

The jukebox of paradise

Before long, the ultimate, on-demand digital music service might be more than science fiction.

By Dan Heilman

Digital music has its roots in the 1970s, but most music lovers didn't get to know this super-modern baby until the new millennium. Seemingly overnight, consumers could not only get virtually any song they wanted for free via easy-to-use (if legally sketchy) download services, but they could also tweak them as they saw necessary thanks to ever-cheaper digital-music editors.

So where has that stunning explosion of digital music left us, and where will it lead us? The answers are slowly coming into focus, but it's possible that the developments of the next five years will be just as unpredictable and crazy as those from the last five. It's also quite possible that the final result will be beyond anyone's fondest dreams.

The next big thing

Much of the innovation in digital music has recently been funneled toward two areas: improving the sound quality of CDs and MP3s, and refining digital-rights management. But to some observers, much of the sweat expended over the coming years might be going toward how music devices work--both alone and in tandem.

One factor that consumers will keep an eye on is storage capacity. Moore's Law regarding the ever-growing capacity of computer memory is rapidly being applied to MP3 players, as each successive generation of players grows in memory size, if not physical size. The Apple iPod Mini, barely the size of a Zippo cigarette lighter, can hold 4GB of data; Apple conservatively projects that the Mini it sells by the end of the decade will hold 55GB, enough music to keep playing for almost a week nonstop without repeating a song.

That ability is impressive, but it will be made all the more so by your audio device's ability, one of these days, to incorporate much more than MP3s. "Fairly soon, a handheld Nokia phone will hold as much data as a standard PC," says Michael P.A. Cohen, a Washington, D.C., attorney specializing in digital media. "You might see the efficiencies of peer-to-peer networking at work between digital devices--not so much in the form of file sharing, but more in the ways devices can work together."

Getting the word (and music) out

The success of such pay-download services as iTunes and Rhapsody has shown that consumers are hungry for a point-and-click method of getting the songs they want--and only the songs they want.

But two very basic items, selection and price, are stopping the pay-download business from truly taking off. So far, about 10 million Americans have paid to download a song. While impressive for a relatively new distribution model, the figure looks puny when put next to the fact that 800 million CDs were sold in 2002--and that was a bad year.

So how can record companies bring their mountain to the Mohammeds who buy their products? Some feel that the answer will boil down to some old-fashioned virtues: making a quality product easily available.

"Music will be less and less about producing a product and more and more about being a service," says Lena L. West, owner of XynoMedia Technology, a Yonkers, N.Y.-based tech consulting firm. "With any type of music available literally at arm's length, at any time, increasingly artists are going to have to rely less on flashy marketing campaigns and more on producing good, quality music." Cohen says,

"The download services offered by Apple, Real, and MusicMatch are good services. Unfortunately, 99 cents per song won't cut it for much longer. Once the novelty wears off, record companies are going to have to concentrate on making as much of their catalogs available as possible, and finding a price point--whether it's a quarter per song, a dime, I don't know--that consumers will stick with."

Paul Zullo, CEO of the New York-based music database service Muze, puts it more succinctly: "I don't care how curious you are or how much you love him, nobody's going to dig into the hundreds of songs in Bob Dylan's catalog at 99 cents per track. That just makes no sense."

The right side of the law

People on every side of the digital-music issue agree that for this great idea to work, consumers and record companies have to play nice, something they haven't managed during the post-Napster era of lawsuits against downloaders.

So far, every effort that the record industry has made to curtail illegal downloading has resulted in a public-relations disaster. Stories of little old ladies and children being erroneously sued has served only to poison any efforts toward deterring downloaders. Some observers feel record companies are refusing to change with the times and see that consumers want a workable solution to the downloading dilemma as much as anyone.

"What few people realize is the music fans' propensity to consume has been horrendously underestimated," says Tom Barnes, a media consultant with Atlanta-based Mediathink. "Five years from now, most people will have music libraries with thousands of songs--and the more they have, the more they will want. A few difficult legal tweaks, cheaper storage, and new recommendation technology will spark a demand for music that no one could ever have imagined."

Meanwhile the U.S. Congress will resemble a copyright battlefield over the next several years. Legislation regarding everything from fair use in digital sampling to what sort of fees should be paid by webcasters will be bandied about in an effort to see that copyright owners get compensated fairly without stifling artistic creativity and the rights of consumers.

I want it all

For such a thorny issue, the elements are clear-cut: One side wants all the music ever recorded, easily and cheaply available in digital form. The other side wants to get rich providing that service. Nothing to it, right? If technology, distribution, and policy all keep pace with one another, the perfect world evoked by that scenario might not be that far off.

"Because the digital world is theoretically unlimited, the CD has already become obsolete," says Cohen. "Consumers won't put up with having boundaries imposed by physical storage space. Record labels need to keep their eye on that fact if they want to really capitalize on digital music."

The greatest advance currently under way in digital music might be the simple acknowledgement of everyone involved that the day might come when the ultimate 24/7, on-demand music service is a reality and not a pipe dream. It's hard for any music lover not to get dewy-eyed imagining such a utopian scene.

"In a scenario where we have best-of-breed technology," says Muze's Zullo, "all music--all music--should be available to whoever wants it."