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HEADLINE: LET THE GAMES BEGIN;

The Xbox 360 kicks off the holidays in high definition. Plus, we pick the top games and gear from Nintendo, Sony, and more.

BYLINE: PETER LEWIS

BODY:

MICROSOFT XBOX 360

GEAR REVIEW

Microsoft's got game. After plunging an estimated \$ 4 billion into the development and marketing of its Xbox videogame console, the centerpiece of its strategy to expand from the office to the living room, Microsoft has taken the wraps off its next-generation game box, the Xbox 360. And judging from the features Microsoft has packed into the new box, it's clear the company is playing for keeps.

Despite a relatively steep pricetag of \$ 400 for the complete hardware package, an initially sparse selection of new games at a typical hit of \$ 50 each, requirement of a broadband Internet connection, and online fees that can be as much as \$ 8 a month, we expect the Xbox 360 to be the techie toy of choice for gamers this holiday season.

The \$ 400 Xbox 360 "premium" bundle includes the completely redesigned game console; a wireless controller; cables for attaching the Xbox 360 to a TV set; a removable 20GB hard disk; a headset; customized face plates; a monster-size AC power adapter; and a free pass for a basic subscription to Xbox Live, the online gaming network that is rapidly setting Xbox apart from its main rival and the market leader, the Sony PlayStation 2.

Microsoft will also offer a basic Xbox 360 system for \$ 300, consisting of just the console itself, a wired controller, and the basic Xbox Live service. However, the experience of using the full system is so compelling that most consumers are likely to opt for the premium package.

To recoup its investment--\$ 4 billion is a big ante even for a company with \$ 40 billion in cash--Microsoft has to sell its Xbox 360 as not just a hard-core gaming machine for testosterone-addled men 18 to 34 years old but also as a family entertainment and communications center for boomers, soccer moms, and casual gamers.

To broaden the appeal of the 360, Microsoft is going from wild to mild. The first-generation Xbox, introduced four years ago, was big and black and brutish and boxy, just the sort of design that would appeal to boys who like to blow things up. The new Xbox 360 design is more Martha Stewart. That's not to say Ms. Stewart doesn't like to blow things up; perhaps she does. But the new machine is an upright tower with gentle curves and pale plastic. Microsoft says the design is "more Porsche than Hummer," but I find it more ho-hummer, even with the giant, toxic-green, eyeball-like power button that's one of the few design holdovers from the original.

Microsoft is also boosting the mildness quotient with an emphasis on classic arcade and parlor games, offering alternative amusements to people who don't care to wallow in bone-crunching sports games or screeching, spark-spewing race games. Puzzles, poker and other card games, billiards, and similar family fare

will be available either free or for a nominal sum, probably somewhere in the \$ 10 range.

To appeal to nongamers, the Xbox 360 can also be used as an adjunct to the home entertainment system, playing audio CDs and serving as a progressive-scan DVD player, for those times when separating monsters from their intestines becomes tedious. Connected to any TV--ideally a high-definition, widescreen digital set--the 360 becomes a digital hub for the family room. Three USB 2.0 connection ports allow users to attach digital cameras, portable MP3 music players (including the Apple iPod), or even a Microsoft Windows Media Center PC. Plug in your iPod and use your own favorite music as a soundtrack to an Xbox 360 game instead of the one on the game disc. (Just don't expect to play any songs you've purchased through the Apple iTunes Music Store, because Apple has not given Microsoft a license for Apple's copyright-protection system.) If the Media Center PC is in the other room, an optional Wi-Fi adapter or an Ethernet cable can pull music, photos, home movies, and other Windows Media files from the computer to the Xbox for display on the big-screen TV. Setting up such a networked system is always tricky, however, even for experienced techies, and rigging this one up may cause them to want to blow something up.

And that, of course, is where the Xbox 360 really shines. In the process of giving me thumb calluses while I tested new games like Perfect Dark Zero, Call of Duty 2, and Project Gotham Racing 3, the Xbox 360 revealed itself to be the most powerful and immersing gaming console available today. (Elsewhere on these pages are my picks of the best games for the holidays.)

All new Xbox 360 games are high-definition, showing individual blades of grass rippling in the wind, beads of sweat on an athlete's face, and blood splatters in exquisite detail, accompanied by 5.1-channel surround-sound audio. The enhanced realism comes from the Xbox 360's custom-designed IBM PowerPC processor and ATI graphics chip, which together deliver near-cinematic quality.

Microsoft chose to support the 720p (720 lines scanned progressively) high-definition video standard instead of the more advanced 1,080p level announced by Sony for its PS3. All I can say is that 720p looks pretty darned good.

Microsoft also chose a standard-definition DVD player for the Xbox 360, a conservative move, given that high-definition DVD players are expected to start arriving soon. (The PS3 will feature a high-definition DVD drive.) But Microsoft reserved the option to add a high-def DVD player once a technical standard for those next-generation DVDs has been resolved.

The Xbox 360 carries interaction among players to new levels. There's a tiered pricing system for Xbox Live, with online subscriptions ranging from free for the basic Silver level to \$ 50 or more per year for Gold and Premium Gold levels, which include multiplayer online gaming and the ability to buy virtual gear for virtual characters using real money. Players can enter tournaments, compete for prizes, challenge other players in ranking ladders, and build a global reputation.

Only a few of the most popular first-generation Xbox games will be playable on the new console, which means either keeping an older Xbox attached to the TV along with the new one or buying new versions of your favorites. The Xbox 360 also falls short, ironically, in integration with other Microsoft products and services like MSN's music store and Hotmail e-mail. Perhaps that's not bad. The first time an Excel spreadsheet or PowerPoint presentation tries to sneak onto my TV screen, I'm ripping out the wires. Let's not forget that the Xbox 360 was built primarily for fun and games. And with its powerful new hardware and endless expansion possibilities through Xbox Live, it's the only game in town this holiday season.

NINTENDO MICRO

GEAR REVIEW

The new Nintendo Game Boy Micro is to portable gaming what the Apple iPod Nano is to portable music: an impossibly small device that delivers bigtime entertainment. The Micro (\$ 100) is the latest and by far the smallest iteration

of the world's most popular portable game player. Measuring just four inches wide and two inches tall, the Micro is smaller and lighter than most cellphones. Yet despite its diminutive size, it manages to offer useful and relatively comfortable control buttons for blasting aliens or getting in a quick game of virtual tennis.

Unlike other new portable devices such as the Sony PSP, the Nokia N-Gage, or even the Micro's bigger brother, the Nintendo DS, all of which made their debuts with a limited number of available game titles, the Micro was born with an inheritance of more than 700 compatible games written for the Game Boy Advance (GBA) and GBA SP models. (Older games written for the original Game Boy and Game Boy Color won't fit in the Micro's cartridge slot.) Luckily, the Micro did not inherit some of the defects of its older siblings, including notoriously dim display screens and the need for a clunky earphone adapter. The Micro's small, high-resolution display is bright and highly readable, at least for the generation of users most likely to make use of it. (Those of us old enough to require reading glasses will still have to squint at times.) It comes with a set of alternate snap-on face plates for users who want something jazzier than the standard black or silver bodies. The extra covers, which have names like Camouflage, Flame, Ladybug, and Ammonite, also protect the screen from scratches.

The question is whether owners of previous Nintendo portables will find the Micro's reduced dimensions appealing enough to warrant spending a Benjamin. Serious gamers will probably spend \$ 30 more for the dual-screen Nintendo DS, or even \$ 150 more for the Sony PSP. Those on tight allowances may choose to save \$ 20 by getting the larger GBA SP, money that can buy an extra game. Even so, I expect the Micro to be the next big thing in on-the-go gaming.

SONY PLAYSTATION

GEAR PREVIEW

More than 90 million PlayStation 2 consoles have been sold worldwide since the PS2's debut in 2000, compared with some 25 million Microsoft Xboxes sold since 2001. Even if the new Xbox 360 is a rousing success, Sony's dominance of the console universe is likely to continue, and there's a powerful new PlayStation coming next year.

The PS3, scheduled to be introduced in Japan in mid-2006 and in the U.S. a few months later, is expected to be technically more advanced than the Xbox 360 in many ways. Notably, it will include a high-definition DVD player intended to capitalize on the growing market for HDTV sets, which, of course, Sony also makes. (The Xbox 360 supports HD games, but it lacks the ability to play next-generation, prerecorded HD movies.) Sony's CEO, Sir Howard Stringer, said recently that Sony will sell the PS3 at a loss in order to populate the world with Sony's favored high-definition DVD standard, known as Blu-ray. If millions of Blu-ray PlayStations find their way into living rooms, Sony figures, movie studios will be compelled to embrace it over the rival standard, known as HD-DVD. Yes, brace yourself for another Betamax vs. VHS standards war.

Sir Howard said the PS3 will sell for \$ 300 to \$ 400 and will come with a bundle of games, movies, and TV shows, many of which Sony also makes. The question is whether the titles will be bundled on Blu-ray DVD discs or on a built-in hard drive.

Because the first standalone Blu-ray DVD players are expected to cost \$ 1,000 or so, Sony is essentially giving a free next-generation DVD player to every PS3 customer. That eases the pain (a little bit) for people faced with buying new, high-def versions of their favorite DVDs.

Of course, nothing is stopping Microsoft from adding a high-definition DVD player to the Xbox down the road, once the standards battle has been resolved.

How else does the PS3 stack up against the Xbox 360? It's based on a bodaciously powerful Cell processor developed by IBM and Toshiba, which appears to outmuscle the IBM PowerPC custom chip used in Microsoft's Xbox 360. Sony has also tapped nVidia to supply the graphics engine in the PS3, and it's going to be a whopper, with nearly double the rendering power of the top graphics card

that nVidia now supplies to PC gaming enthusiasts. Again, on specs alone, the PS3 should have a graphics edge over the ATI-based Xbox 360.

Fancy hardware doesn't mean anything, though, if the people who write the games for the hardware can't take advantage of it. (Exhibit A: The PlayStation 2 is technically inferior to the original Xbox, but it's still the world's most popular gaming platform based on the selection of compelling game titles.) At its launch the PS3 will be backward compatible with thousands of earlier PlayStation titles. But Microsoft knows software, and game developers are praising it for providing them the tools and support to build new titles for the Xbox 360.

So should you wait a year for the PS3 or buy the Xbox 360 today? Current Xbox owners are likely to upgrade to the 360, and current PS2 owners will probably stick with Sony. New gamers, however, have little reason to wait nearly a year for the PS3, and Microsoft is almost certain to gain some ground on Sony. The one wild card: Sony could slash the price of the current PS2, perhaps to \$ 100, making the \$ 400 Xbox 360 seem less attractive. Strike, counterstrike: It's all playing out like a good videogame. Only in this game, billions of dollars are at stake.

PC SYSTEMS

Alienware Area-51 ALX Some people think the Xbox 360 is for wimps, and they're willing to spend more than \$ 5,000 to prove it. The ALX system boasts a liquid-cooled, dual-core Intel Pentium Extreme 840 processor and two nVidia processors. It's scary on the outside too.

Dell XPS M170 Who would spend \$ 3,500 on a laptop just to play games? Trick question. The XPS M170 is much more than a game machine, featuring Windows Media Center PC software. But with a 17-inch screen and a killer nVidia graphics card, the XPS M170 makes Quake a lot more fun than Office.

Razer Copperhead This may be the best (and at \$ 80, the most expensive) gaming mouse in the world. It's an ambidextrous laser mouse with 2,000-dot-per-inch accuracy and custom weights for perfect balance.

Logitech G5 Laser Mouse For those who want a more general-purpose but sniper-like mouse, the \$ 70 Logitech is also custom weighted and highly precise (it's for righties only).

BOX STORY:

GAME REVIEW XBOX 360

Perfect Dark Zero (\$ 50, Xbox 360, Microsoft Games) Talk about killer apps: This sci-fi shooter features dazzling graphics, multiplayer game play, and a very lethal heroine.

Peter Jackson's King Kong (\$ 60, Xbox 360, Ubisoft) The Lord of the Rings director had a hand in making sure this videogame apes his new movie faithfully. T. Rex rules!

Star Wars Battlefront II (\$ 50, Xbox, LucasArts) The force is with this new epic. You play the Jedi in space combat and in locations featured in all six movie episodes.

FIFA Soccer 06: Road to World Cup (\$ 60, Xbox 360, Electronic Arts) The most realistic simulation yet of the world's most popular sport, celebrating next year's World Cup.

Call of Duty 2 (\$ 60, Xbox 360, Activision) A World War II shooter enhanced with new artificial intelligence. Throw a grenade and the German enemy ducks for cover.

BOX STORY:

GAME REVIEW NINTENDO

NBA Live 06 (\$ 40, Game Cube, Electronic Arts) This one's a slam dunk, offering by far the best hoops action and featuring a roster of your favorite All-Stars.

Battalion Wars (\$ 50, Game Cube, Nintendo of America) War is heck. Lead your squad of soldiers into battle in this relatively bloodless, turn-based strategy game.

The Sims 2 (\$ 35, Nintendo DS, Electronic Arts) Get a life, even if it's someone else's. Become a leading citizen of Strangetown by tapping into the DS touch screen.

Harry Potter and the Goblet of Fire (\$ 30, Game Boy Advance, Electronic Arts) This one will put a spell on you. You're Harry in the showdown with Voldemort.

Tony Hawk's American Wasteland (\$ 50, Game Cube, Activision). The wasteland, in this case, is Los Angeles, and the nonstop action involves skateboards and bikes.

BOX STORY:

GAME REVIEW SONY PLAYSTATION 2 AND PSP

Shadow of the Colossus (\$ 40, PS2, Sony Computer Entertainment) Wander ancient fairy-tale landscapes, hunting the Colossus and slaying giant mythical beasts.

Guitar Hero (\$ 70, PS2, RedOctane) Amp it up to 11! This rocker uses a giant, plastic, guitar-shaped controller. Score points by playing along to classic rock tunes.

WWE SmackDown! vs. RAW 2006 (\$ 50, PSP, THQ) A rasslin' game with loads of unrealistic characters but surprisingly realistic graphics and physics.

The Matrix: Path of Neo (\$ 50, PS2, Atari) The Wachowski Brothers scripted this sequel, which for the first time lets the player be Neo in the battle against the machines.

Resident Evil 4 (\$ 40, or \$ 50 for a deluxe version, PS2, Capcom) The evil corporate bad guys have taken the President's daughter (which one?). Get her back or die trying.

BOX STORY:

GAME REVIEW PC

Sid Meier's Civilization IV (\$ 50, PC, 2K Games) This multiplayer sequel to one of the great strategy games of all time adds new tools for building your empire.

F.E.A.R.: First Encounter Assault Recon (\$ 50, PC, Vivendi Universal Games) A mysterious paramilitary force has just massacred a Special Ops team. You're next in line.

Quake 4 (\$ 50, PC, Activision) More demons from hell? Yes, and they're creepier than ever. Turn down the lights, turn up the sound, and don't forget to breathe.

Age of Empires III (\$ 50, PC, Microsoft Games) There's a New World to be conquered, putting you into realistic battle against wooden warships and ferocious natives.

Battlefield 2: Special Forces (\$ 50, PC, Electronic Arts) This multiplayer Special Ops blaster features the latest weapons, Navy SEALs, rebels, and insurgents.

GRAPHIC: ILLUSTRATION, HIGH-DEFINITION GRAPHICS ARE SHOWCASED IN UBISOFT'S KING KONG., TWENTY-SIX PHOTOS, TWO PHOTOS, NINTENDO'S GAME BOY MICRO TAKES HANDHELD GAMING DOWN TO THUMB-HELD SIZE.

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HEADLINE: MEET THE NEXT DISNEY;
Shanda, China's hottest online-game company, is betting that it can become an entertainment giant.

BYLINE: STEPHAN FARIS

BODY:

[This article contains a chart -- Please see hardcopy of magazine or PDF.]

It was the first crime of its kind in China: Last year a 40-year-old man used a real knife to stab to death a younger man who had borrowed his virtual sword from an online videogame and sold it for \$ 870. There are no laws in China protecting virtual property, so Qiu Chengwei, the man whose sword had been stolen, got no help from the police. Instead he tracked Zhu Caoyuan to his one-room apartment in Shanghai and, in the presence of Zhu's girlfriend, plunged a knife into his heart.

The crime earned Qiu a death sentence. It also sent shivers through China's fast-growing and increasingly controversial gaming industry, which has been accused of causing obsessive and sometimes violent behavior. Nowhere has that backlash against videogames been more keenly watched than at the Shanghai headquarters of Shanda Interactive Entertainment, China's biggest gaming company. Shanda specializes in online role-playing games that draw thousands of players together in their virtual worlds. Although it doesn't operate the game that Qiu and Zhu were playing--Legend of Mir III--it does operate the even more popular version, Legend of Mir II, featuring Asian warriors. And for Chen Tianqiao, Shanda's founder and CEO, the backlash is one more reason that he's racing to transform his successful videogame company into a more broadly based entertainment conglomerate--one he hopes will become China's Disney.

This isn't the first time Chen, a quiet, unassuming 32-year-old, has made a counterintuitive bet. Four years ago, with the dot-com bubble bursting and the \$ 3 million in venture capital he had raised for an online cartoon website running out, Chen forked over his last \$ 300,000 to a South Korean company for the Chinese rights to Legend of Mir II. His friends thought he was crazy. No sooner had other companies launched videogames in China than pirated copies flooded the streets. But Chen, who graduated in economics from Shanghai's prestigious Fudan University, had a deceptively simple yet ingenious plan: He would give the software away free and get players to buy time on the company's servers. For as little as 3 cents an hour, they could interact and compete. "They cracked the piracy problem," says Duncan Clark, chairman and co-managing director of BDA China, a Beijing technology consulting firm. "In China shrink-wrapped products don't sell."

Chen's gamble paid off: Within two months the company was profitable. Last year it went public, and it now has one of the largest market capitalizations (\$ 1.8 billion) of any Internet company in China. Online role-playing games, like Legend of Mir II and others the company has developed on its own, offered China's young people an escape from the barren entertainment landscape of state-run television and poor-quality knockoffs of Western movies. For many it was an escape from reality itself. Teenage boys and young men streamed into Internet cafes to log on to Shanda's games and assume the identities of warriors, monks, and magicians in order to kill monsters and one another. Online gaming became a

national obsession, with as many as 2.5 million players logging on to Shanda's games at once. Revenues doubled every year, on average, reaching \$ 61.7 million in the third quarter of 2005, up 41% from the previous year. Net income grew too, jumping 58%, to \$ 32.3 million, in the same period. And Shanda's stock--listed on Nasdaq--nearly tripled after the IPO before cooling off in recent months.

Now Chen is betting against conventional wisdom again. Although industry analysts expect China's online gaming industry will continue to expand by 35% a year for the next five years, Shanda is looking to diversify into other forms of interactive online entertainment. For a company used to doubling in size every year, 35% growth isn't good enough. "If we want to keep Shanda growing very quickly," Chen says, "we have to expand, to broaden our demographics."

Over the past year Shanda has taken the \$ 150 million it raised in its public offering and another \$ 275 million from the sale of convertible bonds and bought several companies, many beyond the realm of online gaming. After buying Digital-Red, a provider of games for cellphones, and Qidian, a literature website, Chen made waves by spending \$ 230 million to acquire 19.5% of Sina.com, China's premier Internet portal and news site. It was the closest thing the country has seen to a hostile takeover. Shanda has also teamed up with Baidu, one of China's top search engines, and it is partnering with Universal Music to offer digital downloads.

The company has been expanding its reach in the gaming world too, with a move into so-called casual games--online arcade offerings, often in the style of Super Mario Bros. but with hundreds playing at once. The games are free, but users pay for upgrades to provide their characters with clothing or hats, say, or to change the background. "It's just like you'd buy something at the shopping mall," says Frank Liang, Shanda's associate director of investor relations. "Everyone wants to look different from the others."

But Chen's biggest bet is on a new set-top box called EZ Station, designed to bring the Internet to the country's 370 million televisions. To Chen, a marriage of broadband with television could bring Shanda to those who might not frequent a cybercafe or use a home computer. The box, which began selling in late October for \$ 849 in one test market, features a jack for ADSL, a cable for television, and the tantalizing promise of piping the Internet--and Shanda products--directly into the living room.

Shanda is still trying to grow its online role-playing games. It currently offers six titles, including four developed in-house, and it's planning a fantasy cartoon game and a new 3-D role-playing game that would compete with World of Warcraft, a popular new game operated by rival The9. But role-playing games now account for only two-thirds of Shanda's revenue, and the company's managers expect that figure to keep dropping. "The natural growth of the gaming industry is higher than that for just role-playing games," says Li Shujun, Shanda's chief financial officer.

The epicenter of China's gaming revolution is a four-story office park in the distant reaches of Shanghai's Pudong district. In the reception area, above an aquarium, a flat-screen TV loops a trailer for Magical Land, a cartoon-style online role-playing game targeting young girls. Most visitors head through a side entrance to Shanda's customer-service center, where clerks behind glass handle cases of lost passwords and theft of virtual equipment by hackers. Some customers have traveled more than 800 miles. (The company requires people who forget their password to show up in person with ID.) "If you were cheated by your friend, I can't solve that problem for you," says Li Li, a 24-year-old clerk.

In another wing sit 300 telephone operators, who field questions from callers 24 hours a day. They are testimony to Chen's view of the industry. "Online gaming is not a product, it's a service," he says. "The first month we got profitable, we invested in the call center." In another room, technicians monitor real-time digital graphs that track how many users are logged on to Shanda's games. (The company has a network of 14,000 servers that can accommodate as many

as 5.9 million users at once.) "A lot of people think of games as whoever has the hottest product will be the winner," says Zhou Donglei, head of investor relations. "But it's really not. It's who has the most stable platform." Or, as Chen puts it, "If you want to live in a house, first it should be strong enough. Then we can add the decorations."

Most of Shanda's headquarters is devoted to game development. The company employs 2,000 workers (average age: 25), who are expected to know what their game-playing peers want. In cubicle after cubicle, designers draw new monsters, map new lands, dream up new gear, mastermind challenges for players, and test their co-workers' products. The company has recently invested in motion-capture equipment to speed animation, and it has brought in actors, professional dancers, and martial artists to lend their moves to the characters. The motions range from a simple wave of the hand to flying kung fu kicks. "We even have expressions," says Cai Ying, a 23-year-old motion-capture engineer. "The actor does some motion showing that he's hungry or happy."

Shanda employees sometimes enter their own online worlds. On a recent day Hu Zhenkai, 24, was leading several dozen online Legend of Mir II players into a virtual cave. Logged on as a game master, a special character that can't be harmed, he waited in a clearing near some trees. An armored knight with white, feathery wings arrived and slashed at him with a sword (a standard greeting). Other characters appeared, one followed by a pig, another escorted by a skeletal henchman. Hu led them through twisting corridors, around gray stalagmites, and past the corpses of bat-winged beasts. Every so often a blue bolt would blast him: a new arrival, saying hello. When the last beast, a giant dragon, succumbed to the barrage, the players were rewarded with snowmen that exploded into piles of gold.

The very features of the games that pull players in--their violence, their ability to shunt the real world aside--make them unpopular with parents and the government. The Chinese press delights in linking videogames with obsessive or violent acts. A 13-year-old boy jumps from a 24th floor with his arms stretched forward in a flying posture, leaving a note that says he is joining three virtual friends. Another teenager, accustomed to dodging bullets in a popular videogame, can walk only in zigzags. A man protests a game by setting himself on fire.

Each report turns up the heat. "The values and rules in these online games are completely different from real, physical society," says Shang Jiangang, a lawyer with the Shanghai Industry Association of Online Professionals, a group of gaming companies tasked by Shanghai's municipal government with considering industry regulations. It wouldn't be the first time the government intervened to protect the young. When PlayStation arcades elicited similar complaints in the 1990s, officials forced them to close. Last year many telecom companies took a hit when a crackdown on short-messaging systems cut off an important revenue stream. After a fire in an Internet cafe killed 25 people in 2002, the government began restricting their use. Players must prove they are 18 or older, and the cafes, where nearly half the online gamers play, must close at midnight. Universities have blocked access to game servers, and schools have banned cafes in their neighborhoods. The obsessive nature of online role-playing games--their "stickiness," in Shanda's parlance--helped build the industry. Now that stickiness threatens to undermine it.

So far the government's focus has been on limiting playing time, mainly by introducing the concept of fatigue--points earned by players are automatically reduced after the first few hours of play. In August officials issued regulations requiring that players have their online characters' powers diminished after three hours of play and severely restricted after five hours. Seven of China's largest gaming companies, including Shanda, pledged to implement the system. Other proposals include speeding up character advancement, banning those under 18 from playing games that involve killing other players, restricting the trade in virtual weapons, and introducing a rating system like the one for movies in the U.S. Though Shanda seems to be currying favor with the regulators--in September it announced it would team up with the government to develop patriotic games featuring historical characters approved by the Communist Party--the re-

restrictions could squeeze gaming revenues. Against this backdrop, Shanda's diversification strategy looks less like a gamble.

When Chen moved into online role-playing games, he had the China market to himself, and for four years his games were the most popular in the country. Now, Legend of Mir II is showing its age: Revenue dropped 34% in the third quarter. For the first time, another game--Netease's Fantasy Westward Journey--holds the No. 1 spot. And World of Warcraft has become a runaway success since its launch in June.

Whether these rivals are luring customers from Shanda or expanding the market is a subject of debate, but they're one more reason that life in the gaming business is becoming a little more uncomfortable for Chen. James Rhee, who handles investor relations for The9, reckons there's room for several corporate players in a growing market. "New players are being drawn in who have never played in the past," he says. But Chen isn't so sanguine. "The competition to acquire the games is increasing," he says, "but the demographics are remaining fixed."

That's why the EZ Station is so important to Shanda's future. Like a character in one of his games, Chen wants to stay ahead of hungry competitors nipping at his heels, perhaps even slay one or two. So he has lined up 48 content partners to offer a variety of entertainment products appealing to many segments of the population. Chen imagines teenagers playing fantasy games, parents playing educational games with their children, grandparents playing mahjong online, and whole families singing karaoke in front of their TV sets. "Maybe you can't overcome the piracy problem on the content side," Chen says, "but you can control the channel side and charge for it."

In October he unveiled two additional weapons: the EZ Mini, a handheld wireless gaming device that will be rolled out later this year, and the EZ Center/EZ Pod, software developed in partnership with Intel (which also provides the chip set for the EZ Station) that enables a normal PC to be operated by remote control, like a television set. Failure to get a return on those investments could damage the company. "It's a high-stakes game," says Clark of BDA China. "The market is not mature yet."

But Chen likes his odds. "If we can double in the next five years, every year, then maybe we can have the same valuation as Disney," he says, without a hint of humor in his voice, adding that he expects to push out to Asia and then the U.S. in the next few years. "Now we are at nearly \$ 2 billion, and Disney is at about \$ 40 billion to \$ 50 billion. If we double five times ..." His voice trails off. "It's not a target," he says. "It's a dream. It's my dream."

Shanda cracked China's piracy problem: It gives away its software but charges gamers for playing time.

The obsessive nature of online role-playing games helped build the industry. Now it threatens to undermine it.

GRAPHIC: PHOTO: PHOTOGRAPH BY FRITZ HOFFMANN--DOCUMENTCHINA, SWASHBUCKLING SHANDA USES ACTORS TO SIMULATE ACTION FOR ITS ROLE-PLAYING, FANTASIES., THREE PHOTOS: PHOTOGRAPHS BY FRITZ HOFFMANN--DOCUMENTCHINA, MONSTERS AND MAGICIANS: SHANDA'S MOTION-CAPTURE EQUIPMENT (LEFT) HELPS, DESIGNERS ACCURATELY PORTRAY CHARACTERS' EXPRESSIONS AND ACTIONS. ABOVE: SCENES FROM MIR II., PHOTO: PHOTOGRAPH BY FRITZ HOFFMANN--DOCUMENTCHINA, EYEING DISNEY: CHEN IS DIVERSIFYING INTO OTHER FORMS OF ENTERTAINMENT., PHOTO: PHOTOGRAPH BY FRITZ HOFFMANN--DOCUMENTCHINA, RED ALERT: MORE THAN HALF OF CHINA'S GAME PLAYERS USE INTERNET CAFES, TO ENTER THEIR VIRTUAL WORLDS., CHART: FORTUNE CHART / SOURCES: IDC; GOLDMAN SACHS, TURBOCHARGED, Online gaming has exploded in China, and so have Shanda's revenues.; PHOTO: PHOTOGRAPH BY FRITZ HOFFMANN--DOCUMENTCHINA, LOST AND FOUND: SHANDA CLERKS DEAL WITH FORGOTTEN PASSWORDS AND, VIRTUAL THEFT.

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BYLINE: Evelyn Nussenbaum; Oliver Ryan; Peter Lewis

BODY:

If you're looking for the new face of technological change, consider King Kong. In director Peter Jackson's remake of the classic big-ape movie, the wizards at Weta Digital have created computer graphics that are astonishingly life-like. For four more meteoric areas of media change, open the foldout pages that follow.

DIGITAL REALISM Technology: Digital animation that has mesmeric, flesh-and-blood verisimilitude Where you'll see it: In the movies King Kong and The Chronicles of Narnia: The Lion, the Witch, and the Wardrobe, both of which open in December Who's behind it: FX houses such as Weta Digital (Kong) of New Zealand and Rhythm & Hues (Narnia) of Los Angeles What makes it possible: Weta's ape-face algorithm and Rhythm & Hues' Cube Camera, which captures light from six angles

IF YOU'VE ALWAYS WANTED TO DIRECT Technology: Do-it-yourself video on the web What makes it possible: A new breed of user-friendly video-centric sites and video software Where you can find it: At sites such as Blip.tv, Clipshack, Google Video, Phanfare, Revver, VideoEgg, Vimeo, and YouTube When it's available: Now Why it'll be big business: From video personal ads to video auctions, the options are endless.

Move over, blogging: Here comes "vlogging." In the past 18 months, the world of web video has moved from a simmer to a boil. And thanks to a new breed of free or low-cost, easy-to-use video-sharing websites--and the ubiquity of affordable digital videocameras--the average nongeek can now painlessly record, edit, and post videoclips to the web for the world to see. "Up to a year ago, if you wanted to put video on the web, you had to do everything yourself," says Jakob Lodwick, founder of Vimeo.com. "Compressing the video," he says by way of example, "was just one of several major steps. And with each of those steps, you lost people." Not anymore. Startups like Vimeo (not to mention Google Video) have attracted hordes of cyber-Spielbergs eager to share their work. "The uptick is larger than even the optimists predicted," says Kevin Sladek, the 25-year-old co-founder of VideoEgg. Part of the motivation is economic. Sladek claims that in a recent VideoEgg study on eBay, used items that were sold using videoclips went for 70% more than similar items sold without video. Roll cameras.

COMING SOON TO A TINY SCREEN NEAR YOU Technology: Mobile digital video What makes it possible: New mobile broadband digital video broadcast infrastructure and video-ready mobile phones Where it's already up and running: South Korea, Japan, and Europe When it's coming to the U.S.: In the next couple of years, depending on the amount of legal wrangling Who's behind it: KT and Samsung in South Korea, Nokia and O2 in Europe, Texas Instruments and Qualcomm in the U.S.

A new generation of mobile phones, equipped with digital television receivers and larger-than-usual color screens, holds the promise of putting TVs in the pockets of hundreds of millions of consumers by the end of the decade. Beamed

directly from satellites or relayed through repeaters from terrestrial broadcast stations, the mobile video signals can be viewed on laptop screens, dashboard-mounted LCD displays, handheld computers, and of course cellphones. In South Korea earlier this year a trial run revealed surprisingly good video and sound quality on handheld phones in cars traveling 75 miles per hour, and even in subways. Deployment of mobile video services in the U.S. is lagging behind Asia and Europe, in part because of industry politics, wrangling over spectrum allocation, and technical standards. But America's appetite for television is so great that mobile video is an inevitable part of our future. Let's just hope it's not while we're driving.

DID THAT MAGAZINE JUST WINK AT ME? Technology: Digital paper What makes it possible: Breakthroughs such as electrochromatic polymers that allow flexible, paperlike electronic displays Where you'll see it: First in retail packaging, later in the form of books and magazines When you'll see it: Now in Japan, U.S. in 2006

Digital paper has a long history of unfulfilled promise. But the wait for "electronic ink" may be coming to an end. E Ink, a spinout from MIT's Media Lab, announced in October that it has, together with LG Philips LCD, built a new flexible 10.1-inch display that is about the thickness of construction paper and has the resolution of a standard desktop monitor. Already last spring Microsoft used a color version of E Ink's technology to light up the packaging of Xbox game Jade Empire. And Sony is selling an E Ink--enabled book reader in Japan. Potentially even more promising is an advance by German tech giant Siemens. Using an entirely different technology--electrochromatic polymers--it has developed "wafer thin" color displays that can deliver video, something the slightly higher-resolution E Ink technology can't yet manage. And the Siemens material may prove inexpensive enough to be viable as packaging for low-cost, everyday products. "I've gotten a lot of interest from advertising agencies," says Norbert Aschenbrenner of Siemens. So, long before Tolstoy fans get a one-page, foldable version of War and Peace, grocery shoppers should see Tony the Tiger waving madly at them from the Frosted Flakes box on aisle four.

GRAPHIC: PHOTO ILLUSTRATION: ASLAN: DISNEY/WALDEN; KONG: UNIVERSAL STUDIOS, PHOTO ILLUSTRATION: PHOTO ILLUSTRATIONS BY SEAN MCCABE

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SECTION: U.S. EDITION; **INNOVATION/ONLINE GAMES;** Pg. 203

LENGTH: 623 words

HEADLINE: YIELD OF DREAMS;

A former child actor builds a brokerage business, buying and selling assets that players earn in videogames.

BYLINE: JULIA BOORSTIN

BODY:

Brock Pierce is comfortable in unreal worlds. As a child actor he landed roles in Hollywood movies. At the peak of the Internet bubble he co-founded a company to deliver entertainment over broadband. When that flopped, he immersed himself in the virtual world of EverQuest, a multiplayer videogame. He got so engrossed, he says, that he played an average of eight hours a day for two years.

Pierce forced himself to quit, but then, he says, "I had to justify the way I'd spent the past two years." So in 2001 he started on what he calls his next game--Internet Gaming Entertainment, now the leading company in the curious, fast-growing business that links virtual economies with the real one.

IGE allows players to sell game assets they accumulate in their imaginary worlds--from currency to characters--for cash or, alternatively, to buy virtual assets they would otherwise have to spend dozens of hours earning in a game. Pierce, 25, estimates that IGE accounts for about 50% of this "secondary market" in the U.S., which he says has about \$ 500 million in annual volume. (One industry analyst thinks the figure could be as low as \$ 50 million.) The company's growth rates for both revenues and earnings are over 100% a year, Pierce says, and its margins top 10%. IGE is closely held and doesn't disclose financials, so it's hard to know how virtual those numbers may be.

IGE, based in Los Angeles (with offices in Hong Kong, Shanghai, and London), employs 200 people to handle trades, mostly through its website, IGE.com. Since 2004 the company has spent more than \$ 25 million to acquire the seven next-biggest sites that arbitrage virtual assets--buying and selling them at prices to maximize the spread--four eBay-style trading platforms, and about 40 fan and content sites. "We're the Wal-Mart, the Sears--we're the Saks Fifth Avenue," Pierce says. "We cover the market."

Pierce has always thought big. His parents started him acting when he was 3. When Disney came to his hometown, Minneapolis, to shoot The Mighty Ducks, he was cast as a young Emilio Estevez. Movie roles took him to Los Angeles, and in 1996 he starred in a Disney film with Sinbad. In 1997 he co-founded an arbitrage business for virtual-trading cards used in an online game similar to Dungeons & Dragons. That lasted nine months, until Pierce decided that the game's 200,000-player market was too limited. He turned to another business he had co-founded, Digital Entertainment Network. Pierce produced shows and helped DEN raise \$ 100 million before he left in 1999; in 2000, DEN evaporated, having yielded almost no revenues. "All the things we did wrong stand out, the biggest of which was to bet on broadband's rollout," he says. He also learned to avoid investors; he has funded IGE using his own savings and cash flow.

In 1999 one of Pierce's virtual card-trading partners suggested he try EverQuest. "I was astonished. I saw it as the next killer application," Pierce says.

YIELD OF DREAMS;A former child actor builds a brokerage business, buying

"I was thinking about secondary markets, but I'd be lying if I said that was why I was playing." Today some 200,000 gamers trade assets from more than 15 games through IGE. The company profits from the spread between its purchase price (it gets most of its assets from about 1,000 sellers) and the price it fetches through its website.

Some game manufacturers--and some gamers--protest that this corrupts the purity of play. But Pierce insists that the secondary market is crucial to the continued success of multiplayer games. "It's like how a robust secondary market for homes drives a strong primary market," he says. "We allow the players to feel their activities have value."

FEEDBACK jboorstin@fortunemail.com

GRAPHIC: PHOTO: ELENA DORFMAN, THE 25-YEAR-OLD CEO OF IGE, BROCK PIERCE, FOUND PROFIT IN HIS GAMING, ADDICTION.

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HEADLINE: FROM MEGS TO RICHES;
Multiplayer games are taking off, and with them a vast and unexpected new market. People are trading imaginary things in imaginary worlds yet making real money.

BYLINE: ROGER PARLOFF

BODY:

"Paul" and I are seated on a plush couch in the atrium-style living room of his starter mansion north of Dallas. A 71-inch flat-screen HDTV dominates the far wall. His Porsche 911 Carrera and his wife's Lincoln Navigator nestle in the garage. It's a good life and would not be a surprising one for a 33-year-old corporate litigator like Paul, except that he quit his law partnership two years ago. Since then he's been self-employed at an even more lucrative calling: He plays a medieval-themed online videogame called EverQuest. Because so many young people now spend so much of their lives immersed in the simulated 3-D worlds of games like this one, the noncorporeal emoluments they accumulate in these environments--virtual swords, cloaks, gauntlets, in-game currency, etc.--acquire real value to them, and they will pay real U.S. dollars--and euros, yen, won, and yuan--to acquire them. So Paul buys and sells virtual items and currency for a living. "The valuation is always difficult," he concedes. "When you think about people paying real cash for something you can't even touch, smell, taste--that's tough."

Launched in 1997 and now owned by Sony Online Entertainment, EverQuest is one of a category of increasingly popular computer games known as massively multiplayer online role-playing games (MMO for short). Though EverQuest has about 300,000 player-subscribers worldwide, a 2004 entry into the market called World of Warcraft (made by Vivendi subsidiary Blizzard Entertainment) has become the industry's transformative, breakthrough blockbuster. WoW, as it's known, has already garnered 4.5 million subscriptions worldwide and is expected to gross \$ 500 million this year alone--more than most hit movies ever earn at the box office.

Paul is one of a growing number of people who either make their living or supplement their income through businesses catering to needs that arise only in virtual worlds. Anshe Chung, for instance, is the in-game character, or "avatar," created by a German woman who teaches school near Frankfurt. Since March 2004, Chung has accumulated more than \$ 200,000 worth of in-game currency and "land holdings" by conducting businesses inside a serene synthetic world called Second Life. Chung buys "land" there, builds communities using tools provided by the game developers, and then rents or resells plots to other players. Second Life is a world simulated by 1,400 servers run by a San Francisco company called Linden Lab. The money Chung earns is convertible to dollars over an exchange run by Linden Lab.

Estimates of the size of the nascent market in virtual property range widely--from about \$ 200 million to \$ 1 billion worldwide--but most industry observers agree that it is increasing at a breakneck pace, possibly 100% year over year. Because it involves commerce between imaginary worlds and the real one (known to some gamers as "meat space"), it raises knotty questions. The things Paul and

FROM MEGS TO RICHES; Multiplayer games are taking off, and with them a va

Anshe trade, for instance, are merely the graphical manifestations of data entered into spreadsheets owned by Sony and Linden Lab. Do they constitute "property" recognizable by U.S. courts? If so, whose?

While Linden Lab grants its players intellectual property rights in everything they create, Sony lawyers say that all the items earned or created in EverQuest remain Sony's. Indeed, the company purports to ban doing what Paul does in the click-through contracts players agree to when they log in to the game. (That's why we've agreed to assign Paul a pseudonym; Chung requested anonymity to preserve the freedom that is the *raison d'etre* of role-playing games.) But Sony can't stop the trading and probably no longer wants to. In July it launched its own virtual-to-real currency-exchange service for certain player populations who use a later version of the game, called EverQuest II, and it will soon expand the service to many of its other games as well.

Though we readily accept the puzzling valuations that our society attaches to real-world things like diamonds, Louis Vuitton bags, pet rocks, or bottled water, many can't get their minds around the notion of paying for flickering shadows that can never be extracted from the planar surface of an LCD monitor. Yet so much of our economy revolves around buying prestige, status, and fun--rather than food, shelter, and clothing--that there is scant basis for wonder. This weird new commerce reflects simply the growing importance that virtual worlds are playing in the lives of our children, our colleagues, and--like it or not--ourselves. The more time we spend as avatars in synthetic worlds, the more money we will have to shell out keeping up with the Joneses' avatars.

In the late 1970s two English computer science students invented a text-based, multiplayer role-playing computer game called MUD, for Multi-User Dungeon. It offered many of the same allures as the older, tabletop role-playing game Dungeons & Dragons, which can exert a frighteningly powerful hold on its players. Over time multiplayer games (with maybe a dozen players interacting) gave way to "massively" multiplayer games (thousands of users), and text-based games were supplanted by graphical ones. In the mid-1990s, game companies began marketing commercial MMOs, whose main revenue stream came from monthly subscriptions.

When you charge people a monthly subscription for an addictive product--typically \$ 15 a month--you have a formula for business success. Consider, for instance, the case of longtime MMO fan Amy Goldenburg, a personable, married 31-year-old business manager for a high-tech consultancy in Austin. Since World of Warcraft's U.S. launch in October 2004, Goldenburg has logged 52 days of playtime, according to an in-game odometer-like display. The ticker counts only actual minutes logged on, so Goldenburg has literally played 1,248 hours over the past year, or more than 31 40-hour workweeks. "And that's for that character," Goldenburg clarifies, a little sheepishly, admitting that she sometimes plays other avatars, too, whose game times are not included in the 52-day tally.

Players like Goldenburg explain why game companies are hoping MMOs will take off in the U.S. the way they already have in South Korea, China, and Taiwan (see "Meet the Next Disney"). What the game companies didn't anticipate, though, was that the games would also spawn a thriving market outside their control.

Regardless of whether MMOs are set in fantasy Middle Earth, medieval Camelot, or intergalactic space, they all have recognizably capitalist internal economies whose centerpiece is some sort of auction house or bazaar where players can buy and sell in-game valuables using in-game currency--gold in WoW or platinum pieces in EverQuest, for instance. These in-game economies were designed long before game developers realized that real-world entrepreneurs would be poaching their turf. In EVE Online, an MMO marketed by CCP, an Icelandic company, the developers created a "hypercapitalistic" society in outer space that might have been envisioned by a committee of Cato Institute economists and Russian organized-crime figures. In EVE, corporations compete--via industrial espionage, sabotage, fraud, and assassination--to corner the market for precious ores used to manufacture industrial products and military hardware. "Capitalism incentivizes people to build, to excel, to do something skilled, to strive to sort of succeed," says Hilmar Petursson, CCP's CEO. "If we were to build in communism,

FROM MEGS TO RICHES; Multiplayer games are taking off, and with them a va

that wouldn't make for interesting game play, because in perfect communism, everybody has the same, everybody's happy --no game."

Most MMOs also provide players with a way of making what amounts to a wage. By performing some minor feat--killing a giant rodent, say, or mining ore from an asteroid--the player gains modest quantities of the realm's currency. Valuable items (a cloak or sword) may also fall off slain prey. And as the player performs tasks, he wins "experience points," which enable his avatar to move up a level and gain additional powers. Here's the thing: An avatar must climb 60 levels to achieve the maximum powers in World of Warcraft--70 in EverQuest--so for some players, this process of "grinding" out experience becomes tedious.

Players who wanted to circumvent this process began buying in-game currency, items, or even entire high-level avatars from other players over eBay. Player A would send player B real U.S. dollars, and B would have his avatar deliver the promised goods to player A's avatar within the game. In the case of an avatar sale, player B would send his user name and password, turning over his entire account. Like any eBay transaction, the deal hinged to an alarming degree on trust, and fraud was rampant.

In 2001 a then-obscure economist--and, yes, avid gamer--at Indiana University began studying the economy of Norrath, the virtual world that players of EverQuest inhabit. "I thought, wouldn't it be a funny joke to write about the economy in a videogame," says Edward Castronova, a soft-spoken, bald academic with an earring. "It stopped being a joke after a couple months writing down prices and volumes." When he calculated Norrath's wealth, using then-prevailing exchange rates available on the Internet gray market, and then compared it with the per capita GNPs of real nations, he reached a remarkable conclusion: "Norrath is the 77th-richest country in the world, roughly equal to Russia." The article, probably one of the most downloaded in the history of Munich's Center for Economic Studies and Ifo Institute for Economic Research, put so-called real-money trade (RMT) on the map. (Castronova's book, *Synthetic Worlds: The Business and Culture of Online Games*, comes out this month from the University of Chicago press.)

Among players, RMT was controversial. "I'm pissed if someone can buy themselves ahead of me in what's supposed to be my fantasy game," says Greg Boyd, 31, an intellectual property lawyer at Kenyon & Kenyon in New York City who has been playing the games since the early 1990s. RMT could also distort a game and devalue its currency, he notes. There have been many Internet reports, for instance, of alleged gaming sweatshops in Mexico, Indonesia, China, or Romania, where workers are said to be paid low wages to play the game and engage in "farming"--the process of repetitively killing a certain monster solely for the purpose of accumulating items for resale. Farmers can sometimes even automate the process by devising "macros"--a programmed series of keystrokes--that will perform the wealth-yielding tasks on their own. In his 2001 article, Castronova calculated that gamers could make a wage as high as \$ 3.42 an hour through farming on EverQuest. Castronova now thinks that a better figure, which he recently computed for the WoW environment, would be closer to \$ 1.17 an hour--still sufficient to attract poor workers in developing countries. Though no journalist has actually seen a sweatshop--the accounts come from e-mails from alleged insiders--there is no question that farming occurs. Game publishers say they monitor and terminate accounts when they see anomalous, repetitive conduct occurring around the clock.

If farming affords an income well below minimum wage, how can our friend "Paul," of Dallas, quit his law partnership to play EverQuest for a living? "It's a business model I developed when I didn't know what a business model was," Paul says in a clear, confident litigator's voice. When he was 12, he would buy collections of baseball cards and then sell the cards individually for a profit. Today Paul buys EverQuest accounts from players who are retiring from the game, typically over a website called playerauctions.com. He then sells the acquired avatars' items to players through EverQuest's in-game bazaar in exchange for "plat"--i.e., "platinum pieces," the game's currency. Then he exchanges plat for dollars through Internet Gaming Entertainment, a broker specializing in the secondary market for game currency (see "Yield of Dreams"). He

FROM MEGS TO RICHES; Multiplayer games are taking off, and with them a va

has about 20 EverQuest accounts, he says, and keeps at least seven avatars trading "24/7." Each can be programmed to sell up to 80 items at prices he sets. So he can market up to 560 items around the clock. The most he's ever received for a single item, he says, was about 3 million plat, which might fetch between \$ 840 and \$ 1,200, depending on where plat is trading against the dollar when he exchanges it.

Initially game publishers were just as outraged by RMT as some of their customers were. For one thing, when players got ripped off they would complain to the publisher, leading to costly customer service calls. (Sony Online Entertainment says that 40% of its customer service calls relate to problems with RMT.) Legally there was an even more ominous prospect. If the company countenanced RMT, it might be acknowledging that players gained ownership rights over things they earned or created using the company's intellectual property. That could have dire consequences down the road. If, for instance, the company altered, upgraded, or discontinued the game--wiping out the virtual wealth it had encouraged its players to accumulate--might it become liable to those players?

Most companies banned RMT in their click-through licenses and demanded that eBay take down auctions for such items; eBay complied, but private auction sites like IGE sprang up to fill the void. Boyd and James Rosini, an IP partner at Kenyon & Kenyon, say that those companies are operating in a gray area. They might be facilitating infringement of the publisher's intellectual property rights, for instance, or inducing breach of its licensing agreements. "There are myriad colorable claims that could be brought" by a game company that might want to challenge the practice, says Boyd, who sounds as if he's waiting by the phone. (IGE's president, Steve Salyer, disagrees. "I've sat with the best legal minds in the U.S. over this issue," he said at a conference recently, "and I'm certain players and IGE are within their rights to conduct the business they conduct.")

There are signs that game publishers may choose to absorb this new market rather than fight it. In July, Sony set up its own RMT service, Station Exchange. In the first three months of operation--limited to a small fraction of players in just one game--Station Exchange hosted \$ 540,000 in RMT, with Sony taking a 10% commission on every transaction.

Until now, we've been focusing on MMOs that fit people's preconceptions of videogames. Players, who range in age from 18 to 35 and skew 80% male, kill dragons or pilot spaceships. But there's another category of MMOs, known as social games, that attract an older, more female base. Some are so open-ended that they arguably aren't games at all.

"It's not a game," says Philip Rosedale, 37, founder of the virtual world called Second Life. "It doesn't have a specific narrative or gamelike goal. There's no 'leveling up.' There's no killing anything. I started the company because I dreamed about a space where I, as a creative inventor, could make things in a faster time frame than in the real world." In Second Life, players--or, what, emigres?--get tool kits that enable them to build and create almost whatever they want, so that the world is "emergent," i.e., it becomes whatever its participants want it to be.

"I started small with nothing," writes Anshe Chung in an e-mail, "and worked my way through five distinct careers." Chung is the avatar of the German schoolteacher who has amassed more than \$ 200,000 worth of in-game currency and "land" in Second Life. "I started ... as a private entertainer, somebody people who are bored or lonely could seek out for company. When more familiar with the creation tools in SL, I began to design and sell my own fashion line." After three months Chung had earned enough Linden dollars, the world's internal currency, to buy land there--i.e., server space. (Each server simulates 16 acres of land.) She would develop the land and then rent it out or resell it. Because of Second Life's rapid population growth--it now has 75,000 subscribers--land speculation has been its most lucrative vocation. Chung now develops private islands and sets up communities restricted to, for instance, East Asian, Victorian, or Gothic architecture, or to French-speakers, or to gays and lesbians, or to fuzzy avatars known as the "furries."

FROM MEGS TO RICHES; Multiplayer games are taking off, and with them a va

Today Chung so dominates the real estate industry in Second Life that a competing land-speculation company known as Cyberland has tried to even the playing field by going "public." Cyberland has issued about 500,000 shares to 524 players. They trade on a private stock exchange set up by Cyberland's CEO, though so far Cyberland is the only company listed. (Total volume was eight trades last week, with 840 shares changing hands.) In September, Cyberland increased its quarterly dividends from 2% to 3% of gross revenue.

Catherine Fitzpatrick, a 49-year-old Russian translator in New York (she did Boris Yeltsin's memoir, *Midnight Diaries*), has made a modest profit on her Cyberland shares, but she makes most of her Second Life income--about \$ 100 to \$ 200 per month--as a manager of "rental properties" there. "I had an ambition to make the Seven Wonders of the World," she says in a bored, deadpan voice, and she did make the Lighthouse of Alexandria and the Hanging Gardens of Babylon. But then Fitzpatrick decided that some of the windowless structures would not transpose well to Second Life, where avatars like to fly into the spaces they visit. "The ancients didn't fly," she observes.

It's unsettling, isn't it? Personally, I get a headache when I talk to any of these people for very long. I asked Castronova why people are so nonplussed by the notion of making money this way. "We really want to say, 'It's kid stuff. It's not important,'" he offers. "We say, 'I'm working hard, but somebody's goofing around on a videogame and making enough to live on?'"

But for Chung, the transition has evidently been smooth. "Second Life is the fourth online world where I became the richest avatar," she writes. "Only this time the wealth is real :-)"

FEEDBACK rparloff@fortunemail.com

BOX STORY:

THERE'S GOLD IN THEM THAR HTMLS

DRESSED IN ALL HER BINARY Aimee Weber, the avatar of a New Yorker in her late 20s, makes and sells clothes for other avatars in the virtual world called Second Life. Though prices are low, she says, marginal costs are zero.

AVATAR RYNTHA SUAVAGE IS SHOWN HERE MODELING DESIGNER FASHIONS MADE BY AIMEE WEBER.

BLUE SWEATER PRICE: 40 LINDEN DOLLARS OR U.S.\$ 0.28

TAN MOCCASIN BOOTS PRICE: 150 LINDEN DOLLARS OR U.S.\$ 0.39

BIZARRE BAZAAR This EverQuest character is in "trader mode," offering items for sale to other players. The "platinum pieces" used as currency in these transactions have dollar value in the secondary market.

THE BOX NEXT TO THE CHARACTER LISTS THE ITEMS FOR SALE TO OTHER PLAYERS.

AN EXAMPLE: CEREMONIAL IKSAR CHESTPLATE PRICE: 5,000 PLATINUM PIECES
SECONDARY MARKET VALUE: \$ 14--\$ 20 U.S.

"When you think about people paying real cash for something you can't even touch, smell, taste--that's tough."

An economist finds: By per capita GNP, the virtual economy of EverQuest is the 77th-richest in the world.

Whether MMOs are set in Middle Earth, Camelot, or intergalactic space, they all have capitalist economies.

"I'm pissed if someone can buy themselves ahead of me in what's supposed to be my fantasy game."

If a company altered or discontinued a game, wiping out players' virtual wealth, might it be legally liable for their loss?

GRAPHIC: ILLUSTRATION: ILLUSTRATION BY MATT MAHURIN, PHOTO: PHOTOGRAPH BY GREGG SEGAL, "PAUL" QUIT LAW PRACTICE TO MAKE MORE MONEY ACQUIRING AND SELLING,

FROM MEGS TO RICHES;Multiplayer games are taking off, and with them a va

EVERQUEST LOOT., PHOTO: PHOTOGRAPH BY GREGG SEGAL, IMMERSSED AMY GOLDENBURG (WITH HUSBAND TIM) SPENT 1,248 HOURS PLAYING, WORLD OF WARCRAFT IN THE PAST YEAR., PHOTO: PHOTOGRAPH BY GREGG SEGAL, RENTAL PROPERTIES INSIDE A GAME EARN CATHERINE FITZPATRICK UP TO \$ 200 A, MONTH., TWO ILLUSTRATIONS, PHOTO: PHOTOGRAPH BY GREGG SEGAL, VIRTUAL PROPERTY RIGHTS ARE A GRAY AREA, SAY IP LAWYERS JAMES ROSINI AND, GREG BOYD., ILLUSTRATION: JONHENRY RIGHTER (LINDEN LAB), RICHEST IN HER WORLD, ANSHE CHUNG (THE AVATAR OF A GERMAN SCHOOLTEACHER), IS A VIRTUAL LAND SPECULATOR.

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