

Learn This: MP3 Players (Do You Like Good Music?)



This is the first of what I hope will be many posts from my talented technical consultant, Abraham Whaley. I've asked Abe to demystify the technology that is intuitive if you're under age 30, but Greek to those of us slightly over that age. I can't repeat enough that I think it's important for managers to stay current on technology to stay fresh, stay marketable, and be able to translate world technology into technology for your practice.

Abraham welcomes your questions and comments.

Do you like good music?

How do you listen to it?

It seems every few years the electronics companies come up with a faster, cheaper, better-sounding something, and they begin anew the job of convincing us that it's the ultimate in sonic enjoyment.

But seriously, what is all the MP3 fuss about?

MP3 is a file format. MP3 files have ".mp3" at the end, so your favorite song looks like "yourfavoritesong.mp3" on your computer. Just like ".doc" means a Microsoft Word document, and ".exe" is an executable program file, ".mp3" is a sound file- i.e. music. MP3 files are a way to "compress" sound files. Compression is a common computer technique, where something is packed into a smaller space than in originally

fit into in order to make it easier to use, and send to other people. Maybe you've downloaded or created ".zip" or ".rar" files for sending over the Internet. MP3 is just a way to make it easier and faster to send sounds to each other.

In order to make the sound file smaller, the programs that compress them find pieces of the sound data that people never hear, or can barely notice, and removes them. For the most part, this doesn't affect the sound quality- although some sound mavens people heartily disagree! And since most MP3 files tend to be between 5 and 10 megabytes, they're pretty quick and easy to send in emails, download, and transfer from a computer to a music player.

What can I do with MP3s?

Listen to them! Any part of your life that would be enhanced with a little music can be enhanced with MP3s. First you'll need something to play your MP3 files. That means either a piece of software that can turn the MP3 file into sound, or a hardware device with that software already on it (ie. an iPod).

The most popular choices for MP3 listening software are [iTunes](#) and [Winamp](#). iTunes is the Apple software that comes with the purchase of an iPod- but you can download it regardless and use it for free anyways. Since so many iPods have been sold (more than 150,000,000 as of this March, FYI), iTunes has become the standard in MP3 software for many people. If you're thinking about buying an iPod, downloading and trying out iTunes is a great way to try the software before you buy the hardware that goes with it. iTunes also allows you easy access to the iTunes Store, where you can buy MP3s of music, audiobooks, and free, Internet radio shows that update and

download automatically. Winamp has been around longer, and is a smaller, lighter program- but is still packed with a ton of features.

Also, both software programs allow you to “burn” CDs. Since every song is an individual .mp3 file, you can very easily make custom CDs that have only the songs you want, in the order you want. This was perhaps the most exciting development for me when I discovered MP3s- that I could make my own CDs to listen to in the car or at friends’ houses.

Where can I get MP3s?

First of all, you can make them! Both iTunes and Winamp allow you to (cool slang alert!) “rip” CDs to MP3. “Ripping” is just taking music on a CD and having the computer compress the sounds into MP3 files. Once this is done, the music stays on your computer and you can now play the music on your computer without the CD. You’ve probably just realized another pretty nice use for MP3 files- they can be used to back up your music collection. “Ripping” CDs is completely legal if you own the CD already, or are ripping music that is in the public domain.

[Amazon](#) has pricing comparable to the iTunes store, but made headlines by offering “DRM free” MP3 files. DRM (Digital Rights Management) is a way to stop people from sharing MP3s with each other by making them so they only play on certain devices, at certain times etc...But since Amazon offered files without the restrictions, their downloads can be a lot easier to use and enjoy. Apple does offer some, but not all downloads are DRM-free. Buying my first MP3 from Amazon was a delightfully quick experience. I didn’t even have an account with Amazon and in less than five minutes I was enjoying “Wily” by the British reggae band “Greyhound”. Amazon

recommends you use their small download manager program, but once you download the program, it's easy to keep track of the songs you downloaded.

Other services, like [Rhapsody](#) and the infamous, but [now totally legal and legitimate Napster](#) offer subscription-based programs. For a monthly fee, you can access and download music on your computer, on other people's computers over the Internet, and onto some, but not all portable music players. The catch is that you aren't buying the music, you're paying for the right to access it. So if you decide to cancel your subscription, the music you downloaded doesn't work anymore.

Additionally, many websites offer free, legal MP3s to download. iTunes usually has a free MP3 of the week, and websites like [CNET's Music.Download.com](#) have plenty of free music that aspiring artists and hopeful record labels have released to get you excited about new songs and albums.

What if I want to take my music wherever I go?

So, you've downloaded an MP3 software program, ripped a few CDs (making sure to use the word "rip" to impress your kids), and even found some free MP3s online that you really like. Maybe you even organized some songs you like to regularly listen to into a "playlist" so you can hear your James Brown in the morning to get going and your Jackson Browne in the afternoon to relax. Sadly, you can't take your laptop on a nice jog and shouldn't browse the web while driving to work.

It's time we liberated those MP3s from your computer! This is where a portable, hardware MP3 player comes in. There are a lot of choices to be made for those in the market, so here's

how to cut through the mumbo-jumbo.

First, the numbers. The two main things that a portable MP3 has that set it apart are its storage capacity and its extra features. Most everything else is negligible. Storage capacity is just that- how much music and sound you can store on the player. Storage on players is measured in gigabytes. Now, if we assume for simplicity that most MP3 files are about 5mb (megabytes), we can get a picture of how much storage you need. A gigabyte of storage is roughly 200 songs. So, how many songs do you think you'll put on a portable player? Are you going to listen to the same music over and over? Probably not. If you have 20 albums that you like to hear, and that's it, a few gigabytes will be just fine. But if you are always on the hunt for new sounds, you're going to want a lot more storage. Also keep in mind what else will be on the player- if you want to download movies, then those are much larger files. How about keeping photos on your player? Do you subscribe to any podcasts? The best way to figure out how much storage you need in a player is to start downloading and listening to MP3s so you can get a feel for how you'll use one, and what you need.

Then there are the extra features. MP3 players are almost like digital pocketknives these days, and you should know ahead of time which tools you want if you're looking to buy. For example, Apple now makes an iPod that is also a cellular phone (the ubiquitous iPhone), as well as an iPod that can surf the web, and send email but isn't a cellphone (the iPod Touch). Microsoft's entry into the market is called the Zune. The Zune has a larger screen, with a more detailed user interface, and some interesting features like the ability to share MP3s between Zune users. If you have a song on your Zune, you can "beam" it to another Zune close by so they can play it too. This feature has a major drawback though- beamed Zune songs are only good for three plays over three days. My neighbor has a Zune, and he loves it. Also, some MP3 players are really more like portable televisions that can also play albums.

Examples of these are the Archos 5, and the Cowan 02.

Lastly, if you're a little overwhelmed by all these choices, I would suggest [CNET's MP3 Player Finder](#). CNET's site will ask you some questions, and make some suggestions as to what might suit your needs.

There's more out there than MP3s!

Don't limit yourself to just MP3 downloads either. There are a ton of ways to listen to music online, and a ton of different startups trying to "solve" online music. Although I own an iPod, and love finding new MP3s, I also regularly listen to custom radio stations on Pandora, search for songs on Songza and Seeqpod, and I've heard great things about MOG, Imeem, and Last.FM. Plus, almost every new college-rock band and aspiring singer has a Myspace page, usually with music to listen to.

On a cautionary note: beware of getting something for nothing. One doesn't have to look very hard to find illegal MP3s for download. The ethics of copyright law in the digital age entail more discussion than this column has room for, but suffice it to say, the laws regarding copyright are quite real. Do you know anyone whom has had the FBI knock on their door for stealing music? I do. It wasn't fun for him.

Also, many of the websites that offer these illegal MP3s also offer other things – viruses, spyware, and things your mother wouldn't approve of on a healthy computer. Be careful, use common sense, and if something seems too good to be true, it probably is. Except of course, the goodies at [ManageMyPractice.com](#) =).

To Recap:

1. Music is good.
2. Download free MP3 software.
3. Download free or not-free MP3s or load your own CDs onto your computer using the software.
4. Make your own CDs or playlists with your favorite songs. (Great holiday gifts!)
5. To take it with you, purchase a MP3 player after assessing your style and your needs, and load your music onto the player. 1 gig storage = 200 songs.
6. Don't steal. Your Mama would know.

Have fun out there!

– ACW

Using What To Do What? Radiologists Use iTunes to...



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Under the category of using existing software for new purposes, radiologists at Renji Hospital and Shanghai Jiaotong University School of Medicine are using iTunes to house and sort medical PDFs of images and research documents. Download Squad has the [story](#) here.