of recent titles are simultaneously published with the printed version
- more titles being produced on cd than on audiocassettes
- readily available in retail outlets and purchases via the internet.

Weaknesses

- some genre areas are still limited. Most audio material is mainstream and production is connected to, and reliant on, high sales of the best selling printed copy
- older style genres such as traditional sagas and romance are no longer being produced
- shorter production runs.

Target group

Strengths

- some members of traditional target groups are still reliant on spoken word cds, including the vision impaired, frail and elderly, print disabled and physically disabled persons
- most traditional users are at least aware of this format and are slowly adopting it, if not already using it regularly
- crosses a wider audience including younger people, car drivers, university students and computer users.

Weaknesses

- those who do not have players or have disabilities that make it difficult to use this format will not benefit from spoken word cds.

Cost

Strengths

- some publishers/suppliers provide replacement cds free of cost
- cds generally available from retail outlets

Weaknesses

- relatively expensive in comparison to printed versions of the title
- offers minimal savings in comparison to the cost of tapes
- has large space requirements for shelving/housing.
- staff time is lost returning and matching multiple cds.

Shelf life

Strengths

- longer life than most cassettes
- can form part of a permanent collection.

Weaknesses

- greater potential to lose discs given that there are usually large multiples per title
- easily scratched. Damage is common through poor packaging
- large space required for storage/display.

Statistics

Strengths

- automatically collected since format is part of most library management systems' reporting module
- most libraries are experiencing higher loans statistics for this collection than its predecessor.

Weaknesses

- lower usage from traditional user groups.

Languages other than English

There appears to be some content in languages other than English available in this format.

mp3 formatted compact discs

Content

Strengths

- market has a good choice of contemporary authors and older classics
- includes abridged and unabridged material

Weaknesses

- there are some genre limitations, particularly family sagas and older nonclassic material.
- much of this material comes from the US
- the UK and Australian market is currently limited
- Australian content is limited and tends to be expensive.

Usability and functionality of the device

Must use a mp3 formatted playback device

Strengths

- compressed format allows entire books to be stored on only one or two discs compared with multiple discs (sometimes as many as 16) needed for the spoken word cd format
- can download from discs to mp3 players via the pc
- if it is Daisy formatted and used on a Daisy compatible device it will allow advanced navigation, including book marking the place left off
- new emerging target groups are embracing this format, as are some traditional users as they find the smaller disc numbers easier to use
- synchronised service to users already with equipment because library stock will play on Vision Australia's Daisy players
- discs can be played on pcs. Some navigation is possible. Complete functionality if the pc has Daisy software loaded.

Weaknesses

- users must have a device that plays mp3 format, thereby limiting the effectiveness of the collection to those already in possession of a device, or requires library provision of the device
- some computer knowledge is needed if users want to transfer material to listening devices
- some people will find it difficult to use mp3 players.

Availability

Strengths

- this format is becoming more popular and hence more mp3 formatted cds are being produced
- stock can be purchased from retail outlets and over the internet
- good availability of popular US titles
- Australian suppliers now offer titles in mp3 disc format
- as this format becomes more popular across the target groups it will favourably influence better availability of this format.

Weaknesses

- still has availability shortfalls in some nonfiction material and traditional fiction such as family sagas and historical romance.
- printed book sales still determine what titles are produced in this format, although as it is a relatively cheaper format to reproduce in general more titles are being produced.

Cost

Strengths

- less expensive than cds or cassettes, particularly material obtained from the US
- takes up less shelf space to house, particularly in freestanding flip type stands
- the potential to appeal to a wider audience makes this format more cost effective
- popularity and demand for this format is increasing.

Weaknesses

- most Australian material is still expensive and limited
- costs of playback devices are prohibitively high if considering supplying the device to users as part of the loan service
- security of the collection. Need for special cases or security tagging that will not disrupt playback.

Shelf life

Strengths

- less damage occurs than with the previous two formats
- only 1 or 2 discs to handle.

Weaknesses

- like all compact discs, mp3 discs can crack and scratch
- most suppliers do not offer replacement cds at low cost.

Statistics

Strengths

- most libraries are experiencing high loans statistics for this collection
- new user groups are loaning this format.

Weaknesses

- as an additional format that needs to be added to library management systems there may not be that facility to allow the extra category. Consequently statistics may not be automatically collected, or separated from other spoken word material.

Languages other than English

This format has the potential to provide a wider audience with regard to languages other than English, but as with the previous audio formats discussed, current availability is poor, and content production will be determined by retail market demand.

Online providers and downloadable audio

This is perhaps the most challenging collection for libraries and their users due to questions over access models. In such a rapidly changing market it is difficult to determine what is the best online service, with the best content, at a price that is cost effective.

Content

Strengths

- there is a multitude of titles available in various readable formats.

Weaknesses

- carries a higher proportion of abridged material
- recording quality for some titles can be below standard
- genre limitations. Much of this material is from the US or European market and more limited amounts of Australian audio content
- competing copyright and licensing arrangements segment what is available via online providers and dislocates the market. It is difficult to achieve a solid collection coverage that includes a range of genre and subject areas in one product. Libraries and users may need to go to a number of providers, which in turn can become very costly.

Usability and functionality of the device

Strengths

- there is access to a wide range of online audio providers

- portability not an issue if content can be loaded to a handheld mp3 device
- can listen via the pc or laptop or transferred to another playback devices
- if parameters permit, remote users can download outside the library's physical environment via the library's web page or virtual catalogue
- if it is Daisy formatted and used in conjunction with a playback device with Daisy software advanced navigation is achievable
- new emerging target groups are embracing this format, as are some traditional users, attracted by the portability of transferring material to a handheld listening device or reader.

Weaknesses

- it is essential to have a device that plays the download format, mp3/Wav/Daisy etc
- computer knowledge is needed if users want to transfer material to listening devices
- the audience for this format is limited to those who have computer knowledge and compatible players
- internet connection speed, memory capacities and the time needed to download can lead to difficulties. Some files are very large and these questions need to be considered
- if people are to use library services there will be a need to determine what impact there will be on library equipment and internet service arrangements
- there may be administrative disadvantages in the hosting and maintenance of the virtual website, and the online collection.

Availability

Strengths

- this format is becoming more popular and hence more providers of electronic content are coming on stream
- users can purchase titles over the internet from commercial providers to augment the library's virtual service.

Weaknesses

- there is still some limitation on nonfiction material, traditional sagas, and Australian content
- a greater proportion of dramatisations, multivoiced and abridged material occurs in online packages, which is not considered suitable or desired by some users

- large files can be download time and server space costly. Internet service times per user may need to be extended to allow for downloading and may impact on general internet usage statistics.

Cost

Strengths

- there are many different options for purchase of audio downloads. Subscription, total purchase of catalogue, or user pay systems are examples
- overall downloads are less expensive than cds or cassettes per title (ignoring the additional communication costs inherent in downloading)
- potentially a wider audience makes this format more cost effective
- no damage can occur to a nonphysical collection.

Weaknesses

- subscription based pricing can become expensive. There may be a licensing cost per year, a maintenance cost for hosting the website, as well as associated communication costs
- subscriptions are usually set for only a certain timeframe. Continued access to audio content may require paying multiple times for the same product whereas if bought in a physical format it is a once off cost
- selection of material may not be a library function. Some material in a subscription collection may contain unwanted content which is paid for regardless.

Shelf life

Strengths

- virtual collections are not tying up physical library space
- collections are added to regularly depending on purchasing options.

Weaknesses

- maintenance of the virtual library may not be in the hands of library staff
- a virtual collection is not permanent. Items might disappear from the online catalogue without notice depending on licensing arrangements
- there are no physical shelves for users to browse.

Statistics

Strengths

- some online suppliers provide reporting software to capture loan statistics, and monitor predetermined loan entitlements.

Weaknesses

- as an additional format that needs to be added to library management systems there may not be that facility to allow the extra category. Consequently statistics may not be automatically collected, or separated from other spoken word material.
- possible difficulties exporting statistics to the library management system.

Languages other than English

Online audio downloads are by far the most adaptive format that will provide for a wider audience with regard to audio content in languages other than English – but like all audio formats the production of suitable audio content will be determined by market trends and sales.

Summary of formats and devices

In summary, for those libraries wanting to retain physical audio resources, Daisy formatted audiobooks and mp3 cds offer advantages over traditional talking books on tape and cd. The primary benefit arises because of their compressed file structure, allowing entire books to fit on a single disc, helping to decrease the incidence of damage while increasing ease of use to user groups.

Daisy players and other mp3 devices have advantages over the cassette and cd player because many of these new devices are multifunctional. Not only can they play Daisy and mp3 files, many can be used as digital voice recorders and have built in synthetic speech capacity allowing the reading of printed text. Attractions also include a high degree of advanced navigation and portability.

With respect to audio downloads, a potential disadvantage is the requirement for computer knowledge to successfully transfer and maintain material to some playback devices. Arguably there are more limitations to the quality and availability of content, compared to that offered in previous formats. In addition, the end user must be able to access fast internet service, either from home or from public providers such

as libraries. This can become costly given the disc space required and the online time needed for some audio downloads.

Although audio publishing is moving to discontinue the cassette format, Churm²¹ makes a valid point regarding online audio content and the general user, stating that ‘until the method of downloading improves a lot and is less complicated, only dedicated persons will become regular users of the service’.

Conclusion

What do talking books have to say? Much more than perhaps we first thought.

Because technology is changing so rapidly, and because no one has yet agreed on a universal design (Daisy being the common default) most developers are designing material which will be adaptable to market changes.

However, libraries need to be aware of not only the rapid development of new formats and devices, but also the competitive nature of the current marketplace. In particular, online providers are prone to suffer due to volatile market changes, some individual vendors folding while new providers come on stream.

Any decisions on content, formats, devices and services should have a solid foundation ensuring continued service in a fluid and competitive market that is likely to change more rapidly than the traditional book market.

Libraries should investigate all audio options *very carefully* before implementing change, bearing in mind what the existing collection is and the objectives to be served. Even though online audio download is becoming more popular, and has the potential to provide audio content to a wider audience, in the medium term a mixture of both physical and virtual audio collections would generally best serve library users, as new developments evolve and solidify.

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Susan Hoy is the home library officer Burwood Public Library in Sydney NSW. She has worked in public libraries for 19 years, undertaking a range of duties at the Burwood Library branch and central services. For most of this time as the home library service officer, Susan has provided for housebound residents, as well as running a seniors reading group and other activities for seniors. She is currently the convener of the New South Wales Home Library Service Working Group. Address: PO Box 240 Burwood NSW 2134 tel(02)99119999 email susan.hoy@burwood.nsw.gov.au

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