



This is the first part of a two part look at Apple's iTunes.

This session we'll have a look at

***'The History of iTunes and the
Evolution of Digital Music'***

Next session, we'll have a look at iTunes itself.



A Brief History of iTunes

Historically music was distributed on analog physical media such as vinyl records, cassettes and 8-tracks.

The release of the first 'Audio Compact Disc' (CD) in 1982 started the change to digital, but it was still on physical media.

As personal computers were becoming more and more ubiquitous and capable, and internet services to the general public like CompuServe, Prodigy and America Online were getting off the ground, the race was on to develop a digital audio format that wasn't dependent on physical media.





A Brief History of iTunes

The MP3 coding format for digital audio was developed largely by Karlheinz Brandenburg and the Fraunhofer Society in Germany, with support from other digital scientists in the United States and elsewhere. The initial version was released in 1991, followed in 1994 by the release of the first software MP3 encoder.



The song '*Tom's Diner*' by Suzanne Vega was the first song used by Karlheinz Brandenburg to develop the MP3 format. Brandenburg adopted the song for testing purposes, listening to it again and again and again each time he refined the scheme, making sure it did not adversely affect the subtlety of Vega's voice. Accordingly, he dubbed Vega the "*Mother of MP3*".



A Brief History of iTunes

With the first real-time software MP3 player WinPlay3 (released 1995), many people were able to encode and then play back MP3 files on their PCs. Because of the relatively small hard drives of the era, the lossy compression was essential to store multiple albums' worth of music on a home computer as full recordings.

The software based digital music revolution had begun. CD's and cassettes had already largely replaced vinyl records and 8-track tapes (and DVD's and Blue Rays had largely replaced video tapes), now they would all be replaced by software based digital media.

MP3 wasn't the first digital software format for audio, and it wasn't the best, but it was the first one to gain widespread popular use because of its ability to store large amounts of audio data at a reasonable quality level. The fact that it was free didn't hurt.

A Brief History of iTunes

In 2001 Apple introduced the iTunes app and the iPod music player. The iTunes app quickly became the most popular digital music player, and the iPod displaced the Sony Walkman and Discman as the premier portable music player family.



iTunes v1.0 install CD (2001)



The original iPod (2001)

A Brief History of iTunes

In the early 2000's the music industry was facing a very serious piracy problem on several fronts, especially from peer-to-peer file sharing services like Napster. After all, why pay up to \$20 for a CD or a cassette, especially if you want just one or two of the songs, when you could get it for free?



Although the music industry prosecuted services like Napster out of existence, and even prosecuted individual users, the problem of where to get reasonably priced music conveniently online as opposed to having to shlep down to your nearest (or maybe not so near) music store continued.

Getting rid of serious music piracy was like a never-ending game of Whack-A-Mole.

A Brief History of iTunes

Apple's Steve Jobs convinced the five biggest music publishers to let him sell individual songs and full albums online for a reasonable price, and in 2003 the iTunes Store was launched.



iTunes Store

Although the iTunes app wasn't the first MP3 player and the iPod wasn't the first dedicated MP3 music player device, when combined with the iTunes Store it became an unbeatable combination



A Brief History of iTunes

Music publishers finally realized that with online sales, they didn't need to produce hard copies (CD's, cassettes, etc.), warehouse them, ship them, take back unsold copies, get caught with their pants down when an album or single was unexpectedly popular, etc. All of these costs and problems disappeared.

It wasn't long before other legal online music stores opened up.

To compete, Apple started adding other media like videos, movies, TV shows, podcasts, etc., and started adding more and more and more and more and more features, many of them not particularly wanted or well received.



A Brief History of iTunes

In the beginning, the iTunes Store used Apple's FairPlay digital rights management (DRM, AKA 'copy protection') technology. FairPlay had several issues with device compatibility, especially with non-Apple devices. There were various successful bootleg efforts to remove the DRM protection from files, with Apple continually updating its software to counteract these efforts.

Starting in 2007 with EMI records, Apple signed deals with all the major record labels as well as a large number of independent labels to offer iTunes customers an 'extra cost' purchase option for a higher-quality, DRM-free version of the label's tracks, mostly in M4A lossless format instead of MP3. Over the next few years the multi-tier pricing model was eventually removed for most of the music in the iTunes Store.

However, television episodes, many books, and films are still FairPlay-protected.



A Brief History of iTunes

By the mid-2010s, streaming media services like Spotify were generating more revenue than the buy-to-own model used by the iTunes Store.

Apple now operates its own subscription-based streaming music service Apple Music alongside the iTunes Store.





A Brief History of iTunes

Though very well received in its early years, iTunes received increasing criticism for a bloated user experience, which incorporated features well beyond its original focus on music.

As a result, beginning with Macs running macOS Catalina (2019), iTunes was replaced by separate apps, namely Music, Podcasts, and TV, with Finder taking over the device management capabilities. This change didn't affect iTunes running on Windows or older macOS versions (at least not yet).

For now, the iTunes Store is a great way to buy downloadable music (and other digital media), and for Windows users the iTunes app is the app required to use it.



That's it for our look at the history of iTunes and the evolution of digital music.

Next session, we'll have a quick look at the basics of using the iTunes app and the iTunes Store to sample and buy music, and to access your online library of digital music.

We'll also have a look at some alternatives to iTunes.