A new digital revolution

March 10 2006

The rise of digital music may spell not just the death knell of the CD, but also a revolution in the way music is actually produced.

For hip-hop, techno and dance music in particular, the changes brought about by digital music has been significant. Computer production has its first poster-boy in hip-hop producer 9th Wonder, who makes his popular beats with a $99 computer program that others with five-figure studios fail to create.

Industry analysts argue that listeners can instantly tell whether a beat came from computer rather than standalone hardware because of the clean sound most digital producers employ. But Wonder's musical backdrops, employed by artists such as Jay-Z, Destiny's Child and Memphis Bleek in addition to his own group Little Brother, refute this notion all by itself.

"I can make it do any type of beat I want to," Wonder said in an interview with Remix Magazine, referring to the program he uses, FL Studio. "I listen for bass lines and the way I can tighten up the drums. I can make it sound like a crispy, empty beat or a dirty beat."

Wonder writes his soulful soundtracks on the same computers millions of Americans use everyday to send e-mails, instant message and play computer games. This is done on a program that often "costs less than a single good microphone," said Mike Metlay, an associate editor at Recording Magazine.

FL Studio is only the beginning when it comes to the massive electronic music production culture. For Windows users there are programs like Cakewalk's Kinetic, Propellerhead's Reason and Sony's ACID while Apple users have access to programs like the free and simple GarageBand or the professional-grade Logic Pro. Each successive version of these programs adds new features, making each one more and more like an all-encompassing studio.

More exhaustive programs now create less-expensive software to compete with the aforementioned programs. The industry standard in music production and sequencing, Pro Tools, once only available for thousands of dollars, now can be accessed in smaller, less intensive versions for just a couple hundred dollars.

"This stuff starts at the fringes in the experimental and DJ culture," Metlay said. "(It) moves toward the mainstream as the companies recognize larger markets. (They) realize that there's a whole world full of people out there who have computers and might enjoy making their own music."

It isn't all about making money for everyone, as evidenced by the free multi-track audio editor and recorder Audacity. The software does many of the things a $1,500 multi-track hardware recorder does but is available for free download on the Web. This program and others like it offer Web forums and message boards for users. This creates a massive digital community that grows everyday.

"Free software is not just free of cost (like 'free beer')," the Audacity Web site states. "It is free as in freedom (like 'free speech'). Free software gives you the freedom to use a program, study how it works, improve it, and share it with others."

A quick search on the Musician's Friend Web site, one of the more

popular musical instrument and equipment retailers, finds that the closest thing to a program like FL Studio, an AKAI MPC1000 sequencer, costs about $1,000. More advanced sequencers cost even more.

"You can do much more for potentially less money," says Markkus Rovito, technology editor for Remix Magazine. "A new MPC2000XL or MPC25000 costs about $2,000 street price. For less money than that, a person could buy a decent PC and (FL Studio), Cakewalk Sonar Home Edition or some similar software -- or an Apple iMac with the pre-loaded GarageBand software."

These pieces of hardware utilize a smaller screen, are less intuitive and adaptive and can't do the wide range of things a computer program can do. But software does have its drawbacks. For one, a computer isn't a standalone instrument like a sequencer is.

"A computer is not designed from the ground up to make music and nothing else," Metlay said. "Even a computer that's built for audio and never used for anything else still uses Mac OS X or Windows XP, operating systems that are not audio-specific. This means that there are many ways a computer can get confused, lock up, or crash while making music that you wouldn't see in a hardware box."

Though 9th Wonder quickly became one of hip-hop's hottest producers using just a turntable and a Dell laptop, the number of well-known artists who make their music solely on computers remains low. Techno artist Moby is known for his laptop-based live shows, Metlay says, and even jazz great Herbie Hancock occasionally replaces his synthesizer hardware with a laptop.

For the most part, many of these inexpensive programs remain underground just like the artists who use them. But just because producers don't use computer software exclusively doesn't mean the

digital revolution doesn't affect music production more and more everyday.

"Ultimately, the transition to computer music production is nearly complete," Rovito said. "There are very few professionals who don't use a computer in some capacity in the production process, and beginners, hobbyists and semi-pros usually take the computer route for its cost effectiveness and practicality."