



get in the

# GAME



BY MICHAEL HODGSON



After two decades of fits and starts, could all the planets now be sufficiently aligned to push **EXERGAMING OVER THE HUMP** in a quest to become the next growth category for the industry?

**S**weat dripped from my brow as I whirled to whack a bleeping light on a tower with my staff. The light, which I successfully targeted, was just level with my head and behind my right shoulder. Another audible tone cued my senses that I needed to twist yet again, this time trying to smack a light low and to my left. I missed, and cursed lightly under my breath. Quickly, though, I readied myself to react to and pounce on the next tone to come. I was having a ball, my heart rate was up, and my senses were alert. Apparently, I was also exercising, although it felt more like play than a workout. Indeed, that is exactly the point growing ranks of exergaming developers and enthusiasts are trying to make.

"I call exergaming stealth exercise," said Paul Dolan, director of business development for Cybex and the man overseeing the Trazzer game. "The kids and adults who are playing (an exergame) don't realize how good it is for them and that they are working quite hard. They are just having fun."

As the previously divergent worlds of electronic games and exercise are colliding, perhaps it is a category the fitness industry should be paying more attention to if it wants to begin attracting new—and younger—customers, as well as the couch potatoes who find working out dull or boring.

Marian Shaw, vice president for Makoto, said she believes the answer is "yes." "You have to entice individuals who get bored working out or going to a club into an activity because it is fun, and fitness should be the by-product of that activity," she said. "Only by making fitness an afterthought will those folks engage in it. And exergames, like Makoto, are ideally positioned to take advantage of that opportunity."

Dolan himself said he sees no limits to the possibilities. "What we have seen in the Trazzer from the beginning is a fantastic opportunity to enter virtual reality and exercise markets on a different path than the steel-and-upholstery one our company has

PHOTOS COURTESY OF CYBEX/TRAZER AND MAKOTO

historically followed,” Dolan said. “There is no limit to the potential, and it gives us an entree into the youth-under-14 fitness market, because there is no way you’d ever see an 8- or 9-year-old on a Total Body Arc Trainer.”

### IN SEARCH OF A DEFINITION

Electronically-enhanced workouts have been quite the rage for a number of years with TV hook-ups, web access, wired and wireless competitions on or between exercise bikes or treadmills and, yes, games like Trazer and Makoto. So with the increased

technology to gain a foothold in the fitness industry with hopes to market the product to fitness professionals as well as to coaches and trainers in schools and universities. The company was Atari, and the program was dubbed Project Puffer. The year was 1982. Atari’s Project Puffer was the first effort GearTrends® is aware of that recognized the potential in creating a software market that was developed specifically for exercise bikes and other equipment.

Atari believed, according to internal memos, that there was a growing and strong interest in health and fitness in the early ’80s and that this interest would

created for the system, just like with the VR Bike. The limited selection of games—oh, and the \$3,500 price of the bike, which included a built-in screen and game connection—doomed the project.

Despite ultimate failure, all of the above were important steps. Other names litter the graveyard of tried-and-failed, including Netpulse, Enercise and Elonton. Why all the failure amid so much perceived demand?

“I think that the reason nothing has succeeded is that all the elements have not been there—the graphics quality, the sound, the pricing and the perception of how good the



“WHEN IT BECOMES MORE FUN FOR YOU TO RUN UP THE STAIRS THAN TAKE THE ELEVATOR, THEN YOU HAVE SOMETHING—AND THAT, IN A SENSE, IS WHAT EXERGAMING IS ATTEMPTING TO DO—MAKE IT MORE FUN TO RUN UP THE STAIRS.”

—Phil Feldman, Powergrid Fitness

attention on calling the category “exergaming,” it seems a little defining is in order; to separate the wheat from the chaff as it were. The experts and inventors we interviewed for this GearTrends® article break down the differences in what we will term “electronically-enhanced exercise” this way:

» **Infotainment:** Any “entertainment” that is purely distraction-based, as most fitness companies have focused on. E.g., any equipment that utilizes a TV screen, computer interface or touch screen to allow the user to simply surf the web, watch TV, or send emails while plodding or pedaling along.

» **Exergaming:** Any activity using equipment that requires the user to be involved and an active participant in either a storyline or some kind of game or action (be it with or against a computer, a posted score or other players).

### NOT A NEW CONCEPT

The fitness industry has been playing with exergaming concepts—or with what the media has now mostly dubbed “exertainment”—since the 1980s with varying degrees of success ... or lack of success. In each case, the idea was then, as it is now, to entertain, motivate, distract and, essentially, tease users into exercising without mentioning the dreaded words “fitness” or “workout.”

Interestingly enough, it was a gaming company that is likely the first that dabbled with the concept of using gaming

make the timing ideal to create an association with video games and a healthy lifestyle. This would, the company believed, add new excitement to video gaming and make their products appealing to a much broader target market.

The home model Atari came up with offered a folding exercise bike with Atari controls mounted on it and also had an add-on module for consumers who already owned a bike. Plans were in the works to develop and release game controls that would adapt to rowing machines and other equipment. In all cases, the equipment would become the game controller, allowing the user to race or maneuver through games.

Puffer, unfortunately, went poof when the company was sold.

To huge acclaim, Tectrix unveiled the VR (Virtual Reality) Bike in 1994. It was designed, the company stated, to “engage both the mind and body to banish workout boredom.” A bit ahead of its time and technology, the VR line ultimately proved unsuccessful and the undoing of the company, which also had non-VR climbers and bikes. It was bought by Cybex/Trotter in 1998.

Not to be outdone, Life Fitness partnered with Nintendo and created a system it dubbed, Exertainment, a term the company filed for a trademark on in 1992, and had granted in 1995. (Yes, the company still owns the trademark, even though it is becoming genericized, rather like Kleenex or Vaseline.) The weakness in the system was that games had to be

exercise really is,” said Ken Stearns, an inventor with a list of fitness patents from weights to ellipticals that fills chapters at the U.S. Patent & Trademark Office. “Unless you actually play Makoto, you really have no idea that it is, indeed, a great workout.”

### GAINING TRACTION

Despite the decades of loud, spectacular and quietly hushed failures, there are believers in our midst who feel strongly that all the required conditions are now in place to push the concept forward—technology, pricing, demand, obesity, interest, you name it.

“Everyone is just starting to come out,” says Ernie Medina Jr., CEO and cofounder of the XRtainment Zone ([www.XRtainmentZone.com](http://www.XRtainmentZone.com)). “The wave is just starting to crest, and the potential in the market is untapped as of yet. If you get out there and establish yourself now, you can have a good position in the market.”

What makes Medina and others believe the wave is finally cresting? For one thing, the electronics community is back on the bandwagon publicly, and the media is beginning to take notice. At the January 2005 Consumer Electronics Show in Las Vegas, the trade show organizers created a first-ever “Cardio PlayZone” for fitness-themed companies—which our scouts on the scene told us was packed for much of the show. Participating companies included Powergrid Fitness with its Kilowatt Sport piece,



# XRTAINMENT: THE ARCADE OF THE FUTURE?

Konami Digital Entertainment (Dance Dance Revolution or DDR), Electric Spin with the Golf LaunchPad, Nicktoons Movin'—a game played with the Sony PlayStation2 EyeToy platform—and two others.

Stories about the “new” category ran on the Associated Press wire, in Wired magazine, on ABC, CNN, Fox, in the New York Times, Web MD, and in major metropolitan papers around the country. In each story, exergaming was being billed as a solution to obesity.

Obesity, especially childhood obesity, is generating concern that plays strongly into the hands of the exergaming aficionados trying to promote the cause. According to the Centers for Disease Control and Prevention, in 1999 and 2000 (the most recent study available), 16 percent of boys and 14.5 percent of girls aged 6 to 11 were obese. Compare that with 4.3 percent of boys and 3.6 percent of girls who registered on the obesity scales from 1971 to 1974, and it is easy to see why folks are alarmed, and why exergaming experts are touting gaming as a fitness solution.

Of course, just as obesity is opening a door for the gaming industry to walk through to merge with the world of fitness, there is an irony here that can't be ignored. Though few studies have actually been completed confirming the assertions, the general consensus is that the blame for our obesity “epidemic” can be placed on video games, fast food, TV and the Internet—many of the modalities key to exergaming and the companies that are creating the category.

“And now we are seeing the potential impact upon our economy as healthcare costs soar from an overweight nation,” said Medina. “Even the military is concerned, as they look at high schoolers today to see how many of them are out-of-shape and overweight, and wonder where the next soldiers will come from.”

Medina, Shaw and the others GearTrends® spoke with have noted that exergaming is finally being taken seriously at both the school and clinical levels as a possible and potentially ideal solution to getting a nation fit again. And that is good news for both the gaming and fitness industries.

In fact, a soon-to-be-released, independent, clinical study from Calvin College in Michigan that utilized the Makoto appears to offer the confirmation that exergamists have been waiting for—that exergames, and especially its subject, the Makoto, improve cognitive performance.

## MEDIA AND OBESITY FEARS NOT ENOUGH

The obesity crisis and media attention alone aren't enough to anchor all the hope and hyperbole being tossed into the exergaming ring. Another moon needed to align with the others: technology. Fortunately, technology is catching up with imagination—and the consumer wallet—so that storylines and imagery are presented with crisp graphics, featuring real-time interaction and frequently surround-sound audio which pull users into the virtual experience more readily.

## web extra

For more exergaming content, including links to interesting sites, go to GearTrends® web extras at [www.GearTrends.com/extras](http://www.GearTrends.com/extras).

For Ernie Medina Jr., when the XRtainment Zone—[www.xrtainmentzone.com](http://www.xrtainmentzone.com)—launches with its first arcade site in the fall of 2005, it will be the realization of a dream that began seven years ago, when he saw the first version of the Trazer at IHRSA.

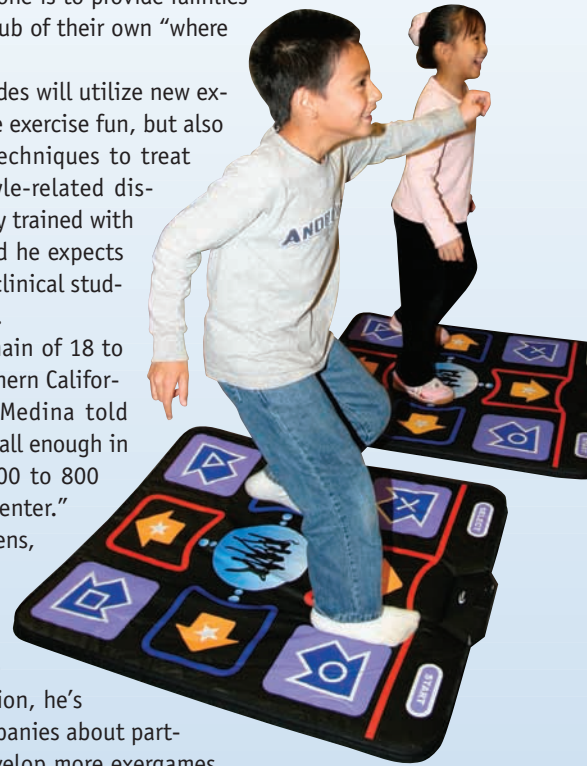
The mission of XRtainment Zone is to provide families and kids of all ages a fitness club of their own “where working out is all play.”

Medina told us that his arcades will utilize new exertainment technology to make exercise fun, but also employ innovative wellness techniques to treat the multiple causes of lifestyle-related diseases. His staff will be clinically trained with master's degrees or Ph.D.s, and he expects to use the arcades to conduct clinical studies for the healthcare industry.

“Our goal is to open up a chain of 18 to 20 franchises throughout Southern California in the next five years,” Medina told GearTrends®. “We want to be small enough in each club to be hands on—400 to 800 members is our goal for each center.”

When Medina's first club opens, expect to see a selection of exergames, including 3 Kick by Spectrum Sports, Kilowatt, DDR, Cateye, Trazer, EyeToy, the Sportwall and others. In addition, he's already talking to gaming companies about partnering with XRtainment to develop more exergames.

Media said he also plans to have his fitness arcades become retailers for the exergames so club members who use the equipment can purchase them for home use.



Wireless developments and broadband popularity now mean that competitors can face off in the same virtual world whether they are mere feet or thousands of miles apart.

Phil Feldman, creator of Kilowatt and chief technical officer for Powergrid Fitness, said, however, the industry is still miles away from “the perception of effortless wellness” or what he terms the Holy Grail of fitness.

“When you were a kid, playing around, you never thought of it as exercise. At some point, as you grew up, exercise became work and as a result, you stopped doing it,” said Feldman. “It becomes easier to take the elevator instead of the stairs, drive a car instead of walk and the downward fitness spiral begins.”

“As an industry, we have to find a way to completely decouple pleasure from effort,” he added. “When it becomes more fun for you to run up the stairs than take the elevator, then you have something—and that, in a sense, is what exergaming is attempting to do—make it more fun to run up the stairs.”

## THE DDR PHENOMENON

Although fitness never became part of the official DDR lexicon until last year, Dance Dance Revolution has become a raging success for Konami, the Japanese company that runs a huge chain of fitness clubs in Japan and is a major player in the video gaming industry. DDR is deceptively simple—you stand on a mat that looks a bit like a completed tic-tac-toe game and is the game's controller. You then follow arrow prompts on a screen that tell you where to move your feet to complete a variety of dance moves in time to the music—well, they'll look like dancing once you get good. The plastic dance mat and game software sell for \$60, and require only a PlayStation 2 or Xbox.

Since December 2003, more than 2 million copies of the game have been sold, and the game has now become so popular as a fitness alternative that it

PHOTO COURTESY OF XRTAINMENT ZONE



# REALITY CHECK



inspired the website, [www.getupmove.com](http://www.getupmove.com). That website documents countless stories of DDR devotees who have danced off mounds of pounds.

And that is what Feldman means by making it more fun to run up the stairs.

## AT WHAT PRICE?

It is easy to see why DDR became so successful. Not much thought goes into spending \$60 for a game. But will the same hold true for a retail version of Makoto (due out in 2006) for around \$1,500. Or \$800 for Kilowatt or \$7,500 for a Trazer with video screen built in? Consider that the treadmill didn't make much of an impact for home use until its price dropped below \$2,000, and neither did the Lifecycle until its price dipped below \$1,000.

While noting that a number of high-end homes have already purchased the Trazer, Dolan, along with others we spoke with, said they believe the market will first have to be developed at the club and commercial level before it will realize the consumer demand and volume necessary to drive down prices and justify increased focus on software development.

And that's just what Broadcast Vision—

IN THE COURSE OF RESEARCHING THE ONLINE COMMUNITY FOR THIS ARTICLE, we came across a few blog postings and chat forums that could be considered a wake-up call for the fitness industry—at least if that industry hopes to continue to engage its disciples through the worship of treadmills, ellipticals and bikes.

One particular chain of discussions surrounding the virtues, or lack thereof, of exergaming and, most often, DDR, had generated this posting: "While yes, it is better to play in the sun with nature, these games aren't meant to be nature replacements, they're treadmill replacements."

If that forum participant is to be believed, could it be that exergames might supplant treadmills and the like as the de facto exercise equipment of the home? Only time will tell.

[www.broadcastvision.com](http://www.broadcastvision.com)—is counting on. The company has packaged a fitness version of DDR (DXR Dance Exercise Revolution) with the Cateye Game Bike Pro and Kilowatt into a club-within-a-club approach the company has dubbed the Fitness Arcade Xpress. It was introduced in late 2004. The arcade is being promoted as ideal for providing "circuit training for aerobic and cardio respiratory conditioning, resistance training, core, balance and agility exercise."

DDR is also being looked at for use in schools, beginning with a school district in Redlands, Calif.—Medina's backyard. Medina told us the pilot program this fall will establish a room and an exergaming component in the PE curriculum with sufficient stations to accommodate a classroom of 35 students for the 50 minutes they would normally spend in a PE class.

If all goes according to plan, Medina will soon have a franchise of fitness arcades in Southern California (see XRtainment sidebar on page 18) that may become another proving ground that the industry needs to generate consumer buzz and demand—and what could be the arcade of the future.

At last, it appears all the needed elements are falling neatly into place for the exergaming category to finally move beyond niche curiosity. It could now become a full-fledged category that is good for wellness, and good for the bottom line. The only question that remains, then, is whether the fitness industry will become a leader or a caboose awaiting the exergaming train to pick up steam before hooking on for the ride.

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